



# CACTUS AVENUE CANNABIS FACILITY

## TRAFFIC IMPACT ANALYSIS

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## **I. INTRODUCTION**

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

The City of Adelanto is the lead agency responsible for preparation of the traffic impact analysis, in accordance with California Environmental Quality Act authorizing legislation. This report analyzes traffic impacts for the anticipated opening date with partial occupancy of the development in Opening Year 2025, at which time it will be generating trips at its full potential, and for the current traffic forecast year, which is the Year 2045.

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

### **A. Project Description**

The proposed development is located north of Cactus Avenue between Beaver Road and Koala Road in the City of Adelanto. A vicinity map showing the project location is provided on Figure 1.

The proposed project is proposed to be developed with 80,000 square feet of the Marijuana Cultivation and Processing land use. Figure 2 illustrates the project site plan.

### **B. Study Area**

Regional access to the project site is mainly provided by the US-395. Local access is provided by various roadways in the vicinity of the site. The north-south roadways expected to provide local access include Koala Road, Bellflower Street, and US-395. The east-west roadway which will be most affected by the project is Rancho Road.

### **C. Analysis Methodology**

The analysis of the traffic impacts from the proposed development and the assessment of the required mitigation measures were based on an evaluation of the existing and forecast traffic conditions in the vicinity of the site with and without the project. The following analysis years are considered in this report:

- Existing Conditions (2024)
- Existing Plus Project Conditions
- Project Opening Year Conditions (2025)
- Horizon Year Conditions (2045)

Existing intersection traffic conditions were established through morning and evening peak hour traffic counts obtained by Kunzman Associates from October 2023 and June 2024 (see Appendix B). In addition, truck classification counts were conducted at the study area intersections. The existing percent of trucks was used in the conversion of trucks to Passenger Car Equivalent's (see Appendix C).

Project traffic volumes for all future projections were estimated using the manual approach. Trip generation has been based upon rates obtained from the Institute of Transportation Engineers, Trip Generation Manual, 11th Edition, 2017.

The distributions of the project trips were based on existing travel patterns calculated using existing traffic counts. This methodology was previously approved by the City of Adelanto Traffic Engineer.

The average daily traffic volume forecasts have been determined using the growth increment approach on the San Bernardino Transportation Analysis Model (SBTAM) traffic model Year 2016 and Year 2040 average daily traffic volume forecasts (see Appendix C). Traffic model plots are included in Appendix D. This difference defines the growth in traffic over the 24 year period. The incremental growth in average daily traffic volume has been factored to reflect the forecast growth between Year 2023 and Year 2040. For this purpose, linear growth between the Year 2016 base condition and the forecast Year 2040 condition was assumed. Since the increment between Year 2024 and Year 2040 is 16 years of the 24 year time frame, a factor of 0.67 (i.e., 16/24) was used.

The Year 2045 without project daily and peak hour directional roadway segment volume forecasts have been determined using the growth increment approach on the SBTAM traffic model Year 2016 and Year 2040 peak hour volumes. The growth increment calculation worksheets are shown in Appendix C. Current peak hour intersection approach/departure data is a necessary input to this approach. The existing traffic count data serves as both the starting point for the refinement process, and also provides important insight into current travel patterns and the relationship between peak hour and daily traffic conditions. The initial turning movement proportions are estimated based upon the relationship of each approach leg's forecast traffic volume to the other legs forecast volumes at the intersection. The initial estimate of turning movement proportions is then entered into a spreadsheet program consistent with the National Cooperative Highway Research Program Report 255. A linear programming algorithm is used to calculate individual turning movements that match the known directional

roadway segment volumes computed in the previous step. This program computes a likely set of intersection turning movements from intersection approach counts and the initial turning proportions from each approach leg.

The Opening Year (2025) traffic volumes have been interpolated from the Year 2040 traffic volumes based upon a portion of the future growth increment.

Year 2045 traffic volumes have also been interpolated from the Year 2040 traffic volumes based upon a portion of the future growth increment. Project traffic is then added to the new future base volumes. Quality control checks and forecast adjustments were performed as necessary to ensure that all future traffic volume forecasts reflect a minimum of 10% growth over existing traffic volumes. The result of this traffic forecasting procedure is a series of traffic volumes suitable for traffic operations analysis.

The technique used to assess the capacity needs of an intersection is known as the Intersection Delay Method (see Appendix F) based on the Highway Capacity Manual – Transportation Research Board Special Report 209. To calculate delay, the volume of traffic using the intersection is compared with the capacity of the intersection. The signalized intersections are considered deficient (Level of Service F) if the overall intersection critical volume to capacity ratio equals or exceeds 1.0, even if the Level of Service defined by the delay value is below the defined Level of Service standard. The volume to capacity ratio is defined as the critical volumes divided by the intersection capacity. A volume to capacity ratio greater than 1.0 implies an infinite queue.

The Level of Service analysis for signalized intersections has been performed using optimized signal timing. This analysis has included an assumed lost time of two seconds per phase. Signal timing optimization has considered pedestrian safety and signal coordination requirements. Appropriate time for pedestrian crossings has also been considered in the signalized intersection analysis. The following formula has been used to calculate the pedestrian minimum times for all Highway Capacity Manual runs:

$$(\text{Curb to curb distance}) / (3.5 \text{ feet/second}) + 7 \text{ seconds}$$

For Existing, Existing Plus Project, and Opening Year (2025) traffic conditions, saturation flow rates of 1,800 vehicles per hour of green for through and right turn lanes and 1,700 vehicles per lane for single left turn lanes, 1,600 vehicles per lane for dual left turn lanes and 1,500 vehicles per lane for triple left turn lanes have been assumed for the capacity analysis.

For Year 2045 traffic conditions, saturation flow rates of 1,900 vehicles per hour of green for through and right turn lanes and 1,800 vehicles per lane for single left turn lanes, 1,700 vehicles per lane for dual left turn lanes and

1,800 vehicles per lane for double right turn lanes have been assumed for the capacity analysis.

The peak hour traffic volumes have been adjusted to peak 15 minute volumes for analysis purposes using the existing observed peak 15 minute to peak hour factors for all scenarios analyzed. Where feasible improvements in accordance with the local jurisdiction's General Plan and which result in acceptable operations cannot be identified, the Year 2045 peak hour factor has been adjusted upwards to 0.95. This is to account for the effects of congestion on peak spreading. Peak spreading refers to the tendency of traffic to spread more evenly across time as congestion increases.

The traffic mitigation needs anticipated at the time of the project opening with full occupancy and for the Year 2045 were combined into a summary of mitigation requirements and costs. The mitigation cost responsibility for the proposed development was estimated based on the percent of the increase in traffic from the existing condition to the Year 2045 that was attributed to the project generated trips.

**D. Definition of Deficiency and Significant Impact**

The following definitions of deficiencies and significant impacts have been developed in accordance with the City of Adelanto requirements.

**1. Definition of Deficiency**

The definition of an intersection deficiency has been obtained from the City of Adelanto General Plan. The General Plan states that peak hour intersection operations of Level of Service D or better are generally acceptable. Therefore, any intersection operating at Level of Service E or F will be considered deficient.

For freeway facilities, the Congestion Management Program controls the definition of deficiency for purposes of this study. The Congestion Management Program definition of deficiency is based on maintaining a Level of Service standard of Level of Service E or better, except where an existing Level of Service F condition is identified in the Congestion Management Program document (San Bernardino County Congestion Management Program Table 2-1). A Congestion Management Program deficiency is, therefore, defined as any freeway segment operating or projected to operate at Level of Service F, unless the segment is identified explicitly in the Congestion Management Program document.

The identification of a Congestion Management Program deficiency requires further analysis in satisfaction of Congestion Management Program requirements, including:

- Evaluation of the mitigation measures required to restore traffic operations to an acceptable level with respect to Congestion Management Program Level of Service standards.
- Calculation of the project share of new traffic on the impacted Congestion Management Program facility during peak hours of traffic.
- Estimation of the cost required to implement the improvements required to restore traffic operations to an acceptable Level of Service as described above.

This study incorporates each of these aspects for all locations where a Congestion Management Program deficiency is identified.

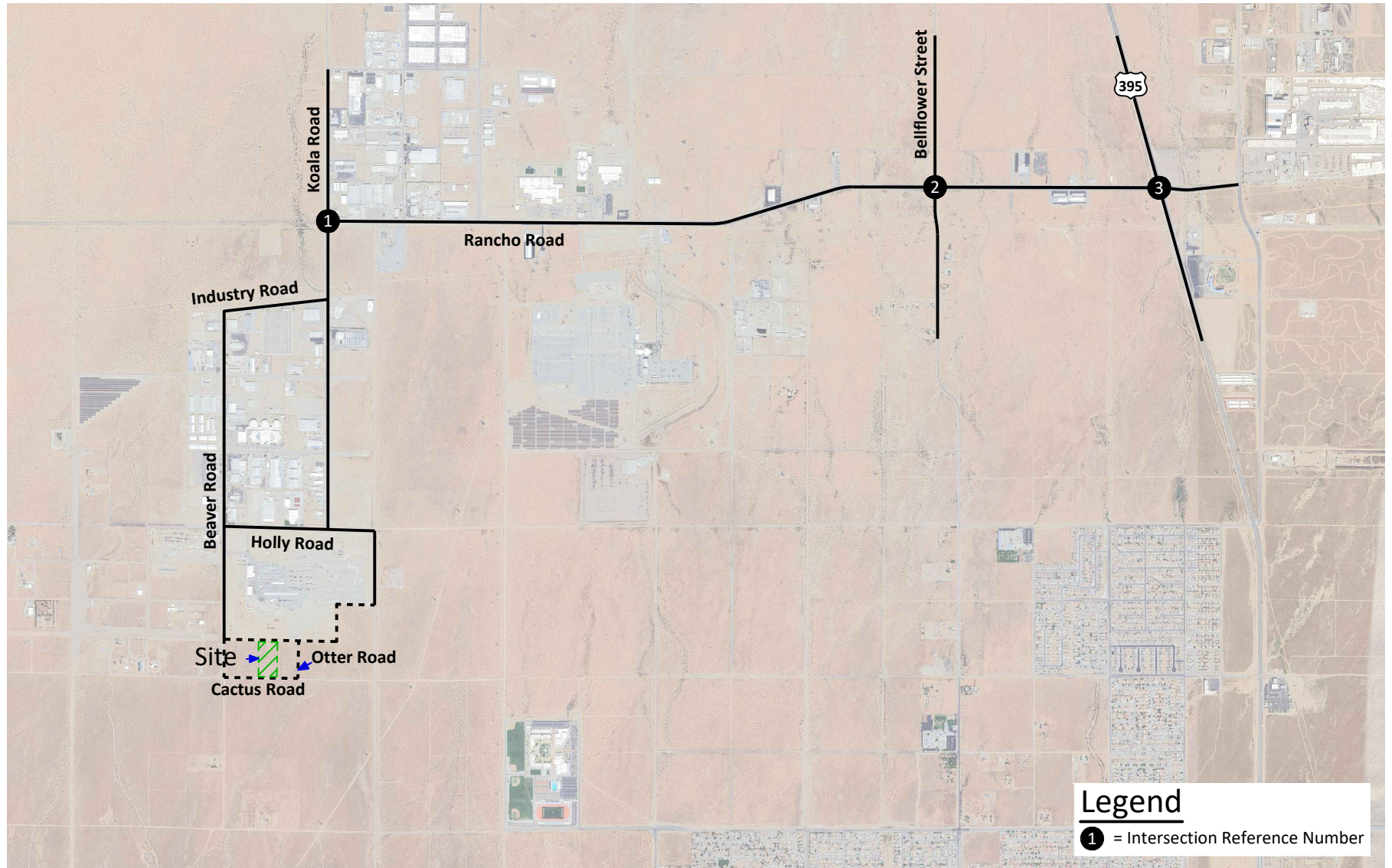
## 2. Definition of Significant Impact

The identification of significant impacts is a requirement of the California Environmental Quality Act. The City of Adelanto Plan and Circulation Element have been adopted in accordance with California Environmental Quality Act requirements, and any roadway improvements within the City of Adelanto that are consistent with these documents are not considered a significant impact, so long as the project contributes its “fair share” funding for improvements.

A traffic impact is considered significant if the project both: i) contributes measurable traffic to and ii) substantially and adversely changes the Level of Service at any off-site location projected to experience deficient operations under foreseeable cumulative conditions, where feasible improvements consistent with the City of Adelanto General Plan cannot be constructed.



Figure 1  
Project Location Map

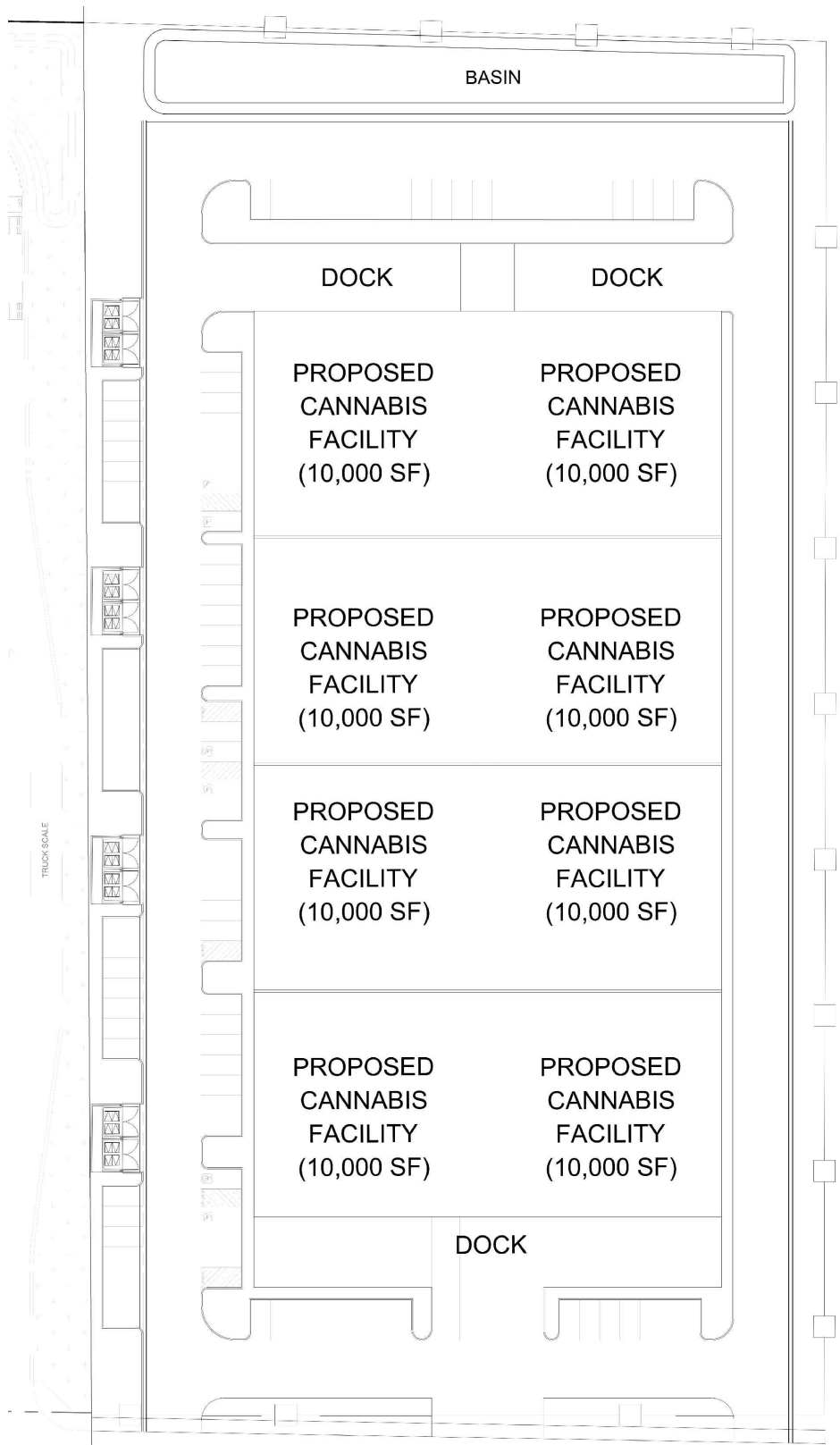


**Legend**

① = Intersection Reference Number



Figure 2  
Site Plan



## **II. EXISTING CONDITIONS**

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### **A. Existing Roadway System**

Figure 3 identifies the existing conditions for the study area roadways. The number of through lanes for existing roadways and the existing intersection controls are identified.

Regional access to the project site is mainly provided by the US-395. Local access is provided by various roadways in the vicinity of the site. The north-south roadways expected to provide local access include Koala Road, Bellflower Street, and US-395. The east-west roadway which will be most affected by the project is Rancho Road.

### **B. Existing Volumes**

Figure 4 depicts the existing average daily traffic volumes. The existing average daily traffic volumes were factored from peak hour counts (see Appendix B) obtained by Kunzman Associates using the following formula for each intersection leg:

$$\text{PM Peak Hour (Approach + Exit Volume)} \times 11.5 = \text{Daily Leg Volume.}$$

This is a conservative estimate and may over estimate the average daily traffic volumes.

Existing intersection traffic conditions were established through morning and evening peak period traffic counts obtained by Kunzman Associates from October 2023 and June 2024 (see Appendix B). The existing traffic volumes are shown in Appendix E. Explicit peak hour factors have been calculated using the data collected for this effort as well. The morning and evening peak hour traffic volumes were identified by counting the two-hour periods from 7:00 AM – 9:00 AM and 4:00 PM – 6:00 PM.

### **C. Existing Level of Service**

The Existing delay and Level of Service for the intersection in the vicinity of the project are shown in Table 1. The study area intersections currently operate at acceptable Levels of Service during the peak hours for existing traffic conditions. Existing delay worksheets are provided in Appendix E.

### **D. Planned Transportation Improvements and Relationship to General Plan**

The City of Adelanto General Plan Circulation Element is shown on Figure 5. Existing and future roadways are included in the Circulation Element of the

General Plan and are graphically depicted on Figure 5. This figure shows the nature and extent of arterial highways that are needed to adequately serve the ultimate development depicted by the Land Use Element of the General Plan. The City of Adelanto General Plan roadway cross-sections are illustrated on Figure 6.

Table 1

## Existing Intersection Delay and Level of Service

Intersection	Jurisdiction	Traffic Control <sup>3</sup>	Intersection Approach Lanes <sup>1</sup>												Peak Hour Delay-LOS <sup>2</sup>	
			Northbound			Southbound			Eastbound			Westbound			Morning	Evening
			L	T	R	L	T	R	L	T	R	L	T	R		
Koala Road (NS) at: Rancho Road (EW) - #1	City of Adelanto	AWS	0.5	0.5	1	0	<1>	0	0	<1>	0	0	<1>	0	9.0-A	8.2-A
Bellflower Street (NS) at: Rancho Road (EW) - #2	City of Adelanto	AWS	0.5	0.5	1	0.5	0.5	1	1	1.5	0.5	1	1.5	0.5	10.5-B	9.7-A
US-395 (NS) at: Rancho Road (EW) - #3	California Department of Transportation/City of Adelanto	TS	1	2	d	1	1.5	0.5	1	2	d	1	1.5	0.5	14.7-B	13.6-B

<sup>1</sup> When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.  
L = Left; T = Through; R = Right; <1> = Shared Left/Through/Right Lane; d = Defacto Right

<sup>2</sup> Delay and Level of Service has been calculated using the following analysis software: Vistro, Version 6.00-02. Per the Highway Capacity Manual, overall average intersection delay and Level of Service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and Level of Service for the worst individual movement (or movements sharing a single lane) are shown.

<sup>3</sup> AWS = All Way Stop; TS = Traffic Signal



Figure 3  
Existing Through Travel Lanes and Intersection Controls

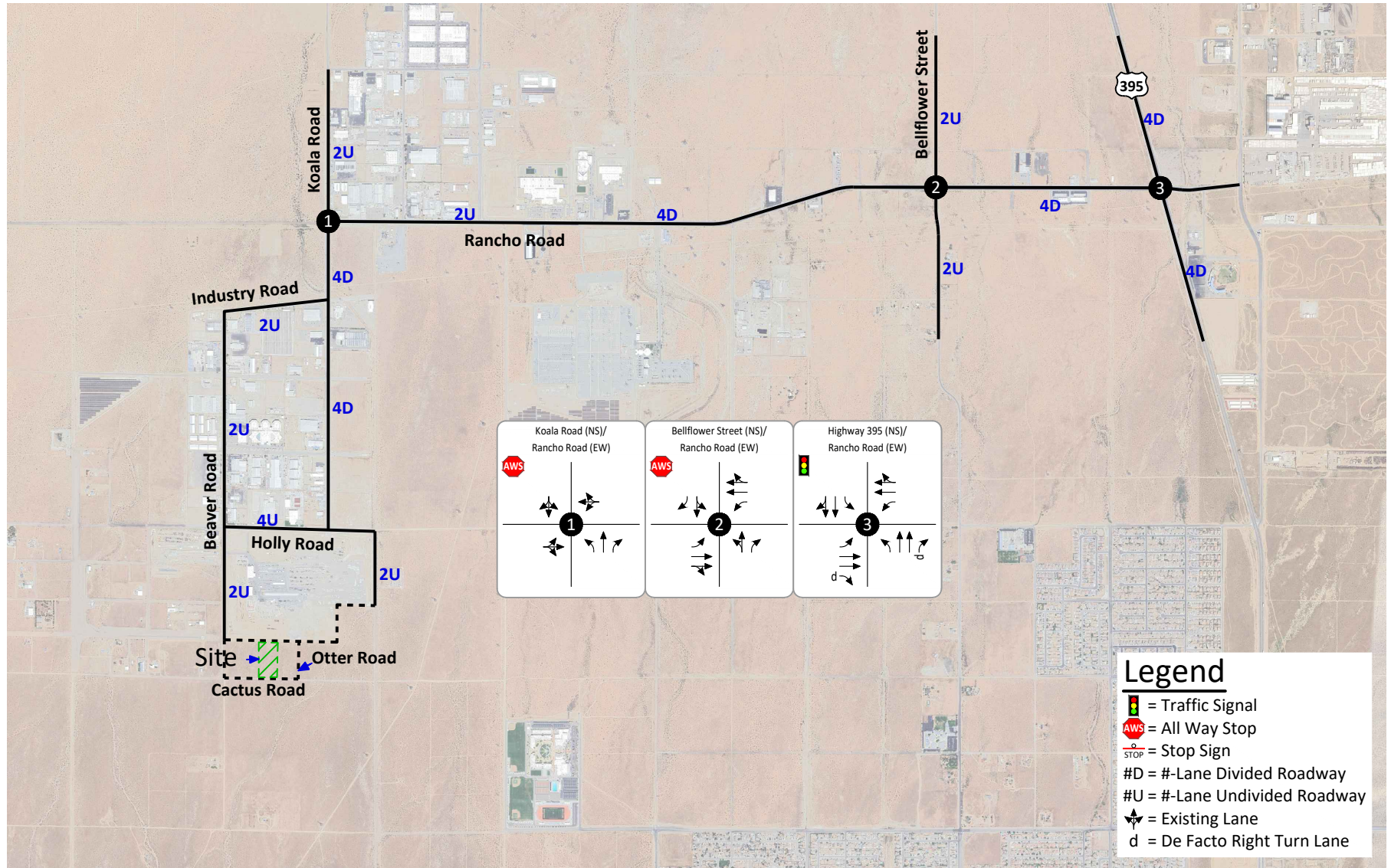




Figure 4  
Existing Average Daily Traffic Volumes

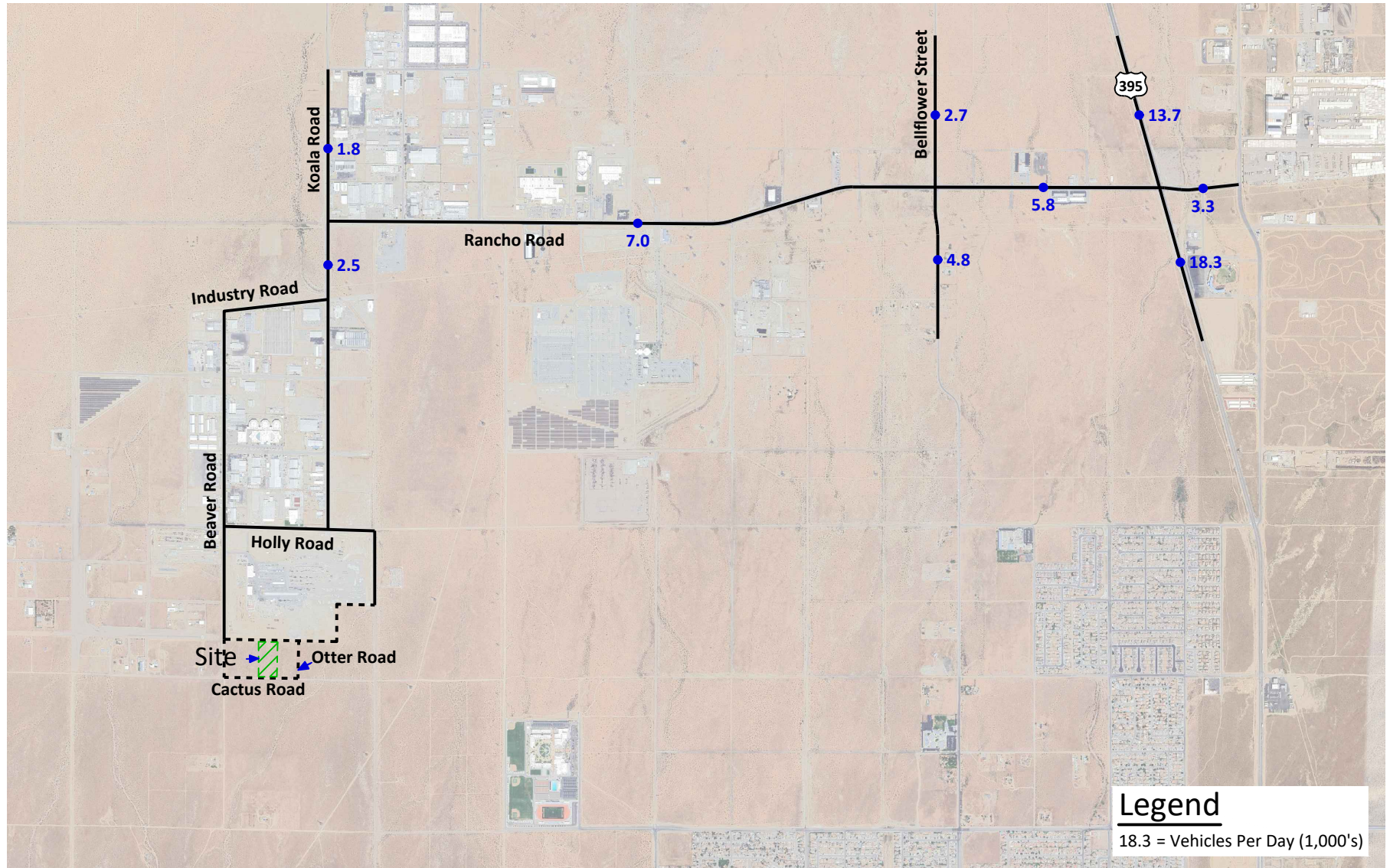


Figure 5  
City of Adelanto General Plan Circulation Element

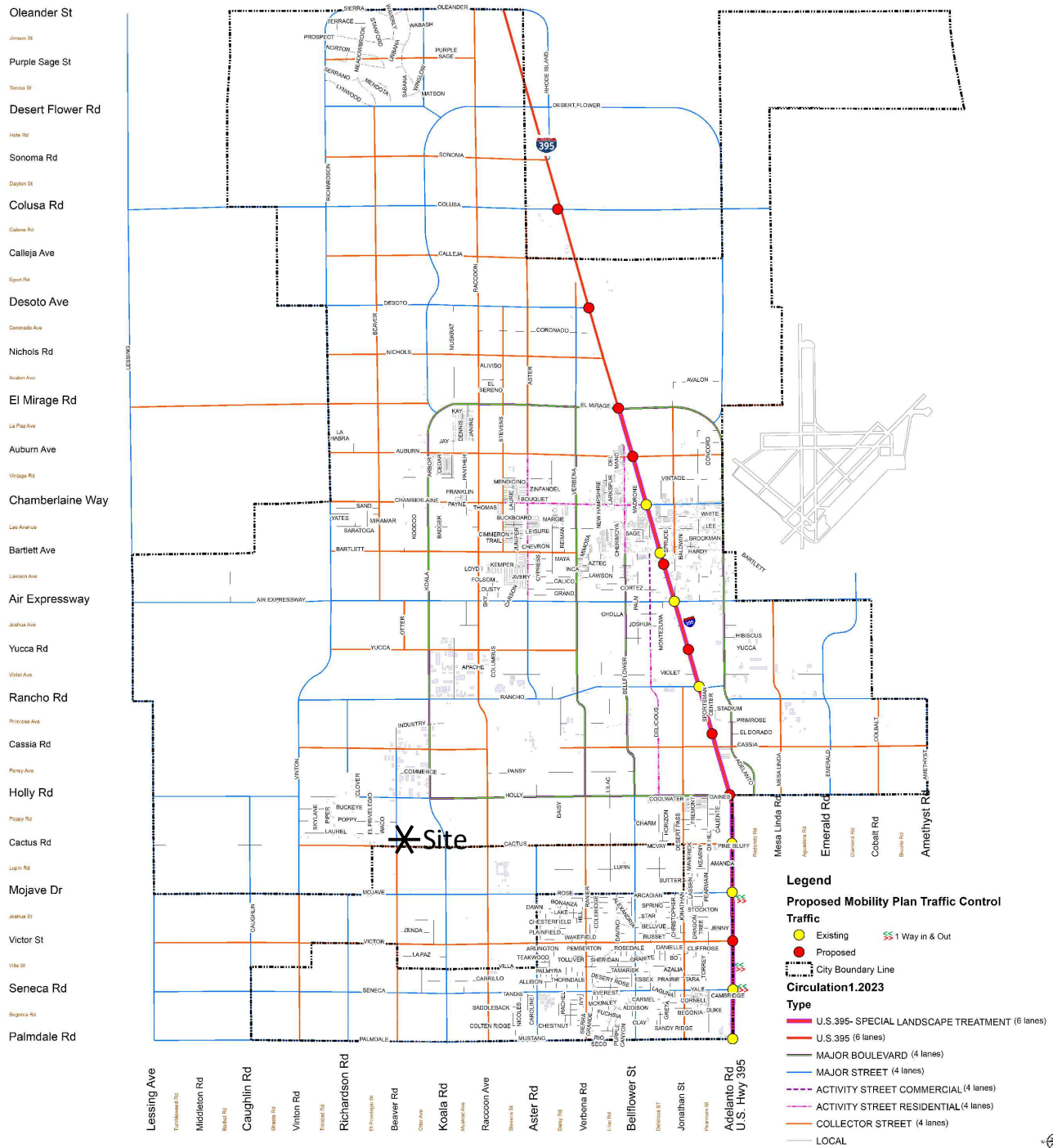
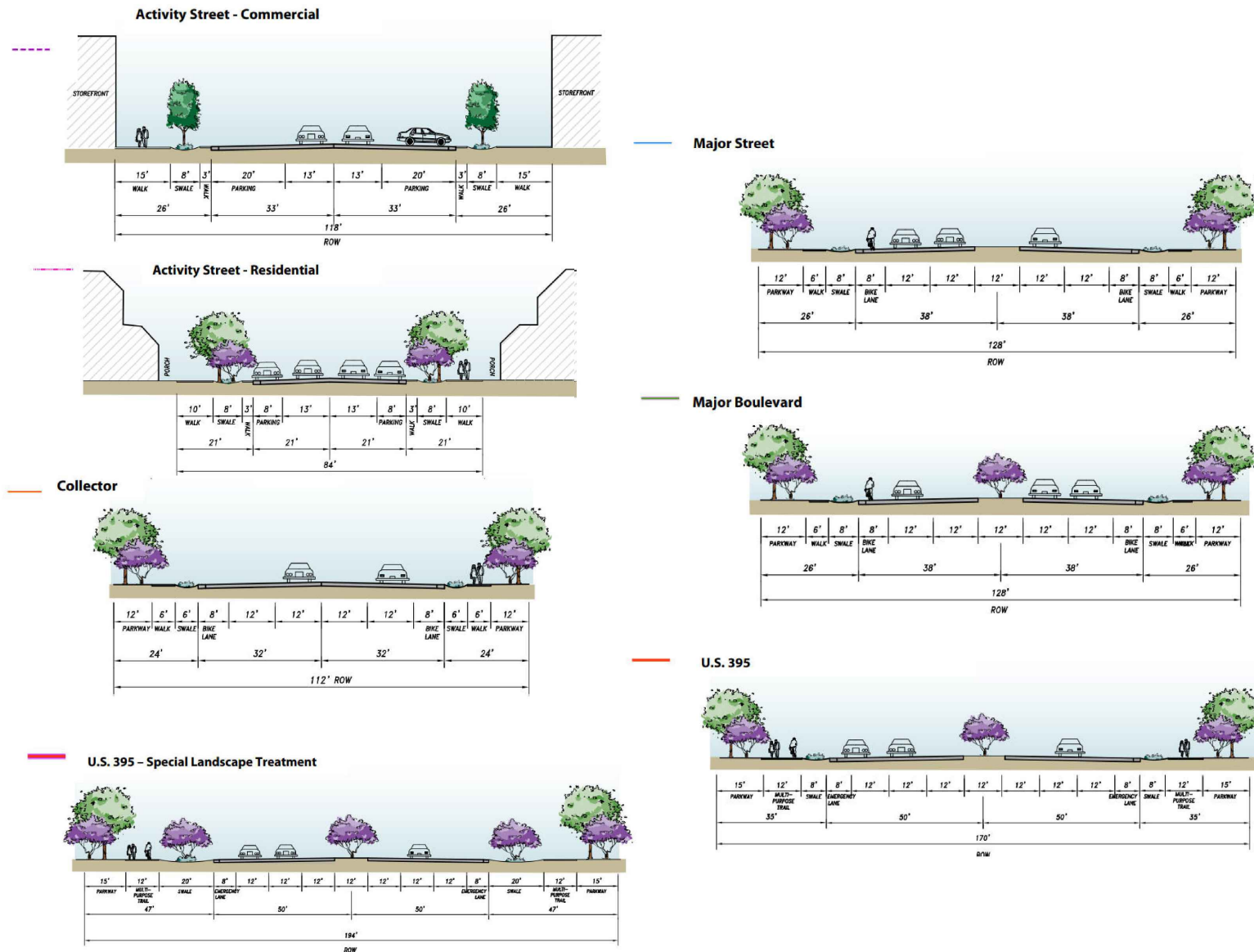




Figure 6  
City of Adelanto General Plan Roadway Cross-Sections



### **III. PROJECT TRAFFIC**

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#### **A. Project Description**

The proposed project is proposed to be developed with 80,000 square feet of the Marijuana Cultivation and Processing land use.

#### **B. Trip Generation**

The trips generated by the project are determined by multiplying an appropriate trip generation rate by the quantity of land use. Trip generation rates are based on the assumption that energy costs, the availability of roadway capacity, the availability of vehicles to drive, and life styles remain similar to what are known today. A major change in these variables may affect trip generation rates.

Trip generation rates were determined for daily traffic and morning peak hour inbound and outbound traffic, and evening peak hour inbound and outbound traffic for the proposed land uses. By multiplying the trip generation rates by the land use quantities, the traffic volumes are determined. The project trip generation is based upon rates obtained from the Institute of Transportation Engineers, Trip Generation Manual, 11th Edition, 2017.

As shown in Table 2, the proposed development is projected to generate a total of approximately 552 daily vehicle trips, 55 of which will occur during the morning peak hour and 51 of which will occur during the evening peak hour.

#### **C. Trip Distribution**

Figure 7 contains the directional distributions of the project trips for the proposed land uses.

To determine the trip distributions for the proposed project, peak hour traffic counts of the existing directional distribution of traffic for existing areas in the vicinity of the site, and other additional information on future development and traffic impacts in the area were reviewed.

#### **D. Trip Assignment**

Based on the identified trip generation and distributions, project average daily traffic volumes have been calculated and shown on Figure 8.

**Table 2**  
**Project Trip Generation<sup>1</sup>**

Land Use	Quantity	Units <sup>2</sup>	Peak Hour						Daily <sup>3</sup>
			Morning			Evening			
			Inbound	Outbound	Total	Inbound	Outbound	Total	
<u>Trip Generation Rates</u>									
Marijuana Cultivation and Processing (190)	1.000	TSF	0.64	0.05	0.69	0.18	0.46	0.64	6.90
<u>Trips Generated</u>									
Marijuana Cultivation and Processing (190)	80.000	TSF	51	4	55	14	37	51	552

<sup>1</sup> Source: Institute of Transportation Engineers, Trip Generation, 11th Edition, 2021, Land Use Category 190.

<sup>2</sup> TSF = Thousand Square Feet

<sup>3</sup> No daily trip generation rates are available. To remain conservative, daily trip generation has been calculated by multiplying the morning trip generation rates by a factor of ten.

Figure 7  
Project Trip Distribution

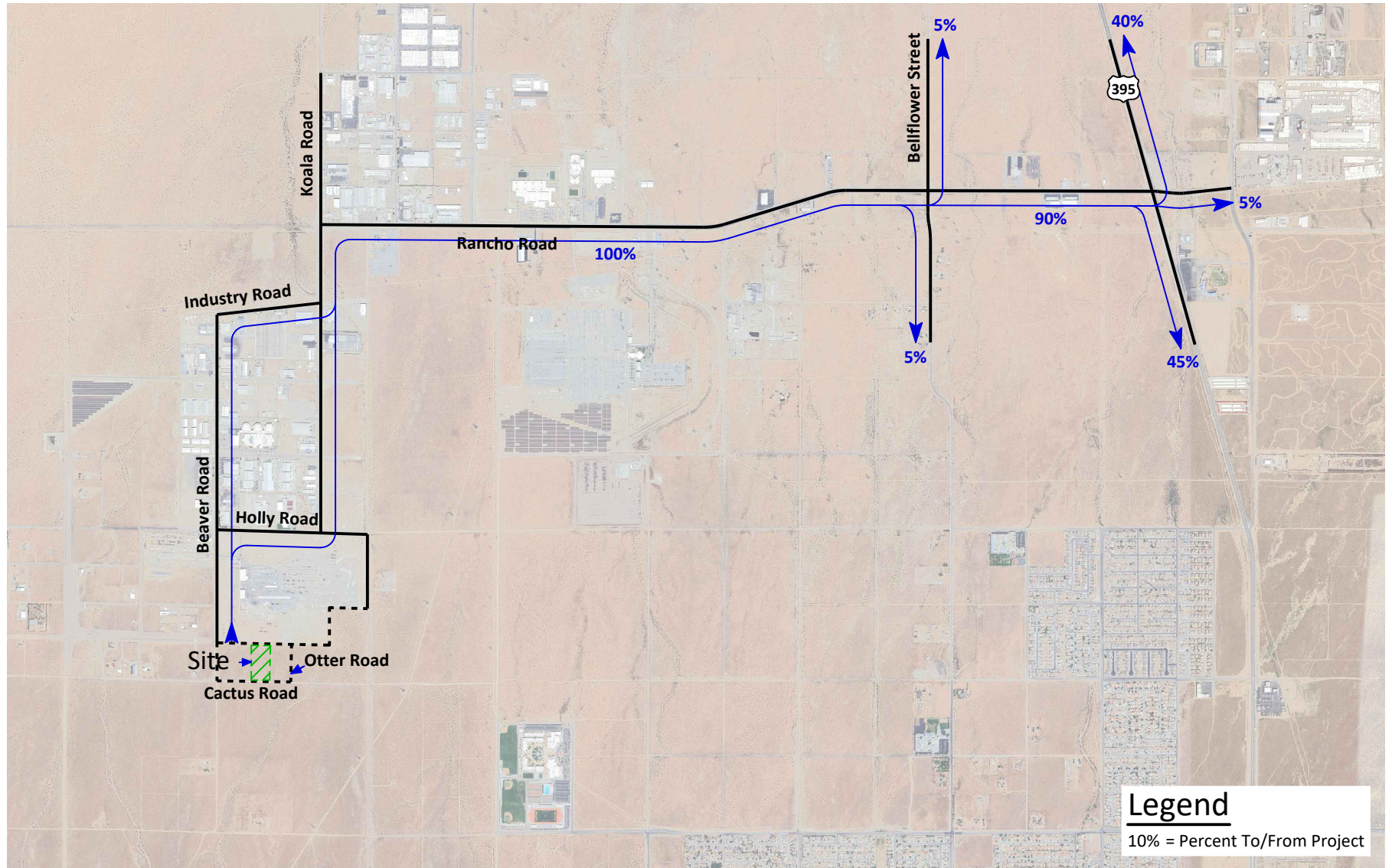
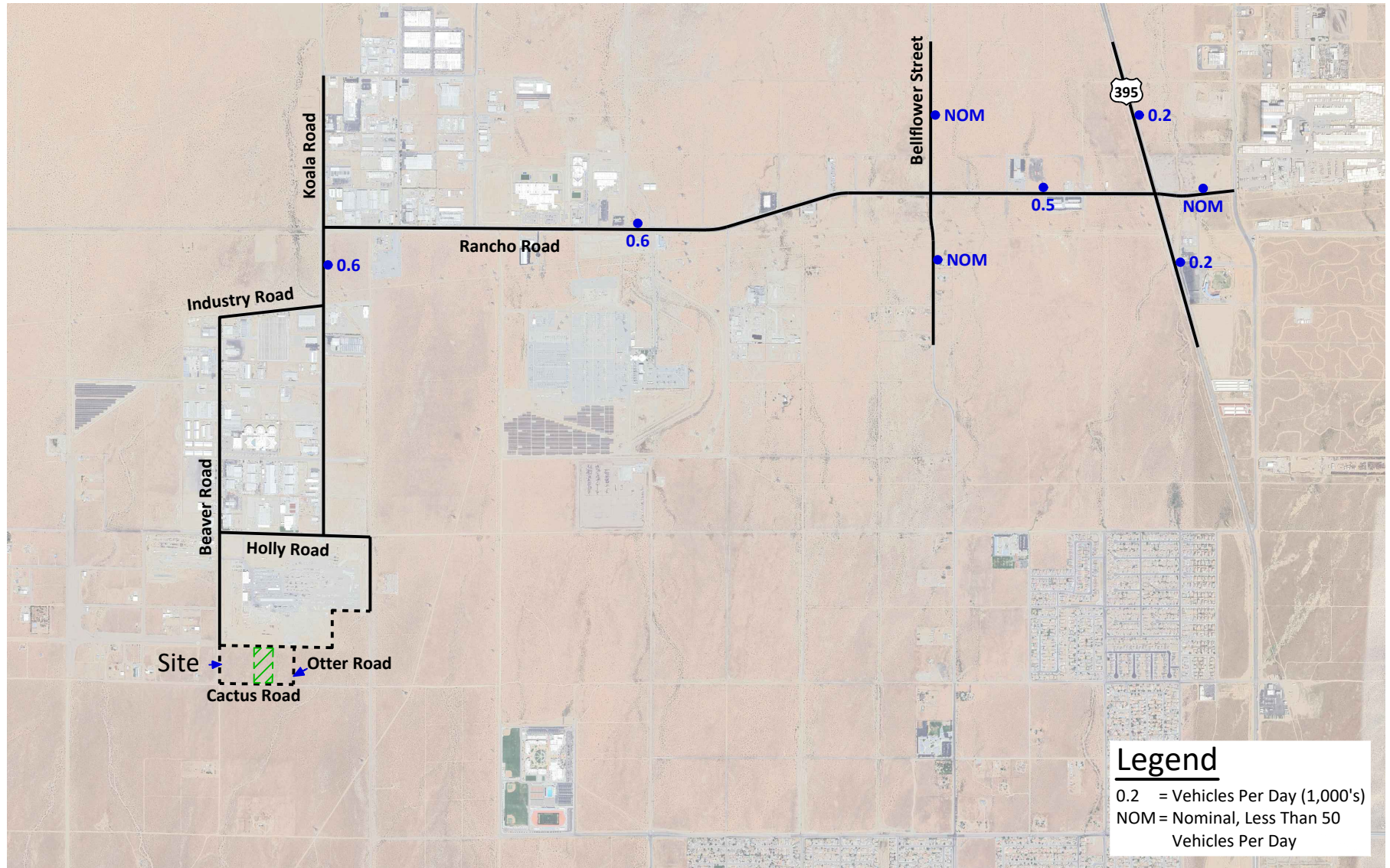




Figure 8  
Project Average Daily Traffic Volumes



## **IV. FUTURE CONDITIONS**

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### **A. Future Volumes**

As described within Section I.C., the Year 2045 average daily traffic volume forecasts with the project are developed using a growth increment process based on volumes predicted by the SBTAM traffic model Year 2016 and Year 2040 traffic models. The growth increment for Year 2040 on each roadway segment is the increase in SBTAM traffic model volumes from existing Year 2023 to Year 2040. The final Year 2045 roadway segment volume used for analysis purposes is then determined by adding the Year 2040 growth increment volume to the existing counted volume.

The Opening Year (2025) traffic projections have been interpolated between Year 2040 traffic volumes and existing traffic volumes utilizing a portion of the growth increment (see Section I.C.). Project traffic volumes for all future projections were estimated using the manual approach.

### **B. Average Daily Traffic Volumes**

#### **1. Existing Plus Project**

The average daily traffic volumes for Existing Plus Project traffic conditions have been determined. Existing Plus Project average daily traffic volumes are shown on Figure 9.

#### **2. Opening Year (2025) Without Project**

The average daily traffic volumes for Opening Year (2025) Without Project traffic conditions have been determined as described above using the growth interpolation process (see Section I.C.). Opening Year (2025) Without Project average daily traffic volumes are shown on Figure 10.

#### **3. Opening Year (2025) With Project**

The average daily traffic volumes for Opening Year (2025) With Project traffic conditions have been determined as described above using the volume addition process (see Section I.C.). Opening Year (2025) With Project average daily traffic volumes are shown on Figure 11.

#### **4. Year 2045 Without Project**

The average daily traffic volumes for Year 2045 Without Project traffic conditions have been determined as described above using the growth

increment process (see Section I.C). Year 2045 Without Project average daily traffic volumes are shown on Figure 12.

5. Year 2045 With Project

The average daily traffic volumes for Year 2045 With Project traffic conditions have been determined as described above using the volume addition process (see Section I.C). Year 2045 With Project average daily traffic volumes are shown on Figure 13.

**C. Future Level of Service**

1. Existing Plus Project

The Existing Plus Project delay and Level of Service for the study area roadway network are shown in Table 3. Existing Plus Project delay calculation worksheets are provided in Appendix E. Existing Plus Project morning and evening peak hour intersection turning movement volumes are shown In Appendix E, respectively.

For Existing Plus Project traffic conditions the study area intersections are projected to operate at acceptable Levels of Service during the peak hours.

2. Opening Year (2025) Without Project

The Opening Year (2025) Without Project delay and Level of Service for the study area roadway network without the proposed project are shown in Table 4. Opening Year (2025) Without Project delay calculation worksheets are provided in Appendix E. Opening Year (2025) Without Project morning and evening peak hour intersection turning movement volumes are shown in Appendix E.

For Opening Year (2025) Without Project traffic conditions, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours.

3. Opening Year (2025) With Project

The Opening Year (2025) With Project delay and Level of Service for the study area roadway network are shown in Table 5 without and with improvements. Opening Year (2025) With Project delay calculation worksheets are provided in Appendix E. Opening Year (2025) With Project morning and evening peak hour intersection turning movement volumes are shown in Appendix E.

For Opening Year (2025) With Project traffic conditions, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours.

4. Year 2045 Without Project

The Year 2045 without project delay and Level of Service for the study area roadway network without the proposed project are shown in Table 6 without and with improvements. Year 2045 Without Project delay calculation worksheets are provided in Appendix E. Year 2045 Without Project morning and evening peak hour intersection turning movement volumes are shown in Appendix E.

For Year 2045 Without Project traffic conditions, traffic conditions the study area intersections are projected to operate at acceptable Levels of Service during the peak hours.

5. Year 2045 With Project

The Year 2045 With Project delay and Level of Service for the study area roadway network are shown in Table 7 without and with improvements. Year 2045 With Project delay calculation worksheets are provided in Appendix E. Year 2045 With Project morning and evening peak hour intersection turning movement volumes are shown in Appendix E.

For Year 2045 With Project traffic conditions, traffic conditions the study area intersections are projected to operate at acceptable Levels of Service during the peak hours.



Table 3

## Existing Plus Project Intersection Delay and Level of Service

Intersection	Jurisdiction	Traffic Control <sup>3</sup>	Intersection Approach Lanes <sup>1</sup>												Peak Hour Delay-LOS <sup>2</sup>	
			Northbound			Southbound			Eastbound			Westbound			Morning	Evening
			L	T	R	L	T	R	L	T	R	L	T	R		
Koala Road (NS) at: Rancho Road (EW) - #1	City of Adelanto	AWS	0.5	0.5	1	0	<1>	0	0	<1>	0	0	<1>	0	9.6-A	8.4-A
Bellflower Street (NS) at: Rancho Road (EW) - #2	City of Adelanto	AWS	0.5	0.5	1	0.5	0.5	1	1	1.5	0.5	1	1.5	0.5	11.0-B	9.9-A
US-395 (NS) at: Rancho Road (EW) - #3	California Department of Transportation/City of Adelanto	TS	1	2	d	1	1.5	0.5	1	2	d	1	1.5	0.5	15.0-B	13.9-B

<sup>1</sup> When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.  
L = Left; T = Through; R = Right; <1> = Shared Left/Through/Right Lane; d = Defacto Right

<sup>2</sup> Delay and Level of Service has been calculated using the following analysis software: Vistro, Version 6.00-02. Per the Highway Capacity Manual, overall average intersection delay and Level of Service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and Level of Service for the worst individual movement (or movements sharing a single lane) are shown.

<sup>3</sup> AWS = All Way Stop; TS = Traffic Signal

Table 4

## Opening Year (2025) Without Project Intersection Delay and Level of Service

Intersection	Jurisdiction	Traffic Control <sup>3</sup>	Intersection Approach Lanes <sup>1</sup>												Peak Hour Delay-LOS <sup>2</sup>	
			Northbound			Southbound			Eastbound			Westbound			Morning	Evening
			L	T	R	L	T	R	L	T	R	L	T	R		
Koala Road (NS) at: Rancho Road (EW) - #1	City of Adelanto	AWS	0.5	0.5	1	0	<1>	0	0	<1>	0	0	<1>	0	9.0-A	8.3-A
Bellflower Street (NS) at: Rancho Road (EW) - #2	City of Adelanto	AWS	0.5	0.5	1	0.5	0.5	1	1	1.5	0.5	1	1.5	0.5	10.6-B	9.7-A
US-395 (NS) at: Rancho Road (EW) - #3	California Department of Transportation/City of Adelanto	TS	1	2	d	1	1.5	0.5	1	2	d	1	1.5	0.5	14.5-B	13.3-B

<sup>1</sup> When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.  
L = Left; T = Through; R = Right; <1> = Shared Left/Through/Right Lane; d = Defacto Right

<sup>2</sup> Delay and Level of Service has been calculated using the following analysis software: Vistro, Version 6.00-02. Per the Highway Capacity Manual, overall average intersection delay and Level of Service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and Level of Service for the worst individual movement (or movements sharing a single lane) are shown.

<sup>3</sup> AWS = All Way Stop; TS = Traffic Signal

Table 5

## Opening Year (2025) With Project Intersection Delay and Level of Service

Intersection	Jurisdiction	Traffic Control <sup>3</sup>	Intersection Approach Lanes <sup>1</sup>												Peak Hour Delay-LOS <sup>2</sup>	
			Northbound			Southbound			Eastbound			Westbound			Morning	Evening
			L	T	R	L	T	R	L	T	R	L	T	R		
Koala Road (NS) at: Rancho Road (EW) - #1	City of Adelanto	AWS	0.5	0.5	1	0	<1>	0	0	<1>	0	0	<1>	0	9.6-A	8.5-A
Bellflower Street (NS) at: Rancho Road (EW) - #2	City of Adelanto	AWS	0.5	0.5	1	0.5	0.5	1	1	1.5	0.5	1	1.5	0.5	11.1-B	10.0-A
US-395 (NS) at: Rancho Road (EW) - #3	California Department of Transportation/City of Adelanto	TS	1	2	d	1	1.5	0.5	1	2	d	1	1.5	0.5	14.8-B	13.7-B

<sup>1</sup> When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.  
L = Left; T = Through; R = Right; <1> = Shared Left/Through/Right Lane; d = Defacto Right

<sup>2</sup> Delay and Level of Service has been calculated using the following analysis software: Vistro, Version 6.00-02. Per the Highway Capacity Manual, overall average intersection delay and Level of Service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and Level of Service for the worst individual movement (or movements sharing a single lane) are shown.

<sup>3</sup> AWS = All Way Stop; TS = Traffic Signal

Table 6

## General Plan Buildout Year (2045) Without Project Intersection Delay and Level of Service

Intersection	Jurisdiction	Traffic Control <sup>3</sup>	Intersection Approach Lanes <sup>1</sup>												Peak Hour Delay-LOS <sup>2</sup>	
			Northbound			Southbound			Eastbound			Westbound			Morning	Evening
			L	T	R	L	T	R	L	T	R	L	T	R		
Koala Road (NS) at: Rancho Road (EW) - #1	City of Adelanto	AWS	0.5	0.5	1	0	<1>	0	0	<1>	0	0	<1>	0	9.6-A	9.4-A
Bellflower Street (NS) at: Rancho Road (EW) - #2	City of Adelanto	AWS	0.5	0.5	1	0.5	0.5	1	1	1.5	0.5	1	1.5	0.5	11.2-B	10.1-B
US-395 (NS) at: Rancho Road (EW) - #3	California Department of Transportation/City of Adelanto	TS	1	2	d	1	1.5	0.5	1	2	d	1	1.5	0.5	22.8-C	18.2-B

<sup>1</sup> When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.  
L = Left; T = Through; R = Right; <1> = Shared Left/Through/Right Lane; d = Defacto Right

<sup>2</sup> Delay and Level of Service has been calculated using the following analysis software: Vistro, Version 6.00-02. Per the Highway Capacity Manual, overall average intersection delay and Level of Service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and Level of Service for the worst individual movement (or movements sharing a single lane) are shown.

<sup>3</sup> AWS = All Way Stop; TS = Traffic Signal

Table 7

## General Plan Buildout Year (2045) With Project Intersection Delay and Level of Service

Intersection	Jurisdiction	Traffic Control	Intersection Approach Lanes <sup>1</sup>												Peak Hour Delay-LOS <sup>2</sup>	
			Northbound			Southbound			Eastbound			Westbound			Morning	Evening
			L	T	R	L	T	R	L	T	R	L	T	R		
Koala Road (NS) at: Rancho Road (EW) - #1	City of Adelanto	AWS	0.5	0.5	1	0	<1>	0	0	<1>	0	0	<1>	0	10.3-B	9.6-A
Bellflower Street (NS) at: Rancho Road (EW) - #2	City of Adelanto	AWS	0.5	0.5	1	0.5	0.5	1	1	1.5	0.5	1	1.5	0.5	11.7-B	10.3-B
US-395 (NS) at: Rancho Road (EW) - #3	California Department of Transportation/City of Adelanto	TS	1	2	d	1	1.5	0.5	1	2	d	1	1.5	0.5	24.5-C	19.0-B

<sup>1</sup> When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; <1> = Shared Left/Through/Right Lane; d = Defacto Right

<sup>2</sup> Delay and Level of Service has been calculated using the following analysis software: Vistro, Version 6.00-02. Per the Highway Capacity Manual, overall average intersection delay and Level of Service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and Level of Service for the worst individual movement (or movements sharing a single lane) are shown.

