



**TTM 16397**

**TRAFFIC IMPACT ANALYSIS**

**July 7, 2020**

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## **I. EXECUTIVE SUMMARY**

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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 TTM 16397 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 Victorville 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 existing plus project, the anticipated opening date with full occupancy of the development in Year 2022 at which time it will be generating trips at its full potential, and for the Year 2040.

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. Analysis Methodology**

A series of scoping discussions were conducted with the City of Victorville to define the desired analysis locations for each future analysis year.

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 (2019)
- Existing Plus Project Conditions
- Opening Year Conditions (2022)
- Horizon Year Conditions (2040)

The roadway elements that must be analyzed are dependent on both the analysis year and project generated trips. The identification of the study area, and the intersections and highway segments requiring analysis, was based on an estimate of the two-way traffic volumes on the roadway segments near the project site. All arterial segments have been included in the analysis when the anticipated project volume equals or exceeds 50 two-way trips in the peak hours. The requirement is 100 two-way peak hour trips for freeways.

The project does not contribute trips greater than the freeway threshold volume of 100 two-way peak hour trips. The project does not contribute trips greater than the arterial link threshold volume of 50 two-way trips in the peak hours on intersections outside the City of San Bernardino.

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

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

1. Definition of Deficiency

The definition of an intersection deficiency has been obtained from the City of Victorville 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 to F will be considered deficient.

2. Definition of Significant Impact

The identification of significant impacts is a requirement of the California Environmental Quality Act. The City of Victorville General Plan and Circulation Element have been adopted in accordance with California Environmental Quality Act requirements, and any roadway improvements within the City of Victorville 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 Victorville General Plan cannot be constructed.

**C. Project Description**

The proposed development is located in the southwest corner of Mesa View Drive and Dos Palmas Road in the City of Victorville. A vicinity map showing the project location is provided on Figure 1.

The project site is proposed to be developed 320 single-family residential dwelling units. The project site is proposed to provide access to Bellflower Street, Mesa View Drive, and Dos Palmas Road. Figure 2 illustrates the project site plan.

**D. Existing Conditions**

The study area intersections currently operate at acceptable Levels of Service during the peak hours for existing traffic conditions.

**E. Project Traffic**

Project traffic volumes for all future projections were estimated using the manual approach. Project trip generation based upon rates obtained from the Institute of Transportation Engineers, Trip Generation, 10th Edition, 2017.

The proposed development is projected to generate approximately 3,021 daily vehicle trips, 237 of which will occur during the morning peak hour and 317 of which will occur during the evening peak hour.

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.

#### **F. Future Conditions**

Based on discussions with the City of Victorville staff, future volumes for both Opening Year (2022) and Year 2040 have been calculated using straight line growth based on a 2% annual growth rate over existing and proposed other development within the study area.

The study area intersections are projected to operate at acceptable Levels of Service during the peak hours for existing plus project traffic conditions (see Table 3).

The study area intersections are projected to operate at acceptable Levels of Service during the peak hours for Opening Year (2022) without project traffic conditions (see Table 5).

The study area intersections are projected to operate at acceptable Levels of Service during the peak hours for Opening Year (2022) with project traffic conditions (see Table 6).

The following study area intersections are projected to operate at unacceptable Levels of Service during the peak hours for Year 2040 without project traffic conditions (see Table 7).

US-395 (NS) at:  
Palmdale Road (EW) - #3  
Dos Palmas Road (EW) - #4  
Luna Road (EW) - #5

The following study area intersections are projected to operate at unacceptable Levels of Service during the peak hours for Year 2040 with project traffic conditions (see Table 8).

US-395 (NS) at:  
Palmdale Road (EW) - #3  
Dos Palmas Road (EW) - #4  
Luna Road (EW) - #5

#### **G. Recommendations**

The recommendations in this section address on-site improvements, off-site improvements and the phasing of all necessary study area transportation improvements.



1. On-Site Improvements

On-site improvements and improvements adjacent to the site will be required in conjunction with the proposed development to ensure adequate circulation within the project itself (see Figure 3).

The project site should provide sufficient parking spaces to meet City of Victorville 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 the project accesses should be reviewed with respect to California Department of Transportation/City of Victorville 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 Victorville should periodically review traffic operations in the vicinity of the project once the project is constructed to see if traffic operations are satisfactory.

Figure 1  
Project Location Map