<sup>3</sup> AWS = All Way Stop; TS = Traffic Signal

Figure 9  
Existing Plus Project Average Daily Traffic Volumes

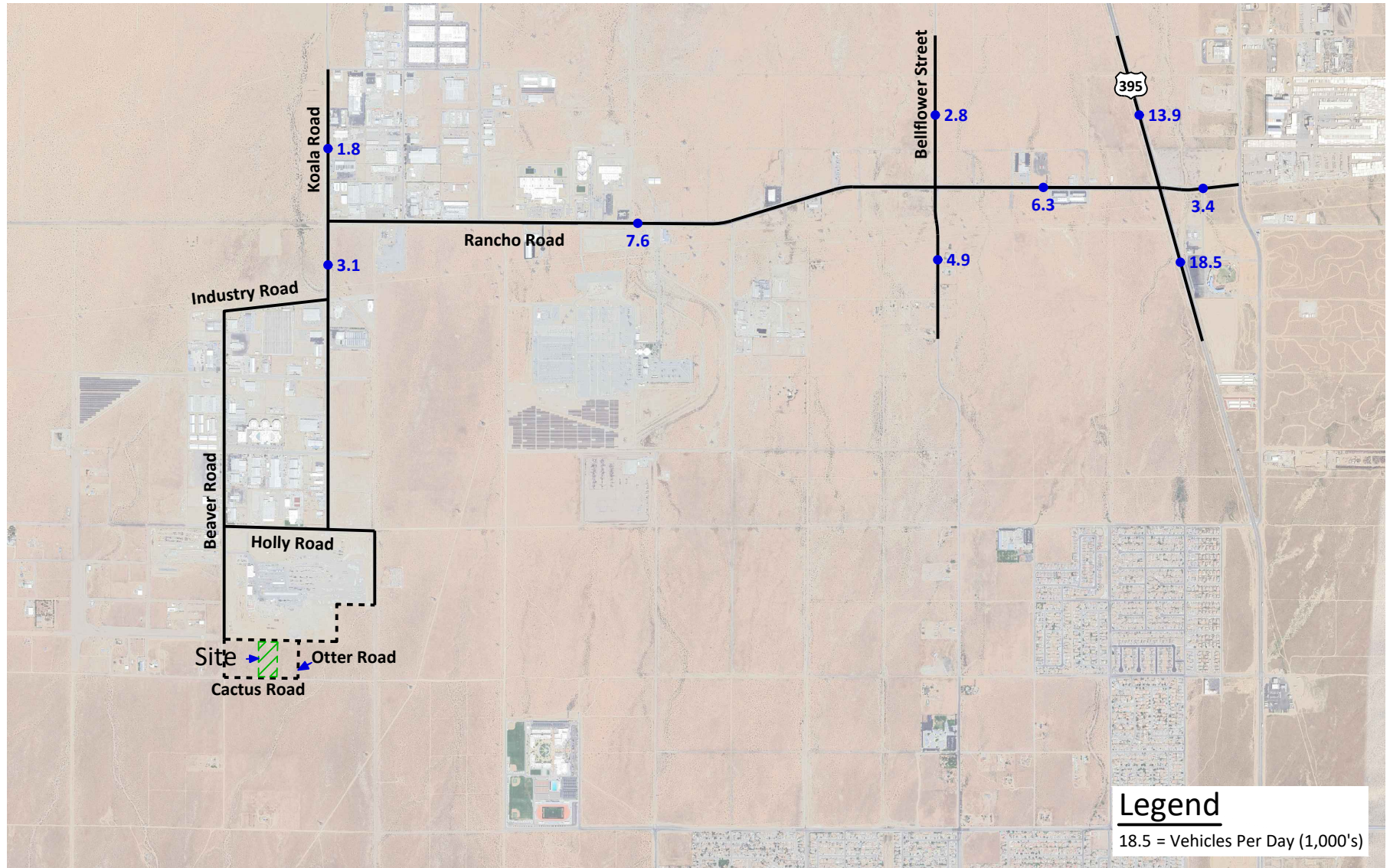




Figure 10  
Opening Year (2025) Without Project  
Average Daily Traffic Volumes

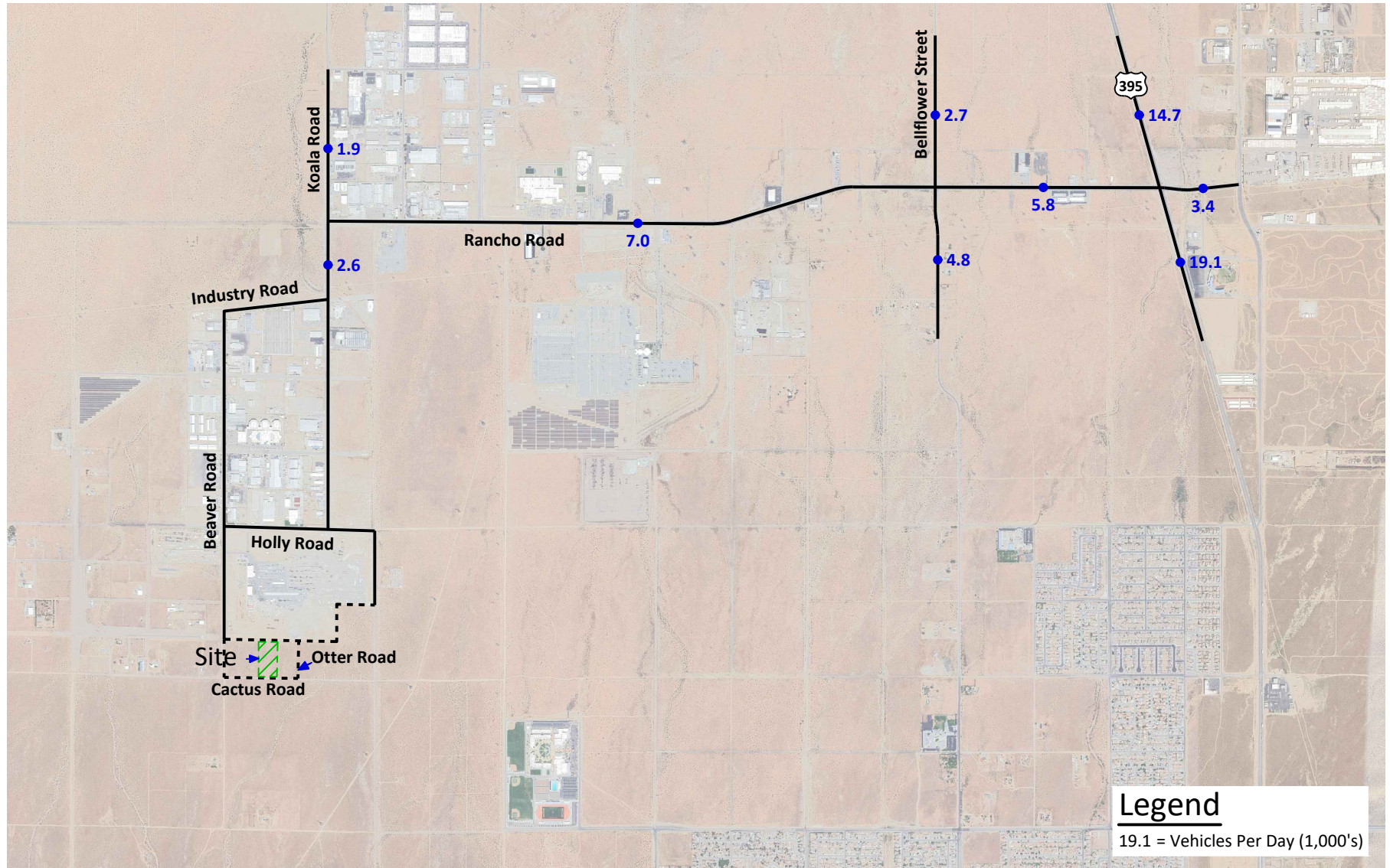




Figure 11  
Opening Year (2025) With Project  
Average Daily Traffic Volumes

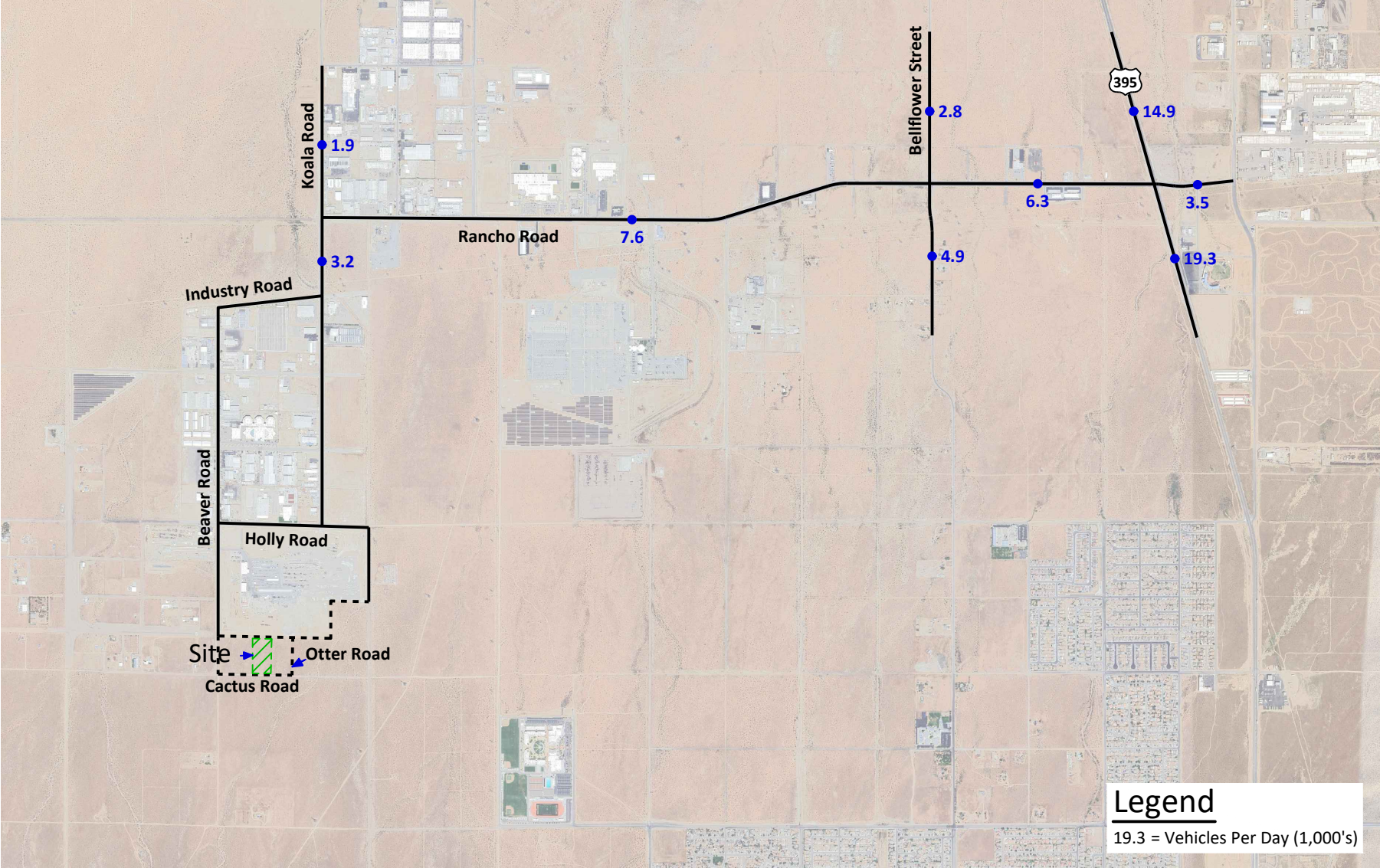




Figure 12  
Opening Year (2045) Without Project  
Average Daily Traffic Volumes

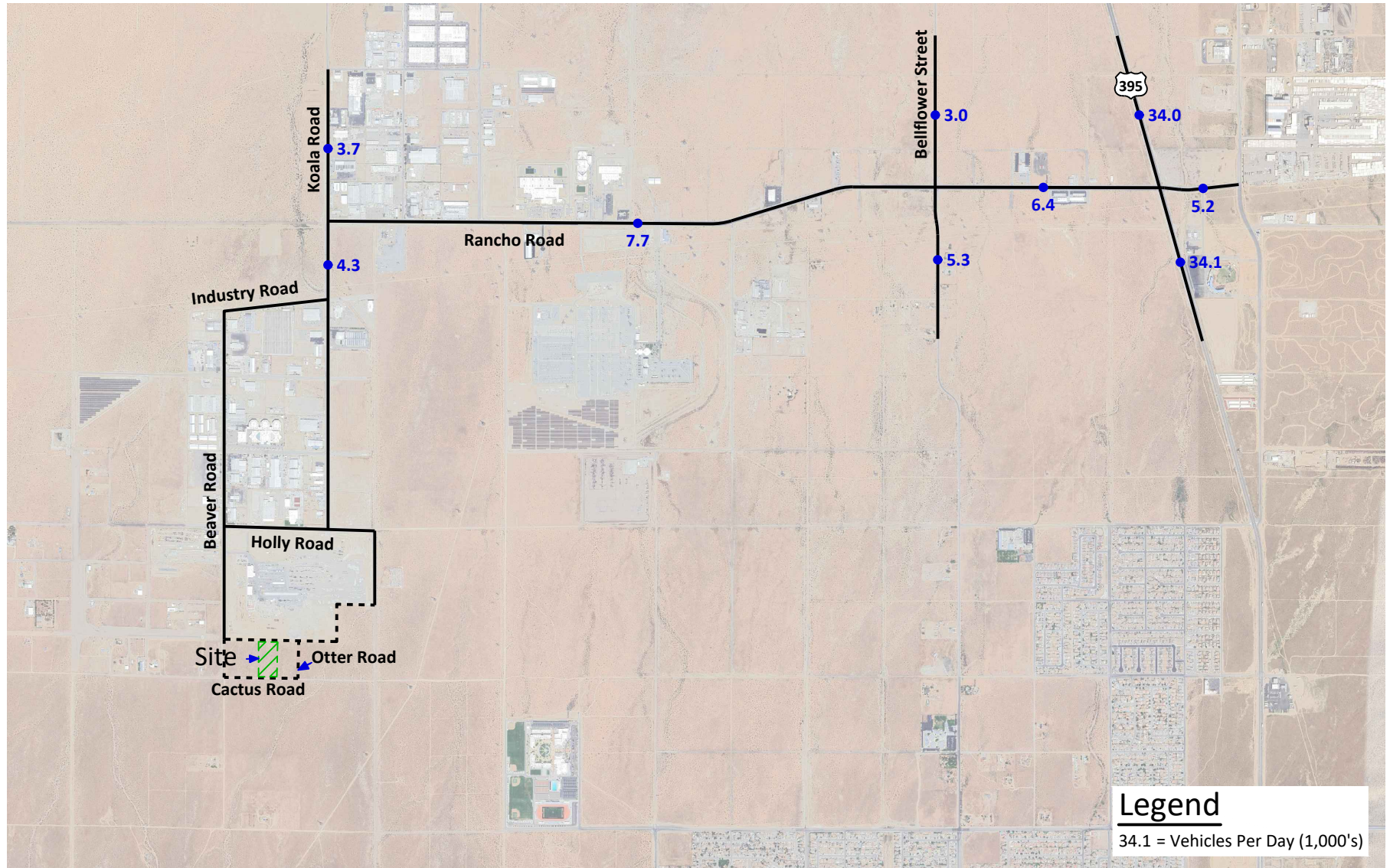
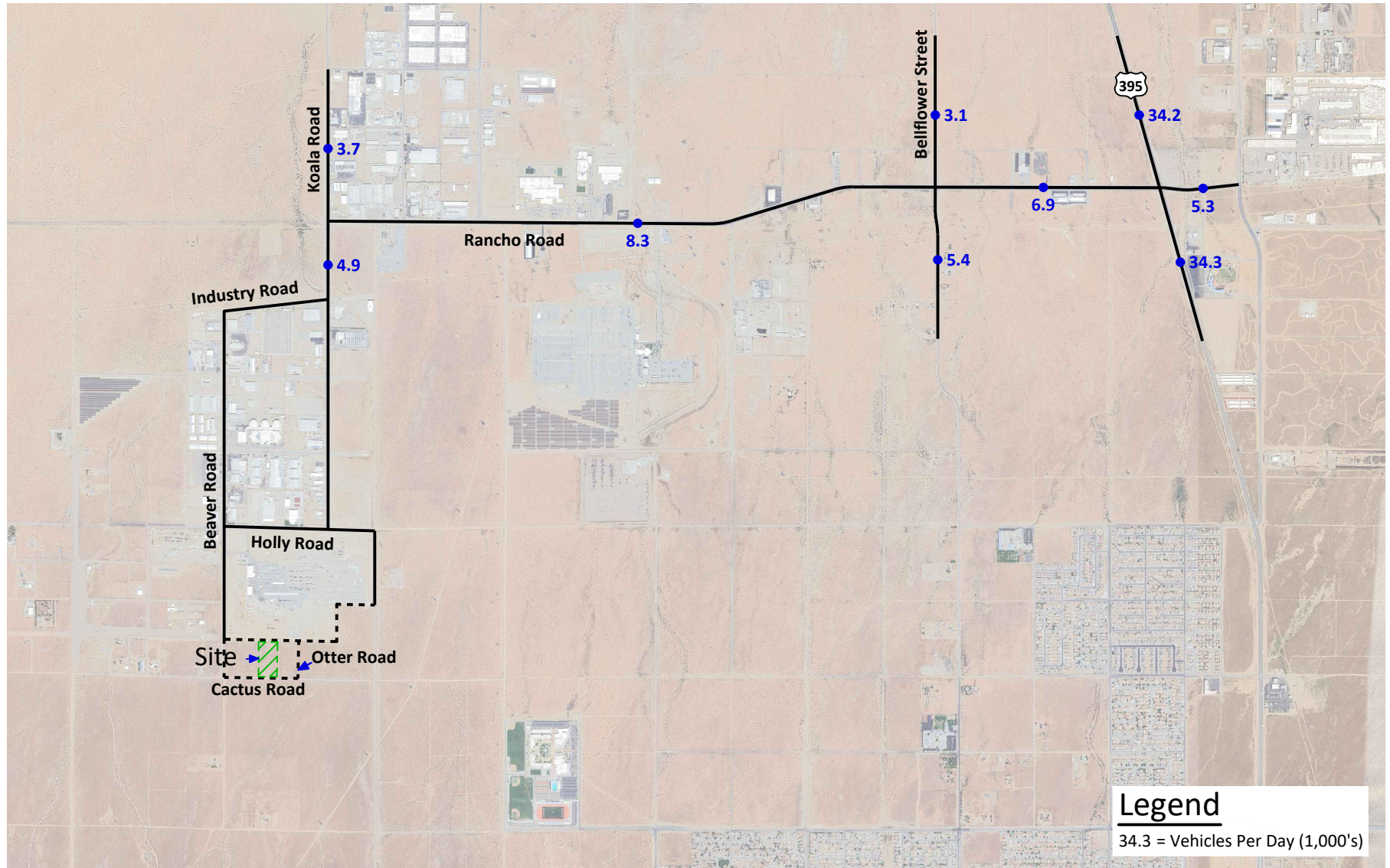




Figure 13  
Opening Year (2045) With Project  
Average Daily Traffic Volumes



## **V. CONCLUSIONS AND RECOMMENDATIONS**

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### **A. Summary**

The traffic issues related to the proposed land uses and development have been evaluated in the context of the California Environmental Quality Act.

The City of Adelanto is the lead agency responsible for preparation of the traffic impact analysis, in accordance with California Environmental Quality Act authorizing legislation. This report analyzes traffic impacts for the anticipated opening date with full occupancy of the development in Year 2025, at which time it will be generating trips at its full potential, and for the current traffic forecast year, which is the Year 2045.

The average daily traffic volume forecasts have been determined using the growth increment approach on the San Bernardino Transportation Analysis Model (SBTAM) traffic model Year 2016 and Year 2040 average daily traffic volume forecasts (see Appendix C). Traffic model plots are included in Appendix D. This difference defines the growth in traffic over the 24 year period. The incremental growth in average daily traffic volume has been factored to reflect the forecast growth between Year 2023 and Year 2040. For this purpose, linear growth between the Year 2016 base condition and the forecast Year 2040 condition was assumed. Since the increment between Year 2023 and Year 2040 is 16 years of the 24 year time frame, a factor of 0.67 (i.e.,  $16/24$ ) was used.

The Year 2045 without project daily and peak hour directional roadway segment volume forecasts have been determined using the growth increment approach on the SBTAM traffic model Year 2016 and Year 2040 peak hour volumes. The growth increment calculation worksheets are shown in Appendix C. Current peak hour intersection approach/departure data is a necessary input to this approach. The existing traffic count data serves as both the starting point for the refinement process, and also provides important insight into current travel patterns and the relationship between peak hour and daily traffic conditions. The initial turning movement proportions are estimated based upon the relationship of each approach leg's forecast traffic volume to the other legs forecast volumes at the intersection. The initial estimate of turning movement proportions is then entered into a spreadsheet program consistent with the National Cooperative Highway Research Program Report 255. A linear programming algorithm is used to calculate individual turning movements that match the known directional roadway segment volumes computed in the previous step. This program computes a likely set of intersection turning movements from intersection approach counts and the initial turning proportions from each approach leg.

The Opening Year (2035) traffic volumes have been interpolated from the Year 2040 traffic volumes based upon a portion of the future growth increment.

Year 2045 traffic volumes have also been interpolated from the Year 2040 traffic volumes based upon a portion of the future growth increment. Project traffic is then added to the new future base volumes. Quality control checks and forecast adjustments were performed as necessary to ensure that all future traffic volume forecasts reflect a minimum of 10% growth over existing traffic volumes. The result of this traffic forecasting procedure is a series of traffic volumes suitable for traffic operations analysis.

## **B. Existing Conditions**

Regional access to the project site is mainly provided by the US-395. Local access is provided by various roadways in the vicinity of the site. The north-south roadways expected to provide local access include Koala Road, Bellflower Street, and US-395. The east-west roadway which will be most affected by the project is Rancho Road.

The existing delay and Level of Service for the intersection in the vicinity of the project are shown in Table 1. The study area intersections currently operate at acceptable Levels of Service during the peak hours for existing traffic conditions. Existing delay worksheets are provided in Appendix E.

## **C. Project Traffic**

The trips generated by the project are determined by multiplying an appropriate trip generation rate by the quantity of land use. Trip generation rates are based on the assumption that energy costs, the availability of roadway capacity, the availability of vehicles to drive, and life styles remain similar to what are known today. A major change in these variables may affect trip generation rates.

Trip generation rates were determined for daily traffic and morning peak hour inbound and outbound traffic, and evening peak hour inbound and outbound traffic for the proposed land uses. By multiplying the trip generation rates by the land use quantities, the traffic volumes are determined. The project trip generation is based upon rates obtained from the Institute of Transportation Engineers, Trip Generation Manual, 11th Edition, 2017.

As shown in Table 2, the proposed development is projected to generate a total of approximately 552 daily vehicle trips, 55 of which will occur during the morning peak hour and 51 of which will occur during the evening peak hour.

Figures 7 and 8 contain the directional distributions of the project trips for the proposed land uses.

To determine the trip distributions for the proposed project, peak hour traffic counts of the existing directional distribution of traffic for existing areas in the vicinity of the site, and other additional information on future development and traffic impacts in the area were reviewed.

#### **D. Future Conditions**

An Existing Plus Project, Opening Year (2025), and Year 2045 analysis are included in this report. The Existing Plus Project delay and Level of Service for the study area roadway network are shown in Table 3. The Opening Year (2025) Without Project delay and Level of Service for the study area roadway network are shown in Table 4. The Opening Year (2025) With Project Phase I delay and Level of Service for the study area roadway network are shown in Table 5. The Year 2045 without project delay and Level of Service for the study area roadway network are shown in Table 6 without and with improvements. The Year 2045 With Project delay and Level of Service for the study area roadway network are shown in Table 7 without and with improvements.

For Existing Plus Project traffic conditions the study area intersections are projected to operate at acceptable Levels of Service during the peak hours.

For Opening Year (2025) Without Project traffic conditions, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours.

For Opening Year (2025) With Project traffic conditions, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours.

For Year 2045 Without Project traffic conditions, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours.

For Year 2045 With Project traffic conditions, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours.

#### **E. Recommendations**

Site-specific circulation and access recommendations are depicted on Figure 14.

1. On-Site Improvements

The project site should provide sufficient parking spaces to meet City of Adelanto parking code requirements in order to service on-site parking demand.

On-site traffic signing and striping should be implemented in conjunction with detailed construction plans for the project.

Sight distance at each project access should be reviewed with respect to California Department of Transportation/City of Adelanto standards in conjunction with the preparation of final grading, landscaping, and street improvement plans.

2. Off-Site Improvements

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

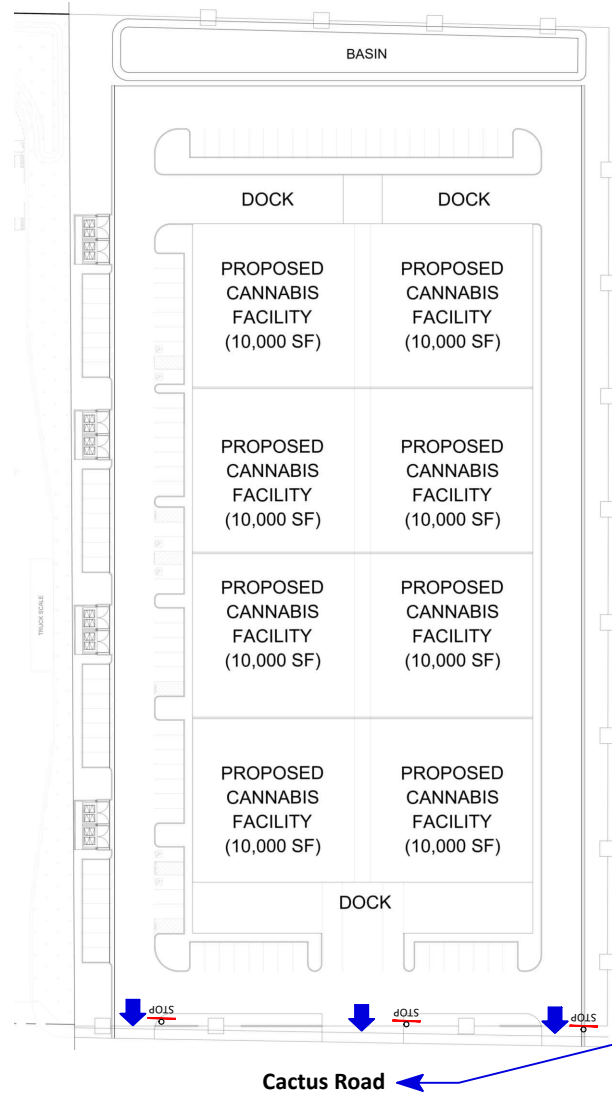
Construct a two lane extension of Beaver Road from the existing southern terminus to Cactus Avenue.

Construct a two lane extension of Cactus Avenue from Beaver Road to the west project boundary.

Construct Cactus Road from west project boundary to the east project boundary at its ultimate half-section width as a Collector Street (112 foot right-of-way) including landscaping and parkway improvements in conjunction with development.



Figure 14  
Circulation Recommendations



The project site should provide sufficient parking spaces to meet City of Adelanto parking code requirements in order to service on-site parking demand.

On-site traffic signing and striping should be implemented in conjunction with detailed construction plans for the project.

Sight distance at each project access should be reviewed with respect to California Department of Transportation/City of Adelanto standards in conjunction with the preparation of final grading, landscaping, and street improvement plans.

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

Construct a two lane extension of Beaver Road from the existing southern terminus to Cactus Avenue.

Construct a two lane extension of Cactus Avenue from Beaver Road to the west project boundary.

Construct Cactus Road from west project boundary to the east project boundary at its ultimate half-section width as a Collector Street (112 foot right-of-way) including landscaping and parkway improvements in conjunction with development.

### Legend

-  = Stop Sign
-  = Full Access Driveway

## **APPENDICES**

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**Appendix A – Glossary of Transportation Terms**

**Appendix B – Traffic Count Worksheets**

**Appendix C – Future Growth Increment Calculation Worksheets**

**Appendix D – Model Plots**

**Appendix E – Explanation and Calculation of Intersection Delay**



## **APPENDIX A**

### **Glossary of Transportation Terms**

## **GLOSSARY OF TRANSPORTATION TERMS**

### **COMMON ABBREVIATIONS**

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

### **TERMS**

**AVERAGE DAILY TRAFFIC:** The total volume during a year divided by the number of days in a year. Usually only weekdays are included.

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

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

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

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

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

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

**CYCLE LENGTH:** The time period in seconds required for one complete signal cycle.

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

**DAILY CAPACITY:** The daily volume of traffic that will result in a volume during the peak hour equal to the capacity of the roadway.

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

**DEMAND RESPONSIVE SIGNAL:** Same as traffic-actuated signal.

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

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

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

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

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

**FORCED FLOW:** Opposite of free flow.

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

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

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

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

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

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

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

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

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

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

**ORIGIN-DESTINATION SURVEY:** A survey to determine the point of origin and the point of destination for a given vehicle trip.

**PASSENGER CAR EQUIVALENTS (PCE):** One car is one Passenger Car Equivalent. A truck is equal to 2 or 3 Passenger Car Equivalents in that a truck requires longer to start, goes slower, and accelerates slower. Loaded trucks have a higher Passenger Car Equivalent than empty trucks.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

## **APPENDIX B**

### **Traffic Count Worksheets**

City of Adelanto  
N/S: Koala Road  
E/W: Rancho Road  
Weather: Clear

File Name : 01\_ADL\_Koala\_Rancho AM  
Site Code : 07524592  
Start Date : 6/18/2024  
Page No : 1

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

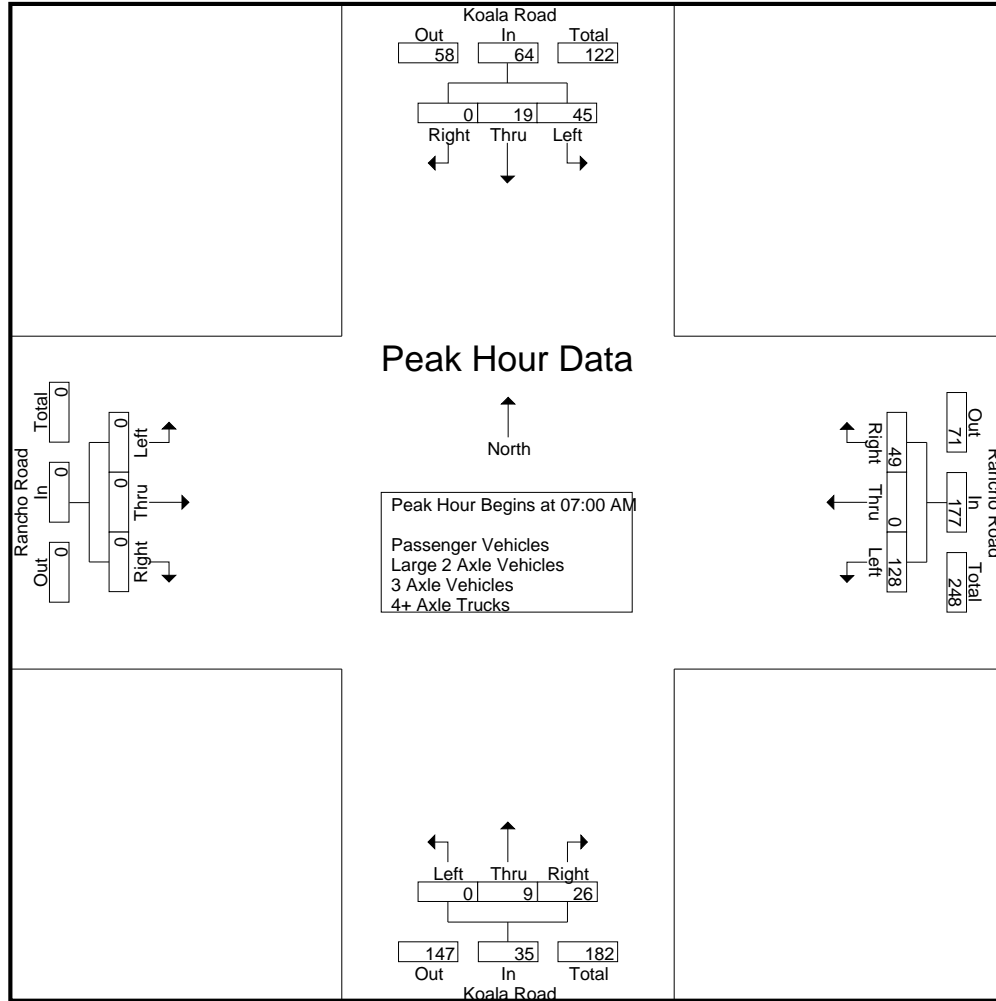
	Koala Road Southbound				Rancho Road Westbound				Koala Road Northbound				Rancho Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	11	2	0	13	36	0	15	51	0	3	3	6	0	0	0	0	70
07:15 AM	7	4	0	11	35	0	15	50	0	0	7	7	0	0	0	0	68
07:30 AM	11	5	0	16	32	0	12	44	0	3	8	11	0	0	0	0	71
07:45 AM	16	8	0	24	25	0	7	32	0	3	8	11	0	0	0	0	67
Total	45	19	0	64	128	0	49	177	0	9	26	35	0	0	0	0	276
08:00 AM	14	6	0	20	21	0	8	29	0	4	13	17	0	2	0	2	68
08:15 AM	7	4	0	11	20	0	13	33	0	5	19	24	0	0	0	0	68
08:30 AM	8	7	0	15	29	0	3	32	1	5	15	21	0	0	0	0	68
08:45 AM	6	8	0	14	31	1	12	44	0	1	10	11	0	0	0	0	69
Total	35	25	0	60	101	1	36	138	1	15	57	73	0	2	0	2	273
Grand Total	80	44	0	124	229	1	85	315	1	24	83	108	0	2	0	2	549
Apprch %	64.5	35.5	0		72.7	0.3	27		0.9	22.2	76.9		0	100	0		
Total %	14.6	8	0	22.6	41.7	0.2	15.5	57.4	0.2	4.4	15.1	19.7	0	0.4	0	0.4	
Passenger Vehicles	64	42	0	106	209	1	77	287	0	21	70	91	0	2	0	2	486
% Passenger Vehicles	80	95.5	0	85.5	91.3	100	90.6	91.1	0	87.5	84.3	84.3	0	100	0	100	88.5
Large 2 Axle Vehicles	4	1	0	5	13	0	1	14	1	1	6	8	0	0	0	0	27
% Large 2 Axle Vehicles	5	2.3	0	4	5.7	0	1.2	4.4	100	4.2	7.2	7.4	0	0	0	0	4.9
3 Axle Vehicles	1	0	0	1	2	0	2	4	0	0	2	2	0	0	0	0	7
% 3 Axle Vehicles	1.2	0	0	0.8	0.9	0	2.4	1.3	0	0	2.4	1.9	0	0	0	0	1.3
4+ Axle Trucks	11	1	0	12	5	0	5	10	0	2	5	7	0	0	0	0	29
% 4+ Axle Trucks	13.8	2.3	0	9.7	2.2	0	5.9	3.2	0	8.3	6	6.5	0	0	0	0	5.3

	Koala Road Southbound				Rancho Road Westbound				Koala Road Northbound				Rancho 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	11	2	0	13	36	0	15	51	0	3	3	6	0	0	0	0	70
07:15 AM	7	4	0	11	35	0	15	50	0	0	7	7	0	0	0	0	68
07:30 AM	11	5	0	16	32	0	12	44	0	3	8	11	0	0	0	0	71
07:45 AM	16	8	0	24	25	0	7	32	0	3	8	11	0	0	0	0	67
Total Volume	45	19	0	64	128	0	49	177	0	9	26	35	0	0	0	0	276
% App. Total	70.3	29.7	0		72.3	0	27.7		0	25.7	74.3		0	0	0		
PHF	.703	.594	.000	.667	.889	.000	.817	.868	.000	.750	.813	.795	.000	.000	.000	.000	.972



City of Adelanto  
N/S: Koala Road  
E/W: Rancho Road  
Weather: Clear

File Name : 01\_ADL\_Koala\_Rancho AM  
Site Code : 07524592  
Start Date : 6/18/2024  
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				07:00 AM				07:45 AM				07:15 AM			
+0 mins.	7	4	0	11	<b>36</b>	0	<b>15</b>	<b>51</b>	0	3	8	11	0	0	0	0
+15 mins.	11	5	0	16	35	0	15	50	0	4	13	17	0	0	0	0
+30 mins.	<b>16</b>	<b>8</b>	0	<b>24</b>	32	0	12	44	0	<b>5</b>	<b>19</b>	<b>24</b>	0	0	0	0
+45 mins.	14	6	0	20	25	0	7	32	<b>1</b>	5	15	21	0	<b>2</b>	0	<b>2</b>
Total Volume	48	23	0	71	128	0	49	177	1	17	55	73	0	2	0	2
% App. Total	67.6	32.4	0		72.3	0	27.7		1.4	23.3	75.3		0	100	0	
PHF	.750	.719	.000	.740	.889	.000	.817	.868	.250	.850	.724	.760	.000	.250	.000	.250

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

City of Adelanto  
N/S: Koala Road  
E/W: Rancho Road  
Weather: Clear

File Name : 01\_ADL\_Koala\_Rancho AM  
Site Code : 07524592  
Start Date : 6/18/2024  
Page No : 1

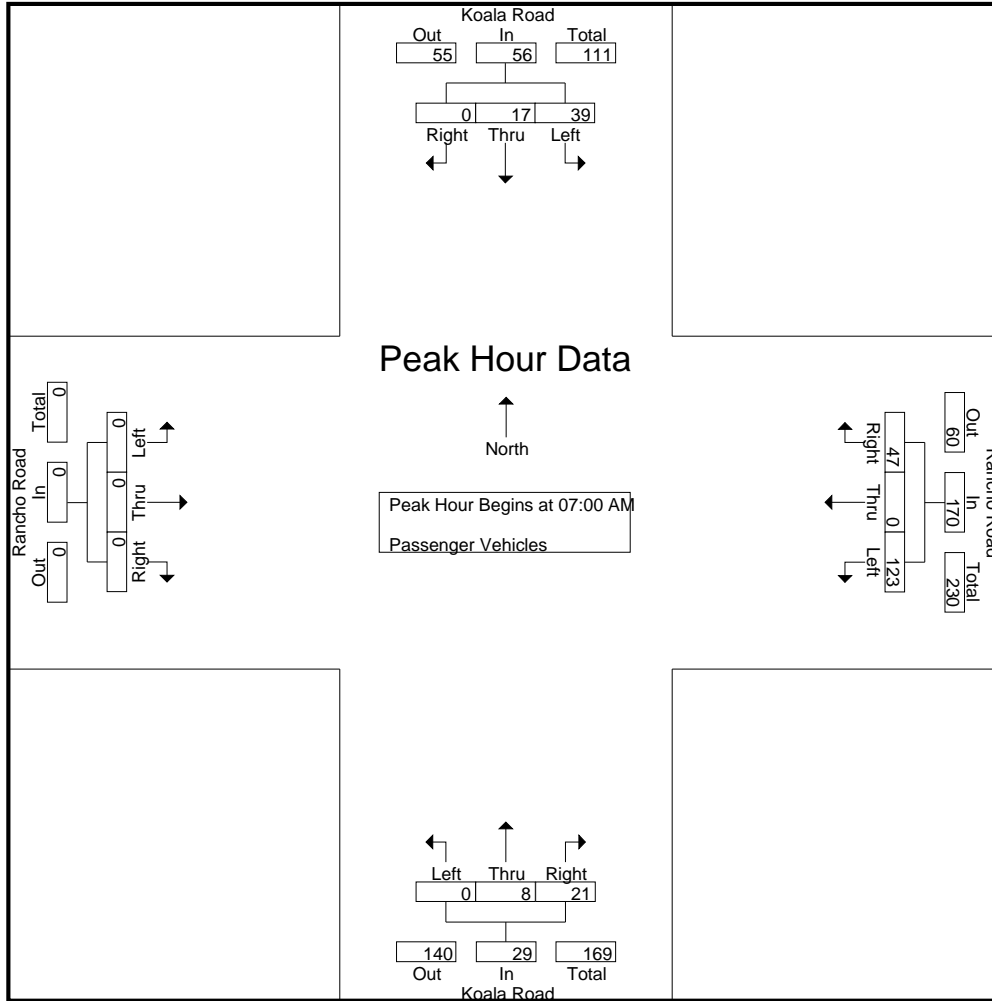
Groups Printed- Passenger Vehicles

	Koala Road Southbound				Rancho Road Westbound				Koala Road Northbound				Rancho 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	10	2	0	12	33	0	14	47	0	3	3	6	0	0	0	0	65
07:15 AM	6	4	0	10	33	0	15	48	0	0	3	3	0	0	0	0	61
07:30 AM	9	4	0	13	32	0	11	43	0	2	7	9	0	0	0	0	65
07:45 AM	14	7	0	21	25	0	7	32	0	3	8	11	0	0	0	0	64
Total	39	17	0	56	123	0	47	170	0	8	21	29	0	0	0	0	255
08:00 AM	9	6	0	15	17	0	6	23	0	4	10	14	0	2	0	2	54
08:15 AM	3	4	0	7	19	0	12	31	0	4	19	23	0	0	0	0	61
08:30 AM	7	7	0	14	24	0	3	27	0	5	12	17	0	0	0	0	58
08:45 AM	6	8	0	14	26	1	9	36	0	0	8	8	0	0	0	0	58
Total	25	25	0	50	86	1	30	117	0	13	49	62	0	2	0	2	231
Grand Total	64	42	0	106	209	1	77	287	0	21	70	91	0	2	0	2	486
Apprch %	60.4	39.6	0		72.8	0.3	26.8		0	23.1	76.9		0	100	0		
Total %	13.2	8.6	0	21.8	43	0.2	15.8	59.1	0	4.3	14.4	18.7	0	0.4	0	0.4	

	Koala Road Southbound				Rancho Road Westbound				Koala Road Northbound				Rancho 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 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	10	2	0	12	<b>33</b>	0	14	47	0	<b>3</b>	3	6	0	0	0	0	<b>65</b>
07:15 AM	6	4	0	10	33	0	<b>15</b>	<b>48</b>	0	0	3	3	0	0	0	0	61
07:30 AM	9	4	0	13	32	0	11	43	0	2	7	9	0	0	0	0	65
07:45 AM	<b>14</b>	<b>7</b>	0	<b>21</b>	25	0	7	32	0	3	<b>8</b>	<b>11</b>	0	0	0	0	64
Total Volume	39	17	0	56	123	0	47	170	0	8	21	29	0	0	0	0	255
% App. Total	69.6	30.4	0		72.4	0	27.6		0	27.6	72.4		0	0	0		
PHF	.696	.607	.000	.667	.932	.000	.783	.885	.000	.667	.656	.659	.000	.000	.000	.000	.981

City of Adelanto  
N/S: Koala Road  
E/W: Rancho Road  
Weather: Clear

File Name : 01\_ADL\_Koala\_Rancho AM  
Site Code : 07524592  
Start Date : 6/18/2024  
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Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	10	2	0	12	<b>33</b>	0	14	47	0	<b>3</b>	3	6	0	0	0	0
+15 mins.	6	4	0	10	33	0	<b>15</b>	<b>48</b>	0	0	3	3	0	0	0	0
+30 mins.	9	4	0	13	32	0	11	43	0	2	7	9	0	0	0	0
+45 mins.	<b>14</b>	<b>7</b>	0	<b>21</b>	25	0	7	32	0	3	<b>8</b>	<b>11</b>	0	0	0	0
Total Volume	39	17	0	56	123	0	47	170	0	8	21	29	0	0	0	0
% App. Total	69.6	30.4	0		72.4	0	27.6		0	27.6	72.4		0	0	0	
PHF	.696	.607	.000	.667	.932	.000	.783	.885	.000	.667	.656	.659	.000	.000	.000	.000

City of Adelanto  
N/S: Koala Road  
E/W: Rancho Road  
Weather: Clear

File Name : 01\_ADL\_Koala\_Rancho AM  
Site Code : 07524592  
Start Date : 6/18/2024  
Page No : 1

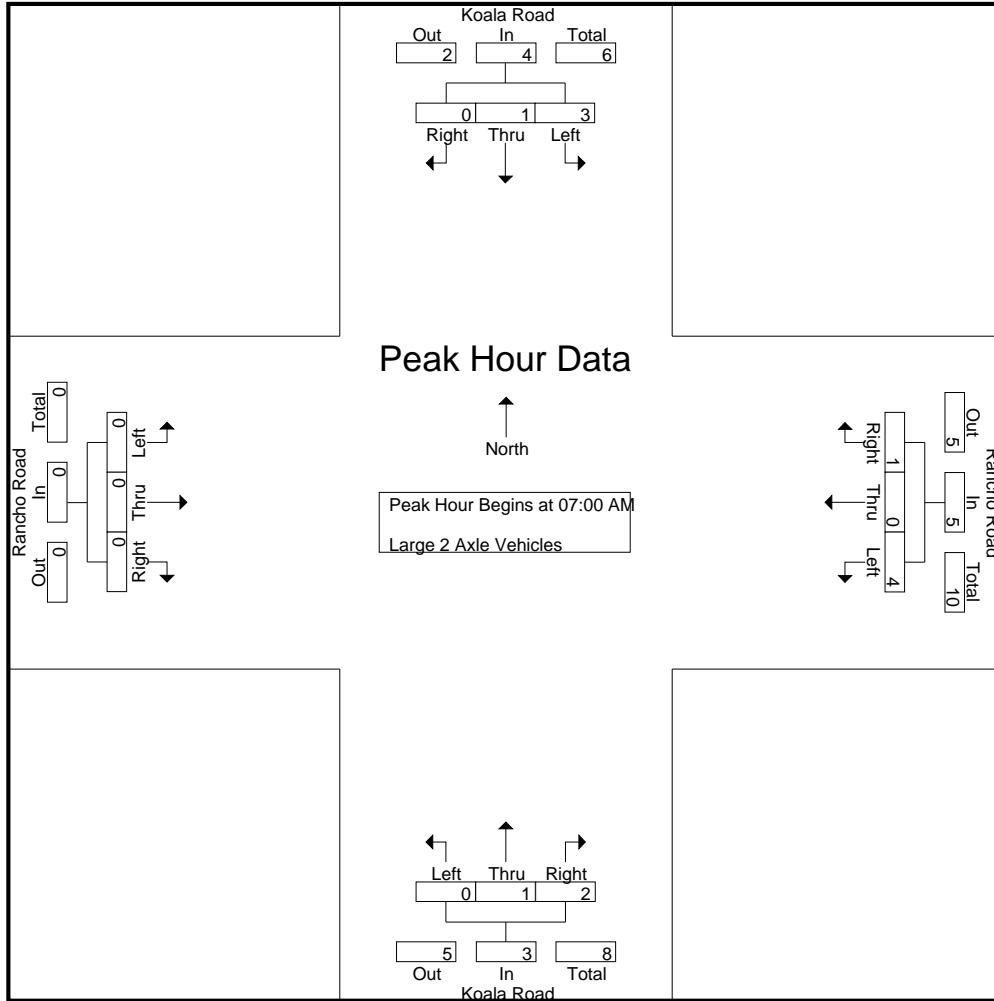
Groups Printed- Large 2 Axle Vehicles

	Koala Road Southbound				Rancho Road Westbound				Koala Road Northbound				Rancho 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	2	0	0	2	0	0	0	0	0	0	0	0	2
07:15 AM	1	0	0	1	2	0	0	2	0	0	1	1	0	0	0	0	4
07:30 AM	1	1	0	2	0	0	1	1	0	1	1	2	0	0	0	0	5
07:45 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	3	1	0	4	4	0	1	5	0	1	2	3	0	0	0	0	12
08:00 AM	1	0	0	1	2	0	0	2	0	0	1	1	0	0	0	0	4
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	5	0	0	5	1	0	2	3	0	0	0	0	8
08:45 AM	0	0	0	0	2	0	0	2	0	0	1	1	0	0	0	0	3
Total	1	0	0	1	9	0	0	9	1	0	4	5	0	0	0	0	15
Grand Total	4	1	0	5	13	0	1	14	1	1	6	8	0	0	0	0	27
Apprch %	80	20	0		92.9	0	7.1		12.5	12.5	75		0	0	0		
Total %	14.8	3.7	0	18.5	48.1	0	3.7	51.9	3.7	3.7	22.2	29.6	0	0	0	0	

	Koala Road Southbound				Rancho Road Westbound				Koala Road Northbound				Rancho 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 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	2
07:15 AM	1	0	0	1	2	0	0	2	0	0	1	1	0	0	0	0	4
07:30 AM	1	1	0	2	0	0	1	1	0	1	1	2	0	0	0	0	5
07:45 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	3	1	0	4	4	0	1	5	0	1	2	3	0	0	0	0	12
% App. Total	75	25	0		80	0	20		0	33.3	66.7		0	0	0		
PHF	.750	.250	.000	.500	.500	.000	.250	.625	.000	.250	.500	.375	.000	.000	.000	.000	.600

City of Adelanto  
N/S: Koala Road  
E/W: Rancho Road  
Weather: Clear

File Name : 01\_ADL\_Koala\_Rancho AM  
Site Code : 07524592  
Start Date : 6/18/2024  
Page No : 2



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

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0
+15 mins.	1	0	0	1	2	0	0	2	0	0	1	1	0	0	0	0
+30 mins.	1	1	0	2	0	0	1	1	0	1	1	2	0	0	0	0
+45 mins.	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	3	1	0	4	4	0	1	5	0	1	2	3	0	0	0	0
% App. Total	75	25	0		80	0	20		0	33.3	66.7		0	0	0	
PHF	.750	.250	.000	.500	.500	.000	.250	.625	.000	.250	.500	.375	.000	.000	.000	.000



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

City of Adelanto  
N/S: Koala Road  
E/W: Rancho Road  
Weather: Clear

File Name : 01\_ADL\_Koala\_Rancho AM  
Site Code : 07524592  
Start Date : 6/18/2024  
Page No : 1

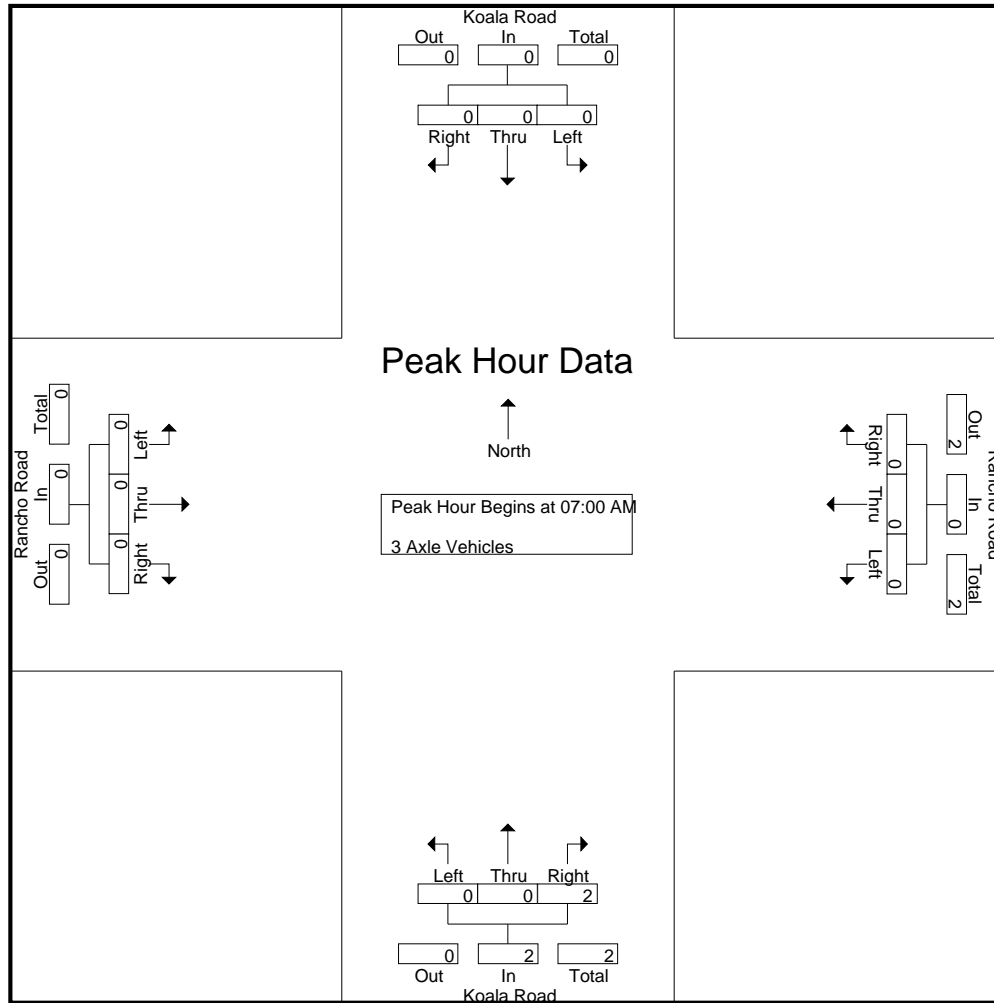
Groups Printed- 3 Axle Vehicles

	Koala Road Southbound				Rancho Road Westbound				Koala Road Northbound				Rancho 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	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	2
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	2
08:00 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
08:45 AM	0	0	0	0	2	0	1	3	0	0	0	0	0	0	0	0	3
Total	1	0	0	1	2	0	2	4	0	0	0	0	0	0	0	0	5
Grand Total	1	0	0	1	2	0	2	4	0	0	2	2	0	0	0	0	7
Apprch %	100	0	0		50	0	50		0	0	100		0	0	0		
Total %	14.3	0	0	14.3	28.6	0	28.6	57.1	0	0	28.6	28.6	0	0	0	0	

	Koala Road Southbound				Rancho Road Westbound				Koala Road Northbound				Rancho 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 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	2
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	2
% App. Total	0	0	0		0	0	0		0	0	100		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.250	.000	.000	.000	.000	.250

City of Adelanto  
N/S: Koala Road  
E/W: Rancho Road  
Weather: Clear

File Name : 01\_ADL\_Koala\_Rancho AM  
Site Code : 07524592  
Start Date : 6/18/2024  
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Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

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

City of Adelanto  
N/S: Koala Road  
E/W: Rancho Road  
Weather: Clear

File Name : 01\_ADL\_Koala\_Rancho AM  
Site Code : 07524592  
Start Date : 6/18/2024  
Page No : 1

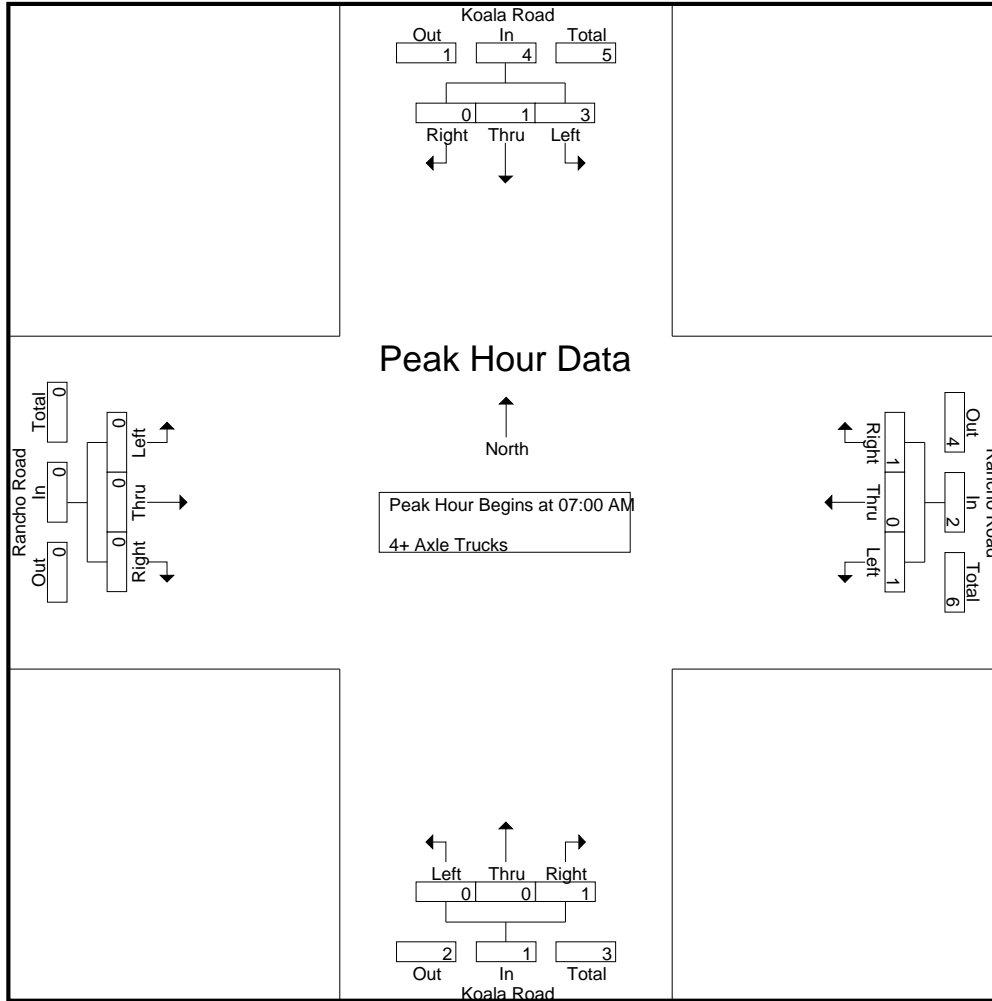
Groups Printed- 4+ Axle Trucks

	Koala Road Southbound				Rancho Road Westbound				Koala Road Northbound				Rancho 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	1	0	1	2	0	0	0	0	0	0	0	0	3
07:15 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
07:30 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:45 AM	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	3	1	0	4	1	0	1	2	0	0	1	1	0	0	0	0	7
08:00 AM	4	0	0	4	2	0	1	3	0	0	2	2	0	0	0	0	9
08:15 AM	4	0	0	4	1	0	1	2	0	1	0	1	0	0	0	0	7
08:30 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
08:45 AM	0	0	0	0	1	0	2	3	0	1	1	2	0	0	0	0	5
Total	8	0	0	8	4	0	4	8	0	2	4	6	0	0	0	0	22
Grand Total	11	1	0	12	5	0	5	10	0	2	5	7	0	0	0	0	29
Apprch %	91.7	8.3	0		50	0	50		0	28.6	71.4		0	0	0		
Total %	37.9	3.4	0	41.4	17.2	0	17.2	34.5	0	6.9	17.2	24.1	0	0	0	0	

	Koala Road Southbound				Rancho Road Westbound				Koala Road Northbound				Rancho 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 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	1	0	0	1	1	0	1	2	0	0	0	0	0	0	0	0	3
07:15 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
07:30 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:45 AM	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Total Volume	3	1	0	4	1	0	1	2	0	0	1	1	0	0	0	0	7
% App. Total	75	25	0		50	0	50		0	0	100		0	0	0		
PHF	.750	.250	.000	.500	.250	.000	.250	.250	.000	.000	.250	.250	.000	.000	.000	.000	.583

City of Adelanto  
N/S: Koala Road  
E/W: Rancho Road  
Weather: Clear

File Name : 01\_ADL\_Koala\_Rancho AM  
Site Code : 07524592  
Start Date : 6/18/2024  
Page No : 2



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

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	1	0	0	1	1	0	1	2	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
+30 mins.	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	3	1	0	4	1	0	1	2	0	0	1	1	0	0	0	0
% App. Total	75	25	0		50	0	50		0	0	100		0	0	0	
PHF	.750	.250	.000	.500	.250	.000	.250	.250	.000	.000	.250	.250	.000	.000	.000	.000

City of Adelanto  
N/S: Koala Road  
E/W: Rancho Road  
Weather: Clear

File Name : 01\_ADL\_Koala\_Rancho PM  
Site Code : 07524592  
Start Date : 6/18/2024  
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Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

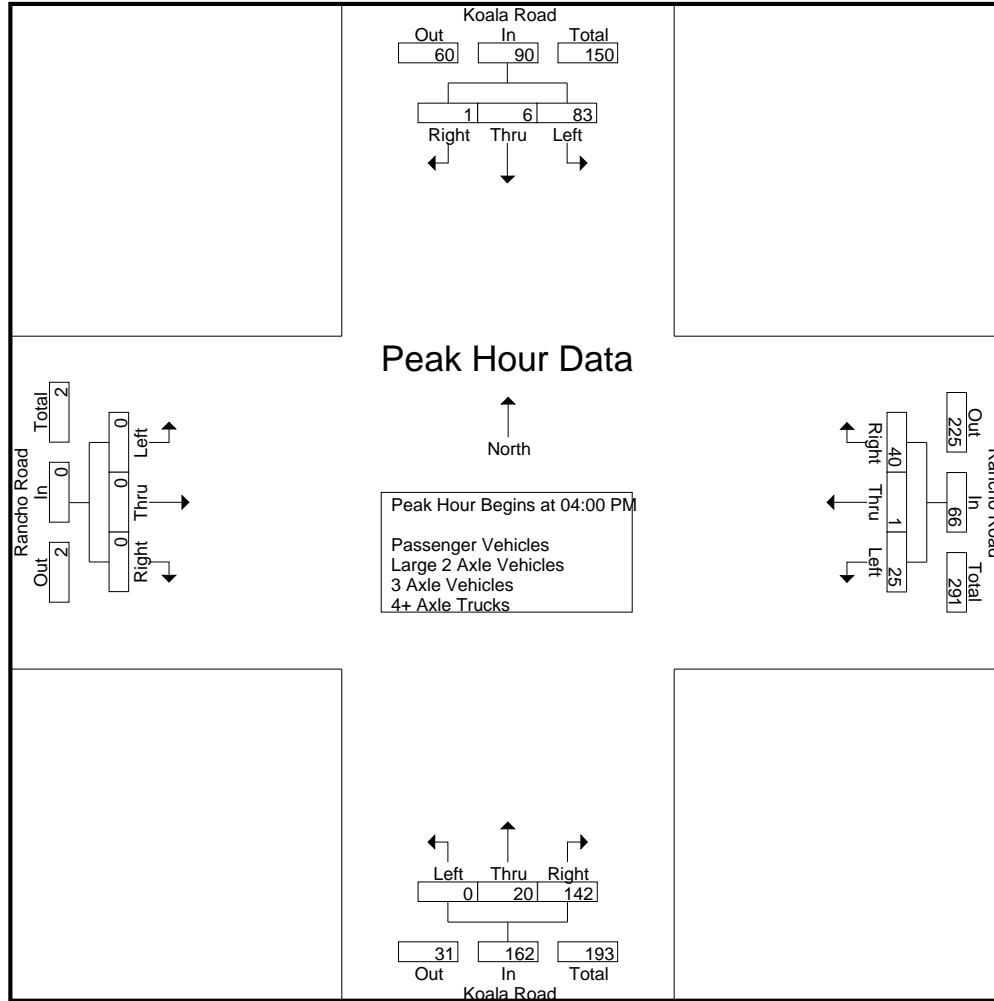
	Koala Road Southbound				Rancho Road Westbound				Koala Road Northbound				Rancho Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	18	1	0	19	4	0	13	17	0	5	39	44	0	0	0	0	80
04:15 PM	21	0	1	22	5	0	11	16	0	7	27	34	0	0	0	0	72
04:30 PM	23	3	0	26	8	0	9	17	0	4	52	56	0	0	0	0	99
04:45 PM	21	2	0	23	8	1	7	16	0	4	24	28	0	0	0	0	67
Total	83	6	1	90	25	1	40	66	0	20	142	162	0	0	0	0	318
05:00 PM	12	2	0	14	8	0	9	17	0	6	14	20	0	0	0	0	51
05:15 PM	13	2	0	15	0	0	8	8	0	5	12	17	0	0	1	1	41
05:30 PM	13	0	0	13	9	1	6	16	0	0	24	24	0	1	0	1	54
05:45 PM	13	1	0	14	10	0	13	23	0	2	24	26	0	0	0	0	63
Total	51	5	0	56	27	1	36	64	0	13	74	87	0	1	1	2	209
Grand Total	134	11	1	146	52	2	76	130	0	33	216	249	0	1	1	2	527
Apprch %	91.8	7.5	0.7		40	1.5	58.5		0	13.3	86.7		0	50	50		
Total %	25.4	2.1	0.2	27.7	9.9	0.4	14.4	24.7	0	6.3	41	47.2	0	0.2	0.2	0.4	
Passenger Vehicles	128	10	1	139	43	2	72	117	0	33	201	234	0	1	1	2	492
% Passenger Vehicles	95.5	90.9	100	95.2	82.7	100	94.7	90	0	100	93.1	94	0	100	100	100	93.4
Large 2 Axle Vehicles	1	0	0	1	1	0	0	1	0	0	2	2	0	0	0	0	4
% Large 2 Axle Vehicles	0.7	0	0	0.7	1.9	0	0	0.8	0	0	0.9	0.8	0	0	0	0	0.8
3 Axle Vehicles	1	0	0	1	1	0	0	1	0	0	1	1	0	0	0	0	3
% 3 Axle Vehicles	0.7	0	0	0.7	1.9	0	0	0.8	0	0	0.5	0.4	0	0	0	0	0.6
4+ Axle Trucks	4	1	0	5	7	0	4	11	0	0	12	12	0	0	0	0	28
% 4+ Axle Trucks	3	9.1	0	3.4	13.5	0	5.3	8.5	0	0	5.6	4.8	0	0	0	0	5.3

	Koala Road Southbound				Rancho Road Westbound				Koala Road Northbound				Rancho 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	18	1	0	19	4	0	13	17	0	5	39	44	0	0	0	0	80
04:15 PM	21	0	1	22	5	0	11	16	0	7	27	34	0	0	0	0	72
04:30 PM	23	3	0	26	8	0	9	17	0	4	52	56	0	0	0	0	99
04:45 PM	21	2	0	23	8	1	7	16	0	4	24	28	0	0	0	0	67
Total Volume	83	6	1	90	25	1	40	66	0	20	142	162	0	0	0	0	318
% App. Total	92.2	6.7	1.1		37.9	1.5	60.6		0	12.3	87.7		0	0	0		
PHF	.902	.500	.250	.865	.781	.250	.769	.971	.000	.714	.683	.723	.000	.000	.000	.000	.803



City of Adelanto  
N/S: Koala Road  
E/W: Rancho Road  
Weather: Clear

File Name : 01\_ADL\_Koala\_Rancho PM  
Site Code : 07524592  
Start Date : 6/18/2024  
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				04:45 PM			
+0 mins.	18	1	0	19	4	0	<b>13</b>	<b>17</b>	0	5	39	44	0	0	0	0
+15 mins.	21	0	<b>1</b>	22	5	0	11	16	0	<b>7</b>	27	34	0	0	0	0
+30 mins.	<b>23</b>	<b>3</b>	0	<b>26</b>	<b>8</b>	0	9	17	0	4	<b>52</b>	<b>56</b>	0	0	<b>1</b>	<b>1</b>
+45 mins.	21	2	0	23	8	<b>1</b>	7	16	0	4	24	28	0	<b>1</b>	0	1
Total Volume	83	6	1	90	25	1	40	66	0	20	142	162	0	1	1	2
% App. Total	92.2	6.7	1.1		37.9	1.5	60.6		0	12.3	87.7		0	50	50	
PHF	.902	.500	.250	.865	.781	.250	.769	.971	.000	.714	.683	.723	.000	.250	.250	.500

City of Adelanto  
N/S: Koala Road  
E/W: Rancho Road  
Weather: Clear

File Name : 01\_ADL\_Koala\_Rancho PM  
Site Code : 07524592  
Start Date : 6/18/2024  
Page No : 1

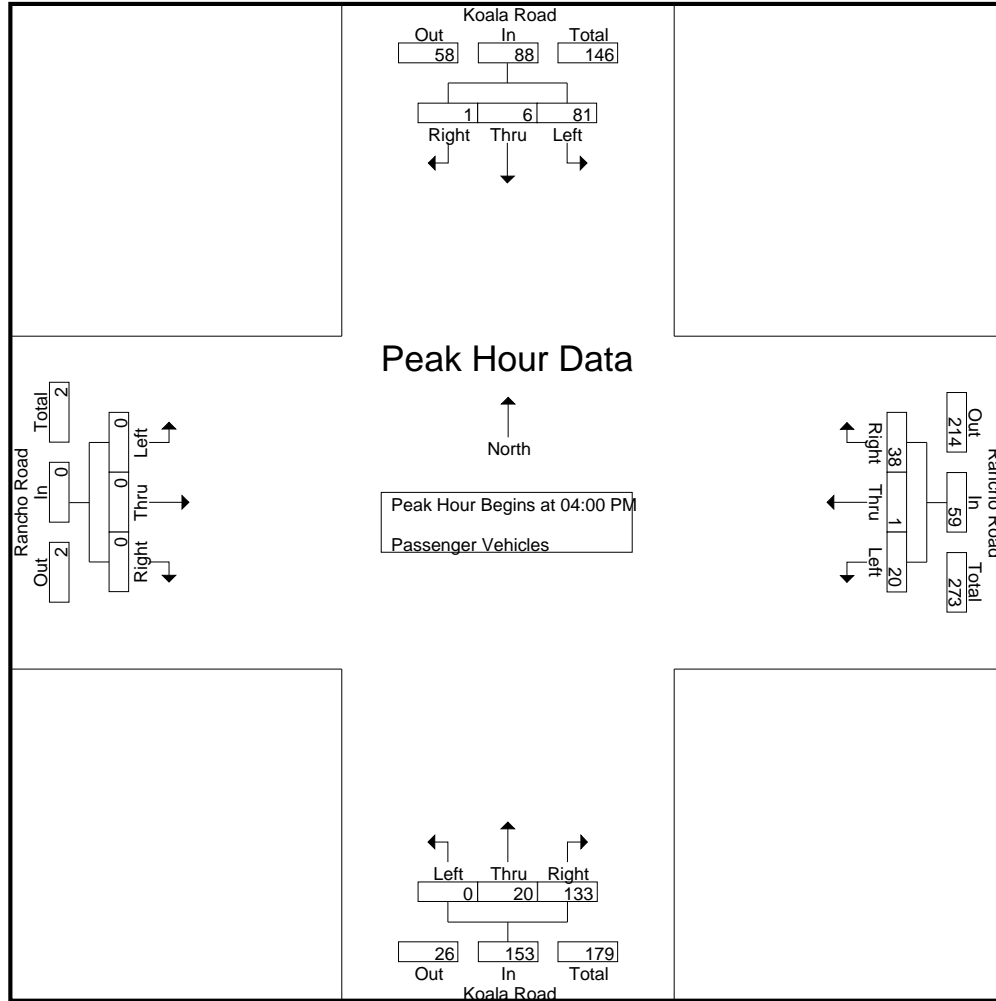
Groups Printed- Passenger Vehicles

	Koala Road Southbound				Rancho Road Westbound				Koala Road Northbound				Rancho 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	17	1	0	18	3	0	12	15	0	5	37	42	0	0	0	0	75
04:15 PM	20	0	1	21	5	0	11	16	0	7	26	33	0	0	0	0	70
04:30 PM	23	3	0	26	7	0	9	16	0	4	47	51	0	0	0	0	93
04:45 PM	21	2	0	23	5	1	6	12	0	4	23	27	0	0	0	0	62
Total	81	6	1	88	20	1	38	59	0	20	133	153	0	0	0	0	300
05:00 PM	9	2	0	11	7	0	8	15	0	6	13	19	0	0	0	0	45
05:15 PM	13	1	0	14	0	0	8	8	0	5	12	17	0	0	1	1	40
05:30 PM	12	0	0	12	6	1	6	13	0	0	23	23	0	1	0	1	49
05:45 PM	13	1	0	14	10	0	12	22	0	2	20	22	0	0	0	0	58
Total	47	4	0	51	23	1	34	58	0	13	68	81	0	1	1	2	192
Grand Total	128	10	1	139	43	2	72	117	0	33	201	234	0	1	1	2	492
Apprch %	92.1	7.2	0.7		36.8	1.7	61.5		0	14.1	85.9		0	50	50		
Total %	26	2	0.2	28.3	8.7	0.4	14.6	23.8	0	6.7	40.9	47.6	0	0.2	0.2	0.4	

	Koala Road Southbound				Rancho Road Westbound				Koala Road Northbound				Rancho 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 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	17	1	0	18	3	0	12	15	0	5	37	42	0	0	0	0	75
04:15 PM	20	0	1	21	5	0	11	16	0	7	26	33	0	0	0	0	70
04:30 PM	23	3	0	26	7	0	9	16	0	4	47	51	0	0	0	0	93
04:45 PM	21	2	0	23	5	1	6	12	0	4	23	27	0	0	0	0	62
Total Volume	81	6	1	88	20	1	38	59	0	20	133	153	0	0	0	0	300
% App. Total	92	6.8	1.1		33.9	1.7	64.4		0	13.1	86.9		0	0	0		
PHF	.880	.500	.250	.846	.714	.250	.792	.922	.000	.714	.707	.750	.000	.000	.000	.000	.806

City of Adelanto  
N/S: Koala Road  
E/W: Rancho Road  
Weather: Clear

File Name : 01\_ADL\_Koala\_Rancho PM  
Site Code : 07524592  
Start Date : 6/18/2024  
Page No : 2



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

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	17	1	0	18	3	0	12	15	0	5	37	42	0	0	0	0
+15 mins.	20	0	1	21	5	0	11	16	0	7	26	33	0	0	0	0
+30 mins.	23	3	0	26	7	0	9	16	0	4	47	51	0	0	0	0
+45 mins.	21	2	0	23	5	1	6	12	0	4	23	27	0	0	0	0
Total Volume	81	6	1	88	20	1	38	59	0	20	133	153	0	0	0	0
% App. Total	92	6.8	1.1		33.9	1.7	64.4		0	13.1	86.9		0	0	0	
PHF	.880	.500	.250	.846	.714	.250	.792	.922	.000	.714	.707	.750	.000	.000	.000	.000

City of Adelanto  
N/S: Koala Road  
E/W: Rancho Road  
Weather: Clear

File Name : 01\_ADL\_Koala\_Rancho PM  
Site Code : 07524592  
Start Date : 6/18/2024  
Page No : 1

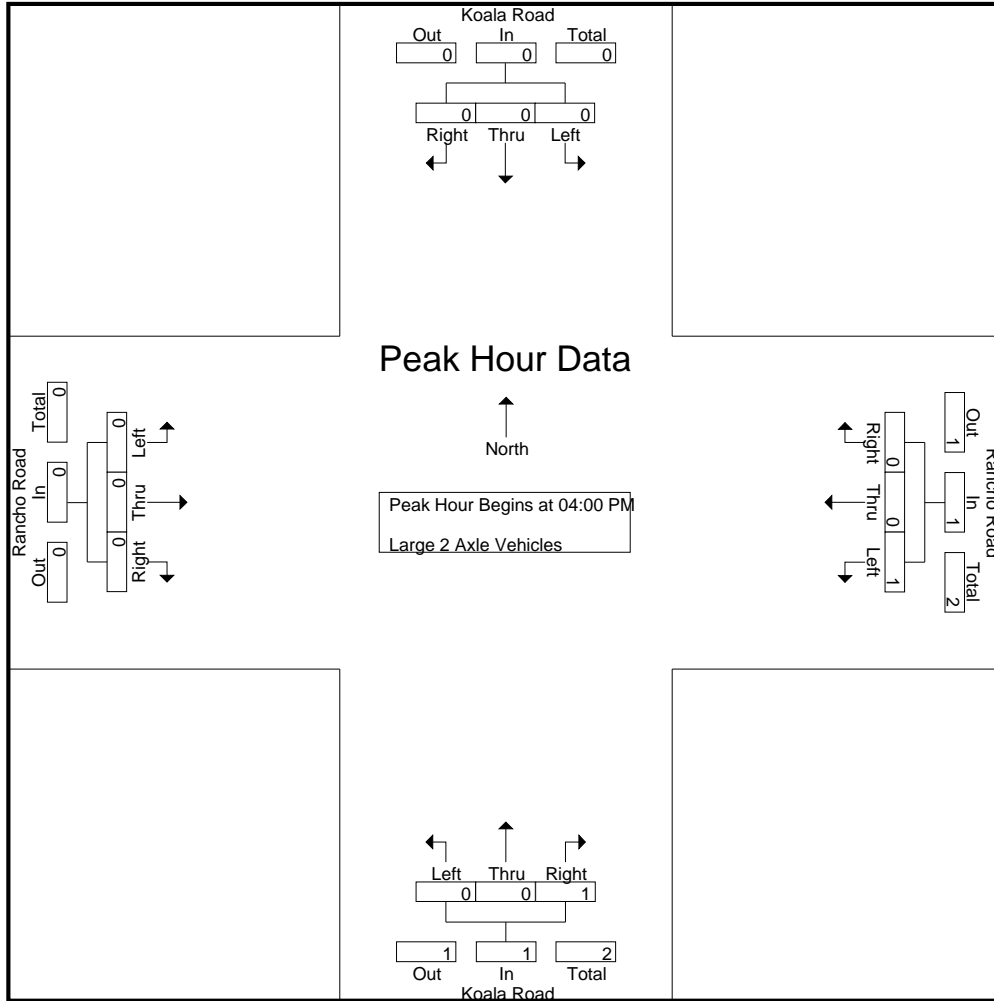
Groups Printed- Large 2 Axle Vehicles

	Koala Road Southbound				Rancho Road Westbound				Koala Road Northbound				Rancho 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	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	1	0	0	1	0	0	1	1	0	0	0	0	2
Total	0	0	0	0	1	0	0	1	0	0	1	1	0	0	0	0	2
05:00 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
Total	1	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	2
Grand Total	1	0	0	1	1	0	0	1	0	0	2	2	0	0	0	0	4
Apprch %	100	0	0		100	0	0		0	0	100		0	0	0		
Total %	25	0	0	25	25	0	0	25	0	0	50	50	0	0	0	0	

	Koala Road Southbound				Rancho Road Westbound				Koala Road Northbound				Rancho 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 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	1	0	0	1	0	0	1	1	0	0	0	0	2
Total Volume	0	0	0	0	1	0	0	1	0	0	1	1	0	0	0	0	2
% App. Total	0	0	0		100	0	0		0	0	100		0	0	0		
PHF	.000	.000	.000	.000	.250	.000	.000	.250	.000	.000	.250	.250	.000	.000	.000	.000	.250

City of Adelanto  
N/S: Koala Road  
E/W: Rancho Road  
Weather: Clear

File Name : 01\_ADL\_Koala\_Rancho PM  
Site Code : 07524592  
Start Date : 6/18/2024  
Page No : 2



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

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



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

City of Adelanto  
N/S: Koala Road  
E/W: Rancho Road  
Weather: Clear

File Name : 01\_ADL\_Koala\_Rancho PM  
Site Code : 07524592  
Start Date : 6/18/2024  
Page No : 1

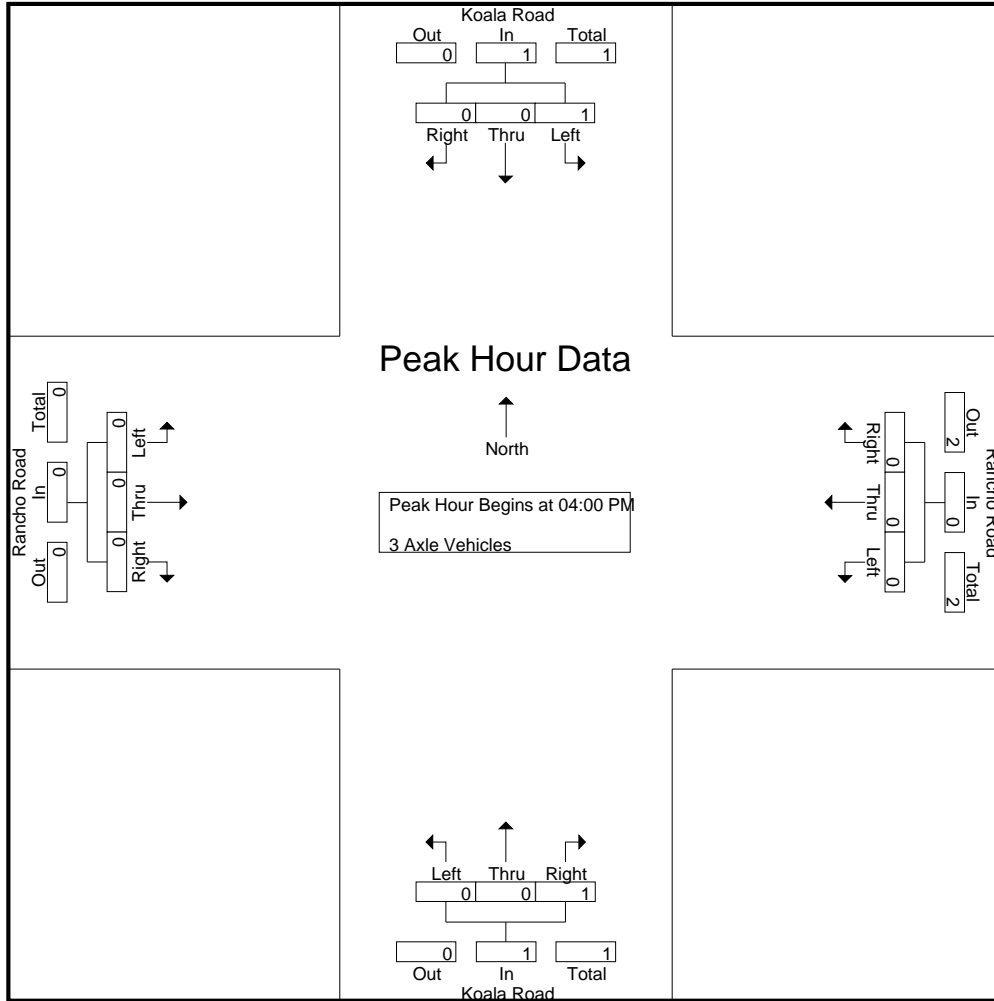
Groups Printed- 3 Axle Vehicles

	Koala Road Southbound				Rancho Road Westbound				Koala Road Northbound				Rancho 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	1	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	2
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	2
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
Grand Total	1	0	0	1	1	0	0	1	0	0	1	1	0	0	0	0	3
Apprch %	100	0	0		100	0	0		0	0	100		0	0	0		
Total %	33.3	0	0	33.3	33.3	0	0	33.3	0	0	33.3	33.3	0	0	0	0	

	Koala Road Southbound				Rancho Road Westbound				Koala Road Northbound				Rancho 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 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	1	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	2
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	1	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	2
% App. Total	100	0	0		0	0	0		0	0	100		0	0	0		
PHF	.250	.000	.000	.250	.000	.000	.000	.000	.000	.000	.250	.250	.000	.000	.000	.000	.250

City of Adelanto  
N/S: Koala Road  
E/W: Rancho Road  
Weather: Clear

File Name : 01\_ADL\_Koala\_Rancho PM  
Site Code : 07524592  
Start Date : 6/18/2024  
Page No : 2



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

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

City of Adelanto  
N/S: Koala Road  
E/W: Rancho Road  
Weather: Clear

File Name : 01\_ADL\_Koala\_Rancho PM  
Site Code : 07524592  
Start Date : 6/18/2024  
Page No : 1

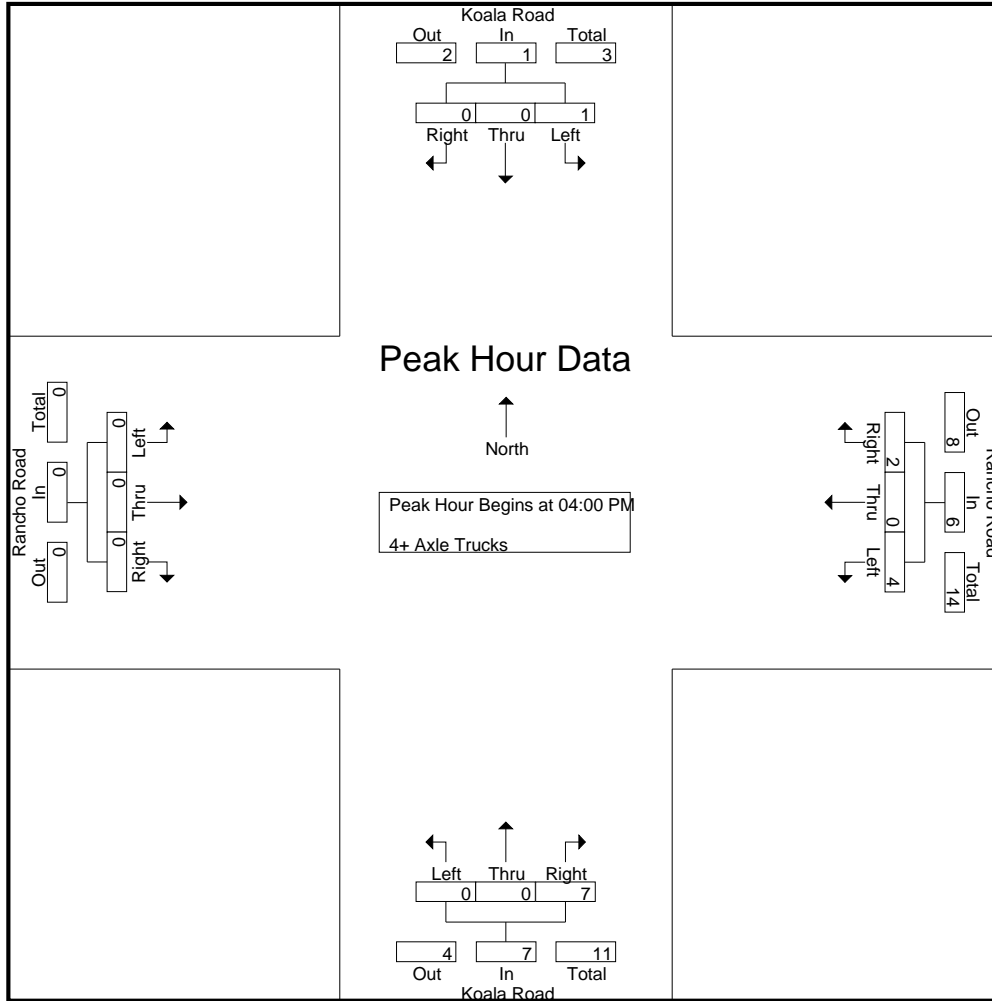
Groups Printed- 4+ Axle Trucks

	Koala Road Southbound				Rancho Road Westbound				Koala Road Northbound				Rancho 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	1	0	1	2	0	0	1	1	0	0	0	0	3
04:15 PM	1	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	2
04:30 PM	0	0	0	0	1	0	0	1	0	0	5	5	0	0	0	0	6
04:45 PM	0	0	0	0	2	0	1	3	0	0	0	0	0	0	0	0	3
Total	1	0	0	1	4	0	2	6	0	0	7	7	0	0	0	0	14
05:00 PM	2	0	0	2	1	0	1	2	0	0	1	1	0	0	0	0	5
05:15 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:30 PM	1	0	0	1	2	0	0	2	0	0	1	1	0	0	0	0	4
05:45 PM	0	0	0	0	0	0	1	1	0	0	3	3	0	0	0	0	4
Total	3	1	0	4	3	0	2	5	0	0	5	5	0	0	0	0	14
Grand Total	4	1	0	5	7	0	4	11	0	0	12	12	0	0	0	0	28
Apprch %	80	20	0		63.6	0	36.4		0	0	100		0	0	0		
Total %	14.3	3.6	0	17.9	25	0	14.3	39.3	0	0	42.9	42.9	0	0	0	0	

	Koala Road Southbound				Rancho Road Westbound				Koala Road Northbound				Rancho 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 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	1	0	1	2	0	0	1	1	0	0	0	0	3
04:15 PM	1	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	2
04:30 PM	0	0	0	0	1	0	0	1	0	0	5	5	0	0	0	0	6
04:45 PM	0	0	0	0	2	0	1	3	0	0	0	0	0	0	0	0	3
Total Volume	1	0	0	1	4	0	2	6	0	0	7	7	0	0	0	0	14
% App. Total	100	0	0		66.7	0	33.3		0	0	100		0	0	0		
PHF	.250	.000	.000	.250	.500	.000	.500	.500	.000	.000	.350	.350	.000	.000	.000	.000	.583

City of Adelanto  
N/S: Koala Road  
E/W: Rancho Road  
Weather: Clear

File Name : 01\_ADL\_Koala\_Rancho PM  
Site Code : 07524592  
Start Date : 6/18/2024  
Page No : 2



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

Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	0	0	0	1	0	1	2	0	0	1	1	0	0	0	0
+15 mins.	1	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0
+30 mins.	0	0	0	0	1	0	0	1	0	0	5	5	0	0	0	0
+45 mins.	0	0	0	0	2	0	1	3	0	0	0	0	0	0	0	0
Total Volume	1	0	0	1	4	0	2	6	0	0	7	7	0	0	0	0
% App. Total	100	0	0		66.7	0	33.3		0	0	100		0	0	0	
PHF	.250	.000	.000	.250	.500	.000	.500	.500	.000	.000	.350	.350	.000	.000	.000	.000

City of Adelanto  
N/S: Bellflower Street  
E/W: Rancho Road  
Weather: Clear

File Name : 01\_ADL\_Bell\_Rancho AM  
Site Code : 07523937  
Start Date : 10/10/2023  
Page No : 1

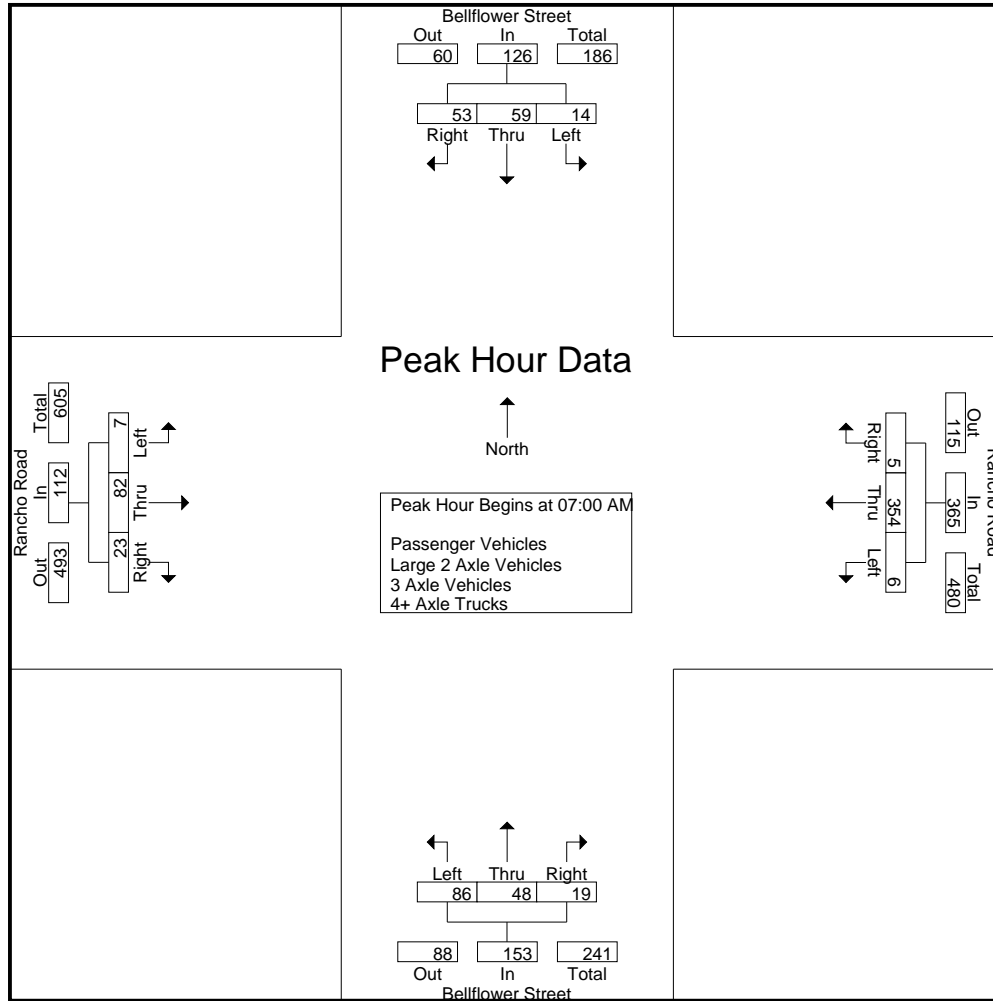
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Bellflower Street Southbound				Rancho Road Westbound				Bellflower Street Northbound				Rancho 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	17	15	33	1	114	1	116	18	9	7	34	2	19	4	25	208
07:15 AM	4	15	11	30	2	77	1	80	23	12	3	38	1	19	7	27	175
07:30 AM	4	10	10	24	1	73	1	75	17	10	5	32	2	13	6	21	152
07:45 AM	5	17	17	39	2	90	2	94	28	17	4	49	2	31	6	39	221
Total	14	59	53	126	6	354	5	365	86	48	19	153	7	82	23	112	756
08:00 AM	4	11	4	19	1	56	4	61	17	16	4	37	1	31	2	34	151
08:15 AM	2	15	5	22	4	47	3	54	11	8	7	26	0	45	7	52	154
08:30 AM	2	8	10	20	1	54	4	59	8	12	6	26	3	36	5	44	149
08:45 AM	6	9	9	24	4	40	3	47	12	11	11	34	0	29	3	32	137
Total	14	43	28	85	10	197	14	221	48	47	28	123	4	141	17	162	591
Grand Total	28	102	81	211	16	551	19	586	134	95	47	276	11	223	40	274	1347
Apprch %	13.3	48.3	38.4		2.7	94	3.2		48.6	34.4	17		4	81.4	14.6		
Total %	2.1	7.6	6	15.7	1.2	40.9	1.4	43.5	9.9	7.1	3.5	20.5	0.8	16.6	3	20.3	
Passenger Vehicles	26	102	76	204	14	527	16	557	132	95	47	274	11	185	36	232	1267
% Passenger Vehicles	92.9	100	93.8	96.7	87.5	95.6	84.2	95.1	98.5	100	100	99.3	100	83	90	84.7	94.1
Large 2 Axle Vehicles	2	0	4	6	0	9	3	12	1	0	0	1	0	17	3	20	39
% Large 2 Axle Vehicles	7.1	0	4.9	2.8	0	1.6	15.8	2	0.7	0	0	0.4	0	7.6	7.5	7.3	2.9
3 Axle Vehicles	0	0	1	1	1	3	0	4	1	0	0	1	0	5	1	6	12
% 3 Axle Vehicles	0	0	1.2	0.5	6.2	0.5	0	0.7	0.7	0	0	0.4	0	2.2	2.5	2.2	0.9
4+ Axle Trucks	0	0	0	0	1	12	0	13	0	0	0	0	0	16	0	16	29
% 4+ Axle Trucks	0	0	0	0	6.2	2.2	0	2.2	0	0	0	0	0	7.2	0	5.8	2.2

	Bellflower Street Southbound				Rancho Road Westbound				Bellflower Street Northbound				Rancho 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	17	15	33	1	114	1	116	18	9	7	34	2	19	4	25	208
07:15 AM	4	15	11	30	2	77	1	80	23	12	3	38	1	19	7	27	175
07:30 AM	4	10	10	24	1	73	1	75	17	10	5	32	2	13	6	21	152
07:45 AM	5	17	17	39	2	90	2	94	28	17	4	49	2	31	6	39	221
Total Volume	14	59	53	126	6	354	5	365	86	48	19	153	7	82	23	112	756
% App. Total	11.1	46.8	42.1		1.6	97	1.4		56.2	31.4	12.4		6.2	73.2	20.5		
PHF	.700	.868	.779	.808	.750	.776	.625	.787	.768	.706	.679	.781	.875	.661	.821	.718	.855

City of Adelanto  
N/S: Bellflower Street  
E/W: Rancho Road  
Weather: Clear

File Name : 01\_ADL\_Bell\_Rancho AM  
Site Code : 07523937  
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Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:15 AM				07:45 AM			
+0 mins.	1	17	15	33	1	114	1	116	23	12	3	38	2	31	6	39
+15 mins.	4	15	11	30	2	77	1	80	17	10	5	32	1	31	2	34
+30 mins.	4	10	10	24	1	73	1	75	28	17	4	49	0	45	7	52
+45 mins.	5	17	17	39	2	90	2	94	17	16	4	37	3	36	5	44
Total Volume	14	59	53	126	6	354	5	365	85	55	16	156	6	143	20	169
% App. Total	11.1	46.8	42.1		1.6	97	1.4		54.5	35.3	10.3		3.6	84.6	11.8	
PHF	.700	.868	.779	.808	.750	.776	.625	.787	.759	.809	.800	.796	.500	.794	.714	.813



City of Adelanto  
N/S: Bellflower Street  
E/W: Rancho Road  
Weather: Clear

File Name : 01\_ADL\_Bell\_Rancho AM  
Site Code : 07523937  
Start Date : 10/10/2023  
Page No : 1

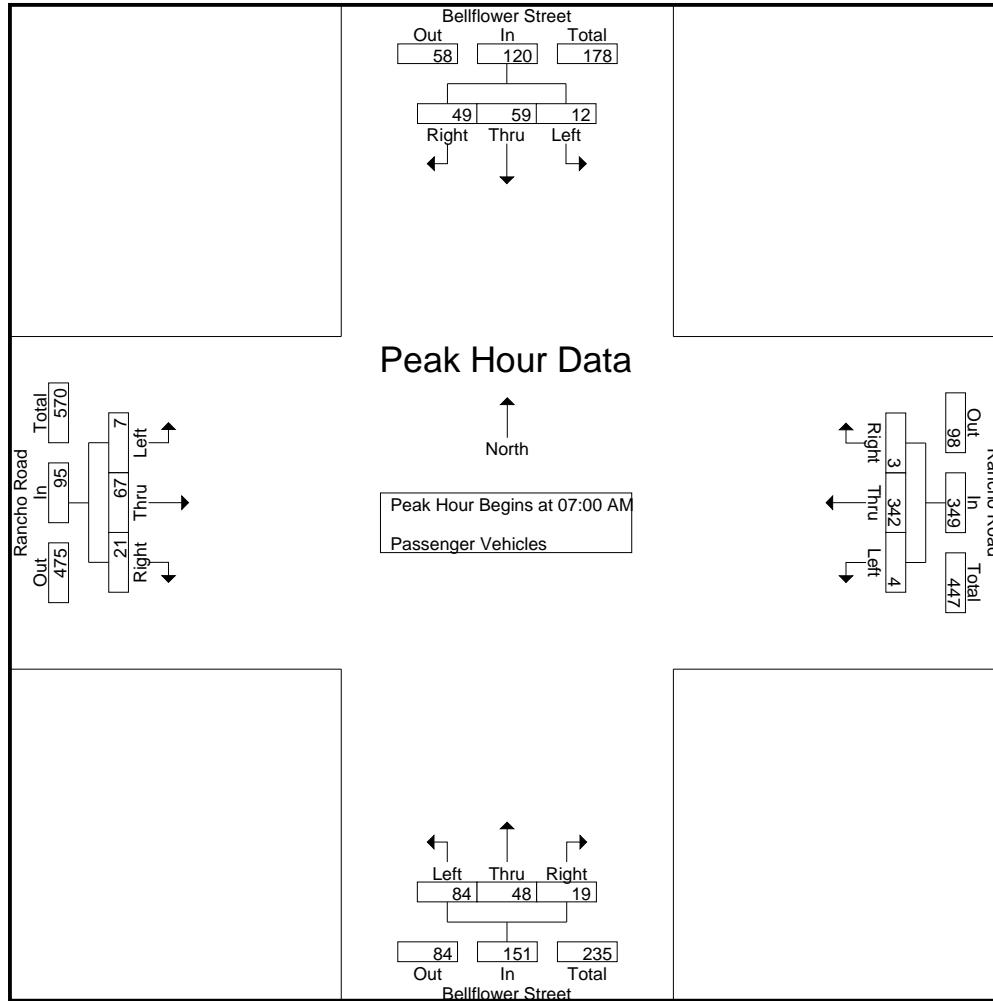
Groups Printed- Passenger Vehicles

	Bellflower Street Southbound				Rancho Road Westbound				Bellflower Street Northbound				Rancho 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	17	14	32	1	110	0	111	18	9	7	34	2	14	4	20	197
07:15 AM	3	15	10	28	2	76	1	79	21	12	3	36	1	14	7	22	165
07:30 AM	4	10	10	24	0	68	1	69	17	10	5	32	2	13	5	20	145
07:45 AM	4	17	15	36	1	88	1	90	28	17	4	49	2	26	5	33	208
Total	12	59	49	120	4	342	3	349	84	48	19	151	7	67	21	95	715
08:00 AM	4	11	4	19	1	53	3	57	17	16	4	37	1	23	2	26	139
08:15 AM	2	15	5	22	4	44	3	51	11	8	7	26	0	40	6	46	145
08:30 AM	2	8	9	19	1	49	4	54	8	12	6	26	3	32	4	39	138
08:45 AM	6	9	9	24	4	39	3	46	12	11	11	34	0	23	3	26	130
Total	14	43	27	84	10	185	13	208	48	47	28	123	4	118	15	137	552
Grand Total	26	102	76	204	14	527	16	557	132	95	47	274	11	185	36	232	1267
Apprch %	12.7	50	37.3		2.5	94.6	2.9		48.2	34.7	17.2		4.7	79.7	15.5		
Total %	2.1	8.1	6	16.1	1.1	41.6	1.3	44	10.4	7.5	3.7	21.6	0.9	14.6	2.8	18.3	

	Bellflower Street Southbound				Rancho Road Westbound				Bellflower Street Northbound				Rancho 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 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	1	17	14	32	1	110	0	111	18	9	7	34	2	14	4	20	197
07:15 AM	3	15	10	28	2	76	1	79	21	12	3	36	1	14	7	22	165
07:30 AM	4	10	10	24	0	68	1	69	17	10	5	32	2	13	5	20	145
07:45 AM	4	17	15	36	1	88	1	90	28	17	4	49	2	26	5	33	208
Total Volume	12	59	49	120	4	342	3	349	84	48	19	151	7	67	21	95	715
% App. Total	10	49.2	40.8		1.1	98	0.9		55.6	31.8	12.6		7.4	70.5	22.1		
PHF	.750	.868	.817	.833	.500	.777	.750	.786	.750	.706	.679	.770	.875	.644	.750	.720	.859

City of Adelanto  
N/S: Bellflower Street  
E/W: Rancho Road  
Weather: Clear

File Name : 01\_ADL\_Bell\_Rancho AM  
Site Code : 07523937  
Start Date : 10/10/2023  
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Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	1	17	14	32	1	110	0	111	18	9	7	34	2	14	4	20
+15 mins.	3	15	10	28	2	76	1	79	21	12	3	36	1	14	7	22
+30 mins.	4	10	10	24	0	68	1	69	17	10	5	32	2	13	5	20
+45 mins.	4	17	15	36	1	88	1	90	28	17	4	49	2	26	5	33
Total Volume	12	59	49	120	4	342	3	349	84	48	19	151	7	67	21	95
% App. Total	10	49.2	40.8		1.1	98	0.9		55.6	31.8	12.6		7.4	70.5	22.1	
PHF	.750	.868	.817	.833	.500	.777	.750	.786	.750	.706	.679	.770	.875	.644	.750	.720

City of Adelanto  
N/S: Bellflower Street  
E/W: Rancho Road  
Weather: Clear

File Name : 01\_ADL\_Bell\_Rancho AM  
Site Code : 07523937  
Start Date : 10/10/2023  
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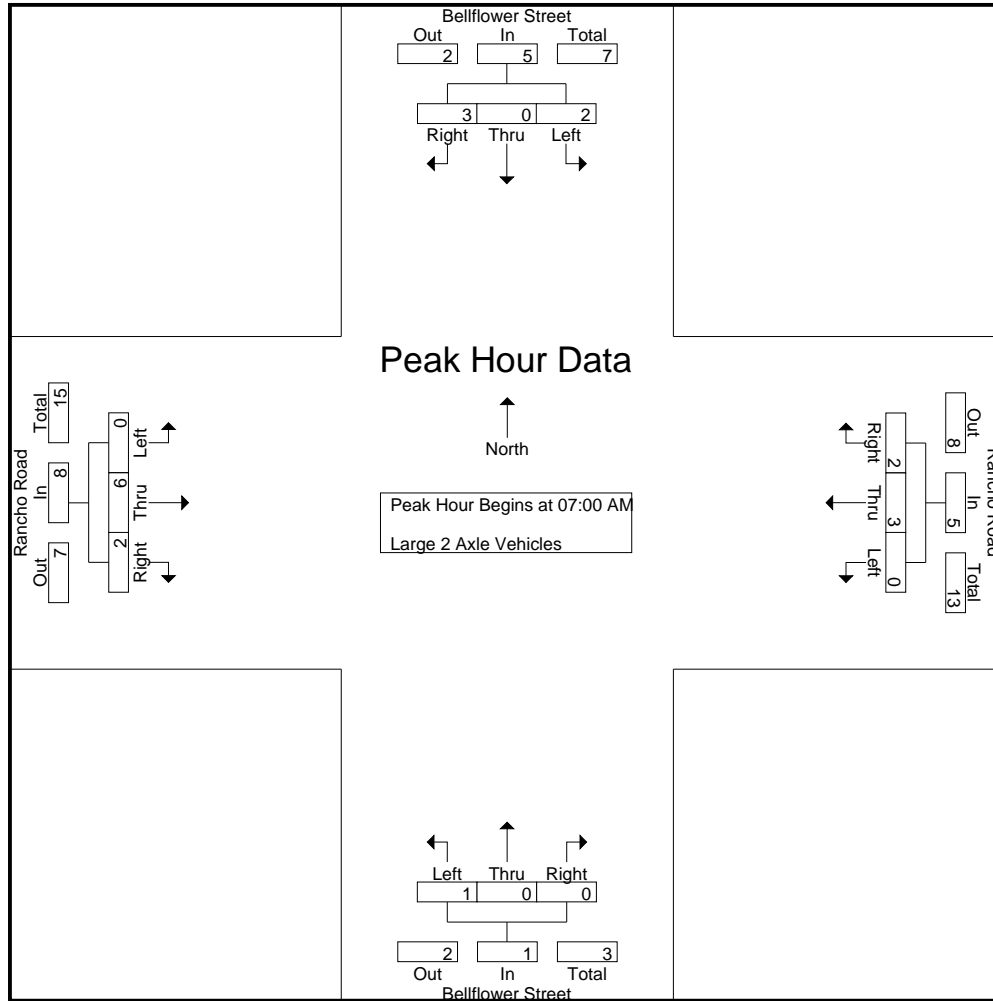
Groups Printed- Large 2 Axle Vehicles

	Bellflower Street Southbound				Rancho Road Westbound				Bellflower Street Northbound				Rancho 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	1	1	0	0	1	1	0	0	0	0	0	1	0	1	3
07:15 AM	1	0	1	2	0	1	0	1	1	0	0	1	0	1	0	1	5
07:30 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	1	1	3
07:45 AM	1	0	1	2	0	0	1	1	0	0	0	0	0	4	1	5	8
Total	2	0	3	5	0	3	2	5	1	0	0	1	0	6	2	8	19
08:00 AM	0	0	0	0	0	2	1	3	0	0	0	0	0	4	0	4	7
08:15 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	3	0	3	5
08:30 AM	0	0	1	1	0	2	0	2	0	0	0	0	0	2	1	3	6
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
Total	0	0	1	1	0	6	1	7	0	0	0	0	0	11	1	12	20
Grand Total	2	0	4	6	0	9	3	12	1	0	0	1	0	17	3	20	39
Apprch %	33.3	0	66.7		0	75	25		100	0	0		0	85	15		
Total %	5.1	0	10.3	15.4	0	23.1	7.7	30.8	2.6	0	0	2.6	0	43.6	7.7	51.3	

	Bellflower Street Southbound				Rancho Road Westbound				Bellflower Street Northbound				Rancho 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 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	1	1	0	0	1	1	0	0	0	0	0	1	0	1	3
07:15 AM	1	0	1	2	0	1	0	1	1	0	0	1	0	1	0	1	5
07:30 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	1	1	3
07:45 AM	1	0	1	2	0	0	1	1	0	0	0	0	0	4	1	5	8
Total Volume	2	0	3	5	0	3	2	5	1	0	0	1	0	6	2	8	19
% App. Total	40	0	60		0	60	40		100	0	0		0	75	25		
PHF	.500	.000	.750	.625	.000	.375	.500	.625	.250	.000	.000	.250	.000	.375	.500	.400	.594

City of Adelanto  
N/S: Bellflower Street  
E/W: Rancho Road  
Weather: Clear

File Name : 01\_ADL\_Bell\_Rancho AM  
Site Code : 07523937  
Start Date : 10/10/2023  
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Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	1	1	0	0	1	1	0	0	0	0	0	1	0	1
+15 mins.	1	0	1	2	0	1	0	1	1	0	0	1	0	1	0	1
+30 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	0	1	1
+45 mins.	1	0	1	2	0	0	1	1	0	0	0	0	0	4	1	5
Total Volume	2	0	3	5	0	3	2	5	1	0	0	1	0	6	2	8
% App. Total	40	0	60		0	60	40		100	0	0		0	75	25	
PHF	.500	.000	.750	.625	.000	.375	.500	.625	.250	.000	.000	.250	.000	.375	.500	.400

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

City of Adelanto  
N/S: Bellflower Street  
E/W: Rancho Road  
Weather: Clear

File Name : 01\_ADL\_Bell\_Rancho AM  
Site Code : 07523937  
Start Date : 10/10/2023  
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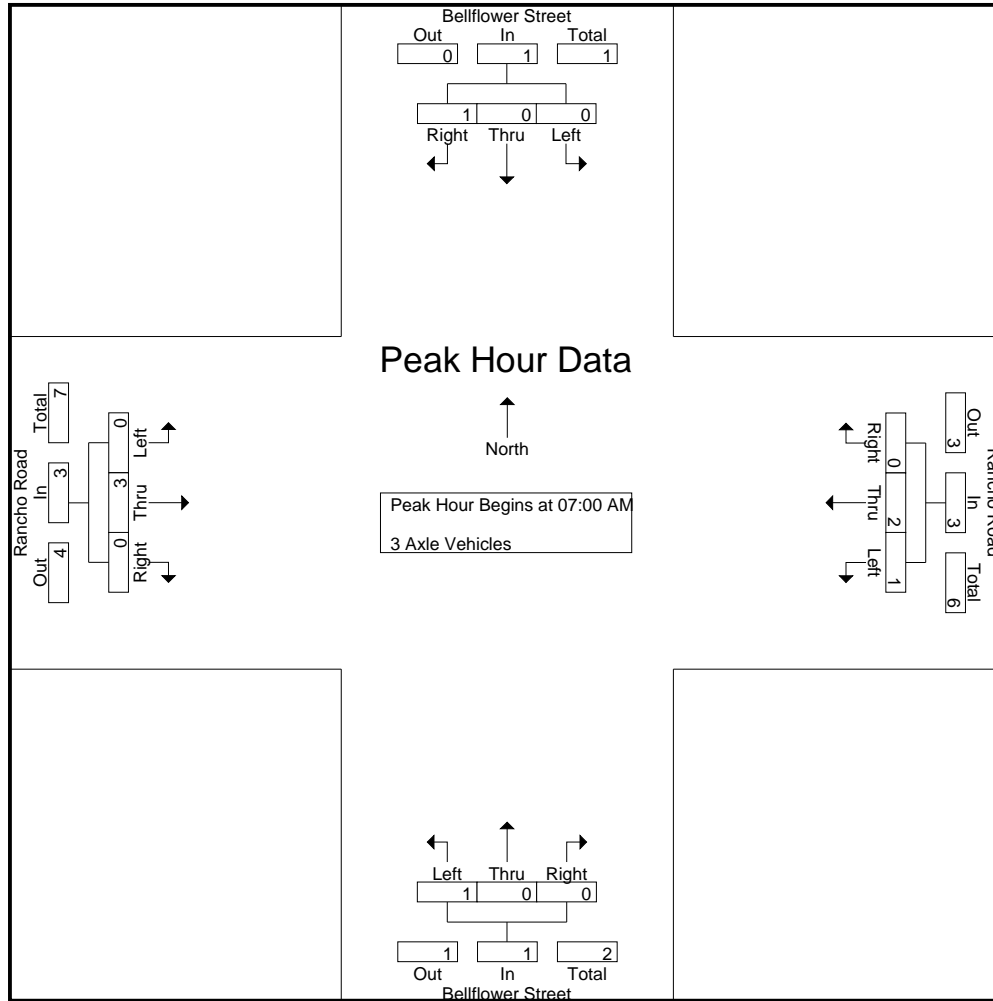
Groups Printed- 3 Axle Vehicles

	Bellflower Street Southbound				Rancho Road Westbound				Bellflower Street Northbound				Rancho 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	1	0	1	0	0	0	0	0	2	0	2	3
07:15 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	1	2
07:30 AM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
07:45 AM	0	0	1	1	0	1	0	1	0	0	0	0	0	0	0	0	2
Total	0	0	1	1	1	2	0	3	1	0	0	1	0	3	0	3	8
08:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	0	1	0	1	0	0	0	0	0	2	1	3	4
Grand Total	0	0	1	1	1	3	0	4	1	0	0	1	0	5	1	6	12
Apprch %	0	0	100		25	75	0		100	0	0		0	83.3	16.7		
Total %	0	0	8.3	8.3	8.3	25	0	33.3	8.3	0	0	8.3	0	41.7	8.3	50	

	Bellflower Street Southbound				Rancho Road Westbound				Bellflower Street Northbound				Rancho 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 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
07:15 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	1	2
07:30 AM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
07:45 AM	0	0	1	1	0	1	0	1	0	0	0	0	0	0	0	0	2
Total Volume	0	0	1	1	1	2	0	3	1	0	0	1	0	3	0	3	8
% App. Total	0	0	100		33.3	66.7	0		100	0	0		0	100	0		
PHF	.000	.000	.250	.250	.250	.500	.000	.750	.250	.000	.000	.250	.000	.375	.000	.375	.667

City of Adelanto  
N/S: Bellflower Street  
E/W: Rancho Road  
Weather: Clear

File Name : 01\_ADL\_Bell\_Rancho AM  
Site Code : 07523937  
Start Date : 10/10/2023  
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Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2
+15 mins.	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	1
+30 mins.	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0
+45 mins.	0	0	1	1	0	1	0	1	0	0	0	0	0	0	0	0
Total Volume	0	0	1	1	1	2	0	3	1	0	0	1	0	3	0	3
% App. Total	0	0	100		33.3	66.7	0		100	0	0		0	100	0	
PHF	.000	.000	.250	.250	.250	.500	.000	.750	.250	.000	.000	.250	.000	.375	.000	.375

City of Adelanto  
N/S: Bellflower Street  
E/W: Rancho Road  
Weather: Clear

File Name : 01\_ADL\_Bell\_Rancho AM  
Site Code : 07523937  
Start Date : 10/10/2023  
Page No : 1

Groups Printed- 4+ Axle Trucks

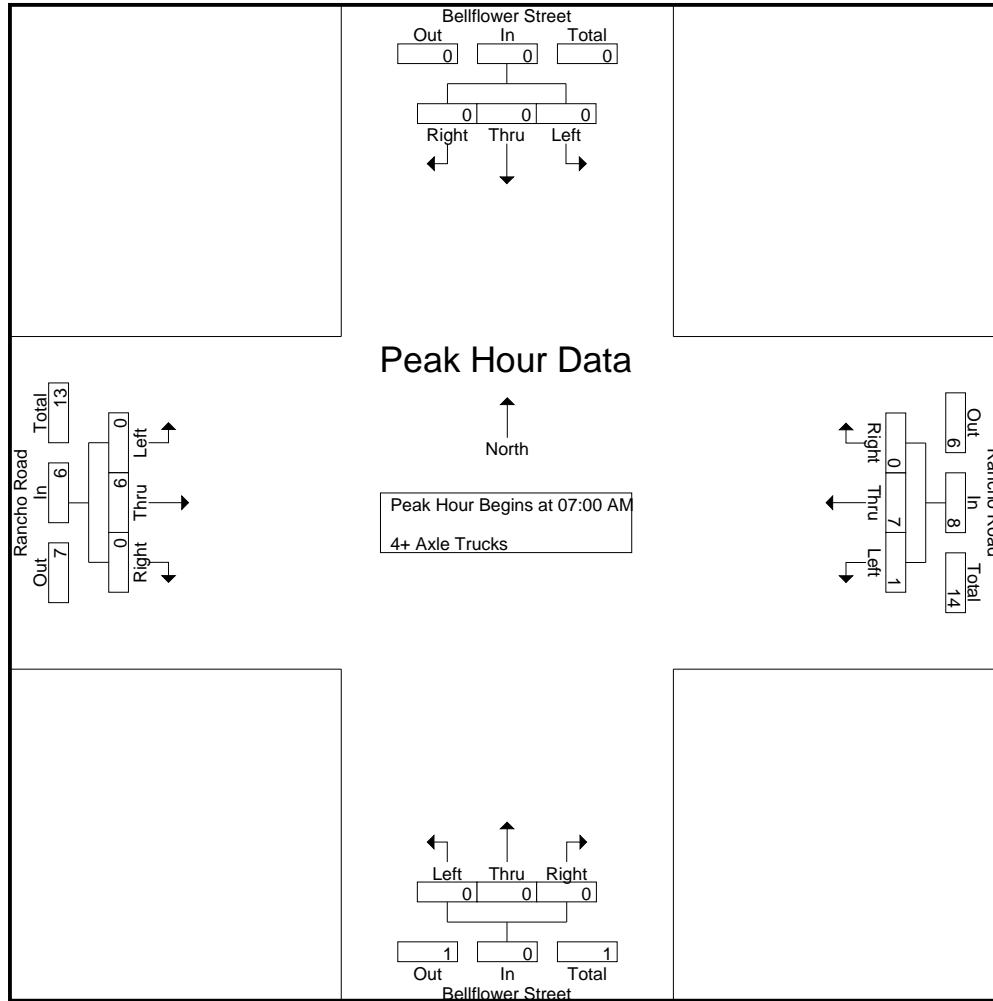
	Bellflower Street Southbound				Rancho Road Westbound				Bellflower Street Northbound				Rancho Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2	5
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	3
07:30 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	3
07:45 AM	0	0	0	0	1	1	0	2	0	0	0	0	0	1	0	1	3
Total	0	0	0	0	1	7	0	8	0	0	0	0	0	6	0	6	14
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	3
08:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
08:30 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2	5
08:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3	4
Total	0	0	0	0	0	5	0	5	0	0	0	0	0	10	0	10	15
Grand Total	0	0	0	0	1	12	0	13	0	0	0	0	0	16	0	16	29
Apprch %	0	0	0		7.7	92.3	0		0	0	0		0	100	0		
Total %	0	0	0	0	3.4	41.4	0	44.8	0	0	0	0	0	55.2	0	55.2	

	Bellflower Street Southbound				Rancho Road Westbound				Bellflower Street Northbound				Rancho 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 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2	5
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	3
07:30 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	3
07:45 AM	0	0	0	0	1	1	0	2	0	0	0	0	0	1	0	1	3
Total Volume	0	0	0	0	1	7	0	8	0	0	0	0	0	6	0	6	14
% App. Total	0	0	0		12.5	87.5	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.250	.583	.000	.667	.000	.000	.000	.000	.000	.500	.000	.500	.700



City of Adelanto  
N/S: Bellflower Street  
E/W: Rancho Road  
Weather: Clear

File Name : 01\_ADL\_Bell\_Rancho AM  
Site Code : 07523937  
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Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	0	0	0	<b>3</b>	0	<b>3</b>	0	0	0	0	0	2	0	2
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>3</b>	0	<b>3</b>
+30 mins.	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	<b>1</b>	1	0	2	0	0	0	0	0	1	0	1
Total Volume	0	0	0	0	1	7	0	8	0	0	0	0	0	6	0	6
% App. Total	0	0	0	0	12.5	87.5	0		0	0	0	0	0	100	0	
PHF	.000	.000	.000	.000	.250	.583	.000	.667	.000	.000	.000	.000	.000	.500	.000	.500

City of Adelanto  
N/S: Bellflower Street  
E/W: Rancho Road  
Weather: Clear

File Name : 01\_ADL\_Bell\_Rancho PM  
Site Code : 07523937  
Start Date : 10/10/2023  
Page No : 1

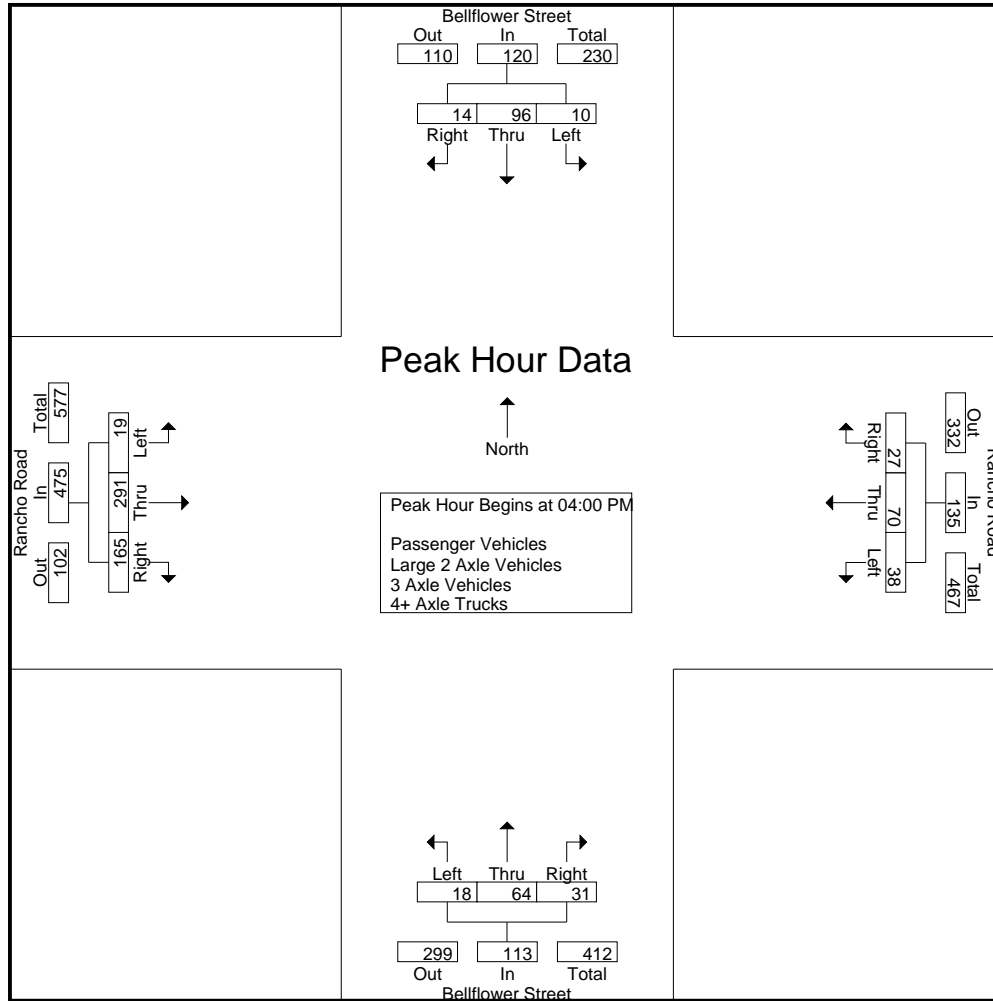
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Bellflower Street Southbound				Rancho Road Westbound				Bellflower Street Northbound				Rancho 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	33	2	37	8	16	5	29	4	21	8	33	8	94	60	162	261
04:15 PM	5	21	4	30	5	17	9	31	7	17	4	28	3	63	33	99	188
04:30 PM	2	26	6	34	13	17	9	39	3	16	9	28	3	79	44	126	227
04:45 PM	1	16	2	19	12	20	4	36	4	10	10	24	5	55	28	88	167
Total	10	96	14	120	38	70	27	135	18	64	31	113	19	291	165	475	843
05:00 PM	3	32	2	37	6	22	6	34	3	14	4	21	4	96	56	156	248
05:15 PM	3	27	2	32	5	23	6	34	7	21	5	33	5	45	28	78	177
05:30 PM	5	23	2	30	7	15	9	31	3	28	2	33	7	61	18	86	180
05:45 PM	2	25	1	28	3	19	3	25	5	26	2	33	2	30	12	44	130
Total	13	107	7	127	21	79	24	124	18	89	13	120	18	232	114	364	735
Grand Total	23	203	21	247	59	149	51	259	36	153	44	233	37	523	279	839	1578
Apprch %	9.3	82.2	8.5		22.8	57.5	19.7		15.5	65.7	18.9		4.4	62.3	33.3		
Total %	1.5	12.9	1.3	15.7	3.7	9.4	3.2	16.4	2.3	9.7	2.8	14.8	2.3	33.1	17.7	53.2	
Passenger Vehicles	22	199	19	240	58	138	48	244	35	153	44	232	37	510	275	822	1538
% Passenger Vehicles	95.7	98	90.5	97.2	98.3	92.6	94.1	94.2	97.2	100	100	99.6	100	97.5	98.6	98	97.5
Large 2 Axle Vehicles	1	3	2	6	0	2	3	5	1	0	0	1	0	2	4	6	18
% Large 2 Axle Vehicles	4.3	1.5	9.5	2.4	0	1.3	5.9	1.9	2.8	0	0	0.4	0	0.4	1.4	0.7	1.1
3 Axle Vehicles	0	0	0	0	0	4	0	4	0	0	0	0	0	3	0	3	7
% 3 Axle Vehicles	0	0	0	0	0	2.7	0	1.5	0	0	0	0	0	0.6	0	0.4	0.4
4+ Axle Trucks	0	1	0	1	1	5	0	6	0	0	0	0	0	8	0	8	15
% 4+ Axle Trucks	0	0.5	0	0.4	1.7	3.4	0	2.3	0	0	0	0	0	1.5	0	1	1

	Bellflower Street Southbound				Rancho Road Westbound				Bellflower Street Northbound				Rancho 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	2	<b>33</b>	2	<b>37</b>	8	16	5	29	4	<b>21</b>	8	<b>33</b>	<b>8</b>	<b>94</b>	<b>60</b>	<b>162</b>	<b>261</b>
04:15 PM	<b>5</b>	21	4	30	5	17	<b>9</b>	31	<b>7</b>	17	4	28	3	63	33	99	188
04:30 PM	2	26	<b>6</b>	34	<b>13</b>	17	9	<b>39</b>	3	16	9	28	3	79	44	126	227
04:45 PM	1	16	2	19	12	<b>20</b>	4	36	4	10	<b>10</b>	24	5	55	28	88	167
Total Volume	10	96	14	120	38	70	27	135	18	64	31	113	19	291	165	475	843
% App. Total	8.3	80	11.7		28.1	51.9	20		15.9	56.6	27.4		4	61.3	34.7		
PHF	.500	.727	.583	.811	.731	.875	.750	.865	.643	.762	.775	.856	.594	.774	.688	.733	.807

City of Adelanto  
N/S: Bellflower Street  
E/W: Rancho Road  
Weather: Clear

File Name : 01\_ADL\_Bell\_Rancho PM  
Site Code : 07523937  
Start Date : 10/10/2023  
Page No : 2



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

	05:00 PM				04:30 PM				05:00 PM				04:00 PM			
+0 mins.	3	<b>32</b>	<b>2</b>	<b>37</b>	<b>13</b>	17	<b>9</b>	<b>39</b>	3	14	4	21	<b>8</b>	<b>94</b>	<b>60</b>	<b>162</b>
+15 mins.	3	27	2	32	12	20	4	36	<b>7</b>	21	<b>5</b>	<b>33</b>	3	63	33	99
+30 mins.	<b>5</b>	23	2	30	6	22	6	34	3	<b>28</b>	2	33	3	79	44	126
+45 mins.	2	25	1	28	5	<b>23</b>	6	34	5	26	2	33	5	55	28	88
Total Volume	13	107	7	127	36	82	25	143	18	89	13	120	19	291	165	475
% App. Total	10.2	84.3	5.5		25.2	57.3	17.5		15	74.2	10.8		4	61.3	34.7	
PHF	.650	.836	.875	.858	.692	.891	.694	.917	.643	.795	.650	.909	.594	.774	.688	.733

City of Adelanto  
N/S: Bellflower Street  
E/W: Rancho Road  
Weather: Clear

File Name : 01\_ADL\_Bell\_Rancho PM  
Site Code : 07523937  
Start Date : 10/10/2023  
Page No : 1

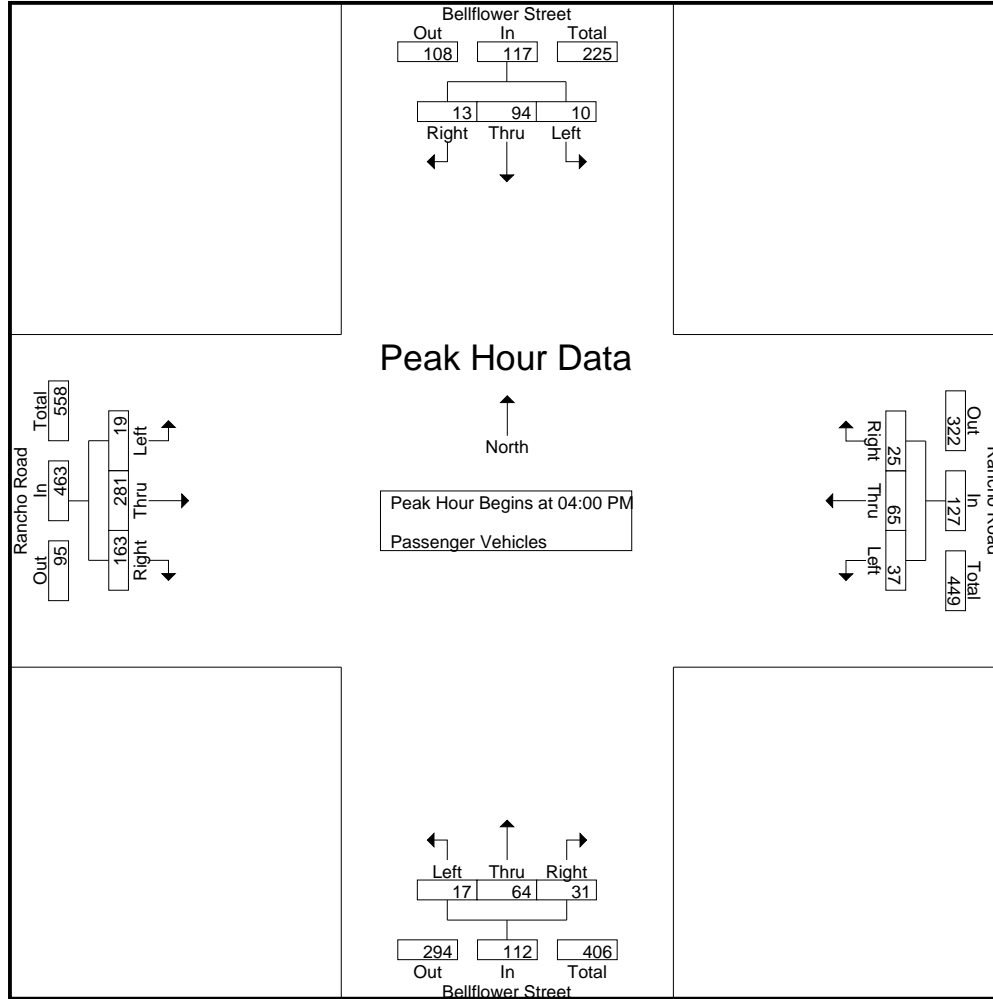
Groups Printed- Passenger Vehicles

	Bellflower Street Southbound				Rancho Road Westbound				Bellflower Street Northbound				Rancho 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	32	2	36	8	14	5	27	4	21	8	33	8	92	59	159	255
04:15 PM	5	21	4	30	5	15	8	28	6	17	4	27	3	61	33	97	182
04:30 PM	2	25	6	33	13	17	8	38	3	16	9	28	3	74	43	120	219
04:45 PM	1	16	1	18	11	19	4	34	4	10	10	24	5	54	28	87	163
Total	10	94	13	117	37	65	25	127	17	64	31	112	19	281	163	463	819
05:00 PM	3	32	2	37	6	21	6	33	3	14	4	21	4	95	54	153	244
05:15 PM	3	26	2	31	5	21	6	32	7	21	5	33	5	44	28	77	173
05:30 PM	4	23	2	29	7	13	8	28	3	28	2	33	7	60	18	85	175
05:45 PM	2	24	0	26	3	18	3	24	5	26	2	33	2	30	12	44	127
Total	12	105	6	123	21	73	23	117	18	89	13	120	18	229	112	359	719
Grand Total	22	199	19	240	58	138	48	244	35	153	44	232	37	510	275	822	1538
Apprch %	9.2	82.9	7.9		23.8	56.6	19.7		15.1	65.9	19		4.5	62	33.5		
Total %	1.4	12.9	1.2	15.6	3.8	9	3.1	15.9	2.3	9.9	2.9	15.1	2.4	33.2	17.9	53.4	

	Bellflower Street Southbound				Rancho Road Westbound				Bellflower Street Northbound				Rancho 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 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	2	<b>32</b>	2	<b>36</b>	8	14	5	27	4	<b>21</b>	8	<b>33</b>	<b>8</b>	<b>92</b>	<b>59</b>	<b>159</b>	<b>255</b>
04:15 PM	<b>5</b>	21	4	30	5	15	<b>8</b>	28	<b>6</b>	17	4	27	3	61	33	97	182
04:30 PM	2	25	<b>6</b>	33	<b>13</b>	17	8	<b>38</b>	3	16	9	28	3	74	43	120	219
04:45 PM	1	16	1	18	11	<b>19</b>	4	34	4	10	<b>10</b>	24	5	54	28	87	163
Total Volume	10	94	13	117	37	65	25	127	17	64	31	112	19	281	163	463	819
% App. Total	8.5	80.3	11.1		29.1	51.2	19.7		15.2	57.1	27.7		4.1	60.7	35.2		
PHF	.500	.734	.542	.813	.712	.855	.781	.836	.708	.762	.775	.848	.594	.764	.691	.728	.803

City of Adelanto  
N/S: Bellflower Street  
E/W: Rancho Road  
Weather: Clear

File Name : 01\_ADL\_Bell\_Rancho PM  
Site Code : 07523937  
Start Date : 10/10/2023  
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Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	2	32	2	36	8	14	5	27	4	21	8	33	8	92	59	159
+15 mins.	5	21	4	30	5	15	8	28	6	17	4	27	3	61	33	97
+30 mins.	2	25	6	33	13	17	8	38	3	16	9	28	3	74	43	120
+45 mins.	1	16	1	18	11	19	4	34	4	10	10	24	5	54	28	87
Total Volume	10	94	13	117	37	65	25	127	17	64	31	112	19	281	163	463
% App. Total	8.5	80.3	11.1		29.1	51.2	19.7		15.2	57.1	27.7		4.1	60.7	35.2	
PHF	.500	.734	.542	.813	.712	.855	.781	.836	.708	.762	.775	.848	.594	.764	.691	.728

City of Adelanto  
N/S: Bellflower Street  
E/W: Rancho Road  
Weather: Clear

File Name : 01\_ADL\_Bell\_Rancho PM  
Site Code : 07523937  
Start Date : 10/10/2023  
Page No : 1

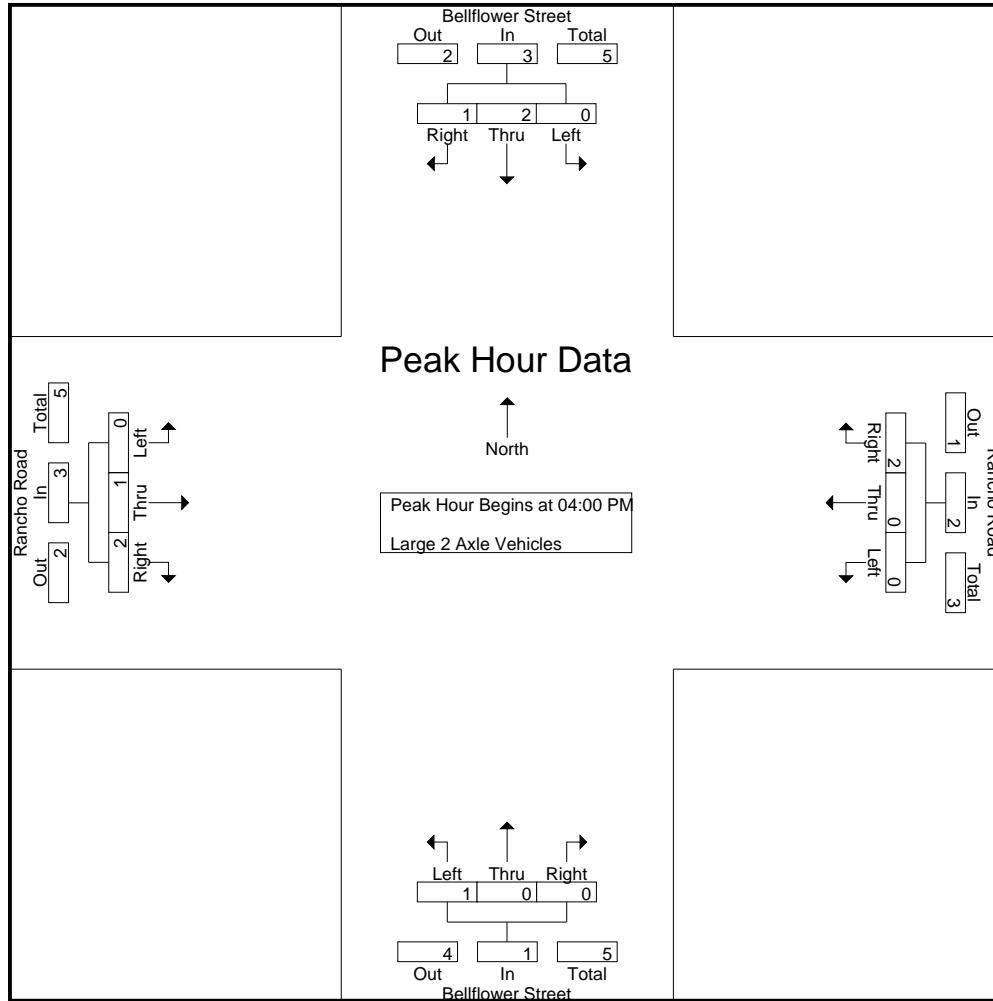
Groups Printed- Large 2 Axle Vehicles

	Bellflower Street Southbound				Rancho Road Westbound				Bellflower Street Northbound				Rancho 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	1	0	1	0	0	0	0	0	0	0	0	0	0	1	1	2
04:15 PM	0	0	0	0	0	0	1	1	1	0	0	1	0	0	0	0	2
04:30 PM	0	1	0	1	0	0	1	1	0	0	0	0	0	0	1	1	3
04:45 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	1	2
Total	0	2	1	3	0	0	2	2	1	0	0	1	0	1	2	3	9
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	3	3
05:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:30 PM	1	0	0	1	0	1	1	2	0	0	0	0	0	0	0	0	3
05:45 PM	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	1	1	1	3	0	2	1	3	0	0	0	0	0	1	2	3	9
Grand Total	1	3	2	6	0	2	3	5	1	0	0	1	0	2	4	6	18
Apprch %	16.7	50	33.3		0	40	60		100	0	0		0	33.3	66.7		
Total %	5.6	16.7	11.1	33.3	0	11.1	16.7	27.8	5.6	0	0	5.6	0	11.1	22.2	33.3	

	Bellflower Street Southbound				Rancho Road Westbound				Bellflower Street Northbound				Rancho 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 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	1	2
04:15 PM	0	0	0	0	0	0	1	1	1	0	0	1	0	0	0	0	2
04:30 PM	0	1	0	1	0	0	1	1	0	0	0	0	0	0	1	1	3
04:45 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	1	2
Total Volume	0	2	1	3	0	0	2	2	1	0	0	1	0	1	2	3	9
% App. Total	0	66.7	33.3		0	0	100		100	0	0		0	33.3	66.7		
PHF	.000	.500	.250	.750	.000	.000	.500	.500	.250	.000	.000	.250	.000	.250	.500	.750	.750

City of Adelanto  
N/S: Bellflower Street  
E/W: Rancho Road  
Weather: Clear

File Name : 01\_ADL\_Bell\_Rancho PM  
Site Code : 07523937  
Start Date : 10/10/2023  
Page No : 2



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

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	1
+15 mins.	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0
+30 mins.	0	1	0	1	0	0	1	1	0	0	0	0	0	0	1	1
+45 mins.	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	1
Total Volume	0	2	1	3	0	0	2	2	1	0	0	1	0	1	2	3
% App. Total	0	66.7	33.3		0	0	100		100	0	0		0	33.3	66.7	
PHF	.000	.500	.250	.750	.000	.000	.500	.500	.250	.000	.000	.250	.000	.250	.500	.750



City of Adelanto  
N/S: Bellflower Street  
E/W: Rancho Road  
Weather: Clear

File Name : 01\_ADL\_Bell\_Rancho PM  
Site Code : 07523937  
Start Date : 10/10/2023  
Page No : 1

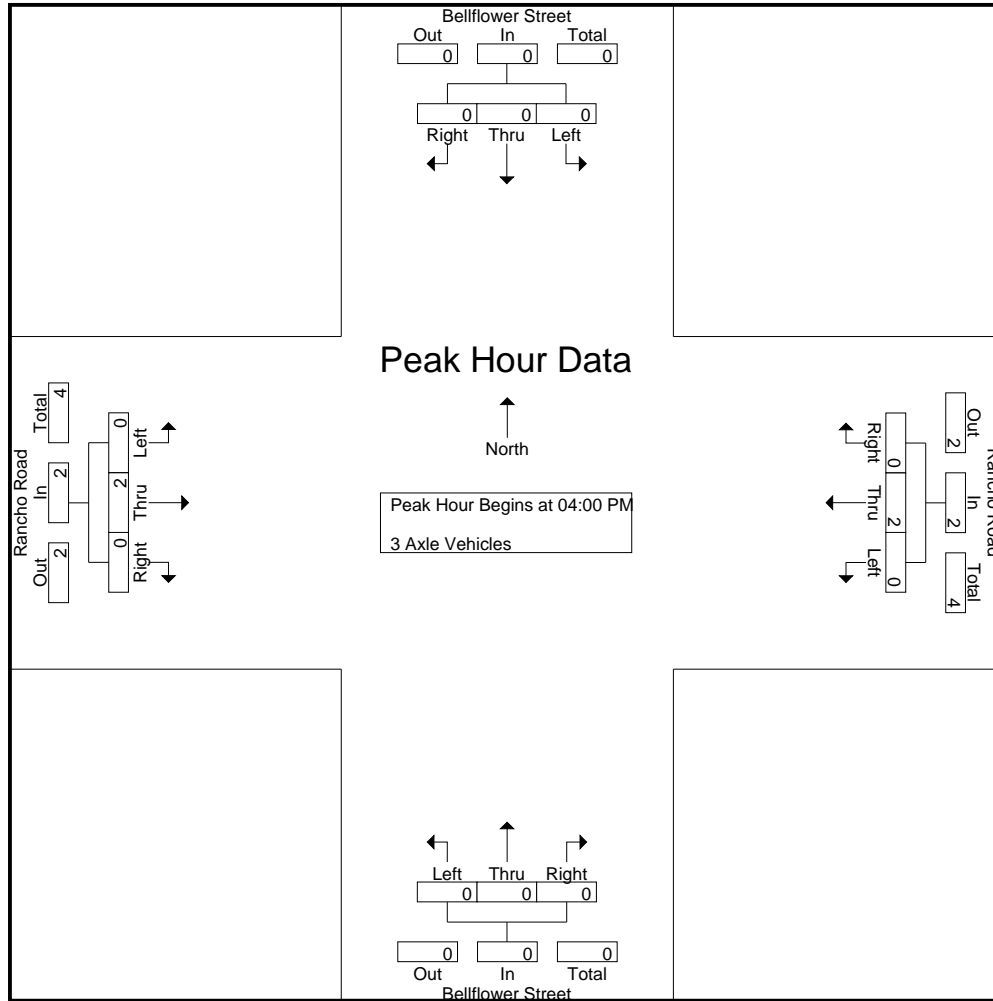
Groups Printed- 3 Axle Vehicles

	Bellflower Street Southbound				Rancho Road Westbound				Bellflower Street Northbound				Rancho 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	1	0	1	0	0	0	0	0	0	0	0	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
05:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
Grand Total	0	0	0	0	0	4	0	4	0	0	0	0	0	3	0	3	7
Apprch %	0	0	0		0	100	0		0	0	0		0	100	0		
Total %	0	0	0	0	0	57.1	0	57.1	0	0	0	0	0	42.9	0	42.9	

	Bellflower Street Southbound				Rancho Road Westbound				Bellflower Street Northbound				Rancho 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 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total Volume	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000	.000	.250	.000	.250	.500

City of Adelanto  
N/S: Bellflower Street  
E/W: Rancho Road  
Weather: Clear

File Name : 01\_ADL\_Bell\_Rancho PM  
Site Code : 07523937  
Start Date : 10/10/2023  
Page No : 2



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

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2
% App. Total	0	0	0	0	0	100	0	0	0	0	0	0	0	100	0	0
PHF	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000	.000	.250	.000	.250

City of Adelanto  
N/S: Bellflower Street  
E/W: Rancho Road  
Weather: Clear

File Name : 01\_ADL\_Bell\_Rancho PM  
Site Code : 07523937  
Start Date : 10/10/2023  
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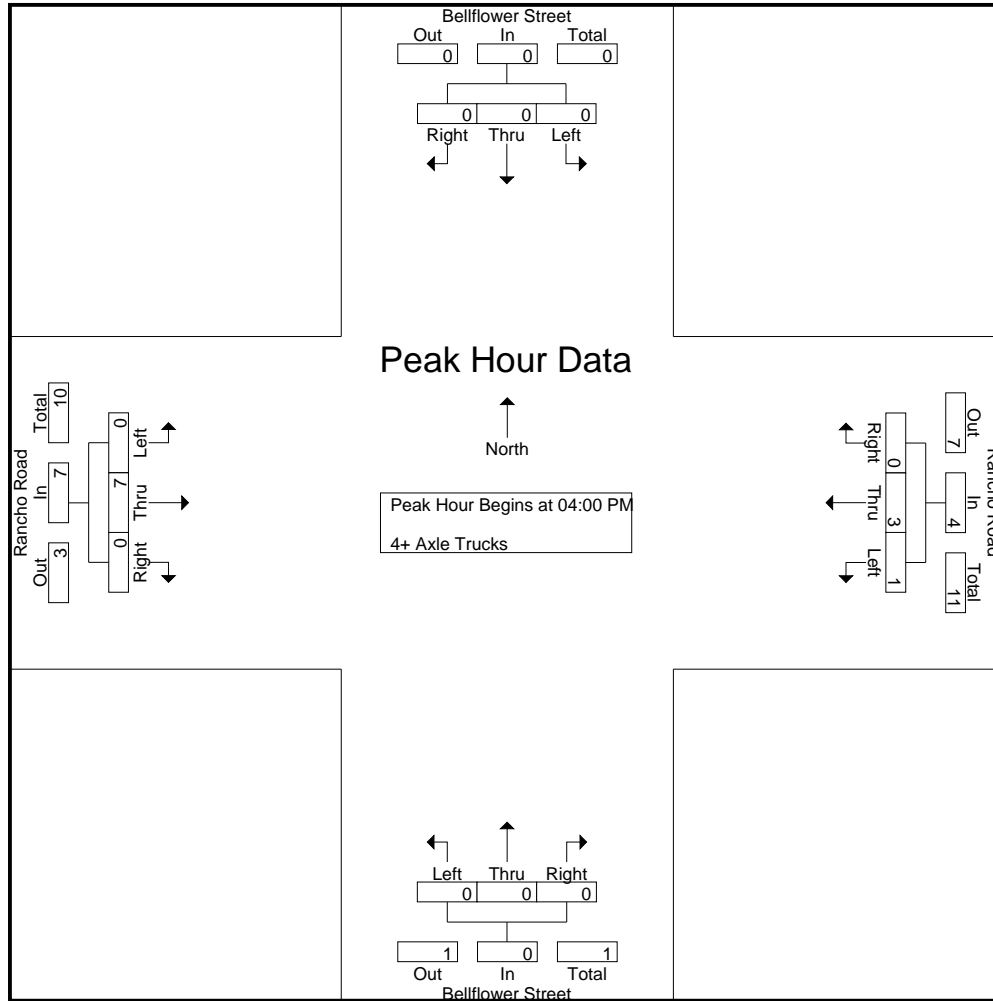
Groups Printed- 4+ Axle Trucks

	Bellflower Street Southbound				Rancho Road Westbound				Bellflower Street Northbound				Rancho 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	1	0	1	0	0	0	0	0	2	0	2	3
04:15 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5	5
04:45 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	1	3	0	4	0	0	0	0	0	7	0	7	11
05:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:15 PM	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	0	2	0	2	0	0	0	0	0	1	0	1	4
Grand Total	0	1	0	1	1	5	0	6	0	0	0	0	0	8	0	8	15
Apprch %	0	100	0		16.7	83.3	0		0	0	0		0	100	0		
Total %	0	6.7	0	6.7	6.7	33.3	0	40	0	0	0	0	0	53.3	0	53.3	

	Bellflower Street Southbound				Rancho Road Westbound				Bellflower Street Northbound				Rancho 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 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
04:15 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5	5
04:45 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
Total Volume	0	0	0	0	1	3	0	4	0	0	0	0	0	7	0	7	11
% App. Total	0	0	0		25	75	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.250	.375	.000	.500	.000	.000	.000	.000	.000	.350	.000	.350	.550

City of Adelanto  
N/S: Bellflower Street  
E/W: Rancho Road  
Weather: Clear

File Name : 01\_ADL\_Bell\_Rancho PM  
Site Code : 07523937  
Start Date : 10/10/2023  
Page No : 2



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

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2
+15 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5
+45 mins.	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	1	3	0	4	0	0	0	0	0	7	0	7
% App. Total	0	0	0	0	25	75	0		0	0	0	0	0	100	0	
PHF	.000	.000	.000	.000	.250	.375	.000	.500	.000	.000	.000	.000	.000	.350	.000	.350

City of Adelanto  
N/S: US-395  
E/W: Rancho Road  
Weather: Clear

File Name : 06\_ADL\_US395\_Rancho AM  
Site Code : 07523937  
Start Date : 10/10/2023  
Page No : 1

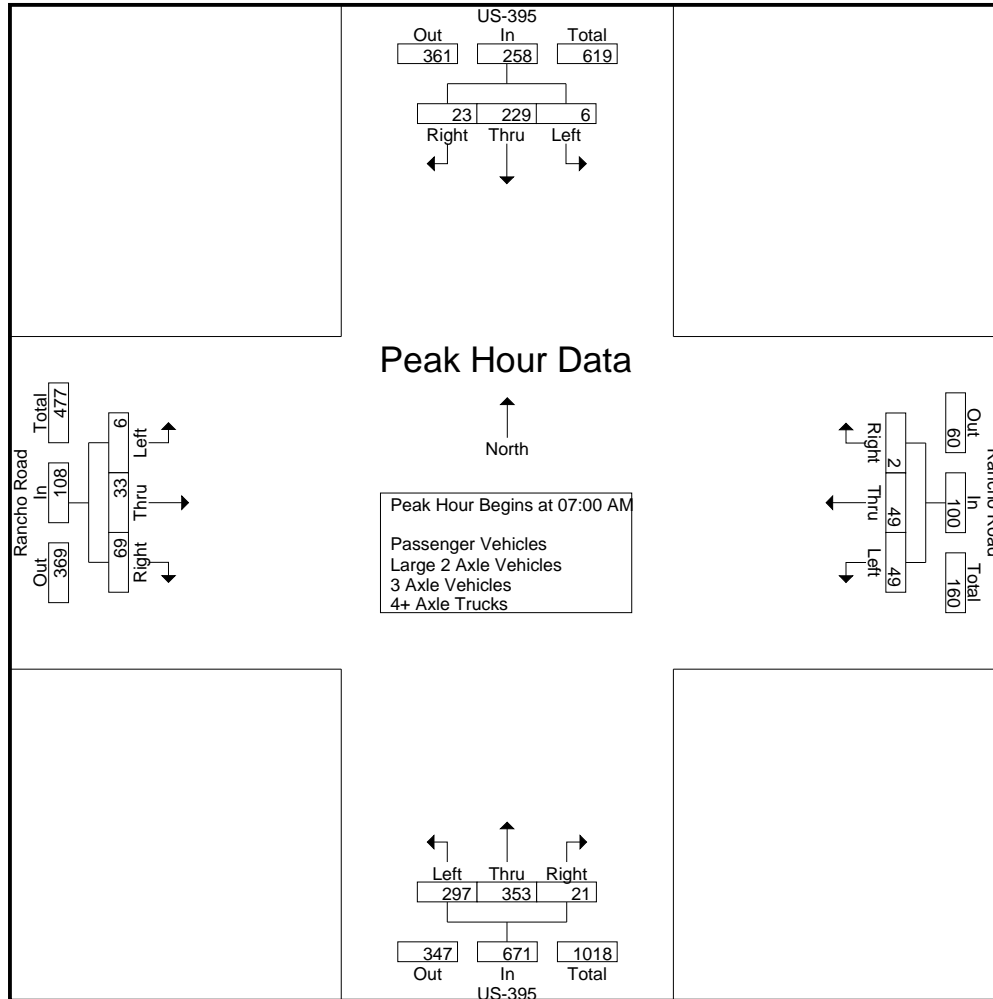
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	US-395 Southbound				Rancho Road Westbound				US-395 Northbound				Rancho 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	48	12	61	17	17	0	34	95	92	9	196	1	7	13	21	312
07:15 AM	4	56	5	65	9	6	1	16	68	71	2	141	2	10	16	28	250
07:30 AM	0	62	2	64	15	9	1	25	57	86	3	146	2	10	15	27	262
07:45 AM	1	63	4	68	8	17	0	25	77	104	7	188	1	6	25	32	313
Total	6	229	23	258	49	49	2	100	297	353	21	671	6	33	69	108	1137
08:00 AM	1	44	4	49	9	8	1	18	48	82	3	133	3	16	20	39	239
08:15 AM	4	58	6	68	8	14	0	22	33	70	3	106	11	15	30	56	252
08:30 AM	3	80	1	84	13	10	0	23	47	69	1	117	3	15	24	42	266
08:45 AM	0	81	9	90	14	9	3	26	35	69	7	111	1	15	21	37	264
Total	8	263	20	291	44	41	4	89	163	290	14	467	18	61	95	174	1021
Grand Total	14	492	43	549	93	90	6	189	460	643	35	1138	24	94	164	282	2158
Apprch %	2.6	89.6	7.8		49.2	47.6	3.2		40.4	56.5	3.1		8.5	33.3	58.2		
Total %	0.6	22.8	2	25.4	4.3	4.2	0.3	8.8	21.3	29.8	1.6	52.7	1.1	4.4	7.6	13.1	
Passenger Vehicles	13	392	40	445	56	81	5	142	445	550	35	1030	18	83	143	244	1861
% Passenger Vehicles	92.9	79.7	93	81.1	60.2	90	83.3	75.1	96.7	85.5	100	90.5	75	88.3	87.2	86.5	86.2
Large 2 Axle Vehicles	0	14	1	15	7	5	0	12	6	21	0	27	3	7	10	20	74
% Large 2 Axle Vehicles	0	2.8	2.3	2.7	7.5	5.6	0	6.3	1.3	3.3	0	2.4	12.5	7.4	6.1	7.1	3.4
3 Axle Vehicles	0	5	1	6	13	1	0	14	1	4	0	5	0	3	1	4	29
% 3 Axle Vehicles	0	1	2.3	1.1	14	1.1	0	7.4	0.2	0.6	0	0.4	0	3.2	0.6	1.4	1.3
4+ Axle Trucks	1	81	1	83	17	3	1	21	8	68	0	76	3	1	10	14	194
% 4+ Axle Trucks	7.1	16.5	2.3	15.1	18.3	3.3	16.7	11.1	1.7	10.6	0	6.7	12.5	1.1	6.1	5	9

	US-395 Southbound				Rancho Road Westbound				US-395 Northbound				Rancho 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	48	<b>12</b>	61	<b>17</b>	<b>17</b>	0	<b>34</b>	<b>95</b>	92	<b>9</b>	<b>196</b>	1	7	13	21	312
07:15 AM	<b>4</b>	56	5	65	9	6	<b>1</b>	16	68	71	2	141	<b>2</b>	<b>10</b>	16	28	250
07:30 AM	0	62	2	64	15	9	1	25	57	86	3	146	2	10	15	27	262
07:45 AM	1	<b>63</b>	4	<b>68</b>	8	17	0	25	77	<b>104</b>	7	188	1	6	<b>25</b>	<b>32</b>	<b>313</b>
Total Volume	6	229	23	258	49	49	2	100	297	353	21	671	6	33	69	108	1137
% App. Total	2.3	88.8	8.9		49	49	2		44.3	52.6	3.1		5.6	30.6	63.9		
PHF	.375	.909	.479	.949	.721	.721	.500	.735	.782	.849	.583	.856	.750	.825	.690	.844	.908

City of Adelanto  
N/S: US-395  
E/W: Rancho Road  
Weather: Clear

File Name : 06\_ADL\_US395\_Rancho AM  
Site Code : 07523937  
Start Date : 10/10/2023  
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:

	08:00 AM				07:00 AM				07:00 AM				08:00 AM			
+0 mins.	1	44	4	49	17	17	0	34	95	92	9	196	3	16	20	39
+15 mins.	4	58	6	68	9	6	1	16	68	71	2	141	11	15	30	56
+30 mins.	3	80	1	84	15	9	1	25	57	86	3	146	3	15	24	42
+45 mins.	0	81	9	90	8	17	0	25	77	104	7	188	1	15	21	37
Total Volume	8	263	20	291	49	49	2	100	297	353	21	671	18	61	95	174
% App. Total	2.7	90.4	6.9		49	49	2		44.3	52.6	3.1		10.3	35.1	54.6	
PHF	.500	.812	.556	.808	.721	.721	.500	.735	.782	.849	.583	.856	.409	.953	.792	.777

City of Adelanto  
N/S: US-395  
E/W: Rancho Road  
Weather: Clear

File Name : 06\_ADL\_US395\_Rancho AM  
Site Code : 07523937  
Start Date : 10/10/2023  
Page No : 1

Groups Printed- Passenger Vehicles

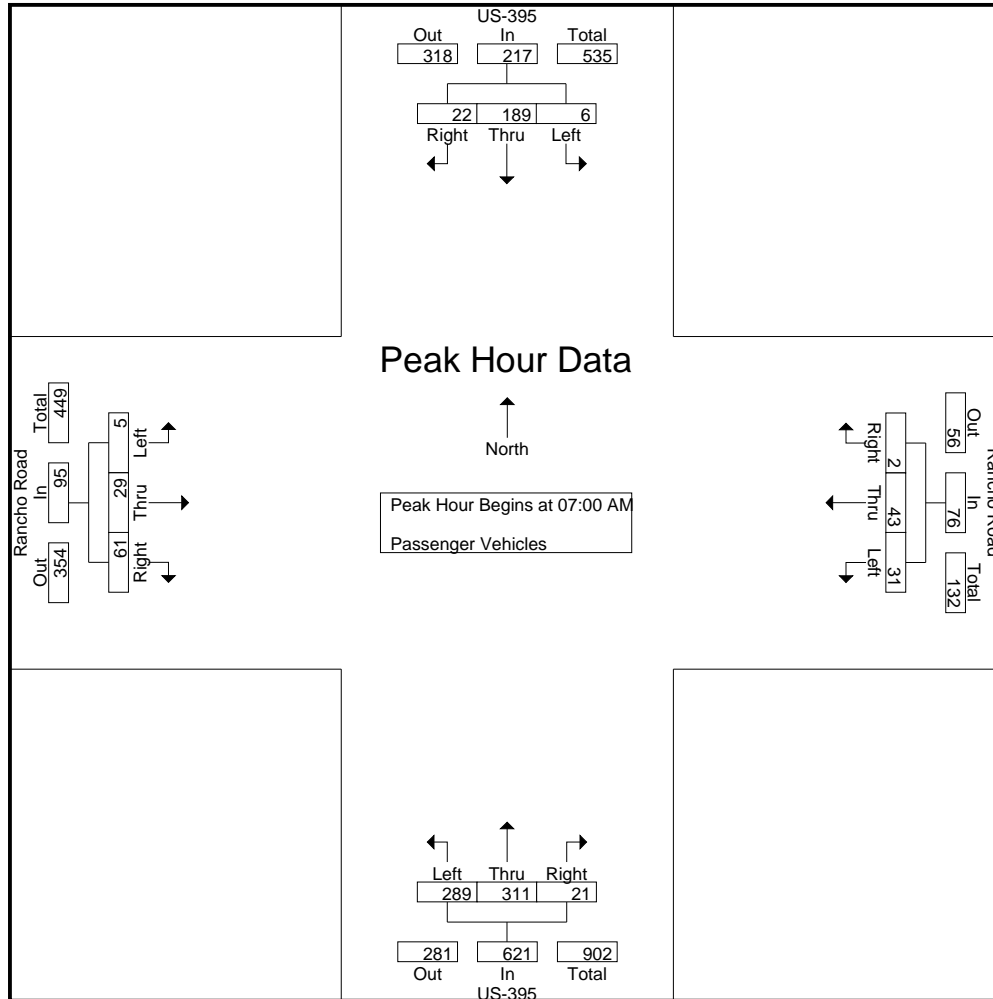
	US-395 Southbound				Rancho Road Westbound				US-395 Northbound				Rancho Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	1	38	11	50	10	17	0	27	92	85	9	186	1	6	11	18	281
07:15 AM	4	46	5	55	6	5	1	12	67	64	2	133	1	8	12	21	221
07:30 AM	0	53	2	55	12	8	1	21	54	73	3	130	2	10	15	27	233
07:45 AM	1	52	4	57	3	13	0	16	76	89	7	172	1	5	23	29	274
Total	6	189	22	217	31	43	2	76	289	311	21	621	5	29	61	95	1009
08:00 AM	0	34	4	38	7	7	0	14	45	73	3	121	1	13	17	31	204
08:15 AM	4	44	5	53	3	13	0	16	33	60	3	96	9	13	26	48	213
08:30 AM	3	61	0	64	7	9	0	16	44	51	1	96	3	14	21	38	214
08:45 AM	0	64	9	73	8	9	3	20	34	55	7	96	0	14	18	32	221
Total	7	203	18	228	25	38	3	66	156	239	14	409	13	54	82	149	852
Grand Total	13	392	40	445	56	81	5	142	445	550	35	1030	18	83	143	244	1861
Apprch %	2.9	88.1	9		39.4	57	3.5		43.2	53.4	3.4		7.4	34	58.6		
Total %	0.7	21.1	2.1	23.9	3	4.4	0.3	7.6	23.9	29.6	1.9	55.3	1	4.5	7.7	13.1	

	US-395 Southbound				Rancho Road Westbound				US-395 Northbound				Rancho 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 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	1	38	11	50	10	17	0	27	92	85	9	186	1	6	11	18	281
07:15 AM	4	46	5	55	6	5	1	12	67	64	2	133	1	8	12	21	221
07:30 AM	0	53	2	55	12	8	1	21	54	73	3	130	2	10	15	27	233
07:45 AM	1	52	4	57	3	13	0	16	76	89	7	172	1	5	23	29	274
Total Volume	6	189	22	217	31	43	2	76	289	311	21	621	5	29	61	95	1009
% App. Total	2.8	87.1	10.1		40.8	56.6	2.6		46.5	50.1	3.4		5.3	30.5	64.2		
PHF	.375	.892	.500	.952	.646	.632	.500	.704	.785	.874	.583	.835	.625	.725	.663	.819	.898



City of Adelanto  
N/S: US-395  
E/W: Rancho Road  
Weather: Clear

File Name : 06\_ADL\_US395\_Rancho AM  
Site Code : 07523937  
Start Date : 10/10/2023  
Page No : 2



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

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	1	38	11	50	10	17	0	27	92	85	9	186	1	6	11	18
+15 mins.	4	46	5	55	6	5	1	12	67	64	2	133	1	8	12	21
+30 mins.	0	53	2	55	12	8	1	21	54	73	3	130	2	10	15	27
+45 mins.	1	52	4	57	3	13	0	16	76	89	7	172	1	5	23	29
Total Volume	6	189	22	217	31	43	2	76	289	311	21	621	5	29	61	95
% App. Total	2.8	87.1	10.1		40.8	56.6	2.6		46.5	50.1	3.4		5.3	30.5	64.2	
PHF	.375	.892	.500	.952	.646	.632	.500	.704	.785	.874	.583	.835	.625	.725	.663	.819

City of Adelanto  
N/S: US-395  
E/W: Rancho Road  
Weather: Clear

File Name : 06\_ADL\_US395\_Rancho AM  
Site Code : 07523937  
Start Date : 10/10/2023  
Page No : 1

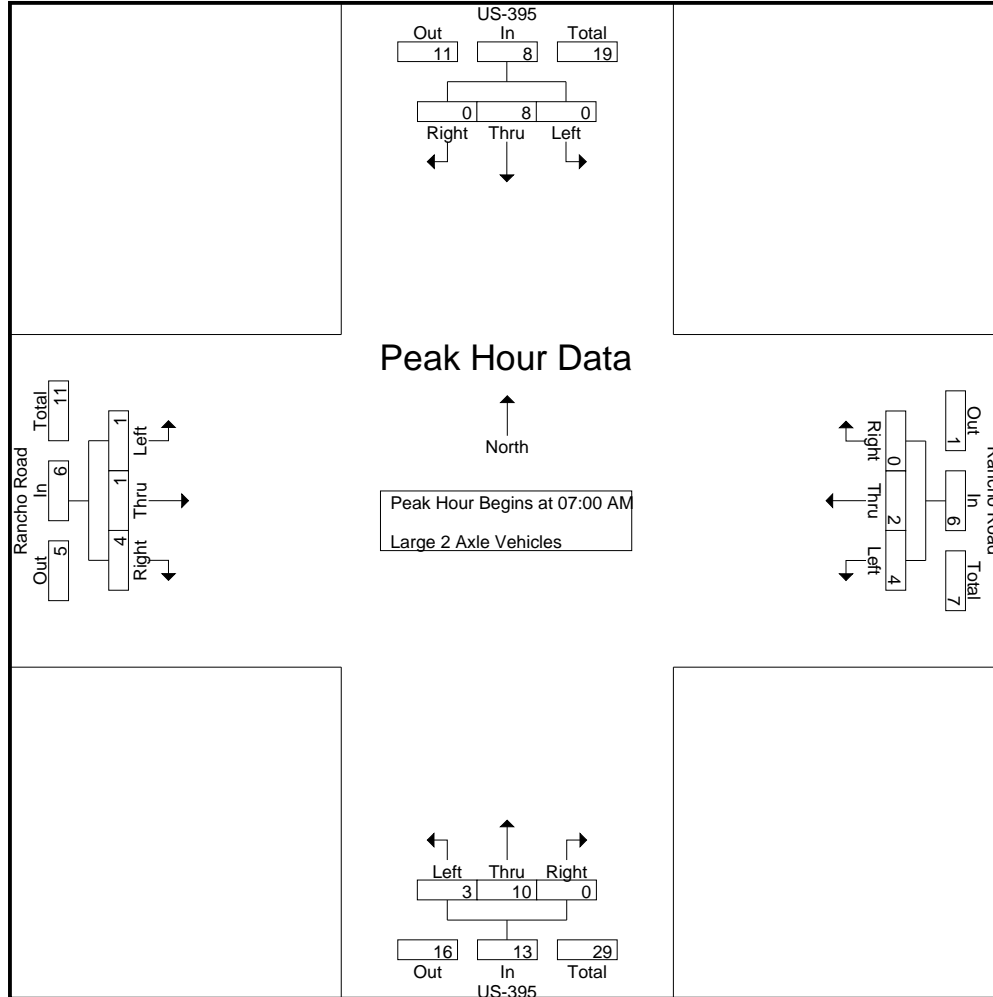
Groups Printed- Large 2 Axle Vehicles

	US-395 Southbound				Rancho Road Westbound				US-395 Northbound				Rancho 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	4	0	4	2	0	0	2	0	1	0	1	0	0	1	1	8
07:15 AM	0	3	0	3	1	0	0	1	0	2	0	2	1	0	1	2	8
07:30 AM	0	1	0	1	0	1	0	1	2	3	0	5	0	0	0	0	7
07:45 AM	0	0	0	0	1	1	0	2	1	4	0	5	0	1	2	3	10
Total	0	8	0	8	4	2	0	6	3	10	0	13	1	1	4	6	33
08:00 AM	0	1	0	1	1	1	0	2	2	1	0	3	0	3	1	4	10
08:15 AM	0	0	1	1	1	1	0	2	0	4	0	4	1	2	2	5	12
08:30 AM	0	3	0	3	1	1	0	2	1	2	0	3	0	1	1	2	10
08:45 AM	0	2	0	2	0	0	0	0	0	4	0	4	1	0	2	3	9
Total	0	6	1	7	3	3	0	6	3	11	0	14	2	6	6	14	41
Grand Total	0	14	1	15	7	5	0	12	6	21	0	27	3	7	10	20	74
Apprch %	0	93.3	6.7		58.3	41.7	0		22.2	77.8	0		15	35	50		
Total %	0	18.9	1.4	20.3	9.5	6.8	0	16.2	8.1	28.4	0	36.5	4.1	9.5	13.5	27	

	US-395 Southbound				Rancho Road Westbound				US-395 Northbound				Rancho 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 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	4	0	4	2	0	0	2	0	1	0	1	0	0	1	1	8
07:15 AM	0	3	0	3	1	0	0	1	0	2	0	2	1	0	1	2	8
07:30 AM	0	1	0	1	0	1	0	1	2	3	0	5	0	0	0	0	7
07:45 AM	0	0	0	0	1	1	0	2	1	4	0	5	0	1	2	3	10
Total Volume	0	8	0	8	4	2	0	6	3	10	0	13	1	1	4	6	33
% App. Total	0	100	0		66.7	33.3	0		23.1	76.9	0		16.7	16.7	66.7		
PHF	.000	.500	.000	.500	.500	.500	.000	.750	.375	.625	.000	.650	.250	.250	.500	.500	.825

City of Adelanto  
N/S: US-395  
E/W: Rancho Road  
Weather: Clear

File Name : 06\_ADL\_US395\_Rancho AM  
Site Code : 07523937  
Start Date : 10/10/2023  
Page No : 2



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

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	4	0	4	2	0	0	2	0	1	0	1	0	0	1	1
+15 mins.	0	3	0	3	1	0	0	1	0	2	0	2	1	0	1	2
+30 mins.	0	1	0	1	0	1	0	1	2	3	0	5	0	0	0	0
+45 mins.	0	0	0	0	1	1	0	2	1	4	0	5	0	1	2	3
Total Volume	0	8	0	8	4	2	0	6	3	10	0	13	1	1	4	6
% App. Total	0	100	0		66.7	33.3	0		23.1	76.9	0		16.7	16.7	66.7	
PHF	.000	.500	.000	.500	.500	.500	.000	.750	.375	.625	.000	.650	.250	.250	.500	.500

City of Adelanto  
N/S: US-395  
E/W: Rancho Road  
Weather: Clear

File Name : 06\_ADL\_US395\_Rancho AM  
Site Code : 07523937  
Start Date : 10/10/2023  
Page No : 1

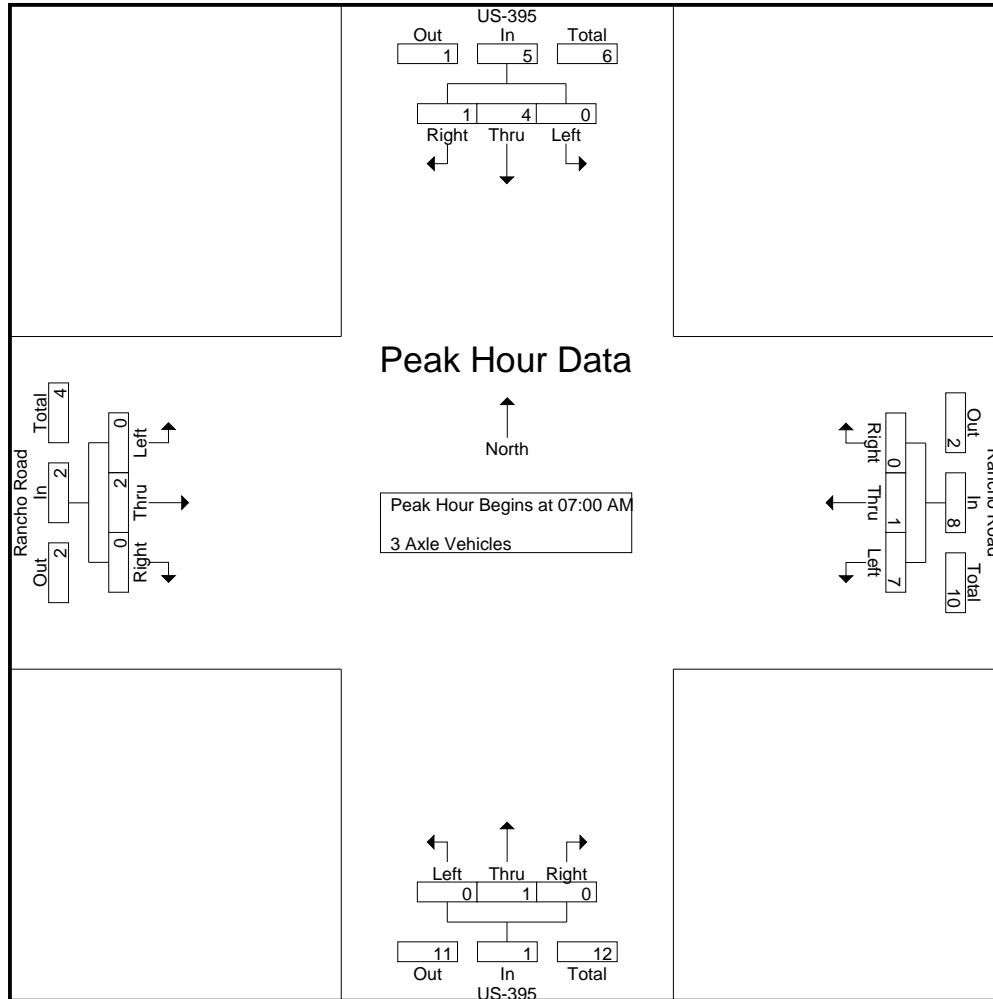
Groups Printed- 3 Axle Vehicles

	US-395 Southbound				Rancho Road Westbound				US-395 Northbound				Rancho 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	1	1	4	0	0	4	0	0	0	0	0	0	0	0	5
07:15 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	2	0	2	3
07:30 AM	0	2	0	2	1	0	0	1	0	1	0	1	0	0	0	0	4
07:45 AM	0	1	0	1	2	1	0	3	0	0	0	0	0	0	0	0	4
Total	0	4	1	5	7	1	0	8	0	1	0	1	0	2	0	2	16
08:00 AM	0	0	0	0	1	0	0	1	1	1	0	2	0	0	1	1	4
08:15 AM	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	2
08:30 AM	0	0	0	0	2	0	0	2	0	2	0	2	0	0	0	0	4
08:45 AM	0	1	0	1	1	0	0	1	0	0	0	0	0	1	0	1	3
Total	0	1	0	1	6	0	0	6	1	3	0	4	0	1	1	2	13
Grand Total	0	5	1	6	13	1	0	14	1	4	0	5	0	3	1	4	29
Apprch %	0	83.3	16.7		92.9	7.1	0		20	80	0		0	75	25		
Total %	0	17.2	3.4	20.7	44.8	3.4	0	48.3	3.4	13.8	0	17.2	0	10.3	3.4	13.8	

	US-395 Southbound				Rancho Road Westbound				US-395 Northbound				Rancho 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 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	1	1	4	0	0	4	0	0	0	0	0	0	0	0	5
07:15 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	2	0	2	3
07:30 AM	0	2	0	2	1	0	0	1	0	1	0	1	0	0	0	0	4
07:45 AM	0	1	0	1	2	1	0	3	0	0	0	0	0	0	0	0	4
Total Volume	0	4	1	5	7	1	0	8	0	1	0	1	0	2	0	2	16
% App. Total	0	80	20		87.5	12.5	0		0	100	0		0	100	0		
PHF	.000	.500	.250	.625	.438	.250	.000	.500	.000	.250	.000	.250	.000	.250	.000	.250	.800

City of Adelanto  
N/S: US-395  
E/W: Rancho Road  
Weather: Clear

File Name : 06\_ADL\_US395\_Rancho AM  
Site Code : 07523937  
Start Date : 10/10/2023  
Page No : 2



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

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	1	1	4	0	0	4	0	0	0	0	0	0	0	0
+15 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	2	0	2
+30 mins.	0	2	0	2	1	0	0	1	0	1	0	1	0	0	0	0
+45 mins.	0	1	0	1	2	1	0	3	0	0	0	0	0	0	0	0
Total Volume	0	4	1	5	7	1	0	8	0	1	0	1	0	2	0	2
% App. Total	0	80	20		87.5	12.5	0		0	100	0		0	100	0	
PHF	.000	.500	.250	.625	.438	.250	.000	.500	.000	.250	.000	.250	.000	.250	.000	.250

City of Adelanto  
N/S: US-395  
E/W: Rancho Road  
Weather: Clear

File Name : 06\_ADL\_US395\_Rancho AM  
Site Code : 07523937  
Start Date : 10/10/2023  
Page No : 1

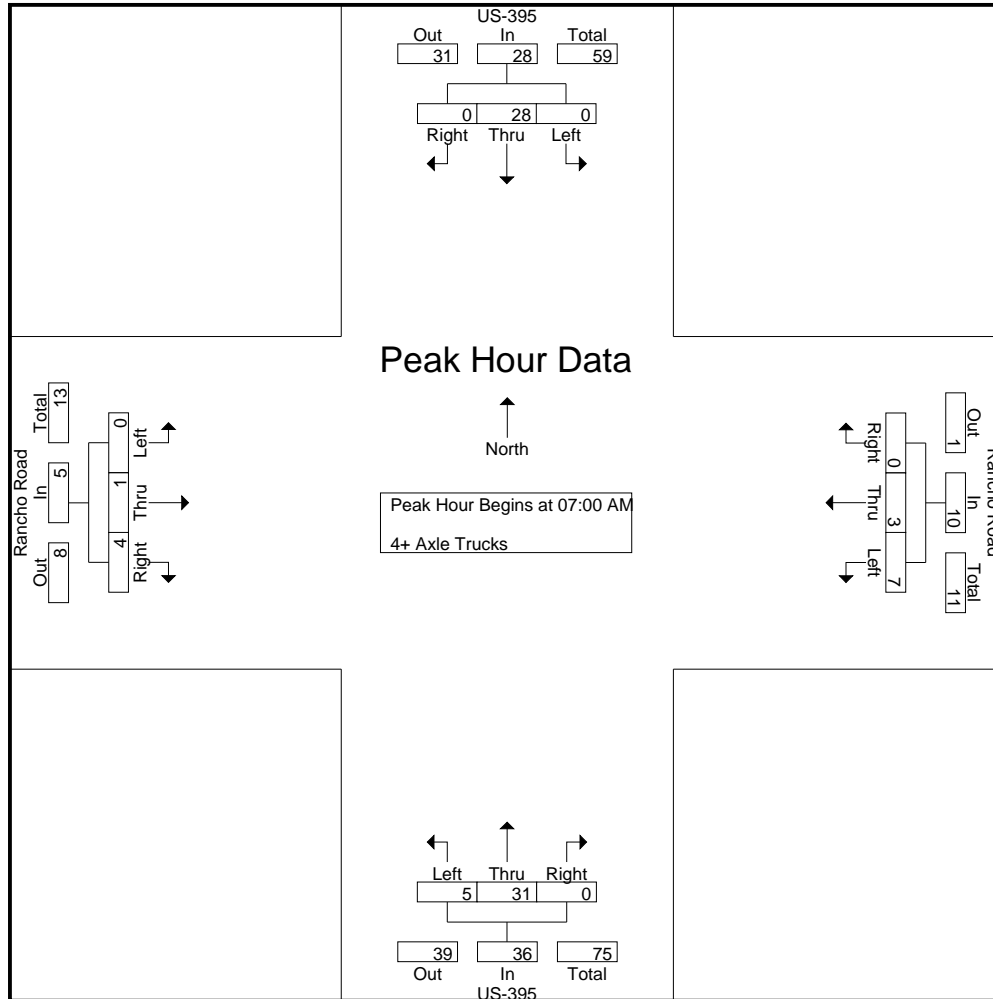
Groups Printed- 4+ Axle Trucks

	US-395 Southbound				Rancho Road Westbound				US-395 Northbound				Rancho 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	6	0	6	1	0	0	1	3	6	0	9	0	1	1	2	18
07:15 AM	0	6	0	6	2	1	0	3	1	5	0	6	0	0	3	3	18
07:30 AM	0	6	0	6	2	0	0	2	1	9	0	10	0	0	0	0	18
07:45 AM	0	10	0	10	2	2	0	4	0	11	0	11	0	0	0	0	25
Total	0	28	0	28	7	3	0	10	5	31	0	36	0	1	4	5	79
08:00 AM	1	9	0	10	0	0	1	1	0	7	0	7	2	0	1	3	21
08:15 AM	0	14	0	14	2	0	0	2	0	6	0	6	1	0	2	3	25
08:30 AM	0	16	1	17	3	0	0	3	2	14	0	16	0	0	2	2	38
08:45 AM	0	14	0	14	5	0	0	5	1	10	0	11	0	0	1	1	31
Total	1	53	1	55	10	0	1	11	3	37	0	40	3	0	6	9	115
Grand Total	1	81	1	83	17	3	1	21	8	68	0	76	3	1	10	14	194
Apprch %	1.2	97.6	1.2		81	14.3	4.8		10.5	89.5	0		21.4	7.1	71.4		
Total %	0.5	41.8	0.5	42.8	8.8	1.5	0.5	10.8	4.1	35.1	0	39.2	1.5	0.5	5.2	7.2	

	US-395 Southbound				Rancho Road Westbound				US-395 Northbound				Rancho 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 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	6	0	6	1	0	0	1	3	6	0	9	0	1	1	2	18
07:15 AM	0	6	0	6	2	1	0	3	1	5	0	6	0	0	3	3	18
07:30 AM	0	6	0	6	2	0	0	2	1	9	0	10	0	0	0	0	18
07:45 AM	0	10	0	10	2	2	0	4	0	11	0	11	0	0	0	0	25
Total Volume	0	28	0	28	7	3	0	10	5	31	0	36	0	1	4	5	79
% App. Total	0	100	0		70	30	0		13.9	86.1	0		0	20	80		
PHF	.000	.700	.000	.700	.875	.375	.000	.625	.417	.705	.000	.818	.000	.250	.333	.417	.790

City of Adelanto  
N/S: US-395  
E/W: Rancho Road  
Weather: Clear

File Name : 06\_ADL\_US395\_Rancho AM  
Site Code : 07523937  
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Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	6	0	6	1	0	0	1	3	6	0	9	0	1	1	2
+15 mins.	0	6	0	6	2	1	0	3	1	5	0	6	0	0	3	3
+30 mins.	0	6	0	6	2	0	0	2	1	9	0	10	0	0	0	0
+45 mins.	0	10	0	10	2	2	0	4	0	11	0	11	0	0	0	0
Total Volume	0	28	0	28	7	3	0	10	5	31	0	36	0	1	4	5
% App. Total	0	100	0		70	30	0		13.9	86.1	0		0	20	80	
PHF	.000	.700	.000	.700	.875	.375	.000	.625	.417	.705	.000	.818	.000	.250	.333	.417



City of Adelanto  
N/S: US-395  
E/W: Rancho Road  
Weather: Clear

File Name : 06\_ADL\_US395\_Rancho PM  
Site Code : 07523937  
Start Date : 10/10/2023  
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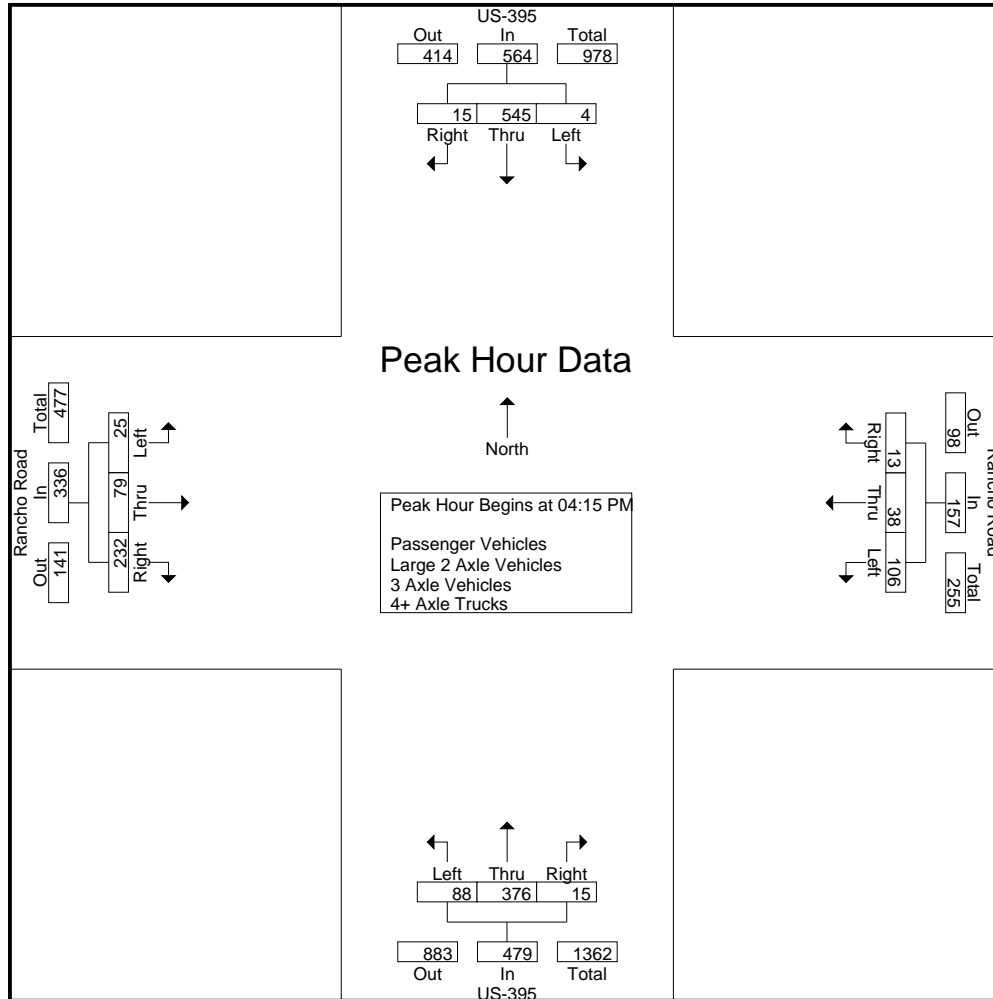
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	US-395 Southbound				Rancho Road Westbound				US-395 Northbound				Rancho 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	126	4	135	36	12	0	48	18	90	1	109	10	28	78	116	408
04:15 PM	1	132	4	137	20	3	4	27	26	95	1	122	4	18	51	73	359
04:30 PM	1	151	3	155	36	14	4	54	19	88	6	113	6	21	60	87	409
04:45 PM	2	124	6	132	24	12	4	40	25	87	3	115	6	13	41	60	347
Total	9	533	17	559	116	41	12	169	88	360	11	459	26	80	230	336	1523
05:00 PM	0	138	2	140	26	9	1	36	18	106	5	129	9	27	80	116	421
05:15 PM	5	133	2	140	18	6	0	24	27	85	4	116	2	12	31	45	325
05:30 PM	1	128	2	131	30	7	0	37	20	119	0	139	4	16	58	78	385
05:45 PM	1	135	3	139	20	1	2	23	22	87	5	114	2	8	25	35	311
Total	7	534	9	550	94	23	3	120	87	397	14	498	17	63	194	274	1442
Grand Total	16	1067	26	1109	210	64	15	289	175	757	25	957	43	143	424	610	2965
Apprch %	1.4	96.2	2.3		72.7	22.1	5.2		18.3	79.1	2.6		7	23.4	69.5		
Total %	0.5	36	0.9	37.4	7.1	2.2	0.5	9.7	5.9	25.5	0.8	32.3	1.5	4.8	14.3	20.6	
Passenger Vehicles	11	915	22	948	196	61	12	269	167	692	23	882	41	137	416	594	2693
% Passenger Vehicles	68.8	85.8	84.6	85.5	93.3	95.3	80	93.1	95.4	91.4	92	92.2	95.3	95.8	98.1	97.4	90.8
Large 2 Axle Vehicles	0	10	1	11	2	0	0	2	5	6	0	11	1	1	3	5	29
% Large 2 Axle Vehicles	0	0.9	3.8	1	1	0	0	0.7	2.9	0.8	0	1.1	2.3	0.7	0.7	0.8	1
3 Axle Vehicles	0	15	1	16	0	1	1	2	0	2	2	4	0	0	1	1	23
% 3 Axle Vehicles	0	1.4	3.8	1.4	0	1.6	6.7	0.7	0	0.3	8	0.4	0	0	0.2	0.2	0.8
4+ Axle Trucks	5	127	2	134	12	2	2	16	3	57	0	60	1	5	4	10	220
% 4+ Axle Trucks	31.2	11.9	7.7	12.1	5.7	3.1	13.3	5.5	1.7	7.5	0	6.3	2.3	3.5	0.9	1.6	7.4

	US-395 Southbound				Rancho Road Westbound				US-395 Northbound				Rancho 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 04:15 PM																	
04:15 PM	1	132	4	137	20	3	4	27	26	95	1	122	4	18	51	73	359
04:30 PM	1	151	3	155	36	14	4	54	19	88	6	113	6	21	60	87	409
04:45 PM	2	124	6	132	24	12	4	40	25	87	3	115	6	13	41	60	347
05:00 PM	0	138	2	140	26	9	1	36	18	106	5	129	9	27	80	116	421
Total Volume	4	545	15	564	106	38	13	157	88	376	15	479	25	79	232	336	1536
% App. Total	0.7	96.6	2.7		67.5	24.2	8.3		18.4	78.5	3.1		7.4	23.5	69		
PHF	.500	.902	.625	.910	.736	.679	.813	.727	.846	.887	.625	.928	.694	.731	.725	.724	.912

City of Adelanto  
N/S: US-395  
E/W: Rancho Road  
Weather: Clear

File Name : 06\_ADL\_US395\_Rancho PM  
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Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	04:30 PM				04:00 PM				04:45 PM				04:00 PM			
+0 mins.	1	151	3	155	36	12	0	48	25	87	3	115	10	28	78	116
+15 mins.	2	124	6	132	20	3	4	27	18	106	5	129	4	18	51	73
+30 mins.	0	138	2	140	36	14	4	54	27	85	4	116	6	21	60	87
+45 mins.	5	133	2	140	24	12	4	40	20	119	0	139	6	13	41	60
Total Volume	8	546	13	567	116	41	12	169	90	397	12	499	26	80	230	336
% App. Total	1.4	96.3	2.3		68.6	24.3	7.1		18	79.6	2.4		7.7	23.8	68.5	
PHF	.400	.904	.542	.915	.806	.732	.750	.782	.833	.834	.600	.897	.650	.714	.737	.724

City of Adelanto  
N/S: US-395  
E/W: Rancho Road  
Weather: Clear

File Name : 06\_ADL\_US395\_Rancho PM  
Site Code : 07523937  
Start Date : 10/10/2023  
Page No : 1

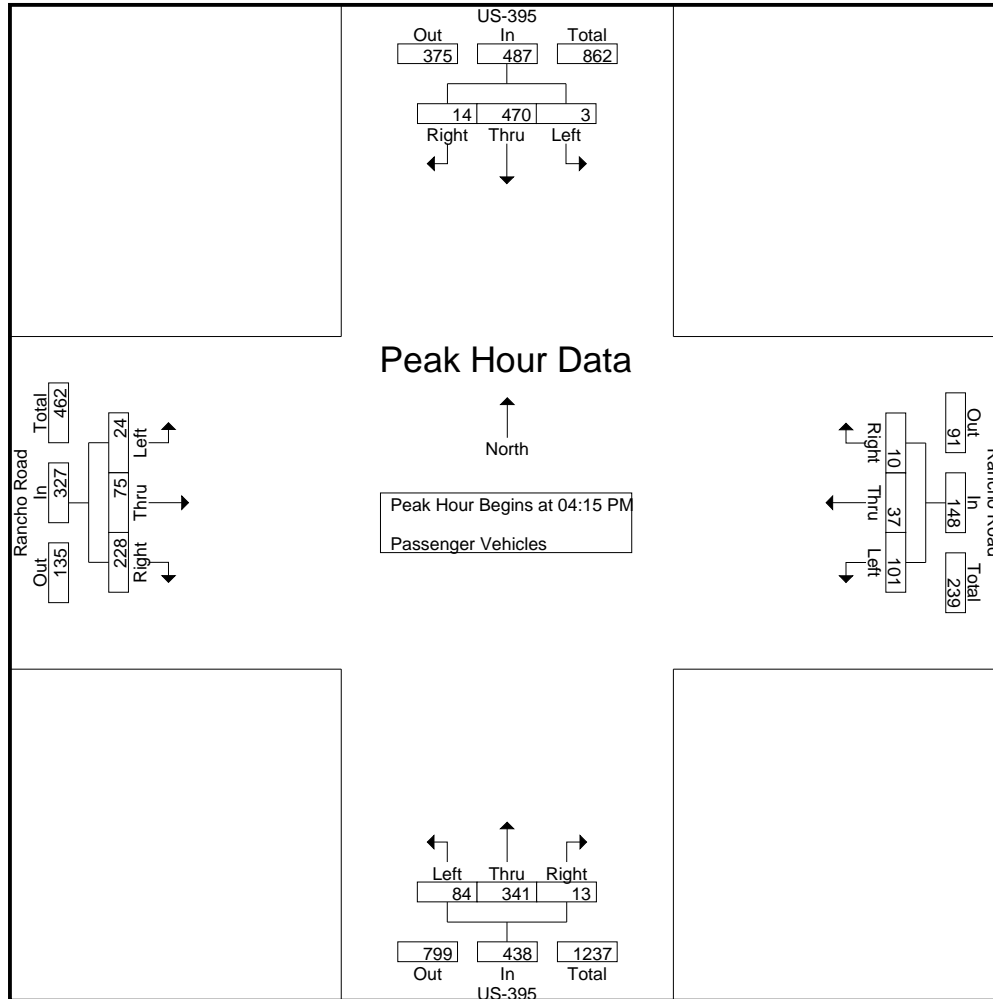
Groups Printed- Passenger Vehicles

	US-395 Southbound				Rancho Road Westbound				US-395 Northbound				Rancho 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	3	107	4	114	32	10	0	42	18	83	1	102	9	27	77	113	371
04:15 PM	0	118	4	122	18	2	4	24	24	82	1	107	4	17	50	71	324
04:30 PM	1	132	2	135	36	14	4	54	18	79	6	103	6	19	58	83	375
04:45 PM	2	103	6	111	24	12	1	37	24	83	3	110	5	13	40	58	316
Total	6	460	16	482	110	38	9	157	84	327	11	422	24	76	225	325	1386
05:00 PM	0	117	2	119	23	9	1	33	18	97	3	118	9	26	80	115	385
05:15 PM	3	110	1	114	16	6	0	22	26	78	4	108	2	12	30	44	288
05:30 PM	1	112	2	115	28	7	0	35	17	108	0	125	4	15	56	75	350
05:45 PM	1	116	1	118	19	1	2	22	22	82	5	109	2	8	25	35	284
Total	5	455	6	466	86	23	3	112	83	365	12	460	17	61	191	269	1307
Grand Total	11	915	22	948	196	61	12	269	167	692	23	882	41	137	416	594	2693
Apprch %	1.2	96.5	2.3		72.9	22.7	4.5		18.9	78.5	2.6		6.9	23.1	70		
Total %	0.4	34	0.8	35.2	7.3	2.3	0.4	10	6.2	25.7	0.9	32.8	1.5	5.1	15.4	22.1	

	US-395 Southbound				Rancho Road Westbound				US-395 Northbound				Rancho 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 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	118	4	122	18	2	4	24	24	82	1	107	4	17	50	71	324
04:30 PM	1	132	2	135	36	14	4	54	18	79	6	103	6	19	58	83	375
04:45 PM	2	103	6	111	24	12	1	37	24	83	3	110	5	13	40	58	316
05:00 PM	0	117	2	119	23	9	1	33	18	97	3	118	9	26	80	115	385
Total Volume	3	470	14	487	101	37	10	148	84	341	13	438	24	75	228	327	1400
% App. Total	0.6	96.5	2.9		68.2	25	6.8		19.2	77.9	3		7.3	22.9	69.7		
PHF	.375	.890	.583	.902	.701	.661	.625	.685	.875	.879	.542	.928	.667	.721	.713	.711	.909

City of Adelanto  
N/S: US-395  
E/W: Rancho Road  
Weather: Clear

File Name : 06\_ADL\_US395\_Rancho PM  
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Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	04:15 PM				04:15 PM				04:15 PM				04:15 PM			
+0 mins.	0	118	4	122	18	2	4	24	24	82	1	107	4	17	50	71
+15 mins.	1	132	2	135	36	14	4	54	18	79	6	103	6	19	58	83
+30 mins.	2	103	6	111	24	12	1	37	24	83	3	110	5	13	40	58
+45 mins.	0	117	2	119	23	9	1	33	18	97	3	118	9	26	80	115
Total Volume	3	470	14	487	101	37	10	148	84	341	13	438	24	75	228	327
% App. Total	0.6	96.5	2.9		68.2	25	6.8		19.2	77.9	3		7.3	22.9	69.7	
PHF	.375	.890	.583	.902	.701	.661	.625	.685	.875	.879	.542	.928	.667	.721	.713	.711

City of Adelanto  
N/S: US-395  
E/W: Rancho Road  
Weather: Clear

File Name : 06\_ADL\_US395\_Rancho PM  
Site Code : 07523937  
Start Date : 10/10/2023  
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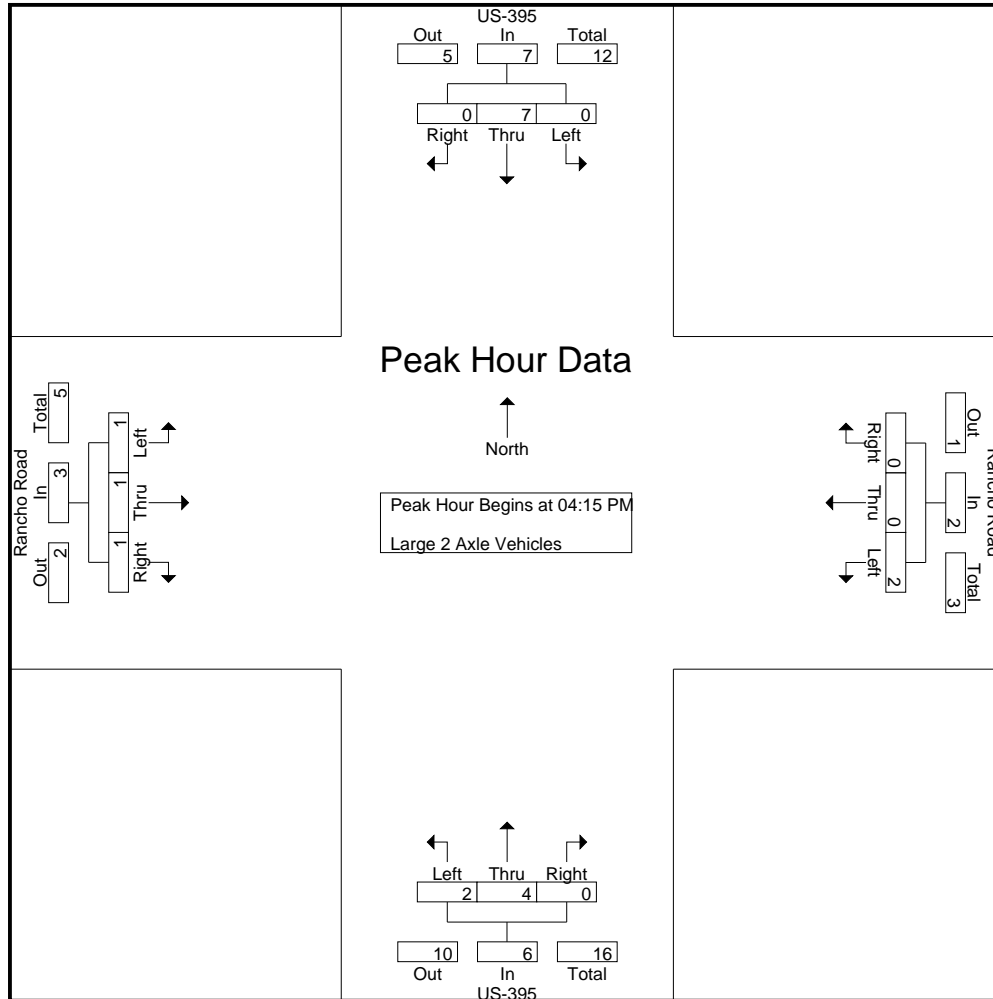
Groups Printed- Large 2 Axle Vehicles

	US-395 Southbound				Rancho Road Westbound				US-395 Northbound				Rancho 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	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:15 PM	0	0	0	0	2	0	0	2	1	3	0	4	0	0	0	0	6
04:30 PM	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
04:45 PM	0	3	0	3	0	0	0	0	1	0	0	1	1	0	1	2	6
Total	0	6	0	6	2	0	0	2	2	4	0	6	1	0	1	2	16
05:00 PM	0	2	0	2	0	0	0	0	0	0	0	0	0	1	0	1	3
05:15 PM	0	1	1	2	0	0	0	0	0	2	0	2	0	0	1	1	5
05:30 PM	0	0	0	0	0	0	0	0	3	0	0	3	0	0	1	1	4
05:45 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	4	1	5	0	0	0	0	3	2	0	5	0	1	2	3	13
Grand Total	0	10	1	11	2	0	0	2	5	6	0	11	1	1	3	5	29
Apprch %	0	90.9	9.1		100	0	0		45.5	54.5	0		20	20	60		
Total %	0	34.5	3.4	37.9	6.9	0	0	6.9	17.2	20.7	0	37.9	3.4	3.4	10.3	17.2	

	US-395 Southbound				Rancho Road Westbound				US-395 Northbound				Rancho 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 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	0	0	0	2	0	0	2	1	3	0	4	0	0	0	0	6
04:30 PM	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
04:45 PM	0	3	0	3	0	0	0	0	1	0	0	1	1	0	1	2	6
05:00 PM	0	2	0	2	0	0	0	0	0	0	0	0	0	1	0	1	3
Total Volume	0	7	0	7	2	0	0	2	2	4	0	6	1	1	1	3	18
% App. Total	0	100	0		100	0	0		33.3	66.7	0		33.3	33.3	33.3		
PHF	.000	.583	.000	.583	.250	.000	.000	.250	.500	.333	.000	.375	.250	.250	.250	.375	.750

City of Adelanto  
N/S: US-395  
E/W: Rancho Road  
Weather: Clear

File Name : 06\_ADL\_US395\_Rancho PM  
Site Code : 07523937  
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Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	04:15 PM				04:15 PM				04:15 PM				04:15 PM			
+0 mins.	0	0	0	0	<b>2</b>	0	0	<b>2</b>	<b>1</b>	<b>3</b>	0	<b>4</b>	0	0	0	0
+15 mins.	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0
+30 mins.	0	<b>3</b>	0	<b>3</b>	0	0	0	0	1	0	0	1	<b>1</b>	0	<b>1</b>	<b>2</b>
+45 mins.	0	2	0	2	0	0	0	0	0	0	0	0	0	<b>1</b>	0	1
Total Volume	0	7	0	7	2	0	0	2	2	4	0	6	1	1	1	3
% App. Total	0	100	0		100	0	0		33.3	66.7	0		33.3	33.3	33.3	
PHF	.000	.583	.000	.583	.250	.000	.000	.250	.500	.333	.000	.375	.250	.250	.250	.375

City of Adelanto  
N/S: US-395  
E/W: Rancho Road  
Weather: Clear

File Name : 06\_ADL\_US395\_Rancho PM  
Site Code : 07523937  
Start Date : 10/10/2023  
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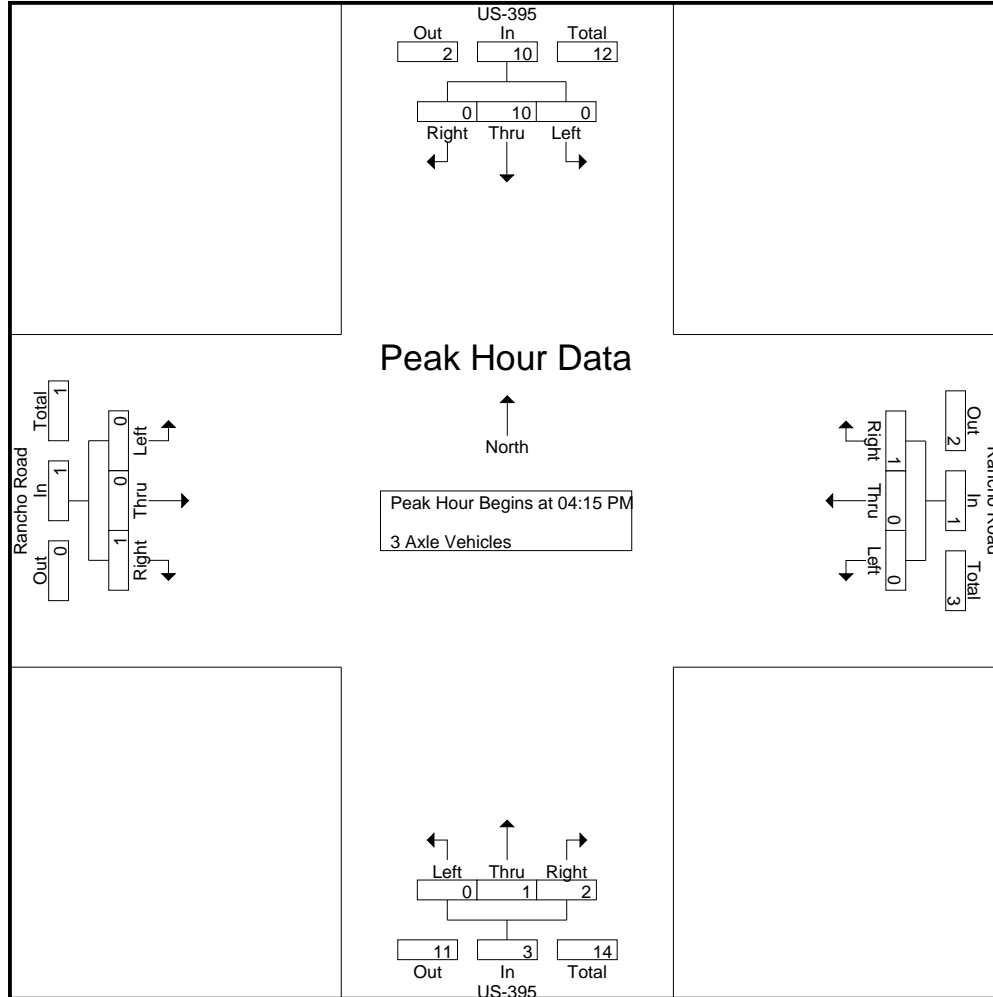
Groups Printed- 3 Axle Vehicles

	US-395 Southbound				Rancho Road Westbound				US-395 Northbound				Rancho 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	0	2	0	1	0	1	0	0	0	0	0	0	0	0	3
04:15 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	1	2
04:30 PM	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
04:45 PM	0	3	0	3	0	0	1	1	0	0	0	0	0	0	0	0	4
Total	0	9	0	9	0	1	1	2	0	0	0	0	0	0	1	1	12
05:00 PM	0	3	0	3	0	0	0	0	0	1	2	3	0	0	0	0	6
05:15 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
05:45 PM	0	2	1	3	0	0	0	0	0	0	0	0	0	0	0	0	3
Total	0	6	1	7	0	0	0	0	0	2	2	4	0	0	0	0	11
Grand Total	0	15	1	16	0	1	1	2	0	2	2	4	0	0	1	1	23
Apprch %	0	93.8	6.2		0	50	50		0	50	50		0	0	100		
Total %	0	65.2	4.3	69.6	0	4.3	4.3	8.7	0	8.7	8.7	17.4	0	0	4.3	4.3	

	US-395 Southbound				Rancho Road Westbound				US-395 Northbound				Rancho 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 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	1	2
04:30 PM	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
04:45 PM	0	3	0	3	0	0	1	1	0	0	0	0	0	0	0	0	4
05:00 PM	0	3	0	3	0	0	0	0	0	1	2	3	0	0	0	0	6
Total Volume	0	10	0	10	0	0	1	1	0	1	2	3	0	0	1	1	15
% App. Total	0	100	0		0	0	100		0	33.3	66.7		0	0	100		
PHF	.000	.833	.000	.833	.000	.000	.250	.250	.000	.250	.250	.250	.000	.000	.250	.250	.625

City of Adelanto  
N/S: US-395  
E/W: Rancho Road  
Weather: Clear

File Name : 06\_ADL\_US395\_Rancho PM  
Site Code : 07523937  
Start Date : 10/10/2023  
Page No : 2



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

	04:15 PM				04:15 PM				04:15 PM				04:15 PM			
+0 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	1
+15 mins.	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	3	0	3	0	0	1	1	0	0	0	0	0	0	0	0
+45 mins.	0	3	0	3	0	0	0	0	0	1	2	3	0	0	0	0
Total Volume	0	10	0	10	0	0	1	1	0	1	2	3	0	0	1	1
% App. Total	0	100	0		0	0	100		0	33.3	66.7		0	0	100	
PHF	.000	.833	.000	.833	.000	.000	.250	.250	.000	.250	.250	.250	.000	.000	.250	.250



City of Adelanto  
N/S: US-395  
E/W: Rancho Road  
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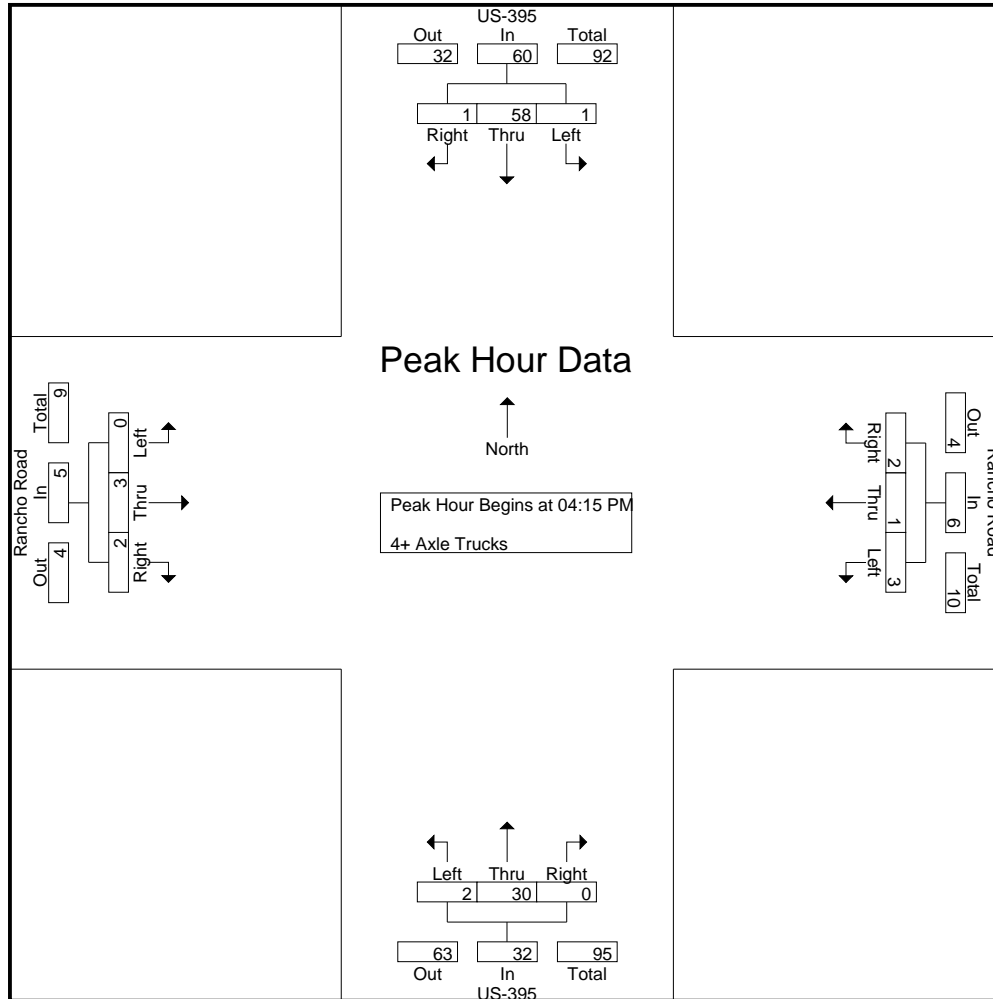
Groups Printed- 4+ Axle Trucks

	US-395 Southbound				Rancho Road Westbound				US-395 Northbound				Rancho 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	16	0	18	4	1	0	5	0	7	0	7	1	1	1	3	33
04:15 PM	1	13	0	14	0	1	0	1	1	10	0	11	0	1	0	1	27
04:30 PM	0	14	1	15	0	0	0	0	1	8	0	9	0	2	2	4	28
04:45 PM	0	15	0	15	0	0	2	2	0	4	0	4	0	0	0	0	21
Total	3	58	1	62	4	2	2	8	2	29	0	31	1	4	3	8	109
05:00 PM	0	16	0	16	3	0	0	3	0	8	0	8	0	0	0	0	27
05:15 PM	2	21	0	23	2	0	0	2	1	5	0	6	0	0	0	0	31
05:30 PM	0	16	0	16	2	0	0	2	0	10	0	10	0	1	1	2	30
05:45 PM	0	16	1	17	1	0	0	1	0	5	0	5	0	0	0	0	23
Total	2	69	1	72	8	0	0	8	1	28	0	29	0	1	1	2	111
Grand Total	5	127	2	134	12	2	2	16	3	57	0	60	1	5	4	10	220
Apprch %	3.7	94.8	1.5		75	12.5	12.5		5	95	0		10	50	40		
Total %	2.3	57.7	0.9	60.9	5.5	0.9	0.9	7.3	1.4	25.9	0	27.3	0.5	2.3	1.8	4.5	

	US-395 Southbound				Rancho Road Westbound				US-395 Northbound				Rancho 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 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	1	13	0	14	0	1	0	1	1	10	0	11	0	1	0	1	27
04:30 PM	0	14	1	15	0	0	0	0	1	8	0	9	0	2	2	4	28
04:45 PM	0	15	0	15	0	0	2	2	0	4	0	4	0	0	0	0	21
05:00 PM	0	16	0	16	3	0	0	3	0	8	0	8	0	0	0	0	27
Total Volume	1	58	1	60	3	1	2	6	2	30	0	32	0	3	2	5	103
% App. Total	1.7	96.7	1.7		50	16.7	33.3		6.2	93.8	0		0	60	40		
PHF	.250	.906	.250	.938	.250	.250	.250	.500	.500	.750	.000	.727	.000	.375	.250	.313	.920

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

	04:15 PM				04:15 PM				04:15 PM				04:15 PM			
+0 mins.	1	13	0	14	0	1	0	1	1	10	0	11	0	1	0	1
+15 mins.	0	14	1	15	0	0	0	0	1	8	0	9	0	2	2	4
+30 mins.	0	15	0	15	0	0	2	2	0	4	0	4	0	0	0	0
+45 mins.	0	16	0	16	3	0	0	3	0	8	0	8	0	0	0	0
Total Volume	1	58	1	60	3	1	2	6	2	30	0	32	0	3	2	5
% App. Total	1.7	96.7	1.7		50	16.7	33.3		6.2	93.8	0		0	60	40	
PHF	.250	.906	.250	.938	.250	.250	.250	.500	.500	.750	.000	.727	.000	.375	.250	.313

## **APPENDIX C**

### **Future Growth Increment Calculation Worksheets**

Koala Road (NS) / Rancho Road (EW) - #1									
MORNING PEAK HOUR					EVENING PEAK HOUR				
EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):					EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):				
2024					2024				
	0	17	39			1	6	81	
		<	v	>		<	v	>	
	0	^		^ 47		0	^		^ 38
	0	>		< 0		0	>		< 1
	0	v		v 123		0	v		v 20
		<	^	>			<	^	>
	0	8	21			0	20	133	
EXISTING PEAK HOUR COUNT YEAR (AUTOS):					EXISTING PEAK HOUR COUNT YEAR (AUTOS):				
2024					2024				
			56	55			88	58	
			v	^			v	^	
	0	<	IN =	255 < 170		2	<	IN =	300 < 59
	0	>	OUT =	255 > 60		0	>	OUT =	300 > 214
			v	^			v	^	
			140	29			26	153	
EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCES):					EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCES):				
	0	5	15			0	0	6	
		<	v	>			<	v	>
	0	^		^ 5		0	^		^ 6
	0	>		< 0		0	>		< 0
	0	v		v 11		0	v		v 14
PCE FACTORS BY AXLE:					PCE FACTORS BY AXLE:				
2:	2.0	3:	2.5	4+: 3.0	2:	2.0	3:	3	4+: 3.0
	0	2	12			0	0	26	
TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):					TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):				
2024					2024				
	0	22	54			1	6	87	
		<	v	>			<	v	>
	0	^		^ 52		0	^		^ 44
	0	>		< 0		0	>		< 1
	0	v		v 134		0	v		v 34
		<	^	>			<	^	>
	0	10	33			0	20	159	
EXISTING PEAK PERIOD MODEL YEAR (AUTO):					EXISTING PEAK PERIOD MODEL YEAR (AUTO):				
2016					2016				
			217	167			254	245	
			v	^			v	^	
	63	<	IN =	515 < 213		279	<	IN =	912 < 348
	40	>	OUT =	518 > 99		96	>	OUT =	911 > 316
			v	^			v	^	
			189	45			71	214	
EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCES):					EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCES):				
2016					2016				
			7	7			10	9	
			v	^			v	^	
	7	<	IN =	27 < 12		16	<	IN =	42 < 21
	7	>	OUT =	27 > 12		9	>	OUT =	43 > 17
			v	^			v	^	
			1	1			1	2	
EXISTING PEAK HOUR MODEL YEAR (PCES):					EXISTING PEAK HOUR MODEL YEAR (PCES):				
PHF FOR CARS: 0.33					PHF FOR CARS: 0.25				
PHF FOR TRUCKS: 0.333					PHF FOR TRUCKS: 0.25				
			75	58			66	64	
			v	^			v	^	
	23	<	IN =	180 < 75		74	<	IN =	239 < 92
	16	>	OUT =	181 > 37		26	>	OUT =	239 > 83
			v	^			v	^	
			63	15			18	54	
FUTURE PEAK PERIOD MODEL YEAR (AUTO):					FUTURE PEAK PERIOD MODEL YEAR (AUTO):				
2040					2040				
			436	347			653	715	
			v	^			v	^	
	463	<	IN =	1265 < 274		384	<	IN =	2007 < 287
	148	>	OUT =	1265 > 94		504	>	OUT =	2006 > 355
			v	^			v	^	
			361	407			552	563	
FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCES):					FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCES):				
2040					2040				
			19	14			26	25	
			v	^			v	^	
	25	<	IN =	65 < 4		19	<	IN =	74 < 14
	14	>	OUT =	65 > 8		14	>	OUT =	73 > 6
			v	^			v	^	
			18	28			23	20	
FUTURE PEAK HOUR MODEL YEAR (PCES):					FUTURE PEAK HOUR MODEL YEAR (PCES):				
PHF FOR CARS: 0.33					PHF FOR CARS: 0.25				
PHF FOR TRUCKS: 0.333					PHF FOR TRUCKS: 0.25				
			152	120			170	185	
			v	^			v	^	
	163	<	IN =	443 < 93		101	<	IN =	520 < 75
	54	>	OUT =	443 > 34		130	>	OUT =	520 > 90
			v	^			v	^	
			126	145			144	146	
RAW GROWTH (PCES): 2016 TO 2040					RAW GROWTH (PCES): 2016 TO 2040				
CONVERSION OF TRUCKS TO: 2040					CONVERSION OF TRUCKS TO: 2040				
FACTOR = 1.00					FACTOR = 1.00				
			77	62			104	122	
			v	^			v	^	
	139	<		< 18		27	<		< -17
	38	>		> -3		103	>		> 7
			v	^			v	^	
			63	130			126	92	
ADJUSTED GROWTH (PCES): 2016 TO 2040					ADJUSTED GROWTH (PCES): 2016 TO 2040				
2 MINIMUM GROWTH %					2 MINIMUM GROWTH %				
			80	60			100	120	
			v	^			v	^	
	140	<	IN =	270 < 20		30	<	IN =	290 < 0
	40	>	OUT =	260 > 0		100	>	OUT =	290 > 10
			v	^			v	^	
			60	130			130	90	
PRORATED GROWTH (PCES): 2024 TO 2045					PRORATED GROWTH (PCES): 2024 TO 2045				
21 YEARS					21 YEARS				
			70	50			90	110	
			v	^			v	^	
	120	<		< 20		30	<		< 0
	40	>		> 0		90	>		> 10
			v	^			v	^	
			50	110			110	80	
NEW PROJECTED VOLUMES (PCES): 2045					NEW PROJECTED VOLUMES (PCES): 2045				
			150	110			180	170	
			v	^			v	^	
	120	<		< 210		30	<		< 80
	40	>		> 90		90	>		> 260
			v	^			v	^	
			210	150			150	260	
YEAR 2025 GROWTH: 2024 TO 2025					YEAR 2025 GROWTH: 2024 TO 2025				
1 YEARS					1 YEARS				
			0	0			0	10	
			v	^			v	^	
	10	<		< 0		0	<		< 0
	0	>		> 0		0	>		> 0
			v	^			v	^	
			0	10			10	0	
INITIAL YEAR 2025 VOLUMES: 2025					INITIAL YEAR 2025 VOLUMES: 2025				
			80	60			90	70	
			v	^			v	^	
	10	<	IN =	320 < 190		0	<	IN =	350 < 80
	0	>	OUT =	320 > 90		0	>	OUT =	370 > 250
			v	^			v	^	
			160	50			50	180	
BALANCED YEAR 2025 VOLUMES: 2025					BALANCED YEAR 2025 VOLUMES: 2025				
			80	60			100	70	
			v	^			v	^	
	10	<	IN =	320 < 190		0	<	IN =	370 < 80
	0	>	OUT =	320 > 90		0	>	OUT =	370 > 250
			v	^			v	^	
			160	50			50	190	

**Koala Road (NS) / Rancho Road (EW) - #1**  
**FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES**  
**NCHRP 255**

YEAR 2025 TRAFFIC CONDITIONS (IN PCEs)									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	YEAR 2025 TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	YEAR 2025 TOTAL
NORTH BOUND	LEFT	0	SOUTH LEG		NORTH BOUND	LEFT	0	SOUTH LEG	
	THRU	10		50		THRU	20		190
	RIGHT	33		160		RIGHT	159		50
SOUTH BOUND	LEFT	54	NORTH LEG		SOUTH BOUND	LEFT	87	NORTH LEG	
	THRU	22		80		THRU	6		100
	RIGHT	0		60		RIGHT	1		70
EAST BOUND	LEFT	0	WEST LEG		EAST BOUND	LEFT	0	WEST LEG	
	THRU	0		0		THRU	0		0
	RIGHT	0		10		RIGHT	0		0
WEST BOUND	LEFT	134	EAST LEG		WEST BOUND	LEFT	34	EAST LEG	
	THRU	0		190		THRU	1		80
	RIGHT	52		90		RIGHT	44		250

YEAR 2025 TRAFFIC CONDITIONS (IN PCEs)									
MORNING PEAK HOUR RESULTS					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	YEAR 2025 FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	YEAR 2025 FORECAST	PEAK - DAILY RELATIONSHIP
NORTH BOUND	LEFT	0	0	NORTH LEG	NORTH BOUND	LEFT	0	0	NORTH LEG
	THRU	10	12	RATIO 4.7%		THRU	20	29	RATIO 5.8%
	RIGHT	33	37	ADT 3,000		RIGHT	159	161	ADT 3,000
SOUTH BOUND	LEFT	54	54	SOUTH LEG	SOUTH BOUND	LEFT	87	89	SOUTH LEG
	THRU	22	24	RATIO 3.9%		THRU	6	11	RATIO 4.5%
	RIGHT	0	0	ADT 5,300		RIGHT	1	1	ADT 5,300
EAST BOUND	LEFT	0	0	EAST LEG	EAST BOUND	LEFT	0	0	EAST LEG
	THRU	0	0	RATIO 4.4%		THRU	0	0	RATIO 5.3%
	RIGHT	0	0	ADT 6,300		RIGHT	0	0	ADT 6,300
WEST BOUND	LEFT	134	136	WEST LEG	WEST BOUND	LEFT	34	39	WEST LEG
	THRU	0	0	RATIO -		THRU	1	1	RATIO 0.0%
	RIGHT	52	52	ADT 7,700		RIGHT	44	44	ADT 7,700

**Koala Road (NS) / Rancho Road (EW) - #1**  
**FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES**  
**NCHRP 255**

YEAR 2045 TRAFFIC CONDITIONS (IN PCEs)									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	YEAR 2045 TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	YEAR 2045 TOTAL
NORTH BOUND	LEFT	0	SOUTH LEG		NORTH BOUND	LEFT	0	SOUTH LEG	
	THRU	10		150		THRU	20		260
	RIGHT	33		210		RIGHT	159		150
SOUTH BOUND	LEFT	54	NORTH LEG		SOUTH BOUND	LEFT	87	NORTH LEG	
	THRU	22		150		THRU	6		180
	RIGHT	0		110		RIGHT	1		170
EAST BOUND	LEFT	0	WEST LEG		EAST BOUND	LEFT	0	WEST LEG	
	THRU	0		40		THRU	0		90
	RIGHT	0		120		RIGHT	0		30
WEST BOUND	LEFT	134	EAST LEG		WEST BOUND	LEFT	34	EAST LEG	
	THRU	0		210		THRU	1		80
	RIGHT	52		90		RIGHT	44		260

YEAR 2045 TRAFFIC CONDITIONS (IN PCEs)									
MORNING PEAK HOUR RESULTS					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	YEAR 2045 FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	YEAR 2045 FORECAST	PEAK - DAILY RELATIONSHIP
NORTH BOUND	LEFT	0	0	NORTH LEG	NORTH BOUND	LEFT	0	0	NORTH LEG
	THRU	10	69	RATIO 8.9%		THRU	20	137	RATIO 13.3%
	RIGHT	33	52	ADT 3,000		RIGHT	159	175	ADT 3,000
SOUTH BOUND	LEFT	54	59	SOUTH LEG	SOUTH BOUND	LEFT	87	96	SOUTH LEG
	THRU	22	82	RATIO 6.6%		THRU	6	92	RATIO 8.7%
	RIGHT	0	0	ADT 5,300		RIGHT	1	27	ADT 5,300
EAST BOUND	LEFT	0	0	EAST LEG	EAST BOUND	LEFT	0	0	EAST LEG
	THRU	0	0	RATIO 5.0%		THRU	0	0	RATIO 6.0%
	RIGHT	0	0	ADT 6,300		RIGHT	0	0	ADT 6,300
WEST BOUND	LEFT	134	147	WEST LEG	WEST BOUND	LEFT	34	58	WEST LEG
	THRU	0	0	RATIO -		THRU	1	3	RATIO 0.4%
	RIGHT	52	57	ADT 7,700		RIGHT	44	48	ADT 7,700

Bellflower Street (NS) / Rancho Road (EW) - #2									
MORNING PEAK HOUR					EVENING PEAK HOUR				
EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):					EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):				
2024					2024				
		49	59	12		13	94	10	
		<	v	>		<	v	>	
	7	^		^	19	^		^	25
	67	>		<	281	>		<	65
	21	v		v	163	v		v	37
		84	48	19		17	64	31	
EXISTING PEAK HOUR COUNT YEAR (AUTOS):					EXISTING PEAK HOUR COUNT YEAR (AUTOS):				
2024					2024				
			120	58			117	108	
			v	^			v	^	
	475	<	IN =	715	<	95	<	IN =	819
	95	>	OUT =	715	>	463	>	OUT =	819
			84	151			294	112	
EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCES):					EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCES):				
2024					2024				
		9	0	4		2	4	0	
		<	v	>		<	v	>	
	0	^		^	0	^		^	4
	38	>		<	28	>		<	14
	4	v		v	4	v		v	3
PCE FACTORS BY AXLE:					PCE FACTORS BY AXLE:				
2:	2.0	3:	2.5	4+:	2:	2.0	3:	3	4+:
			3.0	5				3.0	2
				0					0
TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):					TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):				
2024					2024				
		58	59	16			15	98	10
		<	v	>			<	v	>
	7	^		^	19	^		^	29
	105	>		<	309	>		<	79
	25	v		v	167	v		v	40
			89	48	19		19	64	31
EXISTING PEAK PERIOD MODEL YEAR (AUTO):					EXISTING PEAK PERIOD MODEL YEAR (AUTO):				
2016					2016				
		102	112				244	153	
		v	^				v	^	
	79	<	IN =	377	<	292	<	IN =	862
	51	>	OUT =	377	>	113	>	OUT =	862
			86	156			308	135	
EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCES):					EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCES):				
2016					2016				
		2	3				3	3	
		v	^				v	^	
	12	<	IN =	29	<	22	<	IN =	44
	12	>	OUT =	29	>	16	>	OUT =	45
			1	2			2	2	
EXISTING PEAK HOUR MODEL YEAR (PCES):					EXISTING PEAK HOUR MODEL YEAR (PCES):				
PHF FOR CARS: 0.33					PHF FOR CARS: 0.25				
PHF FOR TRUCKS: 0.333					PHF FOR TRUCKS: 0.25				
		35	38				62	39	
		v	^				v	^	
	30	<	IN =	135	<	79	<	IN =	227
	21	>	OUT =	135	>	32	>	OUT =	227
			29	53			78	34	
FUTURE PEAK PERIOD MODEL YEAR (AUTO):					FUTURE PEAK PERIOD MODEL YEAR (AUTO):				
2040					2040				
		31	45				70	82	
		v	^				v	^	
	161	<	IN =	422	<	393	<	IN =	764
	193	>	OUT =	423	>	237	>	OUT =	764
			19	20			38	38	
FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCES):					FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCES):				
2040					2040				
		2	2				2	2	
		v	^				v	^	
	5	<	IN =	17	<	14	<	IN =	24
	8	>	OUT =	18	>	5	>	OUT =	24
			1	1			1	1	
FUTURE PEAK HOUR MODEL YEAR (PCES):					FUTURE PEAK HOUR MODEL YEAR (PCES):				
PHF FOR CARS: 0.33					PHF FOR CARS: 0.25				
PHF FOR TRUCKS: 0.333					PHF FOR TRUCKS: 0.25				
		11	16				18	21	
		v	^				v	^	
	55	<	IN =	146	<	102	<	IN =	197
	67	>	OUT =	147	>	61	>	OUT =	197
			7	7			10	10	
RAW GROWTH (PCES): 2016 TO 2040					RAW GROWTH (PCES): 2016 TO 2040				
CONVERSION OF TRUCKS TO: 1.00					CONVERSION OF TRUCKS TO: 1.00				
		-24	-23				-44	-18	
		v	^				v	^	
	25	<		<	23	<		<	11
	46	>		>	28	>		>	33
			-22	-46			-68	-25	
ADJUSTED GROWTH (PCES): 2016 TO 2040					ADJUSTED GROWTH (PCES): 2016 TO 2040				
2 MINIMUM GROWTH %					2 MINIMUM GROWTH %				
		0	0				0	0	
		v	^				v	^	
	20	<	IN =	80	<	20	<	IN =	40
	50	>	OUT =	50	>	30	>	OUT =	50
			0	0			0	0	
PRORATED GROWTH (PCES): 2024 TO 2045					PRORATED GROWTH (PCES): 2024 TO 2045				
21 YEARS					21 YEARS				
		0	0				0	0	
		v	^				v	^	
	20	<		<	20	<		<	10
	40	>		>	30	>		>	30
			0	0			0	0	
NEW PROJECTED VOLUMES (PCES): 2045					NEW PROJECTED VOLUMES (PCES): 2045				
		130	60				120	110	
		v	^				v	^	
	540	<		<	130	<		<	160
	180	>		>	530	>		>	380
			90	160			310	110	
YEAR 2025 GROWTH: 2024 TO 2025					YEAR 2025 GROWTH: 2024 TO 2025				
1 YEARS					1 YEARS				
		0	0				0	0	
		v	^				v	^	
	0	<		<	0	<		<	0
	0	>		>	0	>		>	0
			0	0			0	0	
INITIAL YEAR 2025 VOLUMES: 2025					INITIAL YEAR 2025 VOLUMES: 2025				
		130	60				120	110	
		v	^				v	^	
	520	<	IN =	820	<	110	<	IN =	880
	140	>	OUT =	810	>	500	>	OUT =	880
			90	160			310	110	
BALANCED YEAR 2025 VOLUMES: 2025					BALANCED YEAR 2025 VOLUMES: 2025				
		130	60				120	110	
		v	^				v	^	
	530	<	IN =	820	<	110	<	IN =	880
	140	>	OUT =	820	>	500	>	OUT =	880
			90	160			310	110	

**Bellflower Street (NS) / Rancho Road (EW) - #2**  
**FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES**  
**NCHRP 255**

YEAR 2025 TRAFFIC CONDITIONS (IN PCEs)									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	YEAR 2025 TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	YEAR 2025 TOTAL
NORTH BOUND	LEFT	89	SOUTH LEG		NORTH BOUND	LEFT	19	SOUTH LEG	
	THRU	48		160		THRU	64		110
	RIGHT	19		90		RIGHT	31		310
SOUTH BOUND	LEFT	16	NORTH LEG		SOUTH BOUND	LEFT	10	NORTH LEG	
	THRU	59		130		THRU	98		120
	RIGHT	58		60		RIGHT	15		110
EAST BOUND	LEFT	7	WEST LEG		EAST BOUND	LEFT	19	WEST LEG	
	THRU	105		140		THRU	309		500
	RIGHT	25		530		RIGHT	167		110
WEST BOUND	LEFT	10	EAST LEG		WEST BOUND	LEFT	40	EAST LEG	
	THRU	374		390		THRU	79		150
	RIGHT	7		140		RIGHT	29		350

YEAR 2025 TRAFFIC CONDITIONS (IN PCEs)									
MORNING PEAK HOUR RESULTS					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	YEAR 2025 FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	YEAR 2025 FORECAST	PEAK - DAILY RELATIONSHIP
NORTH BOUND	LEFT	89	95	NORTH LEG	NORTH BOUND	LEFT	19	19	NORTH LEG
	THRU	48	48	RATIO 6.6%		THRU	64	64	RATIO 7.8%
	RIGHT	19	19	ADT 3,000		RIGHT	31	31	ADT 3,000
SOUTH BOUND	LEFT	16	16	SOUTH LEG	SOUTH BOUND	LEFT	10	10	SOUTH LEG
	THRU	59	59	RATIO 4.8%		THRU	98	98	RATIO 8.0%
	RIGHT	58	60	ADT 5,300		RIGHT	15	15	ADT 5,300
EAST BOUND	LEFT	7	7	EAST LEG	EAST BOUND	LEFT	19	19	EAST LEG
	THRU	105	107	RATIO 8.5%		THRU	309	311	RATIO 8.0%
	RIGHT	25	26	ADT 6,300		RIGHT	167	171	ADT 6,300
WEST BOUND	LEFT	10	10	WEST LEG	WEST BOUND	LEFT	40	42	WEST LEG
	THRU	374	376	RATIO 8.7%		THRU	79	79	RATIO 8.0%
	RIGHT	7	7	ADT 7,700		RIGHT	29	29	ADT 7,700



**Bellflower Street (NS) / Rancho Road (EW) - #2**  
**FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES**  
**NCHRP 255**

YEAR 2045 TRAFFIC CONDITIONS (IN PCEs)									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	YEAR 2045 TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	YEAR 2045 TOTAL
NORTH BOUND	LEFT	89	SOUTH LEG		NORTH BOUND	LEFT	19	SOUTH LEG	
	THRU	48		160		THRU	64		110
	RIGHT	19		90		RIGHT	31		310
SOUTH BOUND	LEFT	16	NORTH LEG		SOUTH BOUND	LEFT	10	NORTH LEG	
	THRU	59		130		THRU	98		120
	RIGHT	58		60		RIGHT	15		110
EAST BOUND	LEFT	7	WEST LEG		EAST BOUND	LEFT	19	WEST LEG	
	THRU	105		180		THRU	309		530
	RIGHT	25		540		RIGHT	167		130
WEST BOUND	LEFT	10	EAST LEG		WEST BOUND	LEFT	40	EAST LEG	
	THRU	374		420		THRU	79		160
	RIGHT	7		170		RIGHT	29		380

YEAR 2045 TRAFFIC CONDITIONS (IN PCEs)									
MORNING PEAK HOUR RESULTS					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	YEAR 2045 FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	YEAR 2045 FORECAST	PEAK - DAILY RELATIONSHIP
NORTH BOUND	LEFT	89	98	NORTH LEG	NORTH BOUND	LEFT	19	21	NORTH LEG
	THRU	48	53	RATIO 7.2%		THRU	64	70	RATIO 8.6%
	RIGHT	19	21	ADT 3,000		RIGHT	31	34	ADT 3,000
SOUTH BOUND	LEFT	16	18	SOUTH LEG	SOUTH BOUND	LEFT	10	11	SOUTH LEG
	THRU	59	65	RATIO 5.2%		THRU	98	108	RATIO 8.7%
	RIGHT	58	64	ADT 5,300		RIGHT	15	17	ADT 5,300
EAST BOUND	LEFT	7	9	EAST LEG	EAST BOUND	LEFT	19	21	EAST LEG
	THRU	105	136	RATIO 9.6%		THRU	309	340	RATIO 8.8%
	RIGHT	25	29	ADT 6,300		RIGHT	167	184	ADT 6,300
WEST BOUND	LEFT	10	11	WEST LEG	WEST BOUND	LEFT	40	44	WEST LEG
	THRU	374	411	RATIO 9.7%		THRU	79	92	RATIO 8.8%
	RIGHT	7	8	ADT 7,700		RIGHT	29	32	ADT 7,700

US-395 (NS) / Rancho Road (EW) - #3											
MORNING PEAK HOUR						EVENING PEAK HOUR					
EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):						EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):					
2024						2024					
			22	189	6				14	470	3
			<	v	>				<	v	>
		5	^		^			24	^		^
		29	>		<			75	>		<
		61	v		v			228	v		v
			<	^	>				<	^	>
			289	311	21				84	341	13
EXISTING PEAK HOUR COUNT YEAR (AUTOS):						EXISTING PEAK HOUR COUNT YEAR (AUTOS):					
2024						2024					
				217	318				487	375	
				v	^				v	^	
		354	<	IN =	1009			135	<	IN =	1400
		95	>	OUT =	1009			327	>	OUT =	1400
				v	^				v	^	
				281	621				799	438	
EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCES):						EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCES):					
2024						2024					
			3	110	0				3	213	3
			<	v	>				<	v	>
		2	^		^			2	^		^
		10	>		<			11	>		<
		20	v		v			11	v		v
PCE FACTORS BY AXLE:						PCE FACTORS BY AXLE:					
2:	2.0	3:	2.5	4+:	3.0	2:	2.0	3:	3	4+:	3.0
					21				10	101	5
TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):						TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):					
2024						2024					
				25	299				17	683	6
				<	v				<	v	>
		7	^		^			26	^		^
		39	>		<			86	>		<
		81	v		v			239	v		v
			<	^	>				<	^	>
			310	427	21				94	442	18
EXISTING PEAK PERIOD MODEL YEAR (AUTO):						EXISTING PEAK PERIOD MODEL YEAR (AUTO):					
2016						2016					
				1025	1329				1962	1388	
				v	^				v	^	
		96	<	IN =	2469			359	<	IN =	3746
		91	>	OUT =	2469			145	>	OUT =	3746
				v	^				v	^	
				1011	1330				1838	1592	
EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCES):						EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCES):					
2016						2016					
				82	156				147	35	
				v	^				v	^	
		14	<	IN =	266			23	<	IN =	223
		13	>	OUT =	265			19	>	OUT =	224
				v	^				v	^	
				92	168				137	54	
EXISTING PEAK HOUR MODEL YEAR (PCES):						EXISTING PEAK HOUR MODEL YEAR (PCES):					
PHF FOR CARS: 0.33						PHF FOR CARS: 0.25					
PHF FOR TRUCKS: 0.333						PHF FOR TRUCKS: 0.25					
				369	495				527	356	
				v	^				v	^	
		37	<	IN =	911			96	<	IN =	992
		35	>	OUT =	910			41	>	OUT =	993
				v	^				v	^	
				367	499				494	412	
FUTURE PEAK PERIOD MODEL YEAR (AUTO):						FUTURE PEAK PERIOD MODEL YEAR (AUTO):					
2040						2040					
				5066	3045				4553	8008	
				v	^				v	^	
		207	<	IN =	8123			431	<	IN =	12739
		191	>	OUT =	8123			294	>	OUT =	12739
				v	^				v	^	
				4607	2563				3913	7421	
FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCES):						FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCES):					
2040						2040					
				109	213				269	191	
				v	^				v	^	
		8	<	IN =	335			18	<	IN =	477
		11	>	OUT =	335			9	>	OUT =	477
				v	^				v	^	
				96	100				129	178	
FUTURE PEAK HOUR MODEL YEAR (PCES):						FUTURE PEAK HOUR MODEL YEAR (PCES):					
PHF FOR CARS: 0.33						PHF FOR CARS: 0.25					
PHF FOR TRUCKS: 0.333						PHF FOR TRUCKS: 0.25					
				1723	1085				1206	2050	
				v	^				v	^	
		72	<	IN =	2817			112	<	IN =	3304
		67	>	OUT =	2817			76	>	OUT =	3304
				v	^				v	^	
				1566	887				1011	1900	
RAW GROWTH (PCES): 2016 TO 2040						RAW GROWTH (PCES): 2016 TO 2040					
CONVERSION OF TRUCKS TO: 1.00						CONVERSION OF TRUCKS TO: 1.00					
				1355	590				678	1694	
				v	^				v	^	
		35	<		<			17	<		<
		33	>		>			35	>		>
				v	^				v	^	
				1199	388				517	1488	
ADJUSTED GROWTH (PCES): 2016 TO 2040						ADJUSTED GROWTH (PCES): 2016 TO 2040					
2 MINIMUM GROWTH %						2 MINIMUM GROWTH %					
				1350	590				680	1690	
				v	^				v	^	
		30	<	IN =	1900			20	<	IN =	2310
		30	>	OUT =	1900			30	>	OUT =	2310
				v	^				v	^	
				1200	390				520	1490	
PRORATED GROWTH (PCES): 2024 TO 2045						PRORATED GROWTH (PCES): 2024 TO 2045					
21 YEARS						21 YEARS					
				1180	520				600	1480	
				v	^				v	^	
		30	<		<			20	<		<
		30	>		>			30	>		>
				v	^				v	^	
				1050	340				460	1300	
NEW PROJECTED VOLUMES (PCES): 2045						NEW PROJECTED VOLUMES (PCES): 2045					
				1510	960				1310	1970	
				v	^				v	^	
		420	<		<			170	<		<
		160	>		>			380	>		>
				v	^				v	^	
				1510	1100				1500	1850	
YEAR 2025 GROWTH: 2024 TO 2025						YEAR 2025 GROWTH: 2024 TO 2025					
1 YEARS						1 YEARS					
				60	20				30	70	
				v	^				v	^	
		0	<		<			0	<		<
		0	>		>			0	>		>
				v	^				v	^	
				50	20				20	60	
INITIAL YEAR 2025 VOLUMES:						INITIAL YEAR 2025 VOLUMES:					
2025						2025					
				390	460				740	560	
				v	^				v	^	
		390	<	IN =	1450			150	<	IN =	1870
		130	>	OUT =	1430			350	>	OUT =	1880
				v	^				v	^	
				510	780				1060	610	
BALANCED YEAR 2025 VOLUMES:						BALANCED YEAR 2025 VOLUMES:					
2025						2025					
				390	470				740	560	
				v	^				v	^	
		400	<	IN =	1450			150	<	IN =	1870
		130	>	OUT =	1460			350	>	OUT =	1880
				v	^				v	^	
				520	780				1060	610	

**US-395 (NS) / Rancho Road (EW) - #3**  
**FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES**  
**NCHRP 255**

YEAR 2025 TRAFFIC CONDITIONS (IN PCEs)									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	YEAR 2025 TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	YEAR 2025 TOTAL
NORTH BOUND	LEFT	310	SOUTH LEG		NORTH BOUND	LEFT	94	SOUTH LEG	
	THRU	427		780		THRU	442		610
	RIGHT	21		520		RIGHT	18		1,060
SOUTH BOUND	LEFT	6	NORTH LEG		SOUTH BOUND	LEFT	6	NORTH LEG	
	THRU	299		390		THRU	683		740
	RIGHT	25		470		RIGHT	17		560
EAST BOUND	LEFT	7	WEST LEG		EAST BOUND	LEFT	26	WEST LEG	
	THRU	39		130		THRU	86		350
	RIGHT	81		400		RIGHT	239		150
WEST BOUND	LEFT	78	EAST LEG		WEST BOUND	LEFT	114	EAST LEG	
	THRU	59		150		THRU	40		170
	RIGHT	2		70		RIGHT	19		110

YEAR 2025 TRAFFIC CONDITIONS (IN PCEs)									
MORNING PEAK HOUR RESULTS					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	YEAR 2025 FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	YEAR 2025 FORECAST	PEAK - DAILY RELATIONSHIP
NORTH BOUND	LEFT	310	312	NORTH LEG	NORTH BOUND	LEFT	94	94	NORTH LEG
	THRU	427	460	RATIO 2.5%		THRU	442	507	RATIO 3.7%
	RIGHT	21	21	ADT 35,000		RIGHT	18	18	ADT 35,000
SOUTH BOUND	LEFT	6	7	SOUTH LEG	SOUTH BOUND	LEFT	6	6	SOUTH LEG
	THRU	299	354	RATIO 3.8%		THRU	683	716	RATIO 4.9%
	RIGHT	25	30	ADT 34,800		RIGHT	17	18	ADT 34,800
EAST BOUND	LEFT	7	8	EAST LEG	EAST BOUND	LEFT	26	31	EAST LEG
	THRU	39	41	RATIO 4.0%		THRU	86	86	RATIO 5.2%
	RIGHT	81	82	ADT 5,500		RIGHT	239	240	ADT 5,500
WEST BOUND	LEFT	78	84	WEST LEG	WEST BOUND	LEFT	114	115	WEST LEG
	THRU	59	65	RATIO 8.4%		THRU	40	40	RATIO 8.0%
	RIGHT	2	2	ADT 6,400		RIGHT	19	22	ADT 6,400

**US-395 (NS) / Rancho Road (EW) - #3**

**FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES**

**NCHRP 255**

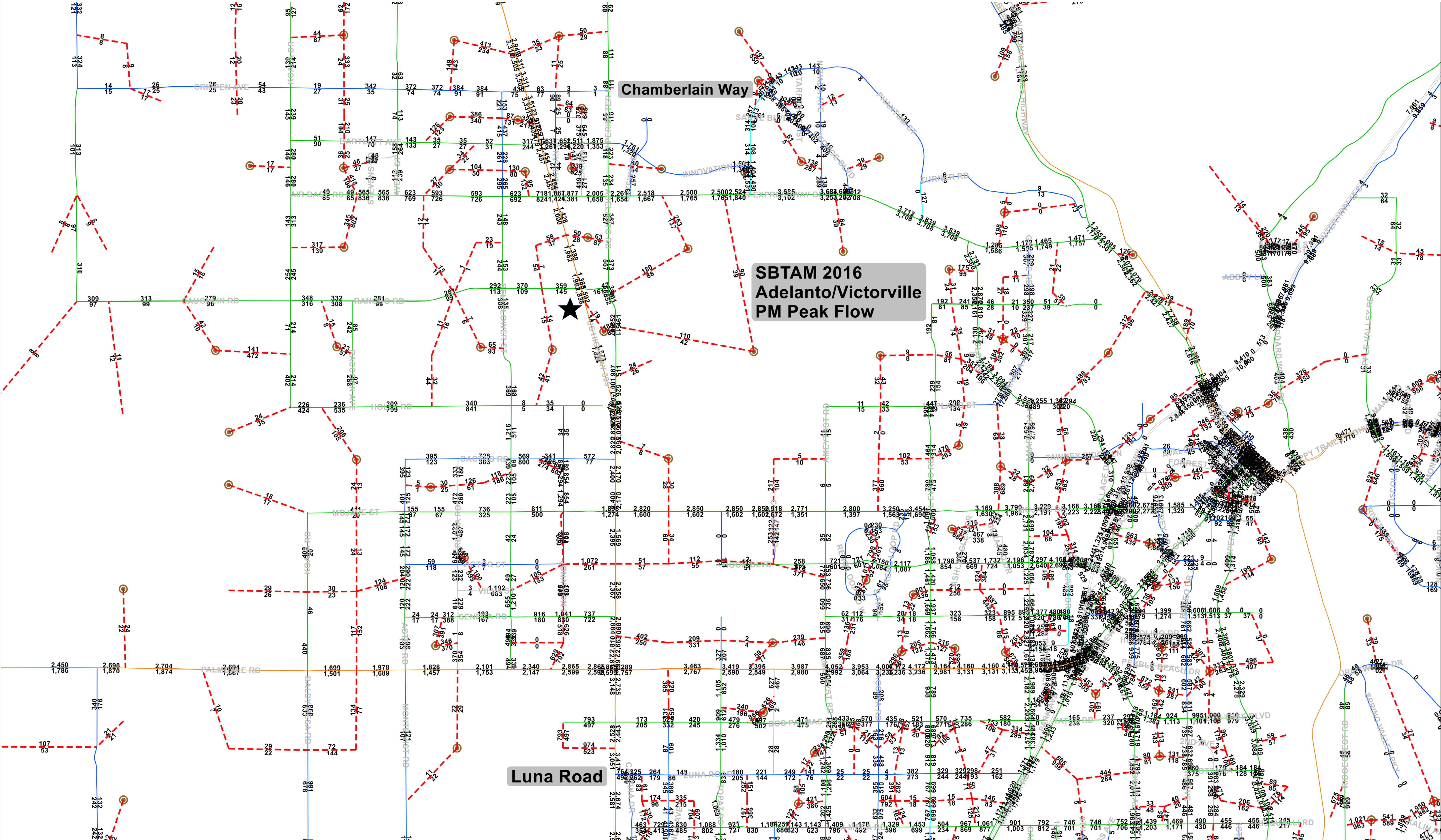
YEAR 2045 TRAFFIC CONDITIONS (IN PCEs)									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	YEAR 2045 TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	YEAR 2045 TOTAL
NORTH BOUND	LEFT	310	SOUTH LEG		NORTH BOUND	LEFT	94	SOUTH LEG	
	THRU	427		1,100		THRU	442		1,850
	RIGHT	21		1,510		RIGHT	18		1,500
SOUTH BOUND	LEFT	6	NORTH LEG		SOUTH BOUND	LEFT	6	NORTH LEG	
	THRU	299		1,510		THRU	683		1,310
	RIGHT	25		960		RIGHT	17		1,970
EAST BOUND	LEFT	7	WEST LEG		EAST BOUND	LEFT	26	WEST LEG	
	THRU	39		160		THRU	86		380
	RIGHT	81		420		RIGHT	239		170
WEST BOUND	LEFT	78	EAST LEG		WEST BOUND	LEFT	114	EAST LEG	
	THRU	59		250		THRU	40		270
	RIGHT	2		140		RIGHT	19		180

YEAR 2045 TRAFFIC CONDITIONS (IN PCEs)									
MORNING PEAK HOUR RESULTS					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	YEAR 2045 FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	YEAR 2045 FORECAST	PEAK - DAILY RELATIONSHIP
NORTH BOUND	LEFT	310	341	NORTH LEG	NORTH BOUND	LEFT	94	103	NORTH LEG
	THRU	427	925	RATIO 7.0%		THRU	442	1,806	RATIO 9.2%
	RIGHT	21	24	ADT 35,000		RIGHT	18	36	ADT 35,000
SOUTH BOUND	LEFT	6	51	SOUTH LEG	SOUTH BOUND	LEFT	6	21	SOUTH LEG
	THRU	299	1,309	RATIO 8.1%		THRU	683	1,193	RATIO 10.2%
	RIGHT	25	117	ADT 34,800		RIGHT	17	29	ADT 34,800
EAST BOUND	LEFT	7	22	EAST LEG	EAST BOUND	LEFT	26	75	EAST LEG
	THRU	39	66	RATIO 7.1%		THRU	86	123	RATIO 8.1%
	RIGHT	81	89	ADT 5,500		RIGHT	239	263	ADT 5,500
WEST BOUND	LEFT	78	130	WEST LEG	WEST BOUND	LEFT	114	133	WEST LEG
	THRU	59	106	RATIO 11.6%		THRU	40	46	RATIO 10.0%
	RIGHT	2	12	ADT 6,400		RIGHT	19	88	ADT 6,400

## **APPENDIX D**

### **Model Plots**



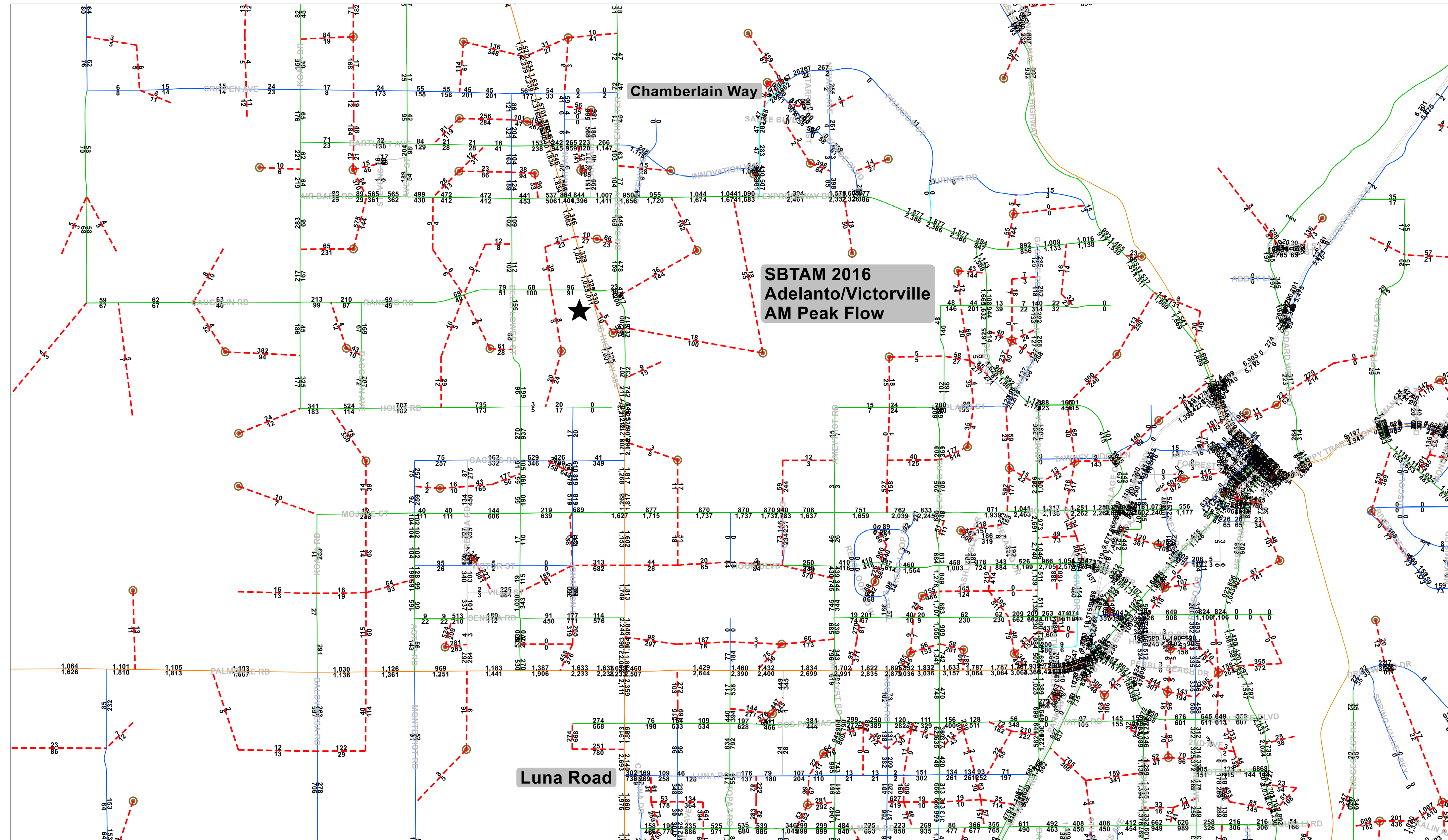




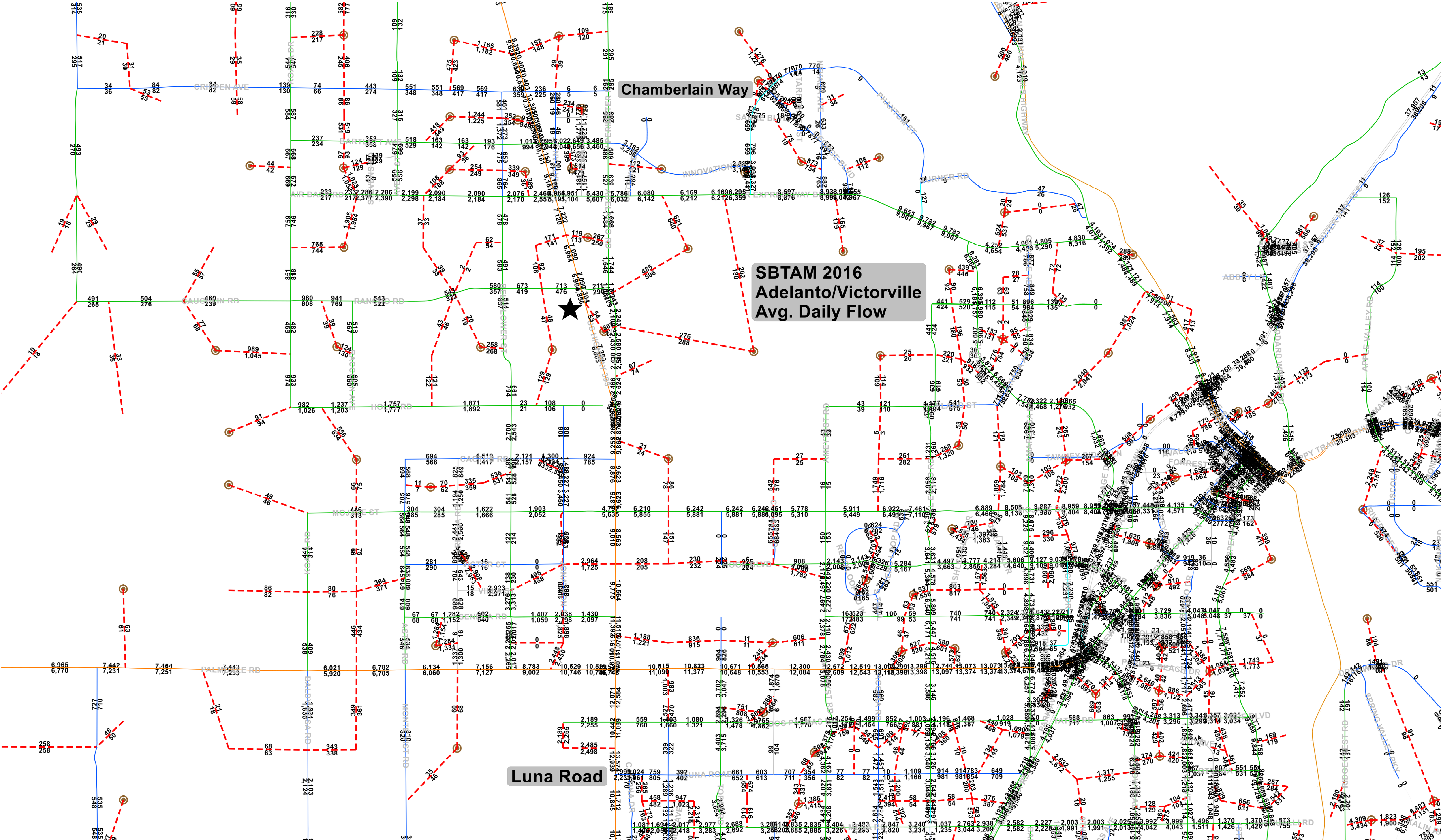
Chamberlain Way

SBTAM 2016  
Adelanto/Victorville  
AM Peak Flow

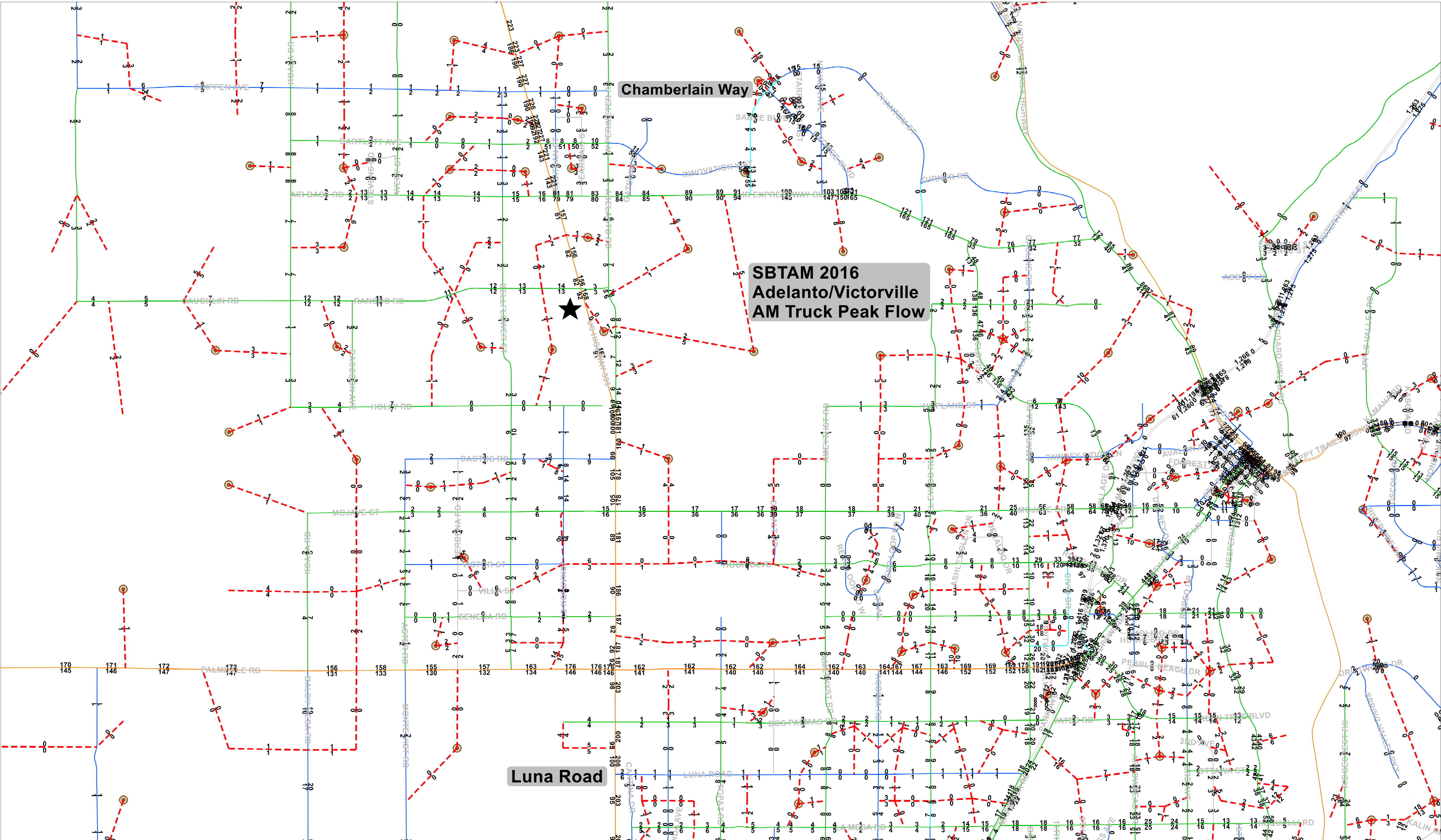
Luna Road



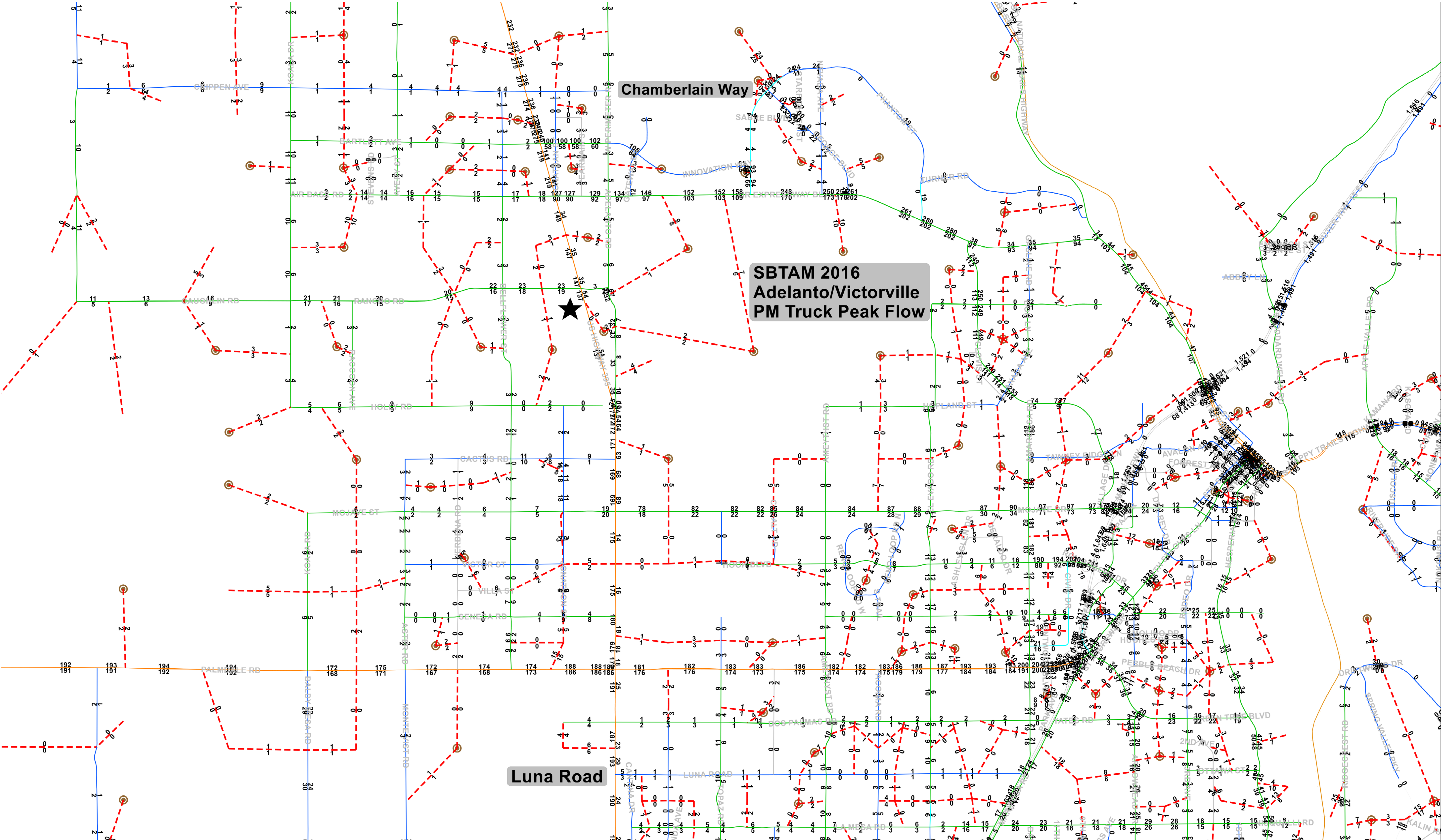




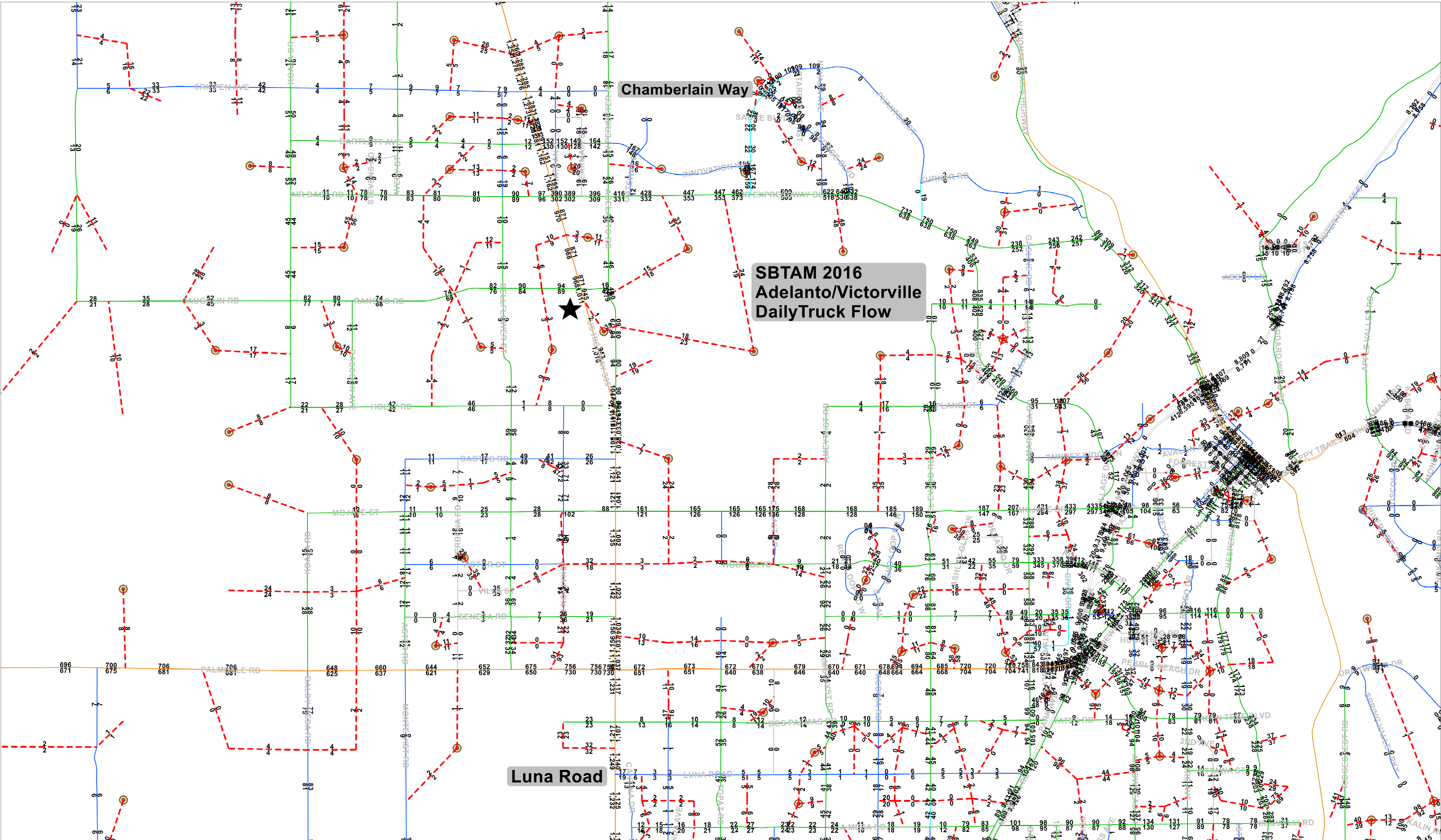










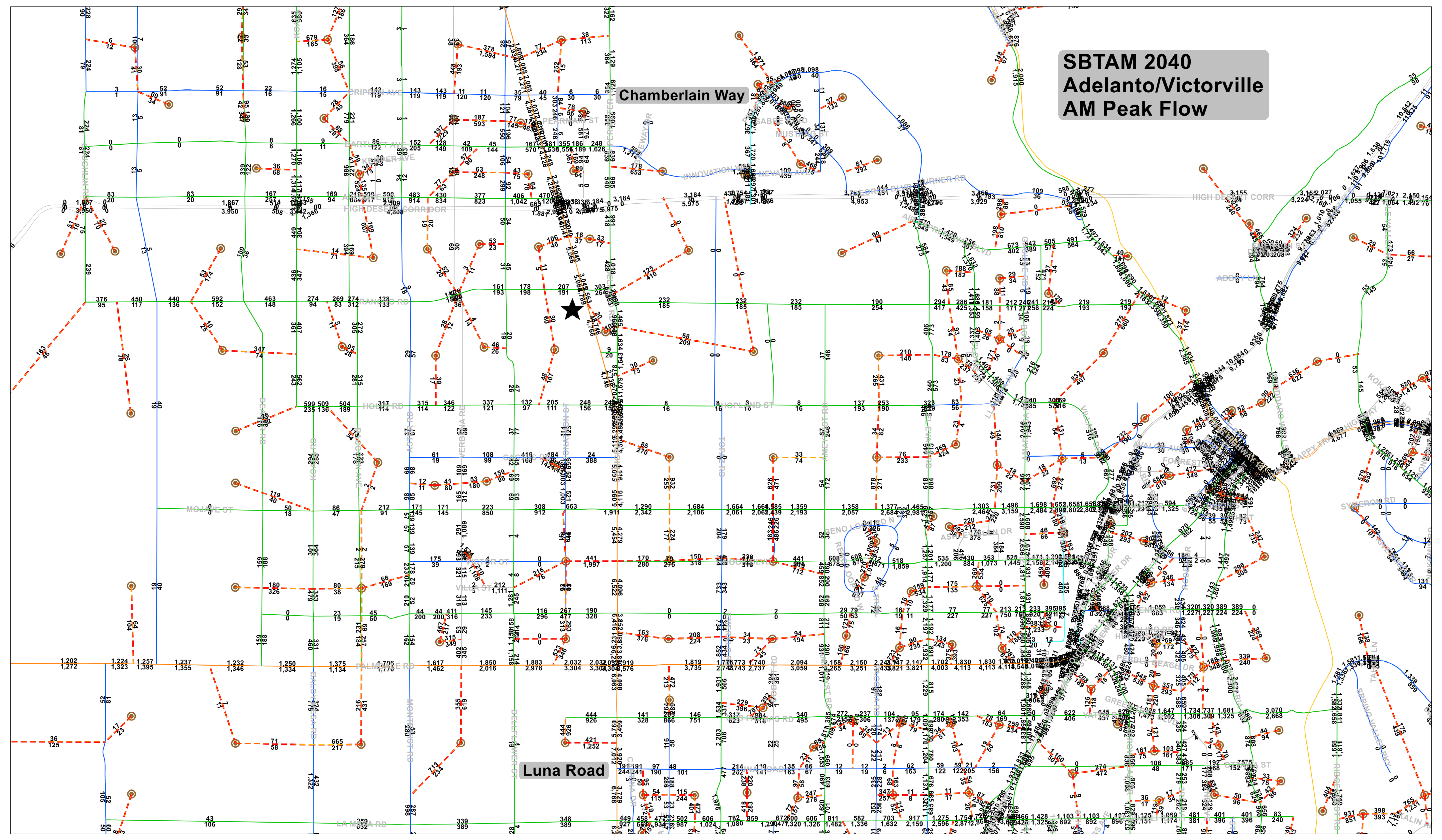




SBTAM 2040  
Adelanto/Victorville  
AM Peak Flow

Chamberlain Way

Luna Road

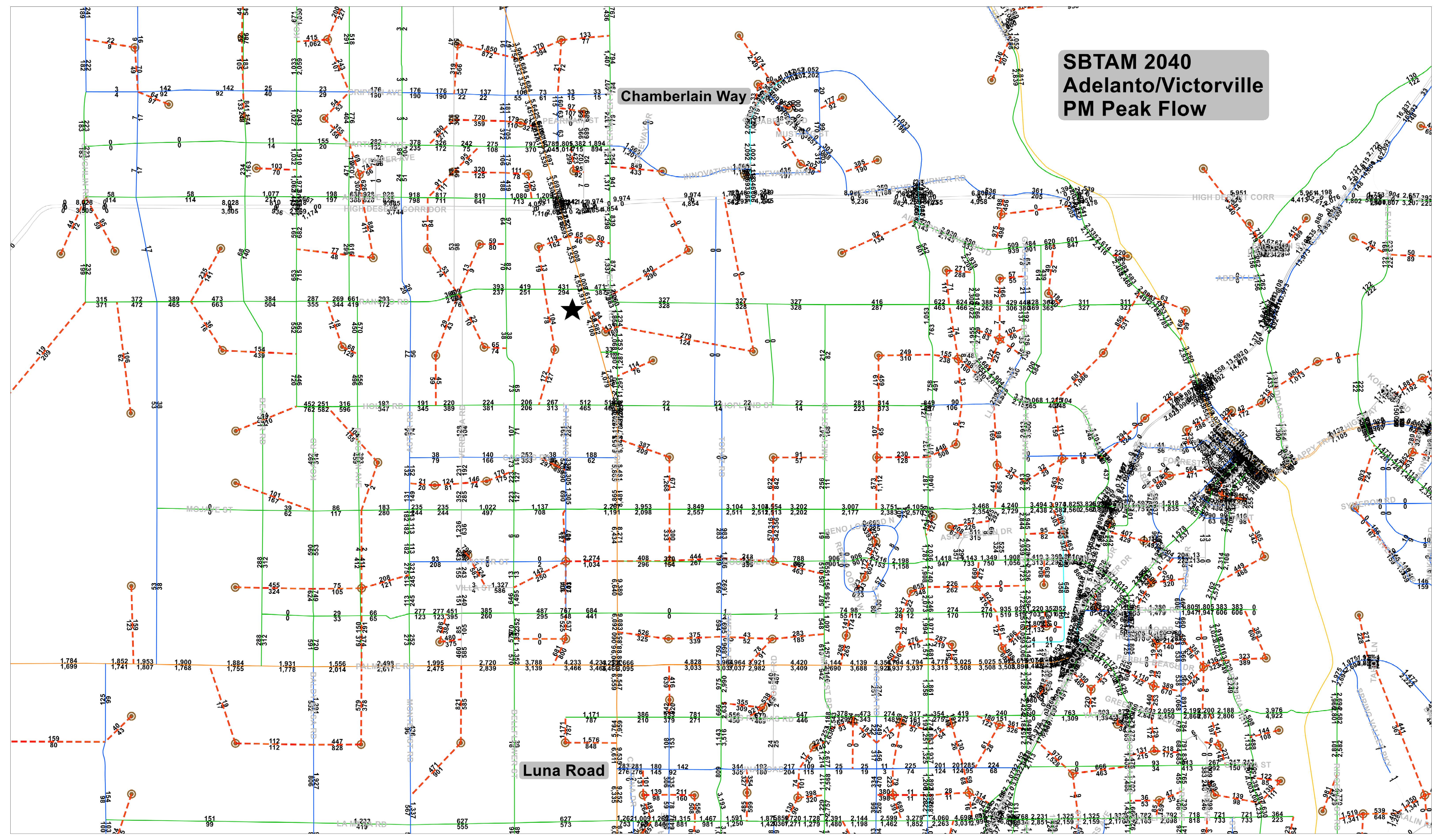




SBTAM 2040  
Adelanto/Victorville  
PM Peak Flow

Chamberlain Way

Luna Road

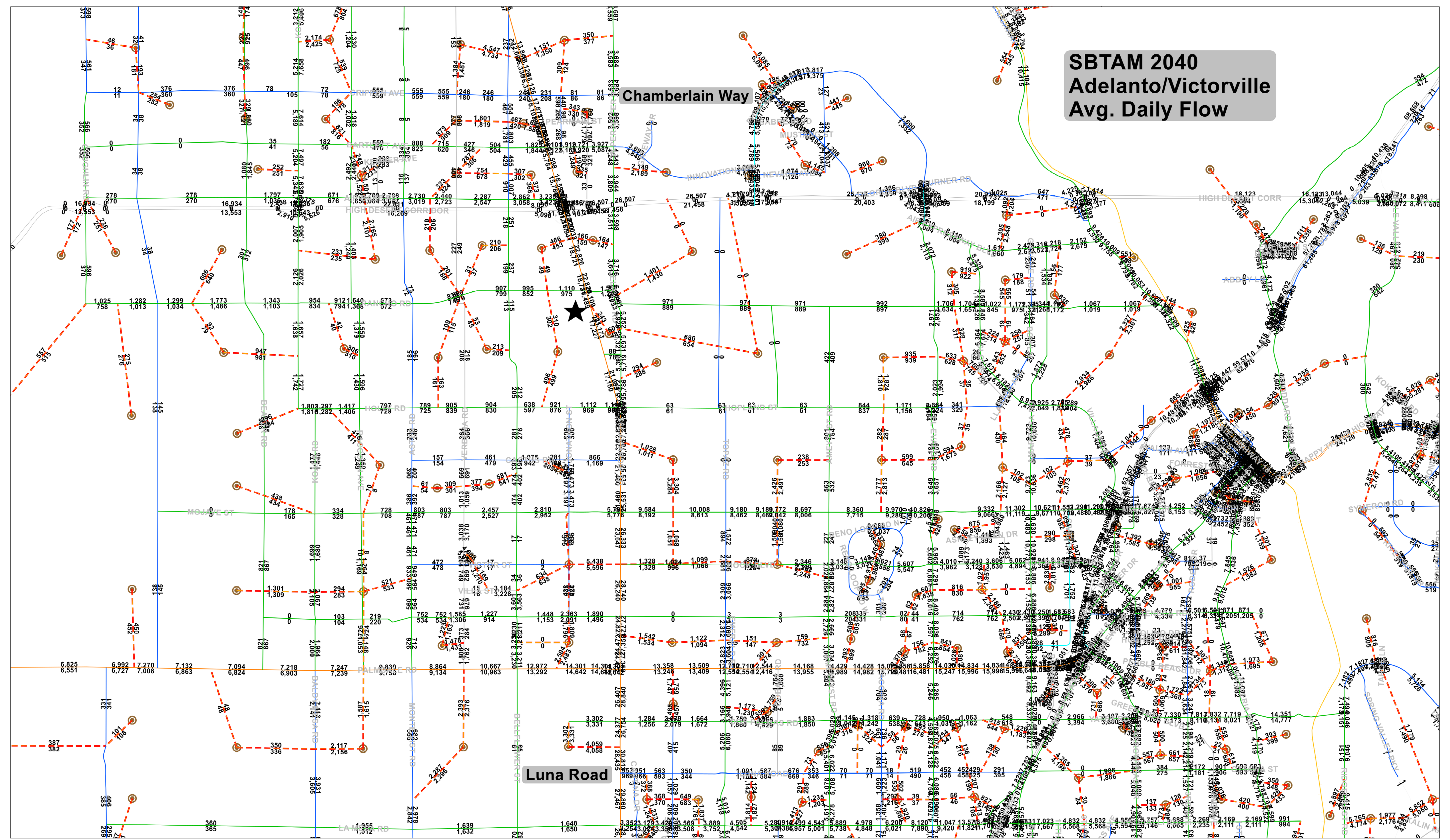




SBTAM 2040  
Adelanto/Victorville  
Avg. Daily Flow

Chamberlain Way

Luna Road

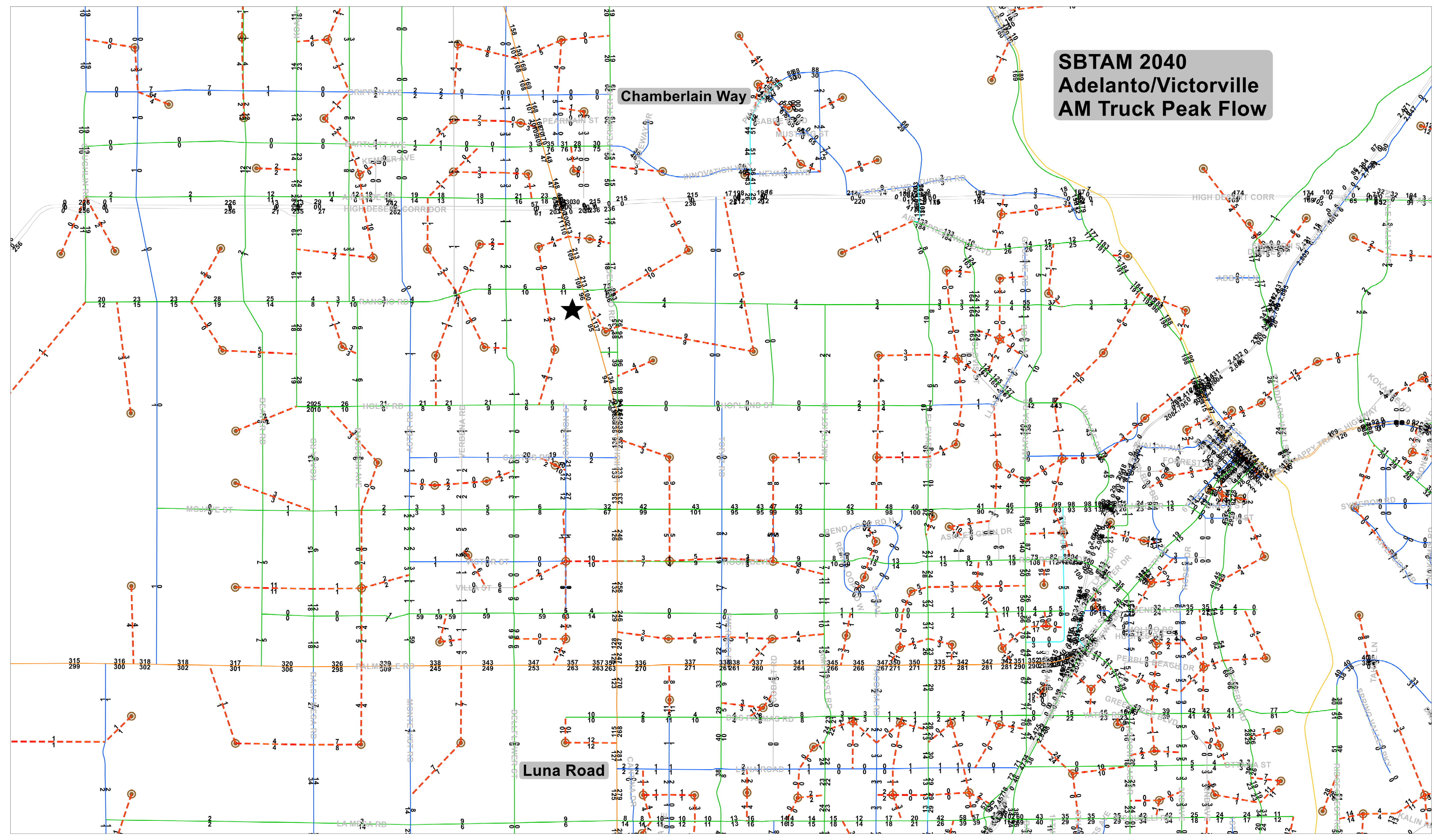




**SBTAM 2040  
Adelanto/Victorville  
AM Truck Peak Flow**

Chamberlain Way

Luna Road

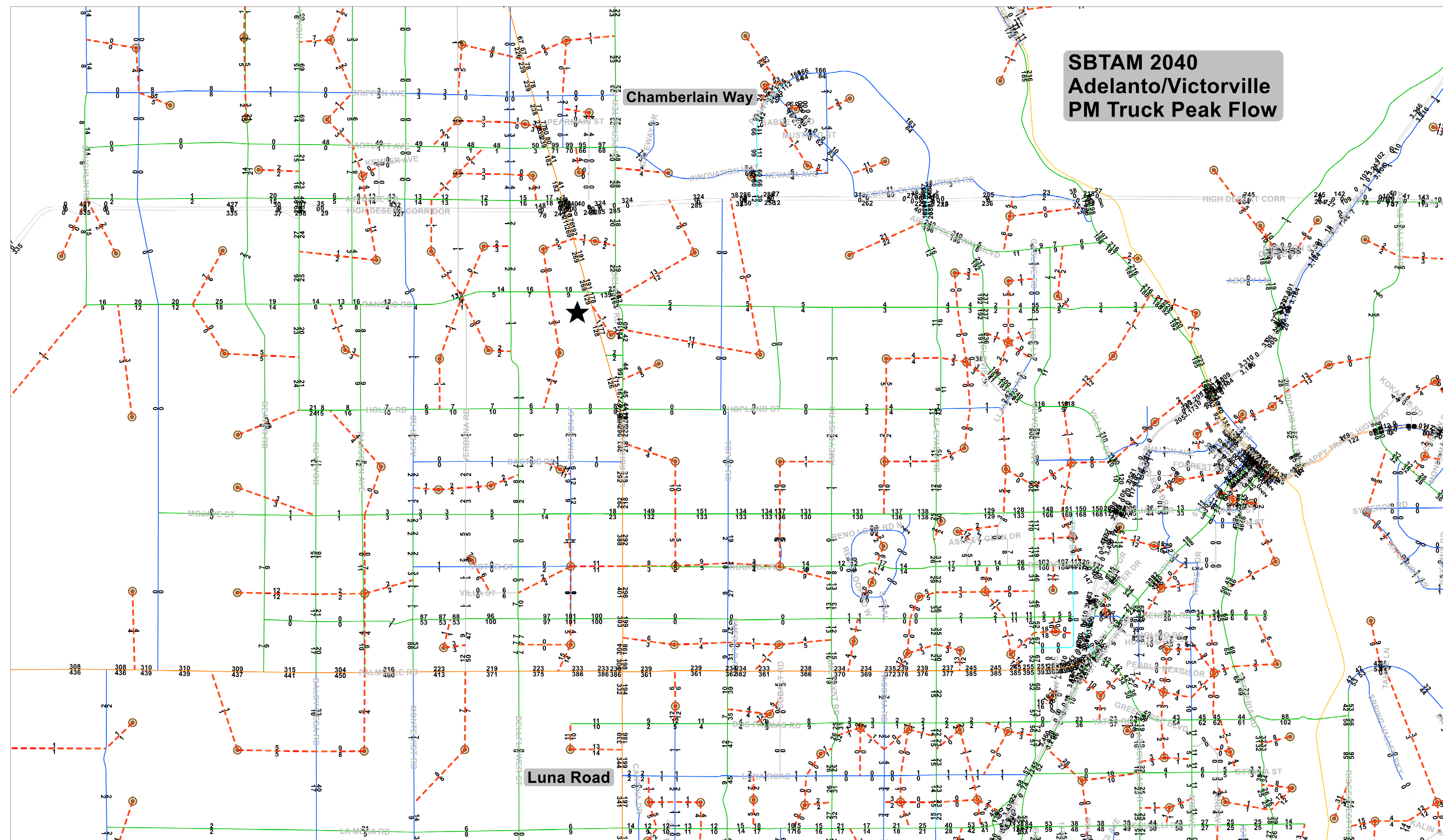




**SBTAM 2040  
Adelanto/Victorville  
PM Truck Peak Flow**

Chamberlain Way

Luna Road

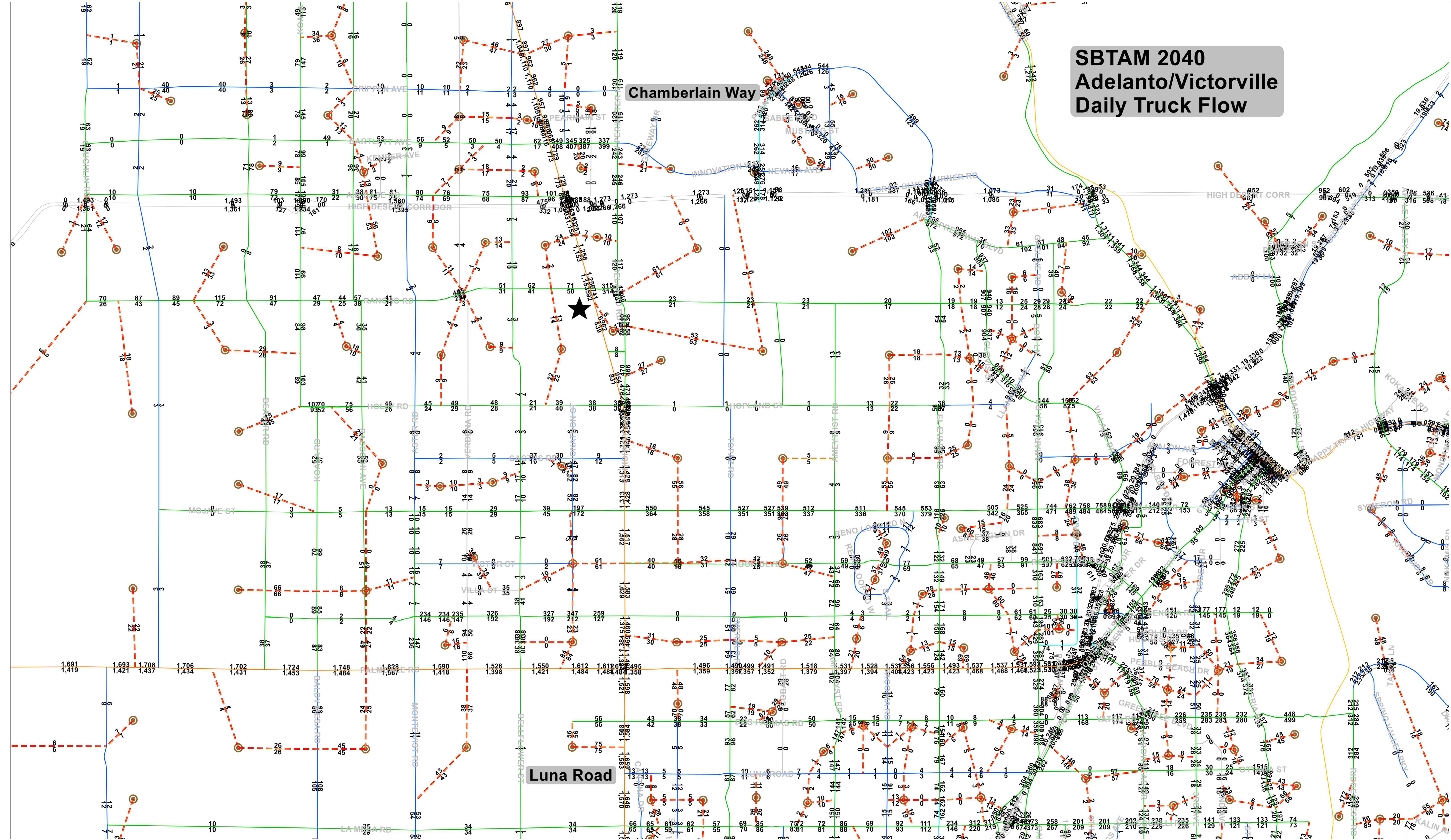




SBTAM 2040  
Adelanto/Victorville  
Daily Truck Flow

Chamberlain Way

Luna Road





## **APPENDIX E**

### **Explanation and Calculation of Intersection Delay**

## **EXPLANATION AND CALCULATION OF INTERSECTION LEVEL OF SERVICE USING DELAY METHODOLOGY**

The levels of service at the unsignalized and signalized intersections are calculated using the delay methodology in the Highway Capacity Manual. This methodology views an intersection as consisting of several lane groups. A lane group is a set of lanes serving a movement. If there are two northbound left turn lanes, then the lane group serving the northbound left turn movement has two lanes. Similarly, there may be three lanes in the lane group serving the northbound through movement, one lane in the lane group serving the northbound right turn movement, and so forth. It is also possible for one lane to serve two lane groups. A shared lane might result in there being 1.5 lanes in the northbound left turn lane group and 2.5 lanes in the northbound through lane group.

For each lane group, there is a capacity. That capacity is calculated by multiplying the number of lanes in the lane group times a theoretical maximum lane capacity per lane time's 12 adjustment factors.

Each of the 12 adjustment factors has a value of approximately 1.00. A value less than 1.00 is generally assigned when a less than desirable condition occurs.

The 12 adjustment factors are as follows:

1. Peak hour factor (to account for peaking within the peak hour)
2. Lane utilization factor (to account for not all lanes loading equally)
3. Lane width
4. Percent of heavy trucks
5. Approach grade
6. Parking
7. Bus stops at intersections
8. Area type (CBD or other)
9. Right turns
10. Left turns
11. Pedestrian activity
12. Signal progression

The maximum theoretical lane capacity and the 12 adjustment factors for it are all unknowns for which approximate estimates have been recommended in the Highway Capacity Manual. For the most part, the recommended values are not based on statistical analysis but rather on educated estimates. However, it is

possible to use the delay method and get reasonable results as will be discussed below.

Once the lane group volume is known and the lane group capacity is known, a volume to capacity ratio can be calculated for the lane group.

With a volume to capacity ratio calculated, average delay per vehicle in a lane group can be estimated. The average delay per vehicle in a lane group is calculated using a complex formula provided by the Highway Capacity Manual, which can be simplified and described as follows:

Delay per vehicle in a lane group is a function of the following:

1. Cycle length
2. Amount of red time faced by a lane group
3. Amount of yellow time for that lane group
4. The volume to capacity ratio of the lane group

The average delay per vehicle for each lane group is calculated, and eventually an overall average delay for all vehicles entering the intersection is calculated. This average delay per vehicle is then used to judge Level of Service. The Level of Services are defined in the table that follows this discussion.

Experience has shown that when a maximum lane capacity of 1,900 vehicles per hour is used (as recommended in the Highway Capacity Manual), little or no yellow time penalty is used, and none of the 12 penalty factors are applied, calculated delay is realistic. The delay calculation for instance assumes that yellow time is totally unused. Yet experience shows that most of the yellow time is used.

An idiosyncrasy of the delay methodology is that it is possible to add traffic to an intersection and reduce the average total delay per vehicle. If the average total delay is 30 seconds per vehicle for all vehicles traveling through an intersection, and traffic is added to a movement that has an average total delay of 15 seconds per vehicle, then the overall average total delay is reduced.

The delay calculation for a lane group is based on a concept that the delay is a function of the amount of unused capacity available. As the volume approaches capacity and there is no more unused capacity available, then the delay rapidly increases. Delay is not proportional to volume, but rather increases rapidly as the unused capacity approaches zero.

Because delay is not linearly related to volumes, the delay does not reflect how close an intersection is to overloading. If an intersection is operating at Level of Service C and has an average total delay of 18 seconds per vehicle, you know very little as to what percent the traffic can increase before Level of Service E is reached.



## LEVEL OF SERVICE DESCRIPTION<sup>1</sup>

Level Of Service	Description	Average Total Delay Per Vehicle (Seconds)	
		Signalized	Unsignalized
A	Level of Service A occurs when progression is extremely favorable and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.	0 to 10.00	0 to 10.00
B	Level of Service B generally occurs with good progression and/or short cycle lengths. More vehicles stop than for Level of Service A, causing higher levels of average total delay.	10.01 to 20.00	10.01 to 15.00
C	Level of Service C generally results when there is fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear in this level. The number of vehicles stopping is significant at this level, although many still pass through the intersection without stopping.	20.01 to 35.00	15.01 to 25.00
D	Level of Service D generally results in noticeable congestion. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high volume to capacity ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.	35.01 to 55.00	25.01 to 35.00
E	Level of Service E is considered to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high volume to capacity ratios. Individual cycle failures are frequent occurrences.	55.01 to 80.00	35.01 to 50.00
F	Level of Service F is considered to be unacceptable to most drivers. This condition often occurs with oversaturation, i.e., when arrival flow rates exceed the capacity of the intersection. It may also occur at high volume to capacity ratios below 1.00 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing causes to such delay levels.	80.01 and up	50.01 and up

<sup>1</sup> Source: Highway Capacity Manual Special Report 209, Transportation Research Board, National Research Council, Washington, D.C., 2000.

**Existing**

## The Cactus Avenue Cannabis Facility

Vistro File: C:\...\AM.vistro

Scenario 1 Existing

Report File: C:\...\AME.pdf

7/17/2024

**Intersection Analysis Summary**





ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Koala Road (NS) at Rancho Road (EW)	All-way stop	HCM 2010	WB Left	0.249	9.0	A
2	Bellflower Street (NS) at Rancho Road (EW)	All-way stop	HCM 2010	NB Left	0.309	10.5	B
3	Highway 395 (NS) at Rancho Road (EW)	Signalized	HCM 2010	SB Left	0.359	14.7	B

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

**Intersection Level Of Service Report**  
**Intersection 1: Koala Road (NS) at Rancho Road (EW)**

Control Type:	All-way stop	Delay (sec / veh):	9.0
Analysis Method:	HCM 2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.249

**Intersection Setup**

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			55.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name												
Base Volume Input [veh/h]	0	10	33	54	22	0	0	0	0	134	0	52
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	10	33	54	22	0	0	0	0	134	0	52
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	3	8	14	6	0	0	0	0	34	0	13
Total Analysis Volume [veh/h]	0	10	33	54	22	0	0	0	0	134	0	52
Pedestrian Volume [ped/h]	0			0			0			0		



**Intersection Settings****Lanes**

Capacity per Entry Lane [veh/h]	706	706	819	690	720	748
Degree of Utilization, x	0.00	0.01	0.04	0.11	0.00	0.25





**Movement, Approach, & Intersection Results**

95th-Percentile Queue Length [veh]	0.00	0.04	0.13	0.37	0.00	0.98
95th-Percentile Queue Length [ft]	0.00	1.08	3.15	9.23	0.00	24.49
Approach Delay [s/veh]	7.42			8.86	0.00	9.40
Approach LOS	A			A	A	A
Intersection Delay [s/veh]	8.99					
Intersection LOS	A					

**Intersection Level Of Service Report**  
**Intersection 2: Bellflower Street (NS) at Rancho Road (EW)**

Control Type:	All-way stop	Delay (sec / veh):	10.5
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.309

**Intersection Setup**

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	1	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	50.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			55.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			No		

**Volumes**

Name												
Base Volume Input [veh/h]	89	48	19	16	59	58	7	105	25	10	374	4
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	89	48	19	16	59	58	7	105	25	10	374	4
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	22	12	5	4	15	15	2	26	6	3	94	1
Total Analysis Volume [veh/h]	89	48	19	16	59	58	7	105	25	10	374	4
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings****Lanes**

Capacity per Entry Lane [veh/h]	558	659	568	648	528	569	569	640	563	611	613
Degree of Utilization, x	0.25	0.03	0.13	0.09	0.01	0.09	0.09	0.04	0.02	0.31	0.31

**Movement, Approach, & Intersection Results**

95th-Percentile Queue Length [veh]	0.96	0.09	0.45	0.29	0.04	0.30	0.30	0.12	0.05	1.31	1.31
95th-Percentile Queue Length [ft]	23.98	2.22	11.33	7.35	1.01	7.59	7.59	3.05	1.36	32.76	32.64
Approach Delay [s/veh]	10.89		9.48		9.46			11.14			
Approach LOS	B		A		A			B			
Intersection Delay [s/veh]	10.54										
Intersection LOS	B										

**Intersection Level Of Service Report**  
**Intersection 3: Highway 395 (NS) at Rancho Road (EW)**

Control Type: Signalized  
Analysis Method: HCM 2010  
Analysis Period: 15 minutes

Delay (sec / veh): 14.7  
Level Of Service: B  
Volume to Capacity (v/c): 0.359

**Intersection Setup**

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↵↵↵			↵↵↵			↵↵↵			↵↵↵		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	340.00	100.00	100.00	290.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			30.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name												
Base Volume Input [veh/h]	310	427	21	6	299	25	7	39	81	78	59	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	310	427	21	6	299	25	7	39	81	78	59	2
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	78	107	5	2	75	6	2	10	20	20	15	1
Total Analysis Volume [veh/h]	310	427	21	6	299	25	7	39	81	78	59	2
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		



**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	4.00

**Phasing & Timing**

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	5	5	0	0	5	0	0	5	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
All red [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Split [s]	24	24	0	18	18	0	0	18	0	0	18	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

Lane Group	L	C	C	L	C	C	L	C	R	L	C	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
g_i, Effective Green Time [s]	13	43	43	0	31	31	7	7	7	7	7	7
g / C, Green / Cycle	0.22	0.72	0.72	0.01	0.51	0.51	0.12	0.12	0.12	0.12	0.12	0.12
(v / s)_i Volume / Saturation Flow Rate	0.18	0.13	0.13	0.00	0.09	0.09	0.01	0.01	0.05	0.06	0.02	0.02
s, saturation flow rate [veh/h]	1681	1765	1736	1681	1765	1718	1336	3360	1500	1363	1765	1744
c, Capacity [veh/h]	365	1269	1248	14	899	875	215	413	185	224	217	215
d1, Uniform Delay [s]	22.54	2.72	2.72	29.63	7.95	7.96	26.04	23.35	24.40	27.17	23.49	23.49
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.52	0.31	0.31	20.21	0.44	0.46	0.06	0.10	1.64	0.93	0.29	0.30
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

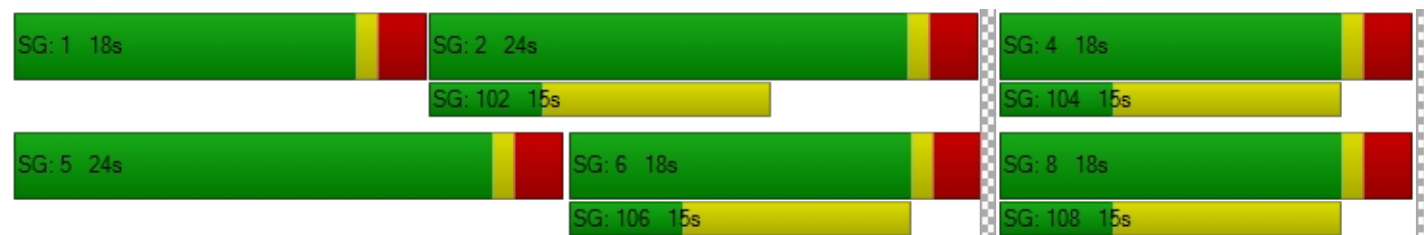
X, volume / capacity	0.85	0.18	0.18	0.44	0.18	0.18	0.03	0.09	0.44	0.35	0.14	0.14
d, Delay for Lane Group [s/veh]	28.06	3.03	3.03	49.84	8.39	8.42	26.11	23.45	26.04	28.09	23.78	23.79
Lane Group LOS	C	A	A	D	A	A	C	C	C	C	C	C
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	4.08	0.34	0.34	0.15	0.90	0.89	0.09	0.24	1.09	1.00	0.35	0.35
50th-Percentile Queue Length [ft/ln]	101.95	8.58	8.49	3.85	22.53	22.29	2.31	5.92	27.18	24.94	8.67	8.65
95th-Percentile Queue Length [veh/ln]	7.34	0.62	0.61	0.28	1.62	1.61	0.17	0.43	1.96	1.80	0.62	0.62
95th-Percentile Queue Length [ft/ln]	183.51	15.44	15.28	6.93	40.56	40.13	4.15	10.66	48.93	44.90	15.60	15.56

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	28.06	3.03	3.03	49.84	8.41	8.42	26.11	23.45	26.04	28.09	23.78	23.79
Movement LOS	C	A	A	D	A	A	C	C	C	C	C	C
d_A, Approach Delay [s/veh]	13.27			9.16			25.24			26.20		
Approach LOS	B			A			C			C		
d_I, Intersection Delay [s/veh]	14.72											
Intersection LOS	B											
Intersection V/C	0.359											

**Sequence**

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



## The Cactus Avenue Cannabis Facility

Vistro File: C:\...\AM.vistro

Scenario 1 Existing

Report File: C:\...\AME.pdf

7/17/2024

## Turning Movement Volume: Detail

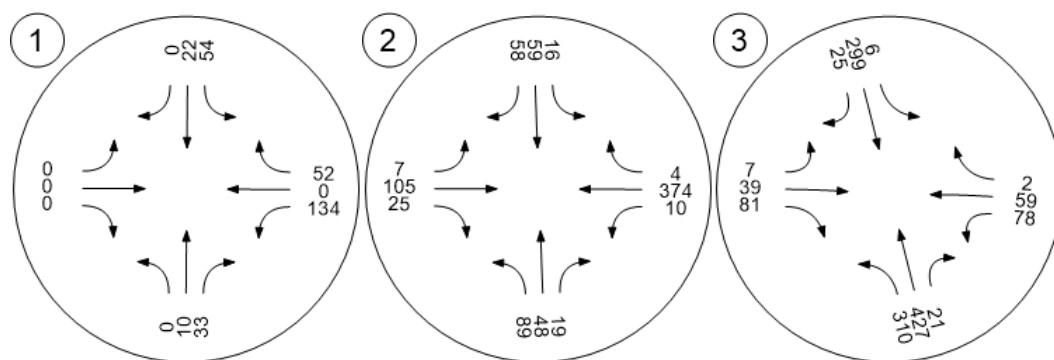
ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	Koala Road (NS) at Rancho Road (EW)	Final Base	0	10	33	54	22	0	0	0	0	134	0	52	305
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>0</b>	<b>10</b>	<b>33</b>	<b>54</b>	<b>22</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>134</b>	<b>0</b>	<b>52</b>	<b>305</b>

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	Bellflower Street (NS) at Rancho Road (EW)	Final Base	89	48	19	16	59	58	7	105	25	10	374	4	814
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>89</b>	<b>48</b>	<b>19</b>	<b>16</b>	<b>59</b>	<b>58</b>	<b>7</b>	<b>105</b>	<b>25</b>	<b>10</b>	<b>374</b>	<b>4</b>	<b>814</b>

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3	Highway 395 (NS) at Rancho Road (EW)	Final Base	310	427	21	6	299	25	7	39	81	78	59	2	1354
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>310</b>	<b>427</b>	<b>21</b>	<b>6</b>	<b>299</b>	<b>25</b>	<b>7</b>	<b>39</b>	<b>81</b>	<b>78</b>	<b>59</b>	<b>2</b>	<b>1354</b>



## Traffic Volume - Future Total Volume



## The Cactus Avenue Cannabis Facility

Vistro File: C:\...\PM.vistro

Scenario 1 Existing

Report File: C:\...\PME.pdf

7/17/2024

**Intersection Analysis Summary**





ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Koala Road (NS) at Rancho Road (EW)	All-way stop	HCM 2010	SB Left	0.182	8.2	A
2	Bellflower Street (NS) at Rancho Road (EW)	All-way stop	HCM 2010	EB Thru	0.243	9.7	A
3	Highway 395 (NS) at Rancho Road (EW)	Signalized	HCM 2010	SB Left	0.444	13.6	B

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

**Intersection Level Of Service Report**  
**Intersection 1: Koala Road (NS) at Rancho Road (EW)**

Control Type:	All-way stop	Delay (sec / veh):	8.2
Analysis Method:	HCM 2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.182

**Intersection Setup**

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			55.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name												
Base Volume Input [veh/h]	0	20	159	87	6	1	0	0	0	34	1	44
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	20	159	87	6	1	0	0	0	34	1	44
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	5	40	22	2	0	0	0	0	9	0	11
Total Analysis Volume [veh/h]	0	20	159	87	6	1	0	0	0	34	1	44
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings****Lanes**

Capacity per Entry Lane [veh/h]	746	746	873	713	688	735
Degree of Utilization, x	0.00	0.03	0.18	0.13	0.00	0.11

**Movement, Approach, & Intersection Results**

95th-Percentile Queue Length [veh]	0.00	0.08	0.66	0.45	0.00	0.36
95th-Percentile Queue Length [ft]	0.00	2.06	16.58	11.33	0.00	8.99
Approach Delay [s/veh]	7.73			8.82	0.00	8.49
Approach LOS	A			A	A	A
Intersection Delay [s/veh]	8.19					
Intersection LOS	A					







**Intersection Level Of Service Report**  
**Intersection 2: Bellflower Street (NS) at Rancho Road (EW)**

Control Type: All-way stop  
Analysis Method: HCM 2010  
Analysis Period: 15 minutes

Delay (sec / veh): 9.7  
Level Of Service: A  
Volume to Capacity (v/c): 0.243

**Intersection Setup**

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	1	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	50.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			55.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			No		

**Volumes**

Name												
Base Volume Input [veh/h]	19	64	31	10	98	15	19	309	167	40	79	29
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	19	64	31	10	98	15	19	309	167	40	79	29
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	16	8	3	25	4	5	77	42	10	20	7
Total Analysis Volume [veh/h]	19	64	31	10	98	15	19	309	167	40	79	29
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings****Lanes**

Capacity per Entry Lane [veh/h]	581	663	591	669	584	636	636	726	539	581	619
Degree of Utilization, x	0.14	0.05	0.18	0.02	0.03	0.24	0.24	0.23	0.07	0.09	0.09

**Movement, Approach, & Intersection Results**

95th-Percentile Queue Length [veh]	0.50	0.15	0.66	0.07	0.10	0.95	0.95	0.89	0.24	0.31	0.29
95th-Percentile Queue Length [ft]	12.42	3.67	16.59	1.72	2.52	23.71	23.71	22.15	6.00	7.64	7.14
Approach Delay [s/veh]	9.52		9.91		9.78			9.47			
Approach LOS	A		A		A			A			
Intersection Delay [s/veh]	9.71										
Intersection LOS	A										

**Intersection Level Of Service Report**  
**Intersection 3: Highway 395 (NS) at Rancho Road (EW)**

Control Type: Signalized  
Analysis Method: HCM 2010  
Analysis Period: 15 minutes

Delay (sec / veh): 13.6  
Level Of Service: B  
Volume to Capacity (v/c): 0.444

**Intersection Setup**

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↵↵			↵↵			↵↵↵			↵↵		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	340.00	100.00	100.00	290.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			30.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name												
Base Volume Input [veh/h]	94	442	18	6	683	17	26	86	239	114	40	19
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	94	442	18	6	683	17	26	86	239	114	40	19
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	24	111	5	2	171	4	7	22	60	29	10	5
Total Analysis Volume [veh/h]	94	442	18	6	683	17	26	86	239	114	40	19
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	4.00

**Phasing & Timing**

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	5	5	0	0	5	0	0	5	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
All red [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Split [s]	8	18	0	8	18	0	0	34	0	0	34	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Exclusive Pedestrian Phase**

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



**Lane Group Calculations**

Lane Group	L	C	C	L	C	C	L	C	R	L	C	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
g_i, Effective Green Time [s]	4	39	39	1	35	35	12	12	12	12	12	12
g / C, Green / Cycle	0.07	0.64	0.64	0.01	0.58	0.58	0.20	0.20	0.20	0.20	0.20	0.20
(v / s)_i Volume / Saturation Flow Rate	0.06	0.13	0.13	0.00	0.20	0.20	0.02	0.03	0.16	0.09	0.02	0.02
s, saturation flow rate [veh/h]	1681	1765	1741	1681	1765	1750	1338	3360	1500	1306	1765	1582
c, Capacity [veh/h]	121	1130	1114	17	1020	1011	330	673	300	317	353	317
d1, Uniform Delay [s]	27.43	4.48	4.48	29.59	6.69	6.69	21.77	19.74	22.88	23.73	19.57	19.59
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	10.07	0.41	0.42	12.44	0.92	0.93	0.10	0.08	4.78	0.69	0.10	0.12
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

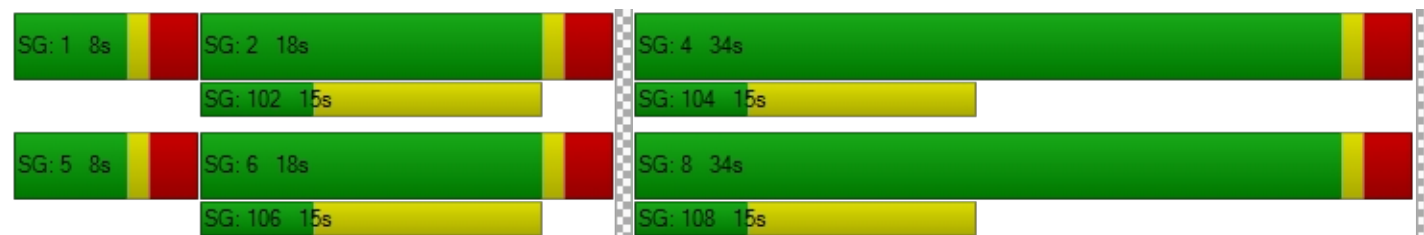
X, volume / capacity	0.78	0.20	0.21	0.36	0.34	0.34	0.08	0.13	0.80	0.36	0.08	0.09
d, Delay for Lane Group [s/veh]	37.49	4.89	4.90	42.03	7.61	7.62	21.87	19.82	27.66	24.42	19.67	19.72
Lane Group LOS	D	A	A	D	A	A	C	B	C	C	B	B
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	Yes	No	No	No
50th-Percentile Queue Length [veh/ln]	1.50	0.71	0.70	0.13	1.68	1.67	0.31	0.47	3.38	1.33	0.30	0.29
50th-Percentile Queue Length [ft/ln]	37.62	17.76	17.61	3.37	41.90	41.63	7.65	11.75	84.43	33.22	7.39	7.16
95th-Percentile Queue Length [veh/ln]	2.71	1.28	1.27	0.24	3.02	3.00	0.55	0.85	6.08	2.39	0.53	0.52
95th-Percentile Queue Length [ft/ln]	67.72	31.97	31.71	6.06	75.42	74.94	13.77	21.16	151.97	59.80	13.29	12.88

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	37.49	4.90	4.90	42.03	7.62	7.62	21.87	19.82	27.66	24.42	19.68	19.72
Movement LOS	D	A	A	D	A	A	C	B	C	C	B	B
d_A, Approach Delay [s/veh]	10.43			7.91			25.31			22.81		
Approach LOS	B			A			C			C		
d_I, Intersection Delay [s/veh]	13.56											
Intersection LOS	B											
Intersection V/C	0.444											

**Sequence**

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



## The Cactus Avenue Cannabis Facility

Vistro File: C:\...\PM.vistro

Scenario 1 Existing

Report File: C:\...\PME.pdf

7/17/2024

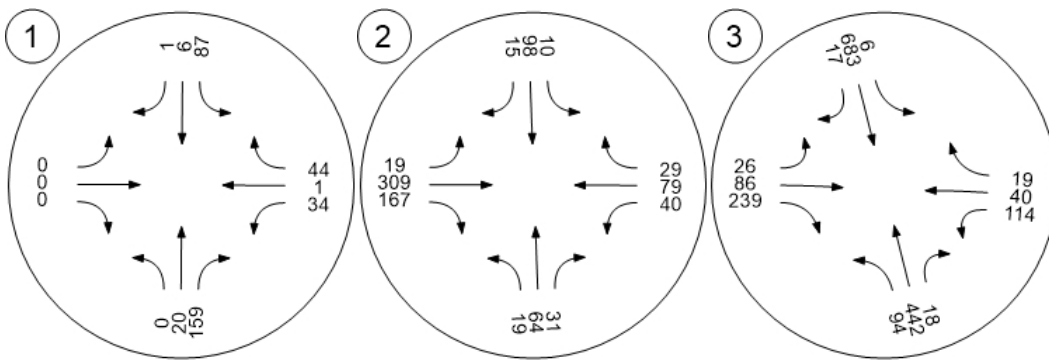
## Turning Movement Volume: Detail

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	Koala Road (NS) at Rancho Road (EW)	Final Base	0	20	159	87	6	1	0	0	0	34	1	44	352
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>0</b>	<b>20</b>	<b>159</b>	<b>87</b>	<b>6</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>34</b>	<b>1</b>	<b>44</b>	<b>352</b>

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	Bellflower Street (NS) at Rancho Road (EW)	Final Base	19	64	31	10	98	15	19	309	167	40	79	29	880
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>19</b>	<b>64</b>	<b>31</b>	<b>10</b>	<b>98</b>	<b>15</b>	<b>19</b>	<b>309</b>	<b>167</b>	<b>40</b>	<b>79</b>	<b>29</b>	<b>880</b>

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3	Highway 395 (NS) at Rancho Road (EW)	Final Base	94	442	18	6	683	17	26	86	239	114	40	19	1784
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>94</b>	<b>442</b>	<b>18</b>	<b>6</b>	<b>683</b>	<b>17</b>	<b>26</b>	<b>86</b>	<b>239</b>	<b>114</b>	<b>40</b>	<b>19</b>	<b>1784</b>

Traffic Volume - Future Total Volume





**Existing Plus Project**

## The Cactus Avenue Cannabis Facility

Vistro File: C:\...\AM.vistro

Scenario 2 Existing Plus Project

Report File: C:\...\AMEp.pdf

7/17/2024

**Intersection Analysis Summary**





ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Koala Road (NS) at Rancho Road (EW)	All-way stop	HCM 2010	WB Left	0.323	9.6	A
2	Bellflower Street (NS) at Rancho Road (EW)	All-way stop	HCM 2010	WB Thru	0.350	11.0	B
3	Highway 395 (NS) at Rancho Road (EW)	Signalized	HCM 2010	SB Left	0.381	15.0	B

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

**Intersection Level Of Service Report**  
**Intersection 1: Koala Road (NS) at Rancho Road (EW)**

Control Type:	All-way stop	Delay (sec / veh):	9.6
Analysis Method:	HCM 2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.323

**Intersection Setup**

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			55.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name												
Base Volume Input [veh/h]	0	10	33	54	22	0	0	0	0	134	0	52
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	4	0	0	0	0	0	0	52	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	10	37	54	22	0	0	0	0	186	0	52
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	3	9	14	6	0	0	0	0	47	0	13
Total Analysis Volume [veh/h]	0	10	37	54	22	0	0	0	0	186	0	52
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings****Lanes**

Capacity per Entry Lane [veh/h]	685	685	791	670	710	738
Degree of Utilization, x	0.00	0.01	0.05	0.11	0.00	0.32

**Movement, Approach, & Intersection Results**





95th-Percentile Queue Length [veh]	0.00	0.04	0.15	0.38	0.00	1.40
95th-Percentile Queue Length [ft]	0.00	1.11	3.68	9.54	0.00	34.94
Approach Delay [s/veh]	7.59			9.06	0.00	10.19
Approach LOS	A			A	A	B
Intersection Delay [s/veh]	9.61					
Intersection LOS	A					



**Intersection Level Of Service Report**  
**Intersection 2: Bellflower Street (NS) at Rancho Road (EW)**

Control Type:	All-way stop	Delay (sec / veh):	11.0
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.350

**Intersection Setup**

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	1	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	50.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			55.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			No		

**Volumes**

Name												
Base Volume Input [veh/h]	89	48	19	16	59	58	7	105	25	10	374	4
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	3	0	0	0	0	3	0	4	0	0	46	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	92	48	19	16	59	61	7	109	25	10	420	4
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	23	12	5	4	15	15	2	27	6	3	105	1
Total Analysis Volume [veh/h]	92	48	19	16	59	61	7	109	25	10	420	4
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings****Lanes**

Capacity per Entry Lane [veh/h]	547	644	555	632	517	557	557	625	558	606	607
Degree of Utilization, x	0.26	0.03	0.13	0.10	0.01	0.10	0.10	0.04	0.02	0.35	0.35

**Movement, Approach, & Intersection Results**

95th-Percentile Queue Length [veh]	1.01	0.09	0.46	0.32	0.04	0.32	0.32	0.12	0.05	1.57	1.56
95th-Percentile Queue Length [ft]	25.32	2.28	11.61	7.98	1.03	8.09	8.09	3.12	1.37	39.15	39.03
Approach Delay [s/veh]	11.17		9.66		9.65			11.74			
Approach LOS	B		A		A			B			
Intersection Delay [s/veh]	10.97										
Intersection LOS	B										

**Intersection Level Of Service Report**  
**Intersection 3: Highway 395 (NS) at Rancho Road (EW)**

Control Type:	Signalized	Delay (sec / veh):	15.0
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.381

**Intersection Setup**

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↵↵↵			↵↵↵			↵↵↵			↵↵↵		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	340.00	100.00	100.00	290.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			30.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name												
Base Volume Input [veh/h]	310	427	21	6	299	25	7	39	81	78	59	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	23	0	0	0	0	20	2	0	2	0	3	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	333	427	21	6	299	45	9	39	83	78	62	2
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	83	107	5	2	75	11	2	10	21	20	16	1
Total Analysis Volume [veh/h]	333	427	21	6	299	45	9	39	83	78	62	2
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	4.00

**Phasing & Timing**

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	5	5	0	0	5	0	0	5	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
All red [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Split [s]	24	22	0	20	18	0	0	18	0	0	18	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Exclusive Pedestrian Phase**

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



**Lane Group Calculations**

Lane Group	L	C	C	L	C	C	L	C	R	L	C	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
g_i, Effective Green Time [s]	14	43	43	0	30	30	7	7	7	7	7	7
g / C, Green / Cycle	0.23	0.72	0.72	0.01	0.49	0.49	0.12	0.12	0.12	0.12	0.12	0.12
(v / s)_i Volume / Saturation Flow Rate	0.20	0.13	0.13	0.00	0.10	0.10	0.01	0.01	0.06	0.06	0.02	0.02
s, saturation flow rate [veh/h]	1681	1765	1736	1681	1765	1686	1332	3360	1500	1363	1765	1745
c, Capacity [veh/h]	388	1267	1246	14	874	835	214	416	186	225	218	216
d1, Uniform Delay [s]	22.13	2.73	2.73	29.63	8.48	8.50	26.09	23.31	24.39	27.13	23.47	23.47
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.55	0.31	0.31	20.21	0.51	0.55	0.08	0.10	1.68	0.92	0.31	0.31
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

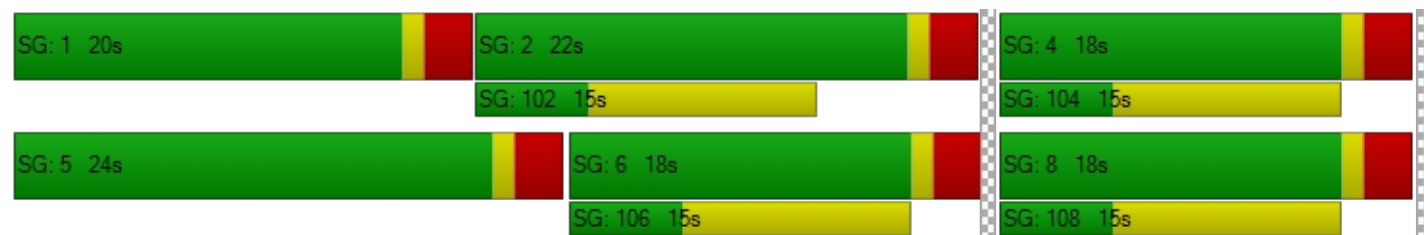
X, volume / capacity	0.86	0.18	0.18	0.44	0.20	0.20	0.04	0.09	0.45	0.35	0.15	0.15
d, Delay for Lane Group [s/veh]	27.68	3.04	3.05	49.84	9.00	9.05	26.17	23.41	26.08	28.04	23.78	23.78
Lane Group LOS	C	A	A	D	A	A	C	C	C	C	C	C
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	4.35	0.35	0.34	0.15	1.02	1.00	0.12	0.24	1.12	1.00	0.36	0.36
50th-Percentile Queue Length [ft/ln]	108.69	8.66	8.57	3.85	25.52	25.04	2.97	5.91	27.89	24.91	9.09	9.07
95th-Percentile Queue Length [veh/ln]	7.77	0.62	0.62	0.28	1.84	1.80	0.21	0.43	2.01	1.79	0.65	0.65
95th-Percentile Queue Length [ft/ln]	194.18	15.59	15.42	6.93	45.94	45.07	5.35	10.65	50.19	44.84	16.36	16.33

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	27.68	3.04	3.05	49.84	9.02	9.05	26.17	23.41	26.08	28.04	23.78	23.78
Movement LOS	C	A	A	D	A	A	C	C	C	C	C	C
d_A, Approach Delay [s/veh]	13.55			9.72			25.29			26.12		
Approach LOS	B			A			C			C		
d_I, Intersection Delay [s/veh]	14.96											
Intersection LOS	B											
Intersection V/C	0.381											

**Sequence**

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



## The Cactus Avenue Cannabis Facility

Vistro File: C:\...\AM.vistro

Scenario 2 Existing Plus Project

Report File: C:\...\AMEp.pdf

7/17/2024

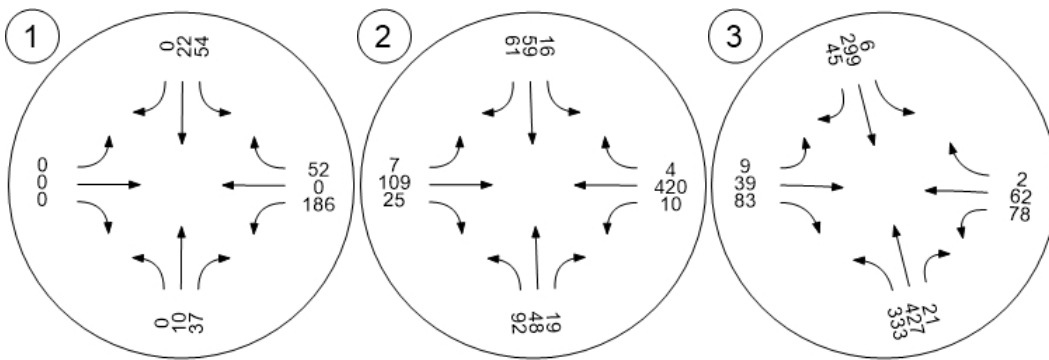
## Turning Movement Volume: Detail

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	Koala Road (NS) at Rancho Road (EW)	Final Base	0	10	33	54	22	0	0	0	0	134	0	52	305
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	4	0	0	0	0	0	0	52	0	0	56
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>0</b>	<b>10</b>	<b>37</b>	<b>54</b>	<b>22</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>186</b>	<b>0</b>	<b>52</b>	<b>361</b>

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	Bellflower Street (NS) at Rancho Road (EW)	Final Base	89	48	19	16	59	58	7	105	25	10	374	4	814
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	3	0	0	0	0	3	0	4	0	0	46	0	56
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>92</b>	<b>48</b>	<b>19</b>	<b>16</b>	<b>59</b>	<b>61</b>	<b>7</b>	<b>109</b>	<b>25</b>	<b>10</b>	<b>420</b>	<b>4</b>	<b>870</b>

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3	Highway 395 (NS) at Rancho Road (EW)	Final Base	310	427	21	6	299	25	7	39	81	78	59	2	1354
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	23	0	0	0	0	20	2	0	2	0	3	0	50
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>333</b>	<b>427</b>	<b>21</b>	<b>6</b>	<b>299</b>	<b>45</b>	<b>9</b>	<b>39</b>	<b>83</b>	<b>78</b>	<b>62</b>	<b>2</b>	<b>1404</b>

Traffic Volume - Future Total Volume



## The Cactus Avenue Cannabis Facility

Vistro File: C:\...\PM.vistro

Scenario 2 Existing Plus Project

Report File: C:\...\PMEp.pdf

7/17/2024

**Intersection Analysis Summary**

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Koala Road (NS) at Rancho Road (EW)	All-way stop	HCM 2010	SB Left	0.227	8.4	A
2	Bellflower Street (NS) at Rancho Road (EW)	All-way stop	HCM 2010	EB Thru	0.271	9.9	A
3	Highway 395 (NS) at Rancho Road (EW)	Signalized	HCM 2010	SB Left	0.461	13.9	B

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







**Intersection Level Of Service Report**  
**Intersection 1: Koala Road (NS) at Rancho Road (EW)**

Control Type: All-way stop  
 Analysis Method: HCM 2010  
 Analysis Period: 15 minutes

Delay (sec / veh): 8.4  
 Level Of Service: A  
 Volume to Capacity (v/c): 0.227

**Intersection Setup**

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			55.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name												
Base Volume Input [veh/h]	0	20	159	87	6	1	0	0	0	34	1	44
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	37	0	0	0	0	0	0	15	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	20	196	87	6	1	0	0	0	49	1	44
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	5	49	22	2	0	0	0	0	12	0	11
Total Analysis Volume [veh/h]	0	20	196	87	6	1	0	0	0	49	1	44
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings****Lanes**

Capacity per Entry Lane [veh/h]	738	738	862	702	674	713
Degree of Utilization, x	0.00	0.03	0.23	0.13	0.00	0.13





**Movement, Approach, & Intersection Results**

95th-Percentile Queue Length [veh]	0.00	0.08	0.87	0.46	0.00	0.45
95th-Percentile Queue Length [ft]	0.00	2.09	21.84	11.54	0.00	11.34
Approach Delay [s/veh]	8.06			8.92	0.00	8.82
Approach LOS	A			A	A	A
Intersection Delay [s/veh]	8.44					
Intersection LOS	A					

**Intersection Level Of Service Report**  
**Intersection 2: Bellflower Street (NS) at Rancho Road (EW)**

Control Type:	All-way stop	Delay (sec / veh):	9.9
Analysis Method:	HCM 2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.271

**Intersection Setup**

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	1	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	50.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			55.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			No		

**Volumes**

Name												
Base Volume Input [veh/h]	19	64	31	10	98	15	19	309	167	40	79	29
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	0	0	0	0	1	2	33	2	0	13	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	20	64	31	10	98	16	21	342	169	40	92	29
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	16	8	3	25	4	5	86	42	10	23	7
Total Analysis Volume [veh/h]	20	64	31	10	98	16	21	342	169	40	92	29
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings****Lanes**

Capacity per Entry Lane [veh/h]	573	654	584	659	580	630	630	719	533	575	607
Degree of Utilization, x	0.15	0.05	0.18	0.02	0.04	0.27	0.27	0.24	0.08	0.11	0.10

**Movement, Approach, & Intersection Results**

95th-Percentile Queue Length [veh]	0.51	0.15	0.67	0.07	0.11	1.10	1.10	0.91	0.24	0.35	0.33
95th-Percentile Queue Length [ft]	12.78	3.73	16.83	1.86	2.81	27.39	27.39	22.75	6.07	8.77	8.26
Approach Delay [s/veh]	9.63		10.01		10.06			9.62			
Approach LOS	A		B		B			A			
Intersection Delay [s/veh]	9.92										
Intersection LOS	A										

**Intersection Level Of Service Report**  
**Intersection 3: Highway 395 (NS) at Rancho Road (EW)**

Control Type:	Signalized	Delay (sec / veh):	13.9
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.461

**Intersection Setup**

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↵↵↵			↵↵↵			↵↵↵			↵↵↵		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	340.00	100.00	100.00	290.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			30.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name												
Base Volume Input [veh/h]	94	442	18	6	683	17	26	86	239	114	40	19
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	6	0	0	0	0	6	15	2	16	0	1	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	100	442	18	6	683	23	41	88	255	114	41	19
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	25	111	5	2	171	6	10	22	64	29	10	5
Total Analysis Volume [veh/h]	100	442	18	6	683	23	41	88	255	114	41	19
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		



**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	4.00

**Phasing & Timing**

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	5	5	0	0	5	0	0	5	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
All red [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Split [s]	8	18	0	8	18	0	0	34	0	0	34	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

Lane Group	L	C	C	L	C	C	L	C	R	L	C	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
g_i, Effective Green Time [s]	5	38	38	1	34	34	13	13	13	13	13	13
g / C, Green / Cycle	0.08	0.63	0.63	0.01	0.56	0.56	0.21	0.21	0.21	0.21	0.21	0.21
(v / s)_i Volume / Saturation Flow Rate	0.06	0.13	0.13	0.00	0.20	0.20	0.03	0.03	0.17	0.09	0.02	0.02
s, saturation flow rate [veh/h]	1681	1765	1741	1681	1765	1745	1337	3360	1500	1304	1765	1584
c, Capacity [veh/h]	129	1109	1094	17	992	980	346	712	318	332	374	336
d1, Uniform Delay [s]	27.26	4.77	4.78	29.59	7.23	7.23	21.43	19.19	22.51	23.11	19.01	19.04
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.56	0.43	0.43	12.44	1.01	1.02	0.15	0.08	4.72	0.61	0.09	0.11
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

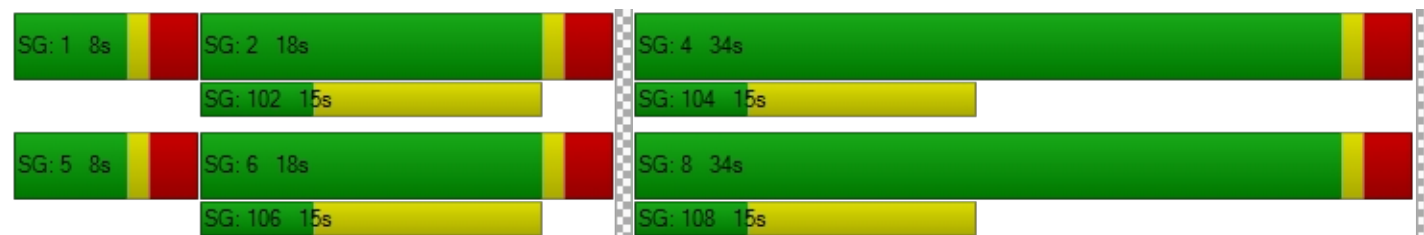
X, volume / capacity	0.78	0.21	0.21	0.36	0.36	0.36	0.12	0.12	0.80	0.34	0.08	0.09
d, Delay for Lane Group [s/veh]	36.82	5.20	5.21	42.03	8.23	8.25	21.58	19.26	27.23	23.72	19.11	19.15
Lane Group LOS	D	A	A	D	A	A	C	B	C	C	B	B
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	Yes	No	No	No
50th-Percentile Queue Length [veh/ln]	1.58	0.76	0.76	0.13	1.83	1.81	0.48	0.47	3.58	1.30	0.29	0.28
50th-Percentile Queue Length [ft/ln]	39.48	19.12	18.95	3.37	45.71	45.32	11.99	11.81	89.40	32.54	7.35	7.12
95th-Percentile Queue Length [veh/ln]	2.84	1.38	1.36	0.24	3.29	3.26	0.86	0.85	6.44	2.34	0.53	0.51
95th-Percentile Queue Length [ft/ln]	71.06	34.41	34.12	6.06	82.28	81.57	21.59	21.25	160.92	58.57	13.23	12.82

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	36.82	5.21	5.21	42.03	8.24	8.25	21.58	19.26	27.23	23.72	19.12	19.15
Movement LOS	D	A	A	D	A	A	C	B	C	C	B	B
d_A, Approach Delay [s/veh]	10.85			8.53			24.80			22.14		
Approach LOS	B			A			C			C		
d_I, Intersection Delay [s/veh]	13.95											
Intersection LOS	B											
Intersection V/C	0.461											

**Sequence**

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



## The Cactus Avenue Cannabis Facility

Vistro File: C:\...\PM.vistro

Scenario 2 Existing Plus Project

Report File: C:\...\PMEp.pdf

7/17/2024

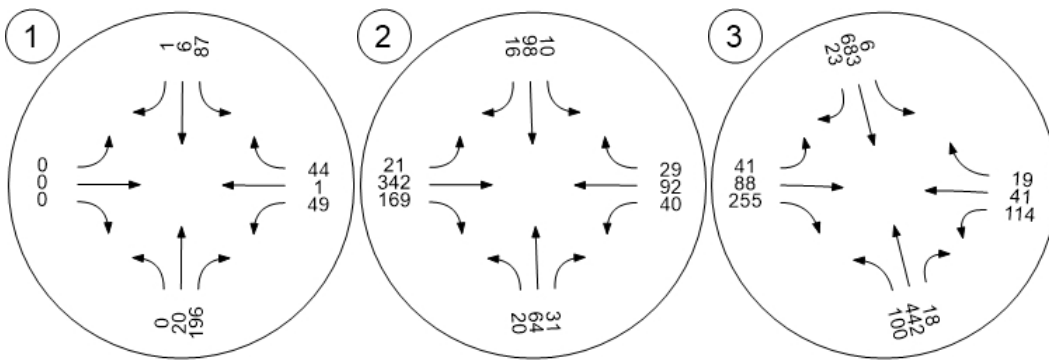
## Turning Movement Volume: Detail

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	Koala Road (NS) at Rancho Road (EW)	Final Base	0	20	159	87	6	1	0	0	0	34	1	44	352
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	37	0	0	0	0	0	0	15	0	0	52
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>0</b>	<b>20</b>	<b>196</b>	<b>87</b>	<b>6</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>49</b>	<b>1</b>	<b>44</b>	<b>404</b>

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	Bellflower Street (NS) at Rancho Road (EW)	Final Base	19	64	31	10	98	15	19	309	167	40	79	29	880
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	1	0	0	0	0	1	2	33	2	0	13	0	52
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>20</b>	<b>64</b>	<b>31</b>	<b>10</b>	<b>98</b>	<b>16</b>	<b>21</b>	<b>342</b>	<b>169</b>	<b>40</b>	<b>92</b>	<b>29</b>	<b>932</b>

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3	Highway 395 (NS) at Rancho Road (EW)	Final Base	94	442	18	6	683	17	26	86	239	114	40	19	1784
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	6	0	0	0	0	6	15	2	16	0	1	0	46
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>100</b>	<b>442</b>	<b>18</b>	<b>6</b>	<b>683</b>	<b>23</b>	<b>41</b>	<b>88</b>	<b>255</b>	<b>114</b>	<b>41</b>	<b>19</b>	<b>1830</b>

Traffic Volume - Future Total Volume





**Opening Year (2025) Without Project**

Vistro File: C:\...\AM.vistro

The Cactus Avenue Cannabis Facility  
Scenario 3 Opening Year (2025) Without Project

Report File: C:\...\AMOY.pdf

7/17/2024

**Intersection Analysis Summary**

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Koala Road (NS) at Rancho Road (EW)	All-way stop	HCM 2010	WB Left	0.252	9.0	A
2	Bellflower Street (NS) at Rancho Road (EW)	All-way stop	HCM 2010	NB Left	0.316	10.6	B
3	Highway 395 (NS) at Rancho Road (EW)	Signalized	HCM 2010	SB Left	0.384	14.5	B





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

**Intersection Level Of Service Report**  
**Intersection 1: Koala Road (NS) at Rancho Road (EW)**

Control Type: All-way stop  
Analysis Method: HCM 2010  
Analysis Period: 15 minutes

Delay (sec / veh): 9.0  
Level Of Service: A  
Volume to Capacity (v/c): 0.252

**Intersection Setup**

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			55.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name												
Base Volume Input [veh/h]	0	12	37	54	24	0	0	0	0	136	0	52
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	12	37	54	24	0	0	0	0	136	0	52
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	3	9	14	6	0	0	0	0	34	0	13
Total Analysis Volume [veh/h]	0	12	37	54	24	0	0	0	0	136	0	52
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings****Lanes**

Capacity per Entry Lane [veh/h]	704	704	817	689	717	745
Degree of Utilization, x	0.00	0.02	0.05	0.11	0.00	0.25





**Movement, Approach, & Intersection Results**

95th-Percentile Queue Length [veh]	0.00	0.05	0.14	0.38	0.00	1.00
95th-Percentile Queue Length [ft]	0.00	1.30	3.55	9.52	0.00	24.97
Approach Delay [s/veh]	7.46			8.89	0.00	9.46
Approach LOS	A			A	A	A
Intersection Delay [s/veh]	9.01					
Intersection LOS	A					

**Intersection Level Of Service Report**  
**Intersection 2: Bellflower Street (NS) at Rancho Road (EW)**

Control Type:	All-way stop	Delay (sec / veh):	10.6
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.316

**Intersection Setup**

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	1	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	50.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			55.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			No		

**Volumes**

Name												
Base Volume Input [veh/h]	95	48	19	16	59	60	7	107	26	10	376	7
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	95	48	19	16	59	60	7	107	26	10	376	7
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	24	12	5	4	15	15	2	27	7	3	94	2
Total Analysis Volume [veh/h]	95	48	19	16	59	60	7	107	26	10	376	7
Pedestrian Volume [ped/h]	0			0			0			0		



**Intersection Settings****Lanes**

Capacity per Entry Lane [veh/h]	555	657	565	643	524	565	565	635	559	607	610
Degree of Utilization, x	0.26	0.03	0.13	0.09	0.01	0.09	0.09	0.04	0.02	0.32	0.31

**Movement, Approach, & Intersection Results**

95th-Percentile Queue Length [veh]	1.02	0.09	0.46	0.31	0.04	0.31	0.31	0.13	0.05	1.35	1.34
95th-Percentile Queue Length [ft]	25.53	2.23	11.41	7.68	1.02	7.81	7.81	3.20	1.36	33.70	33.49
Approach Delay [s/veh]	11.06		9.53		9.53			11.26			
Approach LOS	B		A		A			B			
Intersection Delay [s/veh]	10.65										
Intersection LOS	B										

**Intersection Level Of Service Report**  
**Intersection 3: Highway 395 (NS) at Rancho Road (EW)**

Control Type:	Signalized	Delay (sec / veh):	14.5
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.384

**Intersection Setup**

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↵↵			↵↵			↵↵↵			↵↵		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	340.00	100.00	100.00	290.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			30.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name												
Base Volume Input [veh/h]	312	460	21	7	354	30	8	41	82	84	65	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	312	460	21	7	354	30	8	41	82	84	65	2
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	78	115	5	2	89	8	2	10	21	21	16	1
Total Analysis Volume [veh/h]	312	460	21	7	354	30	8	41	82	84	65	2
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	4.00

**Phasing & Timing**

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	5	5	0	0	5	0	0	5	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
All red [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Split [s]	24	22	0	20	18	0	0	18	0	0	18	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

Lane Group	L	C	C	L	C	C	L	C	R	L	C	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
g_i, Effective Green Time [s]	13	43	43	1	30	30	8	8	8	8	8	8
g / C, Green / Cycle	0.22	0.71	0.71	0.01	0.50	0.50	0.13	0.13	0.13	0.13	0.13	0.13
(v / s)_i Volume / Saturation Flow Rate	0.19	0.14	0.14	0.00	0.11	0.11	0.01	0.01	0.05	0.06	0.02	0.02
s, saturation flow rate [veh/h]	1681	1765	1738	1681	1765	1717	1329	3360	1500	1360	1765	1746
c, Capacity [veh/h]	367	1254	1235	16	885	861	222	437	195	233	230	227
d1, Uniform Delay [s]	22.50	2.91	2.91	29.57	8.38	8.39	25.75	22.99	24.02	26.91	23.15	23.15
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.52	0.34	0.35	18.06	0.57	0.59	0.07	0.09	1.44	0.94	0.29	0.30
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

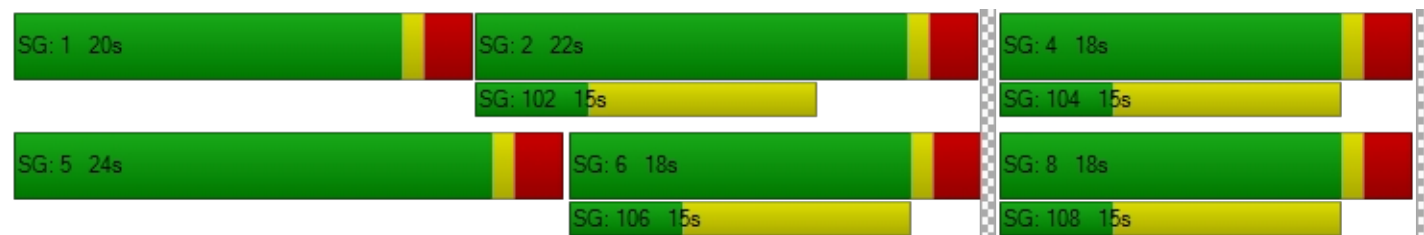
X, volume / capacity	0.85	0.19	0.19	0.44	0.22	0.22	0.04	0.09	0.42	0.36	0.15	0.15
d, Delay for Lane Group [s/veh]	28.02	3.26	3.26	47.62	8.95	8.98	25.82	23.08	25.46	27.85	23.44	23.45
Lane Group LOS	C	A	A	D	A	A	C	C	C	C	C	C
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	4.10	0.41	0.41	0.17	1.13	1.11	0.10	0.25	1.08	1.07	0.38	0.38
50th-Percentile Queue Length [ft/ln]	102.54	10.34	10.23	4.22	28.15	27.79	2.62	6.16	27.11	26.71	9.41	9.39
95th-Percentile Queue Length [veh/ln]	7.38	0.74	0.74	0.30	2.03	2.00	0.19	0.44	1.95	1.92	0.68	0.68
95th-Percentile Queue Length [ft/ln]	184.57	18.60	18.41	7.60	50.67	50.02	4.71	11.09	48.79	48.08	16.94	16.90

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	28.02	3.26	3.26	47.62	8.96	8.98	25.82	23.08	25.46	27.85	23.44	23.45
Movement LOS	C	A	A	D	A	A	C	C	C	C	C	C
d_A, Approach Delay [s/veh]	13.00			9.66			24.74			25.90		
Approach LOS	B			A			C			C		
d_I, Intersection Delay [s/veh]	14.49											
Intersection LOS	B											
Intersection V/C	0.384											

**Sequence**

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





## The Cactus Avenue Cannabis Facility

Vistro File: C:\...IAM.vistro

Scenario 3 Opening Year (2025) Without Project

Report File: C:\...IAMOY.pdf

7/17/2024

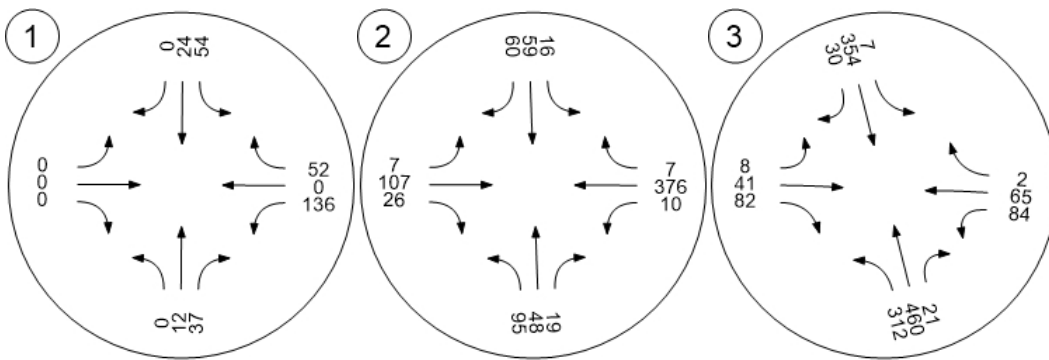
## Turning Movement Volume: Detail

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	Koala Road (NS) at Rancho Road (EW)	Final Base	0	12	37	54	24	0	0	0	0	136	0	52	315
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>0</b>	<b>12</b>	<b>37</b>	<b>54</b>	<b>24</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>136</b>	<b>0</b>	<b>52</b>	<b>315</b>

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	Bellflower Street (NS) at Rancho Road (EW)	Final Base	95	48	19	16	59	60	7	107	26	10	376	7	830
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>95</b>	<b>48</b>	<b>19</b>	<b>16</b>	<b>59</b>	<b>60</b>	<b>7</b>	<b>107</b>	<b>26</b>	<b>10</b>	<b>376</b>	<b>7</b>	<b>830</b>

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3	Highway 395 (NS) at Rancho Road (EW)	Final Base	312	460	21	7	354	30	8	41	82	84	65	2	1466
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>312</b>	<b>460</b>	<b>21</b>	<b>7</b>	<b>354</b>	<b>30</b>	<b>8</b>	<b>41</b>	<b>82</b>	<b>84</b>	<b>65</b>	<b>2</b>	<b>1466</b>

Traffic Volume - Future Total Volume



Vistro File: C:\...\PM.vistro

The Cactus Avenue Cannabis Facility  
Scenario 3 Opening Year (2025) Without Project

Report File: C:\...\PMOY.pdf

7/17/2024

**Intersection Analysis Summary**

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Koala Road (NS) at Rancho Road (EW)	All-way stop	HCM 2010	SB Left	0.185	8.3	A
2	Bellflower Street (NS) at Rancho Road (EW)	All-way stop	HCM 2010	EB Thru	0.245	9.7	A
3	Highway 395 (NS) at Rancho Road (EW)	Signalized	HCM 2010	SB Left	0.455	13.3	B





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

**Intersection Level Of Service Report**  
**Intersection 1: Koala Road (NS) at Rancho Road (EW)**

Control Type: All-way stop  
Analysis Method: HCM 2010  
Analysis Period: 15 minutes

Delay (sec / veh): 8.3  
Level Of Service: A  
Volume to Capacity (v/c): 0.185

**Intersection Setup**

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			55.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name												
Base Volume Input [veh/h]	0	29	161	89	11	1	0	0	0	39	1	44
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	29	161	89	11	1	0	0	0	39	1	44
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	7	40	22	3	0	0	0	0	10	0	11
Total Analysis Volume [veh/h]	0	29	161	89	11	1	0	0	0	39	1	44
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings****Lanes**

Capacity per Entry Lane [veh/h]	743	742	868	710	681	725
Degree of Utilization, x	0.00	0.04	0.19	0.14	0.00	0.12

**Movement, Approach, & Intersection Results**

95th-Percentile Queue Length [veh]	0.00	0.12	0.68	0.49	0.00	0.39
95th-Percentile Queue Length [ft]	0.00	3.05	16.95	12.36	0.00	9.79
Approach Delay [s/veh]	7.78			8.91	0.00	8.62
Approach LOS	A			A	A	A
Intersection Delay [s/veh]	8.27					
Intersection LOS	A					







**Intersection Level Of Service Report**  
**Intersection 2: Bellflower Street (NS) at Rancho Road (EW)**

Control Type: All-way stop  
Analysis Method: HCM 2010  
Analysis Period: 15 minutes

Delay (sec / veh): 9.7  
Level Of Service: A  
Volume to Capacity (v/c): 0.245

**Intersection Setup**

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	1	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	50.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			55.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			No		

**Volumes**

Name												
Base Volume Input [veh/h]	19	64	31	10	98	15	19	311	171	42	79	29
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	19	64	31	10	98	15	19	311	171	42	79	29
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	16	8	3	25	4	5	78	43	11	20	7
Total Analysis Volume [veh/h]	19	64	31	10	98	15	19	311	171	42	79	29
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings****Lanes**

Capacity per Entry Lane [veh/h]	579	661	590	667	584	634	634	725	538	581	618
Degree of Utilization, x	0.14	0.05	0.18	0.02	0.03	0.24	0.24	0.24	0.08	0.09	0.09

**Movement, Approach, & Intersection Results**

95th-Percentile Queue Length [veh]	0.50	0.15	0.67	0.07	0.10	0.96	0.96	0.91	0.25	0.31	0.29
95th-Percentile Queue Length [ft]	12.45	3.68	16.63	1.72	2.52	23.94	23.94	22.87	6.33	7.66	7.16
Approach Delay [s/veh]	9.53		9.93		9.82			9.49			
Approach LOS	A		A		A			A			
Intersection Delay [s/veh]	9.74										
Intersection LOS	A										

**Intersection Level Of Service Report**  
**Intersection 3: Highway 395 (NS) at Rancho Road (EW)**

Control Type:	Signalized	Delay (sec / veh):	13.3
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.455

**Intersection Setup**

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↵↵↵			↵↵↵			↵↵↵			↵↵↵		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	340.00	100.00	100.00	290.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			30.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name												
Base Volume Input [veh/h]	94	507	18	6	716	18	31	86	240	115	40	22
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	94	507	18	6	716	18	31	86	240	115	40	22
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	24	127	5	2	179	5	8	22	60	29	10	6
Total Analysis Volume [veh/h]	94	507	18	6	716	18	31	86	240	115	40	22
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	4.00

**Phasing & Timing**

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	5	5	0	0	5	0	0	5	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
All red [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Split [s]	8	18	0	8	18	0	0	34	0	0	34	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

Lane Group	L	C	C	L	C	C	L	C	R	L	C	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
g_i, Effective Green Time [s]	4	38	38	1	35	35	12	12	12	12	12	12
g / C, Green / Cycle	0.07	0.64	0.64	0.01	0.58	0.58	0.20	0.20	0.20	0.20	0.20	0.20
(v / s)_i Volume / Saturation Flow Rate	0.06	0.15	0.15	0.00	0.21	0.21	0.02	0.03	0.16	0.09	0.02	0.02
s, saturation flow rate [veh/h]	1681	1765	1743	1681	1765	1750	1335	3360	1500	1306	1765	1565
c, Capacity [veh/h]	121	1128	1114	17	1018	1010	330	676	302	319	355	315
d1, Uniform Delay [s]	27.43	4.60	4.60	29.59	6.80	6.80	21.86	19.70	22.85	23.70	19.54	19.57
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	10.07	0.49	0.49	12.44	1.00	1.01	0.12	0.08	4.76	0.69	0.11	0.13
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.78	0.23	0.23	0.36	0.36	0.36	0.09	0.13	0.80	0.36	0.09	0.10
d, Delay for Lane Group [s/veh]	37.49	5.09	5.10	42.03	7.80	7.81	21.98	19.78	27.60	24.39	19.65	19.70
Lane Group LOS	D	A	A	D	A	A	C	B	C	C	B	B
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	Yes	No	No	No
50th-Percentile Queue Length [veh/ln]	1.50	0.84	0.83	0.13	1.79	1.78	0.37	0.47	3.39	1.34	0.31	0.30
50th-Percentile Queue Length [ft/ln]	37.62	20.88	20.72	3.37	44.77	44.47	9.16	11.74	84.68	33.49	7.77	7.50
95th-Percentile Queue Length [veh/ln]	2.71	1.50	1.49	0.24	3.22	3.20	0.66	0.84	6.10	2.41	0.56	0.54
95th-Percentile Queue Length [ft/ln]	67.72	37.59	37.29	6.06	80.58	80.04	16.49	21.12	152.43	60.28	13.99	13.51

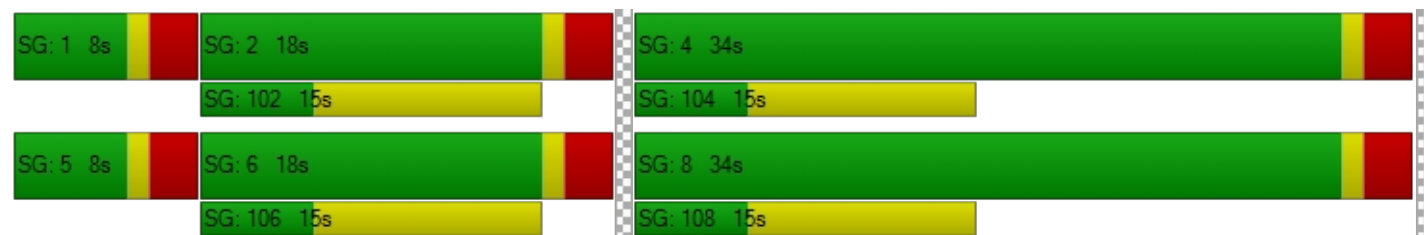


**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	37.49	5.09	5.10	42.03	7.80	7.81	21.98	19.78	27.60	24.39	19.66	19.70
Movement LOS	D	A	A	D	A	A	C	B	C	C	B	B
d_A, Approach Delay [s/veh]	10.01			8.08			25.23			22.74		
Approach LOS	B			A			C			C		
d_I, Intersection Delay [s/veh]	13.32											
Intersection LOS	B											
Intersection V/C	0.455											

**Sequence**

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



## The Cactus Avenue Cannabis Facility

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Scenario 3 Opening Year (2025) Without Project

Report File: C:\...\PMOY.pdf

7/17/2024

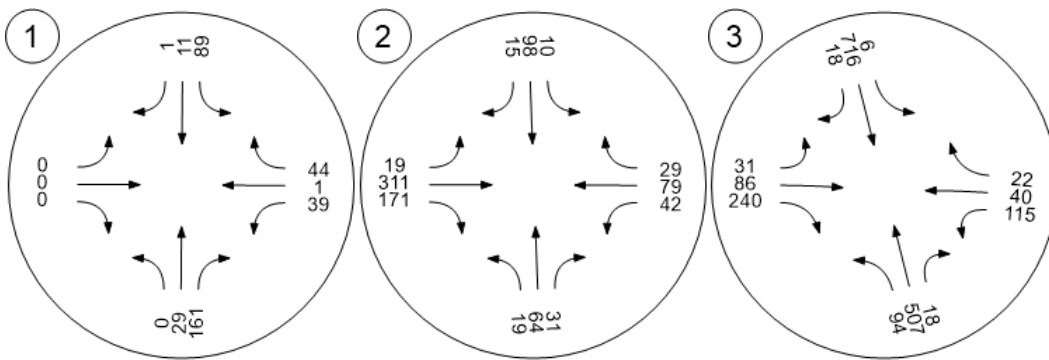
## Turning Movement Volume: Detail

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	Koala Road (NS) at Rancho Road (EW)	Final Base	0	29	161	89	11	1	0	0	0	39	1	44	375
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>0</b>	<b>29</b>	<b>161</b>	<b>89</b>	<b>11</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>39</b>	<b>1</b>	<b>44</b>	<b>375</b>

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	Bellflower Street (NS) at Rancho Road (EW)	Final Base	19	64	31	10	98	15	19	311	171	42	79	29	888
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>19</b>	<b>64</b>	<b>31</b>	<b>10</b>	<b>98</b>	<b>15</b>	<b>19</b>	<b>311</b>	<b>171</b>	<b>42</b>	<b>79</b>	<b>29</b>	<b>888</b>

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3	Highway 395 (NS) at Rancho Road (EW)	Final Base	94	507	18	6	716	18	31	86	240	115	40	22	1893
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>94</b>	<b>507</b>	<b>18</b>	<b>6</b>	<b>716</b>	<b>18</b>	<b>31</b>	<b>86</b>	<b>240</b>	<b>115</b>	<b>40</b>	<b>22</b>	<b>1893</b>

Traffic Volume - Future Total Volume



**Opening Year (2025) With Project**

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Report File: C:\...\AMOYp.pdf

The Cactus Avenue Cannabis Facility

Scenario 4 Opening Year (2025) With Project

7/17/2024

**Intersection Analysis Summary**

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Koala Road (NS) at Rancho Road (EW)	All-way stop	HCM 2010	WB Left	0.327	9.6	A
2	Bellflower Street (NS) at Rancho Road (EW)	All-way stop	HCM 2010	WB Thru	0.357	11.1	B
3	Highway 395 (NS) at Rancho Road (EW)	Signalized	HCM 2010	SB Left	0.406	14.8	B





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



**Intersection Level Of Service Report**  
**Intersection 1: Koala Road (NS) at Rancho Road (EW)**

Control Type:	All-way stop	Delay (sec / veh):	9.6
Analysis Method:	HCM 2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.327

**Intersection Setup**

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			55.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name												
Base Volume Input [veh/h]	0	12	37	54	24	0	0	0	0	136	0	52
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	4	0	0	0	0	0	0	52	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	12	41	54	24	0	0	0	0	188	0	52
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	3	10	14	6	0	0	0	0	47	0	13
Total Analysis Volume [veh/h]	0	12	41	54	24	0	0	0	0	188	0	52
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings****Lanes**

Capacity per Entry Lane [veh/h]	684	684	789	669	707	735
Degree of Utilization, x	0.00	0.02	0.05	0.12	0.00	0.33

**Movement, Approach, & Intersection Results**





95th-Percentile Queue Length [veh]	0.00	0.05	0.16	0.39	0.00	1.42
95th-Percentile Queue Length [ft]	0.00	1.34	4.10	9.85	0.00	35.57
Approach Delay [s/veh]	7.64			9.09	0.00	10.26
Approach LOS	A			A	A	B
Intersection Delay [s/veh]	9.64					
Intersection LOS	A					

**Intersection Level Of Service Report**  
**Intersection 2: Bellflower Street (NS) at Rancho Road (EW)**

Control Type: All-way stop  
Analysis Method: HCM 2010  
Analysis Period: 15 minutes

Delay (sec / veh): 11.1  
Level Of Service: B  
Volume to Capacity (v/c): 0.357

**Intersection Setup**

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	1	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	50.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			55.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			No		

**Volumes**

Name												
Base Volume Input [veh/h]	95	48	19	16	59	60	7	107	26	10	376	7
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	3	0	0	0	0	3	0	4	0	0	46	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	98	48	19	16	59	63	7	111	26	10	422	7
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	25	12	5	4	15	16	2	28	7	3	106	2
Total Analysis Volume [veh/h]	98	48	19	16	59	63	7	111	26	10	422	7
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings****Lanes**

Capacity per Entry Lane [veh/h]	544	641	552	627	514	554	554	620	554	601	604
Degree of Utilization, x	0.27	0.03	0.14	0.10	0.01	0.10	0.10	0.04	0.02	0.36	0.36

**Movement, Approach, & Intersection Results**

95th-Percentile Queue Length [veh]	1.08	0.09	0.47	0.33	0.04	0.33	0.33	0.13	0.06	1.61	1.60
95th-Percentile Queue Length [ft]	26.94	2.29	11.69	8.33	1.04	8.32	8.32	3.28	1.38	40.26	40.03
Approach Delay [s/veh]	11.36		9.71		9.72			11.88			
Approach LOS	B		A		A			B			
Intersection Delay [s/veh]	11.09										
Intersection LOS	B										

**Intersection Level Of Service Report**  
**Intersection 3: Highway 395 (NS) at Rancho Road (EW)**

Control Type: Signalized  
Analysis Method: HCM 2010  
Analysis Period: 15 minutes

Delay (sec / veh): 14.8  
Level Of Service: B  
Volume to Capacity (v/c): 0.406

**Intersection Setup**

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↵↵↵			↵↵↵			↵↵↵			↵↵↵		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	340.00	100.00	100.00	290.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			30.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name												
Base Volume Input [veh/h]	312	460	21	7	354	30	8	41	82	84	65	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	23	0	0	0	0	20	2	0	2	0	3	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	335	460	21	7	354	50	10	41	84	84	68	2
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	84	115	5	2	89	13	3	10	21	21	17	1
Total Analysis Volume [veh/h]	335	460	21	7	354	50	10	41	84	84	68	2
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		



**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	4.00

**Phasing & Timing**

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	5	5	0	0	5	0	0	5	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
All red [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Split [s]	24	21	0	21	18	0	0	18	0	0	18	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

Lane Group	L	C	C	L	C	C	L	C	R	L	C	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
g_i, Effective Green Time [s]	14	43	43	1	29	29	8	8	8	8	8	8
g / C, Green / Cycle	0.23	0.71	0.71	0.01	0.49	0.49	0.13	0.13	0.13	0.13	0.13	0.13
(v / s)_i Volume / Saturation Flow Rate	0.20	0.14	0.14	0.00	0.12	0.12	0.01	0.01	0.06	0.06	0.02	0.02
s, saturation flow rate [veh/h]	1681	1765	1738	1681	1765	1690	1325	3360	1500	1360	1765	1747
c, Capacity [veh/h]	390	1253	1234	16	860	823	221	439	196	233	231	228
d1, Uniform Delay [s]	22.09	2.93	2.93	29.57	8.93	8.95	25.80	22.96	24.02	26.88	23.14	23.14
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.55	0.34	0.35	18.06	0.65	0.70	0.08	0.09	1.48	0.93	0.30	0.31
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

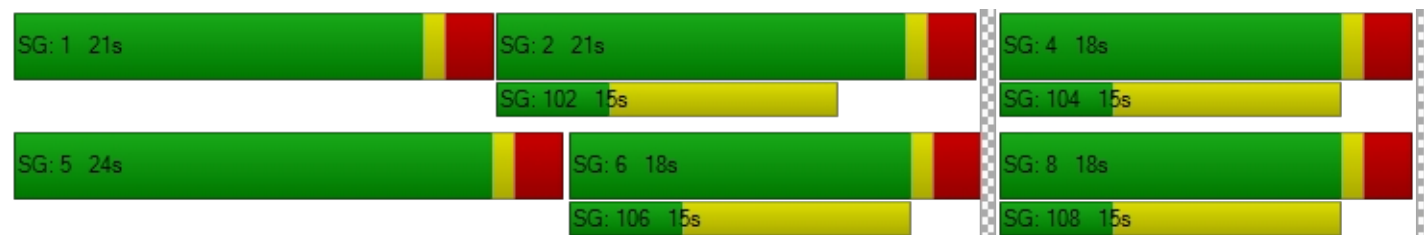
X, volume / capacity	0.86	0.19	0.19	0.44	0.24	0.24	0.05	0.09	0.43	0.36	0.15	0.15
d, Delay for Lane Group [s/veh]	27.65	3.27	3.28	47.62	9.58	9.64	25.89	23.05	25.50	27.81	23.44	23.45
Lane Group LOS	C	A	A	D	A	A	C	C	C	C	C	C
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	4.37	0.42	0.41	0.17	1.26	1.24	0.13	0.25	1.11	1.07	0.39	0.39
50th-Percentile Queue Length [ft/ln]	109.27	10.41	10.30	4.22	31.55	30.89	3.28	6.15	27.80	26.68	9.83	9.81
95th-Percentile Queue Length [veh/ln]	7.80	0.75	0.74	0.30	2.27	2.22	0.24	0.44	2.00	1.92	0.71	0.71
95th-Percentile Queue Length [ft/ln]	194.99	18.74	18.54	7.60	56.80	55.59	5.90	11.08	50.04	48.03	17.70	17.66

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	27.65	3.27	3.28	47.62	9.61	9.64	25.89	23.05	25.50	27.81	23.45	23.45
Movement LOS	C	A	A	D	A	A	C	C	C	C	C	C
d_A, Approach Delay [s/veh]	13.28			10.26			24.79			25.83		
Approach LOS	B			B			C			C		
d_I, Intersection Delay [s/veh]	14.76											
Intersection LOS	B											
Intersection V/C	0.406											

**Sequence**

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



## The Cactus Avenue Cannabis Facility

Vistro File: C:\...\AM.vistro

Scenario 4 Opening Year (2025) With Project

Report File: C:\...\AMOYp.pdf

7/17/2024

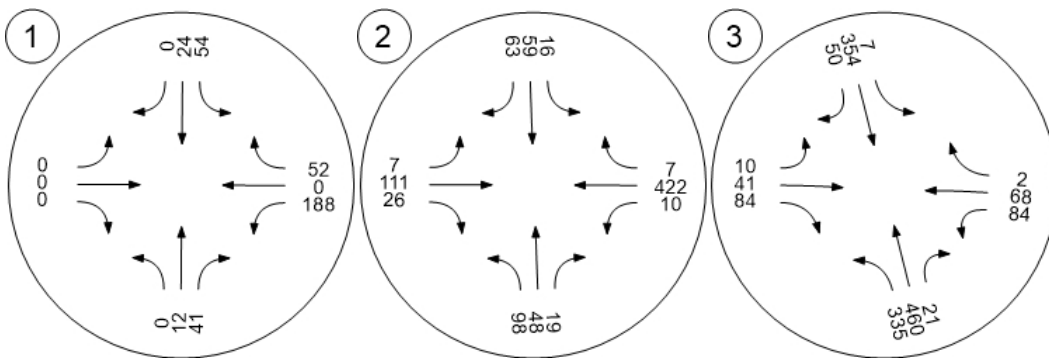
## Turning Movement Volume: Detail

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	Koala Road (NS) at Rancho Road (EW)	Final Base	0	12	37	54	24	0	0	0	0	136	0	52	315
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	4	0	0	0	0	0	0	52	0	0	56
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>0</b>	<b>12</b>	<b>41</b>	<b>54</b>	<b>24</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>188</b>	<b>0</b>	<b>52</b>	<b>371</b>

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	Bellflower Street (NS) at Rancho Road (EW)	Final Base	95	48	19	16	59	60	7	107	26	10	376	7	830
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	3	0	0	0	0	3	0	4	0	0	46	0	56
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>98</b>	<b>48</b>	<b>19</b>	<b>16</b>	<b>59</b>	<b>63</b>	<b>7</b>	<b>111</b>	<b>26</b>	<b>10</b>	<b>422</b>	<b>7</b>	<b>886</b>

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3	Highway 395 (NS) at Rancho Road (EW)	Final Base	312	460	21	7	354	30	8	41	82	84	65	2	1466
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	23	0	0	0	0	20	2	0	2	0	3	0	50
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>335</b>	<b>460</b>	<b>21</b>	<b>7</b>	<b>354</b>	<b>50</b>	<b>10</b>	<b>41</b>	<b>84</b>	<b>84</b>	<b>68</b>	<b>2</b>	<b>1516</b>

Traffic Volume - Future Total Volume





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Scenario 4 Opening Year (2025) With Project

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7/17/2024

**Intersection Analysis Summary**





ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Koala Road (NS) at Rancho Road (EW)	All-way stop	HCM 2010	SB Left	0.231	8.5	A
2	Bellflower Street (NS) at Rancho Road (EW)	All-way stop	HCM 2010	EB Thru	0.273	10.0	A
3	Highway 395 (NS) at Rancho Road (EW)	Signalized	HCM 2010	SB Left	0.473	13.7	B

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

**Intersection Level Of Service Report**  
**Intersection 1: Koala Road (NS) at Rancho Road (EW)**

Control Type:	All-way stop	Delay (sec / veh):	8.5
Analysis Method:	HCM 2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.231

**Intersection Setup**

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			55.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name												
Base Volume Input [veh/h]	0	29	161	89	11	1	0	0	0	39	1	44
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	37	0	0	0	0	0	0	15	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	29	198	89	11	1	0	0	0	54	1	44
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	7	50	22	3	0	0	0	0	14	0	11
Total Analysis Volume [veh/h]	0	29	198	89	11	1	0	0	0	54	1	44
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings****Lanes**

Capacity per Entry Lane [veh/h]	735	734	858	699	667	704
Degree of Utilization, x	0.00	0.04	0.23	0.14	0.00	0.14





**Movement, Approach, & Intersection Results**

95th-Percentile Queue Length [veh]	0.00	0.12	0.89	0.50	0.00	0.49
95th-Percentile Queue Length [ft]	0.00	3.08	22.29	12.59	0.00	12.20
Approach Delay [s/veh]	8.11			9.02	0.00	8.95
Approach LOS	A			A	A	A
Intersection Delay [s/veh]	8.52					
Intersection LOS	A					

**Intersection Level Of Service Report**  
**Intersection 2: Bellflower Street (NS) at Rancho Road (EW)**

Control Type:	All-way stop	Delay (sec / veh):	10.0
Analysis Method:	HCM 2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.273

**Intersection Setup**

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	1	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	50.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			55.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			No		

**Volumes**

Name												
Base Volume Input [veh/h]	19	64	31	10	98	15	19	311	171	42	79	29
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	0	0	0	0	1	2	33	2	0	13	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	20	64	31	10	98	16	21	344	173	42	92	29
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	16	8	3	25	4	5	86	43	11	23	7
Total Analysis Volume [veh/h]	20	64	31	10	98	16	21	344	173	42	92	29
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings****Lanes**

Capacity per Entry Lane [veh/h]	572	652	583	657	579	630	630	718	532	574	606
Degree of Utilization, x	0.15	0.05	0.19	0.02	0.04	0.27	0.27	0.24	0.08	0.11	0.10

**Movement, Approach, & Intersection Results**

95th-Percentile Queue Length [veh]	0.51	0.15	0.67	0.07	0.11	1.11	1.11	0.94	0.26	0.35	0.33
95th-Percentile Queue Length [ft]	12.80	3.74	16.87	1.87	2.82	27.64	27.64	23.49	6.40	8.79	8.28
Approach Delay [s/veh]	9.65		10.02		10.09			9.64			
Approach LOS	A		B		B			A			
Intersection Delay [s/veh]	9.95										
Intersection LOS	A										



**Intersection Level Of Service Report**  
**Intersection 3: Highway 395 (NS) at Rancho Road (EW)**

Control Type: Signalized  
Analysis Method: HCM 2010  
Analysis Period: 15 minutes

Delay (sec / veh): 13.7  
Level Of Service: B  
Volume to Capacity (v/c): 0.473

**Intersection Setup**

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↵↵↵			↵↵↵			↵↵↵			↵↵↵		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	340.00	100.00	100.00	290.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			30.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name												
Base Volume Input [veh/h]	94	507	18	6	716	18	31	86	240	115	40	22
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	6	0	0	0	0	6	15	2	16	0	1	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	100	507	18	6	716	24	46	88	256	115	41	22
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	25	127	5	2	179	6	12	22	64	29	10	6
Total Analysis Volume [veh/h]	100	507	18	6	716	24	46	88	256	115	41	22
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	4.00

**Phasing & Timing**

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	5	5	0	0	5	0	0	5	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
All red [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Split [s]	8	18	0	8	18	0	0	34	0	0	34	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

Lane Group	L	C	C	L	C	C	L	C	R	L	C	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
g_i, Effective Green Time [s]	5	38	38	1	34	34	13	13	13	13	13	13
g / C, Green / Cycle	0.08	0.63	0.63	0.01	0.56	0.56	0.21	0.21	0.21	0.21	0.21	0.21
(v / s)_i Volume / Saturation Flow Rate	0.06	0.15	0.15	0.00	0.21	0.21	0.03	0.03	0.17	0.09	0.02	0.02
s, saturation flow rate [veh/h]	1681	1765	1743	1681	1765	1745	1334	3360	1500	1304	1765	1567
c, Capacity [veh/h]	129	1108	1094	17	990	979	345	715	319	333	375	333
d1, Uniform Delay [s]	27.26	4.90	4.90	29.59	7.34	7.35	21.52	19.14	22.48	23.08	18.99	19.02
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.56	0.51	0.51	12.44	1.09	1.10	0.17	0.08	4.70	0.62	0.10	0.12
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

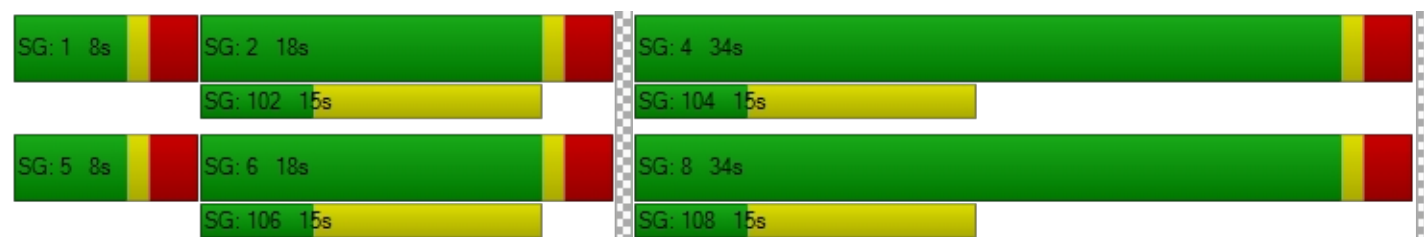
X, volume / capacity	0.78	0.24	0.24	0.36	0.38	0.38	0.13	0.12	0.80	0.35	0.09	0.09
d, Delay for Lane Group [s/veh]	36.82	5.41	5.42	42.03	8.43	8.45	21.69	19.22	27.18	23.69	19.09	19.14
Lane Group LOS	D	A	A	D	A	A	C	B	C	C	B	B
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	Yes	No	No	No
50th-Percentile Queue Length [veh/ln]	1.58	0.90	0.89	0.13	1.95	1.93	0.54	0.47	3.59	1.31	0.31	0.30
50th-Percentile Queue Length [ft/ln]	39.48	22.46	22.28	3.37	48.80	48.37	13.52	11.79	89.65	32.80	7.73	7.46
95th-Percentile Queue Length [veh/ln]	2.84	1.62	1.60	0.24	3.51	3.48	0.97	0.85	6.45	2.36	0.56	0.54
95th-Percentile Queue Length [ft/ln]	71.06	40.43	40.11	6.06	87.85	87.07	24.33	21.22	161.37	59.05	13.91	13.43

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	36.82	5.41	5.42	42.03	8.44	8.45	21.69	19.22	27.18	23.69	19.10	19.14
Movement LOS	D	A	A	D	A	A	C	B	C	C	B	B
d_A, Approach Delay [s/veh]	10.44			8.71			24.74			22.07		
Approach LOS	B			A			C			C		
d_I, Intersection Delay [s/veh]	13.72											
Intersection LOS	B											
Intersection V/C	0.473											

**Sequence**

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



## The Cactus Avenue Cannabis Facility

Vistro File: C:\...\PM.vistro

Scenario 4 Opening Year (2025) With Project

Report File: C:\...\PMOYp.pdf

7/17/2024

## Turning Movement Volume: Detail

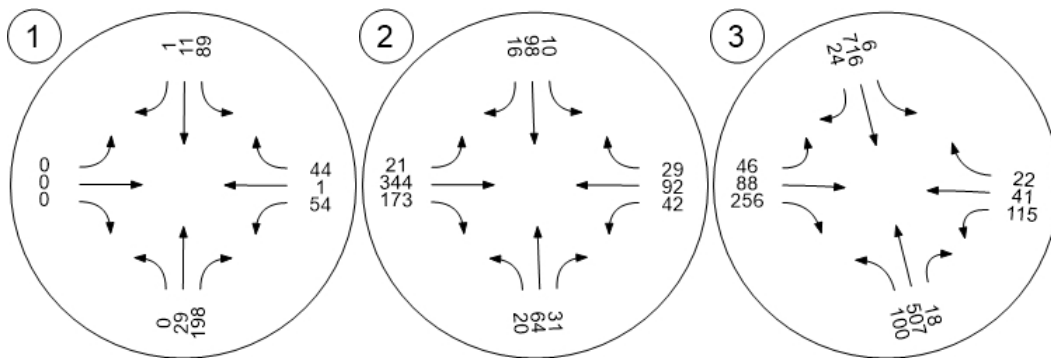
ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	Koala Road (NS) at Rancho Road (EW)	Final Base	0	29	161	89	11	1	0	0	0	39	1	44	375
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	37	0	0	0	0	0	0	15	0	0	52
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>0</b>	<b>29</b>	<b>198</b>	<b>89</b>	<b>11</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>54</b>	<b>1</b>	<b>44</b>	<b>427</b>

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	Bellflower Street (NS) at Rancho Road (EW)	Final Base	19	64	31	10	98	15	19	311	171	42	79	29	888
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	1	0	0	0	0	1	2	33	2	0	13	0	52
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>20</b>	<b>64</b>	<b>31</b>	<b>10</b>	<b>98</b>	<b>16</b>	<b>21</b>	<b>344</b>	<b>173</b>	<b>42</b>	<b>92</b>	<b>29</b>	<b>940</b>

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3	Highway 395 (NS) at Rancho Road (EW)	Final Base	94	507	18	6	716	18	31	86	240	115	40	22	1893
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	6	0	0	0	0	6	15	2	16	0	1	0	46
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>100</b>	<b>507</b>	<b>18</b>	<b>6</b>	<b>716</b>	<b>24</b>	<b>46</b>	<b>88</b>	<b>256</b>	<b>115</b>	<b>41</b>	<b>22</b>	<b>1939</b>



Traffic Volume - Future Total Volume



**Year 2045 Without Project**

## The Cactus Avenue Cannabis Facility

Vistro File: C:\...\AM.vistro

Report File: C:\...\AMFY.pdf

Scenario 5 Year 2045 Without Project

7/17/2024

**Intersection Analysis Summary**





ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Koala Road (NS) at Rancho Road (EW)	All-way stop	HCM 2010	WB Left	0.294	9.6	A
2	Bellflower Street (NS) at Rancho Road (EW)	All-way stop	HCM 2010	WB Thru	0.355	11.2	B
3	Highway 395 (NS) at Rancho Road (EW)	Signalized	HCM 2010	SB Left	0.755	22.8	C

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

**Intersection Level Of Service Report**  
**Intersection 1: Koala Road (NS) at Rancho Road (EW)**

Control Type:	All-way stop	Delay (sec / veh):	9.6
Analysis Method:	HCM 2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.294

**Intersection Setup**

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			55.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name												
Base Volume Input [veh/h]	0	69	52	59	82	0	0	0	0	147	0	57
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	69	52	59	82	0	0	0	0	147	0	57
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	17	13	15	21	0	0	0	0	37	0	14
Total Analysis Volume [veh/h]	0	69	52	59	82	0	0	0	0	147	0	57
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings****Lanes**

Capacity per Entry Lane [veh/h]	684	684	790	675	661	695
Degree of Utilization, x	0.00	0.10	0.07	0.21	0.00	0.29

**Movement, Approach, & Intersection Results**





95th-Percentile Queue Length [veh]	0.00	0.34	0.21	0.78	0.00	1.22
95th-Percentile Queue Length [ft]	0.00	8.38	5.28	19.54	0.00	30.55
Approach Delay [s/veh]	8.14			9.73	0.00	10.32
Approach LOS	A			A	A	B
Intersection Delay [s/veh]	9.57					
Intersection LOS	A					



**Intersection Level Of Service Report**  
**Intersection 2: Bellflower Street (NS) at Rancho Road (EW)**

Control Type:	All-way stop	Delay (sec / veh):	11.2
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.355

**Intersection Setup**

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	1	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	50.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			55.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			No		

**Volumes**

Name												
Base Volume Input [veh/h]	98	53	21	18	65	64	9	136	29	11	411	8
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	98	53	21	18	65	64	9	136	29	11	411	8
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	25	13	5	5	16	16	2	34	7	3	103	2
Total Analysis Volume [veh/h]	98	53	21	18	65	64	9	136	29	11	411	8
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings****Lanes**

Capacity per Entry Lane [veh/h]	541	634	548	621	510	549	549	614	545	589	592
Degree of Utilization, x	0.28	0.03	0.15	0.10	0.02	0.12	0.12	0.05	0.02	0.36	0.35

**Movement, Approach, & Intersection Results**

95th-Percentile Queue Length [veh]	1.14	0.10	0.53	0.34	0.05	0.42	0.42	0.15	0.06	1.60	1.59
95th-Percentile Queue Length [ft]	28.41	2.56	13.28	8.57	1.35	10.53	10.53	3.71	1.55	40.01	39.75
Approach Delay [s/veh]	11.51		9.88		9.95			12.04			
Approach LOS	B		A		A			B			
Intersection Delay [s/veh]	11.20										
Intersection LOS	B										

**Intersection Level Of Service Report**  
**Intersection 3: Highway 395 (NS) at Rancho Road (EW)**

Control Type:	Signalized	Delay (sec / veh):	22.8
Analysis Method:	HCM 2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.755

**Intersection Setup**

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↵↵↵			↵↵↵			↵↵↵			↵↵↵		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	340.00	100.00	100.00	290.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			30.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name												
Base Volume Input [veh/h]	341	925	24	51	1309	117	22	66	89	130	106	12
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	341	925	24	51	1309	117	22	66	89	130	106	12
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	85	231	6	13	327	29	6	17	22	33	27	3
Total Analysis Volume [veh/h]	341	925	24	51	1309	117	22	66	89	130	106	12
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	70
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	4.00

**Phasing & Timing**

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	5	5	0	0	5	0	0	5	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
All red [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Split [s]	26	19	0	33	26	0	0	18	0	0	18	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

Lane Group	L	C	C	L	C	C	L	C	R	L	C	C
C, Cycle Length [s]	70	70	70	70	70	70	70	70	70	70	70	70
L, Total Lost Time per Cycle [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
g_i, Effective Green Time [s]	16	46	46	3	33	33	12	12	12	12	12	12
g / C, Green / Cycle	0.23	0.65	0.65	0.05	0.47	0.47	0.17	0.17	0.17	0.17	0.17	0.17
(v / s)_i Volume / Saturation Flow Rate	0.20	0.27	0.27	0.03	0.41	0.41	0.02	0.02	0.06	0.10	0.03	0.03
s, saturation flow rate [veh/h]	1681	1765	1749	1681	1765	1715	1269	3360	1500	1330	1765	1703
c, Capacity [veh/h]	389	1157	1147	76	828	805	242	574	256	266	301	291
d1, Uniform Delay [s]	25.95	5.69	5.69	32.92	16.66	16.74	28.22	24.56	25.59	29.84	24.91	24.93
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	6.40	1.08	1.10	9.84	12.04	12.89	0.16	0.09	0.81	1.38	0.32	0.34
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.88	0.41	0.41	0.67	0.87	0.88	0.09	0.12	0.35	0.49	0.20	0.20
d, Delay for Lane Group [s/veh]	32.36	6.77	6.79	42.75	28.70	29.63	28.38	24.64	26.40	31.22	25.23	25.27
Lane Group LOS	C	A	A	D	C	C	C	C	C	C	C	C
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	5.46	2.25	2.24	0.98	10.73	10.72	0.33	0.45	1.31	1.98	0.77	0.76
50th-Percentile Queue Length [ft/ln]	136.61	56.33	55.98	24.62	268.35	267.96	8.33	11.31	32.72	49.45	19.27	19.00
95th-Percentile Queue Length [veh/ln]	9.30	4.06	4.03	1.77	16.11	16.09	0.60	0.81	2.36	3.56	1.39	1.37
95th-Percentile Queue Length [ft/ln]	232.46	101.39	100.76	44.31	402.68	402.19	15.00	20.35	58.90	89.01	34.68	34.20

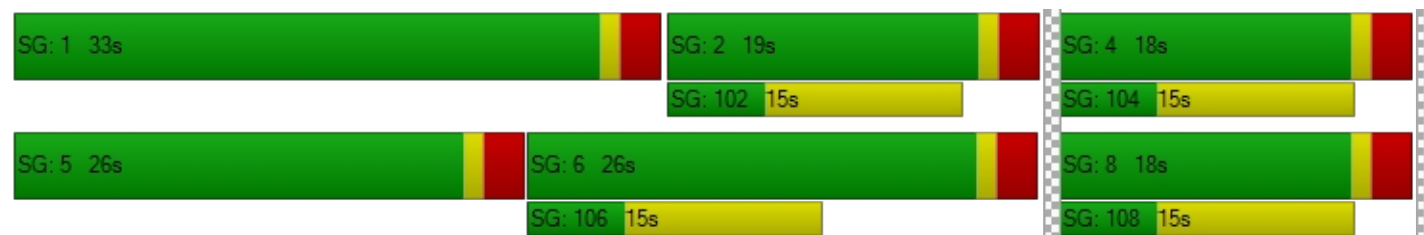


**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	32.36	6.78	6.79	42.75	29.12	29.63	28.38	24.64	26.40	31.22	25.25	25.27
Movement LOS	C	A	A	D	C	C	C	C	C	C	C	C
d_A, Approach Delay [s/veh]	13.54			29.63			25.99			28.38		
Approach LOS	B			C			C			C		
d_I, Intersection Delay [s/veh]	22.83											
Intersection LOS	C											
Intersection V/C	0.755											

**Sequence**

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



## The Cactus Avenue Cannabis Facility

Vistro File: C:\...\AM.vistro

Scenario 5 Year 2045 Without Project

Report File: C:\...\AMFY.pdf

7/17/2024

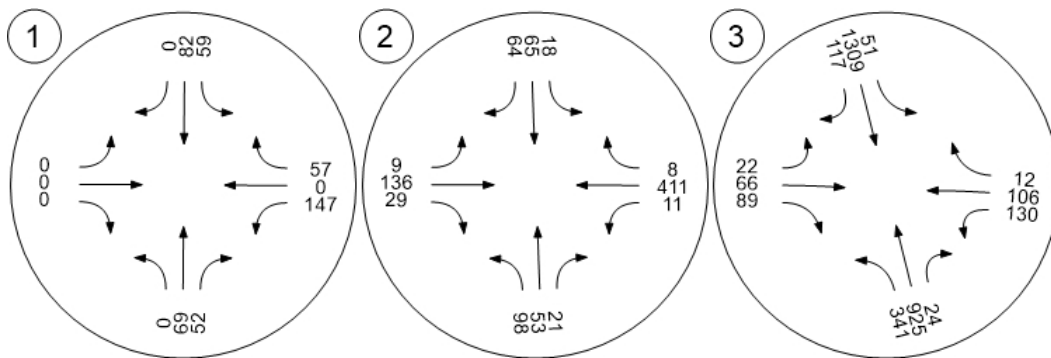
## Turning Movement Volume: Detail

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	Koala Road (NS) at Rancho Road (EW)	Final Base	0	69	52	59	82	0	0	0	0	147	0	57	466
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>0</b>	<b>69</b>	<b>52</b>	<b>59</b>	<b>82</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>147</b>	<b>0</b>	<b>57</b>	<b>466</b>

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	Bellflower Street (NS) at Rancho Road (EW)	Final Base	98	53	21	18	65	64	9	136	29	11	411	8	923
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>98</b>	<b>53</b>	<b>21</b>	<b>18</b>	<b>65</b>	<b>64</b>	<b>9</b>	<b>136</b>	<b>29</b>	<b>11</b>	<b>411</b>	<b>8</b>	<b>923</b>

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3	Highway 395 (NS) at Rancho Road (EW)	Final Base	341	925	24	51	1309	117	22	66	89	130	106	12	3192
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>341</b>	<b>925</b>	<b>24</b>	<b>51</b>	<b>1309</b>	<b>117</b>	<b>22</b>	<b>66</b>	<b>89</b>	<b>130</b>	<b>106</b>	<b>12</b>	<b>3192</b>

Traffic Volume - Future Total Volume



## The Cactus Avenue Cannabis Facility

Vistro File: C:\...\PM.vistro

Report File: C:\...\PMFY.pdf

Scenario 5 Year 2045 Without Project

7/17/2024

**Intersection Analysis Summary**





ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Koala Road (NS) at Rancho Road (EW)	All-way stop	HCM 2010	SB Left	0.308	9.4	A
2	Bellflower Street (NS) at Rancho Road (EW)	All-way stop	HCM 2010	EB Thru	0.274	10.1	B
3	Highway 395 (NS) at Rancho Road (EW)	Signalized	HCM 2010	SB Left	0.757	18.2	B

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

**Intersection Level Of Service Report**  
**Intersection 1: Koala Road (NS) at Rancho Road (EW)**

Control Type:	All-way stop	Delay (sec / veh):	9.4
Analysis Method:	HCM 2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.308

**Intersection Setup**

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			55.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name												
Base Volume Input [veh/h]	0	137	176	96	92	27	0	0	0	58	3	48
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	137	176	96	92	27	0	0	0	58	3	48
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	34	44	24	23	7	0	0	0	15	1	12
Total Analysis Volume [veh/h]	0	137	176	96	92	27	0	0	0	58	3	48
Pedestrian Volume [ped/h]	0			0			0			0		



**Intersection Settings****Lanes**

Capacity per Entry Lane [veh/h]	711	711	826	699	607	644
Degree of Utilization, x	0.00	0.19	0.21	0.31	0.00	0.17

**Movement, Approach, & Intersection Results**





95th-Percentile Queue Length [veh]	0.00	0.71	0.81	1.31	0.00	0.61
95th-Percentile Queue Length [ft]	0.00	17.74	20.13	32.65	0.00	15.14
Approach Delay [s/veh]	8.56			10.43	0.00	9.72
Approach LOS	A			B	A	A
Intersection Delay [s/veh]	9.39					
Intersection LOS	A					

**Intersection Level Of Service Report**  
**Intersection 2: Bellflower Street (NS) at Rancho Road (EW)**

Control Type: All-way stop  
Analysis Method: HCM 2010  
Analysis Period: 15 minutes

Delay (sec / veh): 10.1  
Level Of Service: B  
Volume to Capacity (v/c): 0.274

**Intersection Setup**

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	1	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	50.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			55.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			No		

**Volumes**

Name												
Base Volume Input [veh/h]	21	70	34	11	108	17	21	340	184	44	92	32
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	21	70	34	11	108	17	21	340	184	44	92	32
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	18	9	3	27	4	5	85	46	11	23	8
Total Analysis Volume [veh/h]	21	70	34	11	108	17	21	340	184	44	92	32
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings****Lanes**

Capacity per Entry Lane [veh/h]	568	646	579	652	571	620	620	705	525	566	599
Degree of Utilization, x	0.16	0.05	0.21	0.03	0.04	0.27	0.27	0.26	0.08	0.11	0.10

**Movement, Approach, & Intersection Results**

95th-Percentile Queue Length [veh]	0.57	0.17	0.77	0.08	0.11	1.11	1.11	1.04	0.27	0.37	0.34
95th-Percentile Queue Length [ft]	14.18	4.16	19.15	2.01	2.86	27.79	27.79	26.07	6.84	9.19	8.62
Approach Delay [s/veh]	9.80		10.25		10.26			9.78			
Approach LOS	A		B		B			A			
Intersection Delay [s/veh]	10.12										
Intersection LOS	B										

**Intersection Level Of Service Report**  
**Intersection 3: Highway 395 (NS) at Rancho Road (EW)**

Control Type: Signalized  
Analysis Method: HCM 2010  
Analysis Period: 15 minutes

Delay (sec / veh): 18.2  
Level Of Service: B  
Volume to Capacity (v/c): 0.757

**Intersection Setup**

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	T T T			T T T			T T T			T T T		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	340.00	100.00	100.00	290.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			30.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name												
Base Volume Input [veh/h]	103	1806	36	21	1193	29	75	123	263	133	46	88
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	103	1806	36	21	1193	29	75	123	263	133	46	88
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	26	452	9	5	298	7	19	31	66	33	12	22
Total Analysis Volume [veh/h]	103	1806	36	21	1193	29	75	123	263	133	46	88
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	70
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	4.00

**Phasing & Timing**

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	5	5	0	0	5	0	0	5	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
All red [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Split [s]	9	33	0	8	32	0	0	29	0	0	29	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Exclusive Pedestrian Phase**

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



**Lane Group Calculations**

Lane Group	L	C	C	L	C	C	L	C	R	L	C	C
C, Cycle Length [s]	70	70	70	70	70	70	70	70	70	70	70	70
L, Total Lost Time per Cycle [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
g_i, Effective Green Time [s]	5	45	45	2	41	41	15	15	15	15	15	15
g / C, Green / Cycle	0.08	0.64	0.64	0.02	0.58	0.58	0.21	0.21	0.21	0.21	0.21	0.21
(v / s)_i Volume / Saturation Flow Rate	0.06	0.52	0.53	0.01	0.35	0.35	0.06	0.04	0.18	0.11	0.03	0.06
s, saturation flow rate [veh/h]	1681	1765	1753	1681	1765	1750	1250	3360	1500	1263	1765	1500
c, Capacity [veh/h]	132	1119	1112	43	1026	1018	275	711	318	301	374	318
d1, Uniform Delay [s]	31.72	9.81	9.88	33.70	9.41	9.41	27.73	22.61	26.42	27.85	22.37	23.14
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.63	6.88	7.16	8.23	2.57	2.59	0.53	0.11	5.51	1.02	0.15	0.47
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

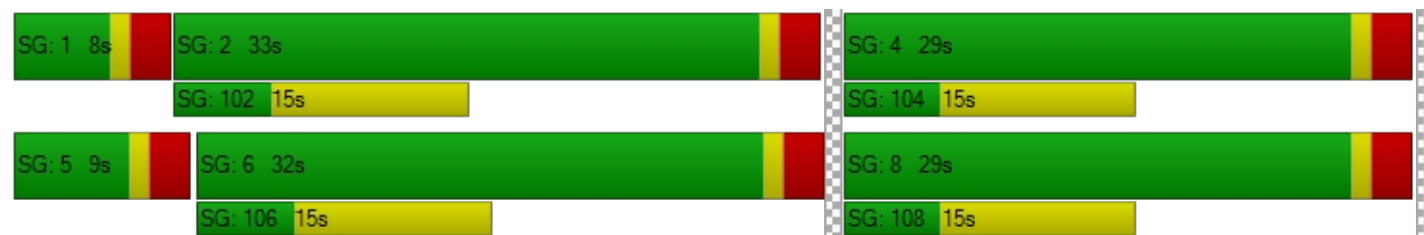
X, volume / capacity	0.78	0.82	0.83	0.49	0.60	0.60	0.27	0.17	0.83	0.44	0.12	0.28
d, Delay for Lane Group [s/veh]	41.35	16.69	17.05	41.92	11.98	12.01	28.26	22.73	31.93	28.87	22.51	23.61
Lane Group LOS	D	B	B	D	B	B	C	C	C	C	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	No	No	No
50th-Percentile Queue Length [veh/ln]	1.91	8.50	8.62	0.42	4.80	4.77	1.15	0.81	4.46	1.93	0.55	1.10
50th-Percentile Queue Length [ft/ln]	47.64	212.40	215.41	10.54	120.02	119.30	28.75	20.18	111.55	48.20	13.76	27.51
95th-Percentile Queue Length [veh/ln]	3.43	13.28	13.43	0.76	8.39	8.35	2.07	1.45	7.93	3.47	0.99	1.98
95th-Percentile Queue Length [ft/ln]	85.75	331.90	335.77	18.97	209.86	208.87	51.75	36.32	198.15	86.76	24.76	49.52

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	41.35	16.86	17.05	41.92	11.99	12.01	28.26	22.73	31.93	28.87	22.51	23.61
Movement LOS	D	B	B	D	B	B	C	C	C	C	C	C
d_A, Approach Delay [s/veh]	18.16			12.50			28.87			26.04		
Approach LOS	B			B			C			C		
d_I, Intersection Delay [s/veh]	18.16											
Intersection LOS	B											
Intersection V/C	0.757											

**Sequence**

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



## The Cactus Avenue Cannabis Facility

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Scenario 5 Year 2045 Without Project

Report File: C:\...\IPMFY.pdf

7/17/2024

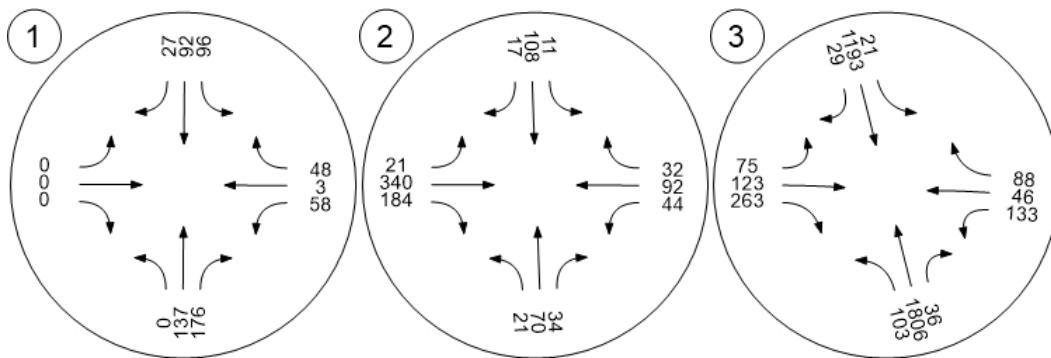
## Turning Movement Volume: Detail

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	Koala Road (NS) at Rancho Road (EW)	Final Base	0	137	176	96	92	27	0	0	0	58	3	48	637
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>0</b>	<b>137</b>	<b>176</b>	<b>96</b>	<b>92</b>	<b>27</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>58</b>	<b>3</b>	<b>48</b>	<b>637</b>

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	Bellflower Street (NS) at Rancho Road (EW)	Final Base	21	70	34	11	108	17	21	340	184	44	92	32	974
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>21</b>	<b>70</b>	<b>34</b>	<b>11</b>	<b>108</b>	<b>17</b>	<b>21</b>	<b>340</b>	<b>184</b>	<b>44</b>	<b>92</b>	<b>32</b>	<b>974</b>

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3	Highway 395 (NS) at Rancho Road (EW)	Final Base	103	1806	36	21	1193	29	75	123	263	133	46	88	3916
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>103</b>	<b>1806</b>	<b>36</b>	<b>21</b>	<b>1193</b>	<b>29</b>	<b>75</b>	<b>123</b>	<b>263</b>	<b>133</b>	<b>46</b>	<b>88</b>	<b>3916</b>

Traffic Volume - Future Total Volume



**Year 2045 With Project**



Vistro File: C:\...\AM.vistro  
Report File: C:\...\AMFYp.pdfThe Cactus Avenue Cannabis Facility  
Scenario 6 Copy of Year 2045 Without Project

7/17/2024

**Intersection Analysis Summary**

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Koala Road (NS) at Rancho Road (EW)	All-way stop	HCM 2010	WB Left	0.374	10.3	B
2	Bellflower Street (NS) at Rancho Road (EW)	All-way stop	HCM 2010	WB Thru	0.398	11.7	B
3	Highway 395 (NS) at Rancho Road (EW)	Signalized	HCM 2010	SB Left	0.771	24.5	C

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





### Intersection Level Of Service Report

#### Intersection 1: Koala Road (NS) at Rancho Road (EW)

Control Type: All-way stop  
 Analysis Method: HCM 2010  
 Analysis Period: 15 minutes

Delay (sec / veh): 10.3  
 Level Of Service: B  
 Volume to Capacity (v/c): 0.374

#### Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			55.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

#### Volumes

Name												
Base Volume Input [veh/h]	0	69	52	59	82	0	0	0	0	147	0	57
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	4	0	0	0	0	0	0	52	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	69	56	59	82	0	0	0	0	199	0	57
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	17	14	15	21	0	0	0	0	50	0	14
Total Analysis Volume [veh/h]	0	69	56	59	82	0	0	0	0	199	0	57
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings****Lanes**

Capacity per Entry Lane [veh/h]	662	662	760	654	649	685
Degree of Utilization, x	0.00	0.10	0.07	0.22	0.00	0.37





**Movement, Approach, & Intersection Results**

95th-Percentile Queue Length [veh]	0.00	0.35	0.24	0.81	0.00	1.73
95th-Percentile Queue Length [ft]	0.00	8.69	5.95	20.35	0.00	43.34
Approach Delay [s/veh]	8.34			10.01	0.00	11.35
Approach LOS	A			B	A	B
Intersection Delay [s/veh]	10.27					
Intersection LOS	B					

**Intersection Level Of Service Report**  
**Intersection 2: Bellflower Street (NS) at Rancho Road (EW)**

Control Type:	All-way stop	Delay (sec / veh):	11.7
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.398

**Intersection Setup**

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	1	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	50.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			55.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			No		

**Volumes**

Name												
Base Volume Input [veh/h]	98	53	21	18	65	64	9	136	29	11	411	8
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	3	0	0	0	0	3	0	4	0	0	46	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	101	53	21	18	65	67	9	140	29	11	457	8
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	25	13	5	5	16	17	2	35	7	3	114	2
Total Analysis Volume [veh/h]	101	53	21	18	65	67	9	140	29	11	457	8
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings****Lanes**

Capacity per Entry Lane [veh/h]	530	620	537	607	501	538	538	600	540	584	587
Degree of Utilization, x	0.29	0.03	0.15	0.11	0.02	0.13	0.13	0.05	0.02	0.40	0.40

**Movement, Approach, & Intersection Results**

95th-Percentile Queue Length [veh]	1.20	0.11	0.54	0.37	0.05	0.45	0.45	0.15	0.06	1.90	1.89
95th-Percentile Queue Length [ft]	29.95	2.63	13.60	9.25	1.37	11.14	11.14	3.80	1.56	47.56	47.27
Approach Delay [s/veh]	11.82		10.07		10.15			12.77			
Approach LOS	B		B		B			B			
Intersection Delay [s/veh]	11.71										
Intersection LOS	B										

**Intersection Level Of Service Report**  
**Intersection 3: Highway 395 (NS) at Rancho Road (EW)**

Control Type:	Signalized	Delay (sec / veh):	24.5
Analysis Method:	HCM 2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.771

**Intersection Setup**

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↵↵↵			↵↵↵			↵↵↵			↵↵↵		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	340.00	100.00	100.00	290.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			30.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name												
Base Volume Input [veh/h]	341	925	24	51	1309	117	22	66	89	130	106	12
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	23	0	0	0	0	20	2	0	2	0	3	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	364	925	24	51	1309	137	24	66	91	130	109	12
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	91	231	6	13	327	34	6	17	23	33	27	3
Total Analysis Volume [veh/h]	364	925	24	51	1309	137	24	66	91	130	109	12
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		



**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	80
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	4.00

**Phasing & Timing**

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	5	5	0	0	5	0	0	5	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
All red [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Split [s]	44	51	0	11	18	0	0	18	0	0	18	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

Lane Group	L	C	C	L	C	C	L	C	R	L	C	C
C, Cycle Length [s]	80	80	80	80	80	80	80	80	80	80	80	80
L, Total Lost Time per Cycle [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
g_i, Effective Green Time [s]	20	54	54	3	38	38	13	13	13	13	13	13
g / C, Green / Cycle	0.24	0.68	0.68	0.04	0.48	0.48	0.16	0.16	0.16	0.16	0.16	0.16
(v / s)_i Volume / Saturation Flow Rate	0.22	0.27	0.27	0.03	0.41	0.42	0.02	0.02	0.06	0.10	0.03	0.04
s, saturation flow rate [veh/h]	1681	1765	1749	1681	1765	1707	1265	3360	1500	1330	1765	1705
c, Capacity [veh/h]	411	1202	1191	72	846	818	224	550	246	250	289	279
d1, Uniform Delay [s]	29.17	5.57	5.57	37.82	18.51	18.64	32.58	28.53	29.78	34.33	28.98	28.99
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	6.57	0.98	0.99	12.33	11.44	12.41	0.21	0.10	0.93	1.68	0.36	0.38
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

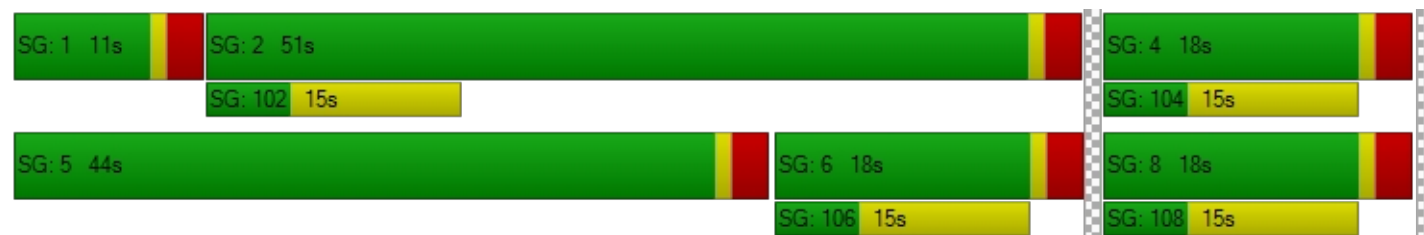
X, volume / capacity	0.89	0.40	0.40	0.71	0.86	0.87	0.11	0.12	0.37	0.52	0.21	0.22
d, Delay for Lane Group [s/veh]	35.73	6.55	6.56	50.15	29.95	31.05	32.78	28.63	30.71	36.01	29.33	29.38
Lane Group LOS	D	A	A	D	C	C	C	C	C	D	C	C
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	6.79	2.48	2.47	1.16	12.42	12.39	0.43	0.54	1.58	2.35	0.95	0.93
50th-Percentile Queue Length [ft/ln]	169.77	62.05	61.66	29.12	310.44	309.69	10.70	13.39	39.58	58.83	23.70	23.37
95th-Percentile Queue Length [veh/ln]	11.06	4.47	4.44	2.10	18.20	18.16	0.77	0.96	2.85	4.24	1.71	1.68
95th-Percentile Queue Length [ft/ln]	276.62	111.69	111.00	52.41	454.92	454.00	19.26	24.09	71.24	105.89	42.65	42.07

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	35.73	6.56	6.56	50.15	30.44	31.05	32.78	28.63	30.71	36.01	29.35	29.38
Movement LOS	D	A	A	D	C	C	C	C	C	D	C	C
d_A, Approach Delay [s/veh]	14.65			31.16			30.23			32.80		
Approach LOS	B			C			C			C		
d_I, Intersection Delay [s/veh]	24.55											
Intersection LOS	C											
Intersection V/C	0.771											

**Sequence**

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



## The Cactus Avenue Cannabis Facility

Vistro File: C:\...\AM.vistro

Scenario 6 Copy of Year 2045 Without Project

Report File: C:\...\AMFYp.pdf

7/17/2024

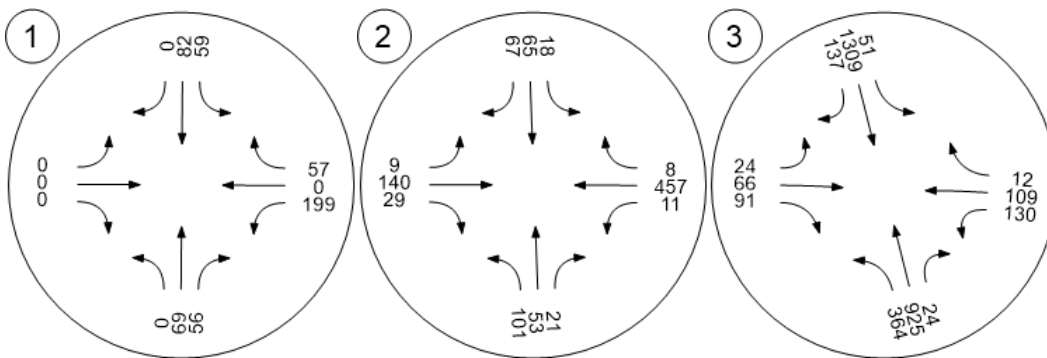
## Turning Movement Volume: Detail

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	Koala Road (NS) at Rancho Road (EW)	Final Base	0	69	52	59	82	0	0	0	0	147	0	57	466
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	4	0	0	0	0	0	0	52	0	0	56
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>0</b>	<b>69</b>	<b>56</b>	<b>59</b>	<b>82</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>199</b>	<b>0</b>	<b>57</b>	<b>522</b>

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	Bellflower Street (NS) at Rancho Road (EW)	Final Base	98	53	21	18	65	64	9	136	29	11	411	8	923
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	3	0	0	0	0	3	0	4	0	0	46	0	56
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>101</b>	<b>53</b>	<b>21</b>	<b>18</b>	<b>65</b>	<b>67</b>	<b>9</b>	<b>140</b>	<b>29</b>	<b>11</b>	<b>457</b>	<b>8</b>	<b>979</b>

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3	Highway 395 (NS) at Rancho Road (EW)	Final Base	341	925	24	51	1309	117	22	66	89	130	106	12	3192
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	23	0	0	0	0	20	2	0	2	0	3	0	50
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>364</b>	<b>925</b>	<b>24</b>	<b>51</b>	<b>1309</b>	<b>137</b>	<b>24</b>	<b>66</b>	<b>91</b>	<b>130</b>	<b>109</b>	<b>12</b>	<b>3242</b>

Traffic Volume - Future Total Volume



## The Cactus Avenue Cannabis Facility

Vistro File: C:\...\PM.vistro

Scenario 6 Year 2045 With Project

Report File: C:\...\PMFYp.pdf

7/17/2024

**Intersection Analysis Summary**

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Koala Road (NS) at Rancho Road (EW)	All-way stop	HCM 2010	SB Left	0.314	9.6	A
2	Bellflower Street (NS) at Rancho Road (EW)	All-way stop	HCM 2010	EB Thru	0.303	10.3	B
3	Highway 395 (NS) at Rancho Road (EW)	Signalized	HCM 2010	SB Left	0.768	19.0	B

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







### Intersection Level Of Service Report

#### Intersection 1: Koala Road (NS) at Rancho Road (EW)

Control Type: All-way stop  
 Analysis Method: HCM 2010  
 Analysis Period: 15 minutes

Delay (sec / veh): 9.6  
 Level Of Service: A  
 Volume to Capacity (v/c): 0.314

#### Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			55.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

#### Volumes

Name												
Base Volume Input [veh/h]	0	137	176	96	92	27	0	0	0	58	3	48
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	37	0	0	0	0	0	0	15	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	137	213	96	92	27	0	0	0	73	3	48
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	34	53	24	23	7	0	0	0	18	1	12
Total Analysis Volume [veh/h]	0	137	213	96	92	27	0	0	0	73	3	48
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings****Lanes**

Capacity per Entry Lane [veh/h]	702	702	814	685	596	630
Degree of Utilization, x	0.00	0.20	0.26	0.31	0.00	0.20





**Movement, Approach, & Intersection Results**

95th-Percentile Queue Length [veh]	0.00	0.72	1.05	1.34	0.00	0.73
95th-Percentile Queue Length [ft]	0.00	18.01	26.23	33.51	0.00	18.18
Approach Delay [s/veh]	8.84			10.63	0.00	10.11
Approach LOS	A			B	A	B
Intersection Delay [s/veh]	9.63					
Intersection LOS	A					

**Intersection Level Of Service Report**  
**Intersection 2: Bellflower Street (NS) at Rancho Road (EW)**

Control Type:	All-way stop	Delay (sec / veh):	10.3
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.303

**Intersection Setup**

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	1	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	50.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			55.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			No		

**Volumes**

Name												
Base Volume Input [veh/h]	21	70	34	11	108	17	21	340	184	44	92	32
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	0	0	0	0	1	2	33	2	0	13	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	22	70	34	11	108	18	23	373	186	44	105	32
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	18	9	3	27	5	6	93	47	11	26	8
Total Analysis Volume [veh/h]	22	70	34	11	108	18	23	373	186	44	105	32
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings****Lanes**

Capacity per Entry Lane [veh/h]	562	638	573	644	567	615	615	699	520	559	589
Degree of Utilization, x	0.16	0.05	0.21	0.03	0.04	0.30	0.30	0.27	0.08	0.12	0.12

**Movement, Approach, & Intersection Results**

95th-Percentile Queue Length [veh]	0.58	0.17	0.78	0.09	0.13	1.27	1.27	1.07	0.28	0.42	0.39
95th-Percentile Queue Length [ft]	14.55	4.21	19.39	2.15	3.17	31.87	31.87	26.75	6.91	10.40	9.81
Approach Delay [s/veh]	9.90		10.34		10.57			9.94			
Approach LOS	A		B		B			A			
Intersection Delay [s/veh]	10.35										
Intersection LOS	B										

**Intersection Level Of Service Report**  
**Intersection 3: Highway 395 (NS) at Rancho Road (EW)**

Control Type: Signalized  
Analysis Method: HCM 2010  
Analysis Period: 15 minutes

Delay (sec / veh): 19.0  
Level Of Service: B  
Volume to Capacity (v/c): 0.768

**Intersection Setup**

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↵↵↵			↵↵↵			↵↵↵			↵↵↵		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	340.00	100.00	100.00	290.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			30.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name												
Base Volume Input [veh/h]	103	1806	36	21	1193	29	75	123	263	133	46	88
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	6	0	0	0	0	6	15	2	16	0	1	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	109	1806	36	21	1193	35	90	125	279	133	47	88
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	27	452	9	5	298	9	23	31	70	33	12	22
Total Analysis Volume [veh/h]	109	1806	36	21	1193	35	90	125	279	133	47	88
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	70
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	4.00

**Phasing & Timing**

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	5	5	0	0	5	0	0	5	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
All red [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Split [s]	9	36	0	8	35	0	0	26	0	0	26	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Exclusive Pedestrian Phase**

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



**Lane Group Calculations**

Lane Group	L	C	C	L	C	C	L	C	R	L	C	C
C, Cycle Length [s]	70	70	70	70	70	70	70	70	70	70	70	70
L, Total Lost Time per Cycle [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
g_i, Effective Green Time [s]	6	44	44	2	40	40	15	15	15	15	15	15
g / C, Green / Cycle	0.08	0.63	0.63	0.02	0.57	0.57	0.22	0.22	0.22	0.22	0.22	0.22
(v / s)_i Volume / Saturation Flow Rate	0.06	0.52	0.53	0.01	0.35	0.35	0.07	0.04	0.19	0.11	0.03	0.06
s, saturation flow rate [veh/h]	1681	1765	1753	1681	1765	1747	1249	3360	1500	1261	1765	1500
c, Capacity [veh/h]	139	1103	1095	43	1002	992	287	743	332	312	390	332
d1, Uniform Delay [s]	31.54	10.32	10.40	33.70	10.07	10.07	27.45	22.09	26.13	27.25	21.85	22.59
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.27	7.52	7.84	8.23	2.83	2.87	0.62	0.11	5.75	0.92	0.14	0.42
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

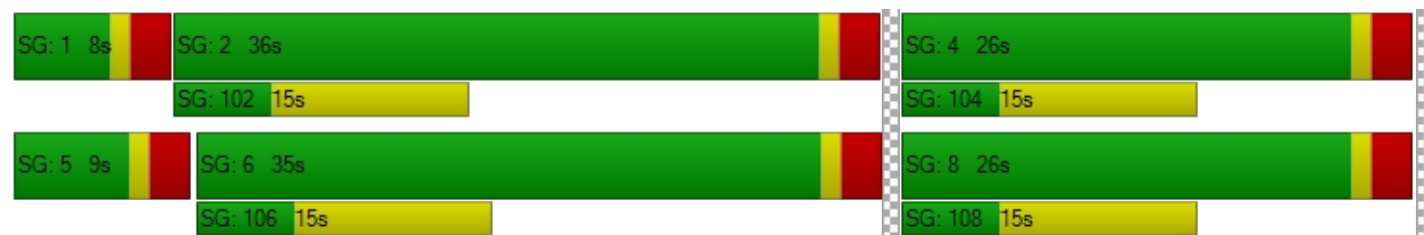
X, volume / capacity	0.78	0.84	0.84	0.49	0.62	0.62	0.31	0.17	0.84	0.43	0.12	0.27
d, Delay for Lane Group [s/veh]	40.81	17.84	18.24	41.92	12.90	12.94	28.07	22.19	31.87	28.18	21.98	23.01
Lane Group LOS	D	B	B	D	B	B	C	C	C	C	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	No	No	No
50th-Percentile Queue Length [veh/ln]	2.00	9.01	9.15	0.42	5.15	5.11	1.38	0.81	4.74	1.90	0.55	1.08
50th-Percentile Queue Length [ft/ln]	49.95	225.33	228.66	10.54	128.65	127.73	34.49	20.21	118.48	47.42	13.83	27.02
95th-Percentile Queue Length [veh/ln]	3.60	13.94	14.11	0.76	8.87	8.82	2.48	1.45	8.31	3.41	1.00	1.95
95th-Percentile Queue Length [ft/ln]	89.92	348.42	352.65	18.97	221.66	220.41	62.08	36.37	207.74	85.35	24.89	48.64

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	40.81	18.04	18.24	41.92	12.92	12.94	28.07	22.19	31.87	28.18	21.98	23.01
Movement LOS	D	B	B	D	B	B	C	C	C	C	C	C
d_A, Approach Delay [s/veh]	19.31			13.41			28.73			25.40		
Approach LOS	B			B			C			C		
d_I, Intersection Delay [s/veh]	19.04											
Intersection LOS	B											
Intersection V/C	0.768											

**Sequence**

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



## The Cactus Avenue Cannabis Facility

Vistro File: C:\...\IPM.vistro

Scenario 6 Year 2045 With Project

Report File: C:\...\IPMFyp.pdf

7/17/2024

## Turning Movement Volume: Detail

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	Koala Road (NS) at Rancho Road (EW)	Final Base	0	137	176	96	92	27	0	0	0	58	3	48	637
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	37	0	0	0	0	0	0	15	0	0	52
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>0</b>	<b>137</b>	<b>213</b>	<b>96</b>	<b>92</b>	<b>27</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>73</b>	<b>3</b>	<b>48</b>	<b>689</b>

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	Bellflower Street (NS) at Rancho Road (EW)	Final Base	21	70	34	11	108	17	21	340	184	44	92	32	974
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	1	0	0	0	0	1	2	33	2	0	13	0	52
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>22</b>	<b>70</b>	<b>34</b>	<b>11</b>	<b>108</b>	<b>18</b>	<b>23</b>	<b>373</b>	<b>186</b>	<b>44</b>	<b>105</b>	<b>32</b>	<b>1026</b>

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3	Highway 395 (NS) at Rancho Road (EW)	Final Base	103	1806	36	21	1193	29	75	123	263	133	46	88	3916
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	6	0	0	0	0	6	15	2	16	0	1	0	46
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>109</b>	<b>1806</b>	<b>36</b>	<b>21</b>	<b>1193</b>	<b>35</b>	<b>90</b>	<b>125</b>	<b>279</b>	<b>133</b>	<b>47</b>	<b>88</b>	<b>3962</b>

Traffic Volume - Future Total Volume

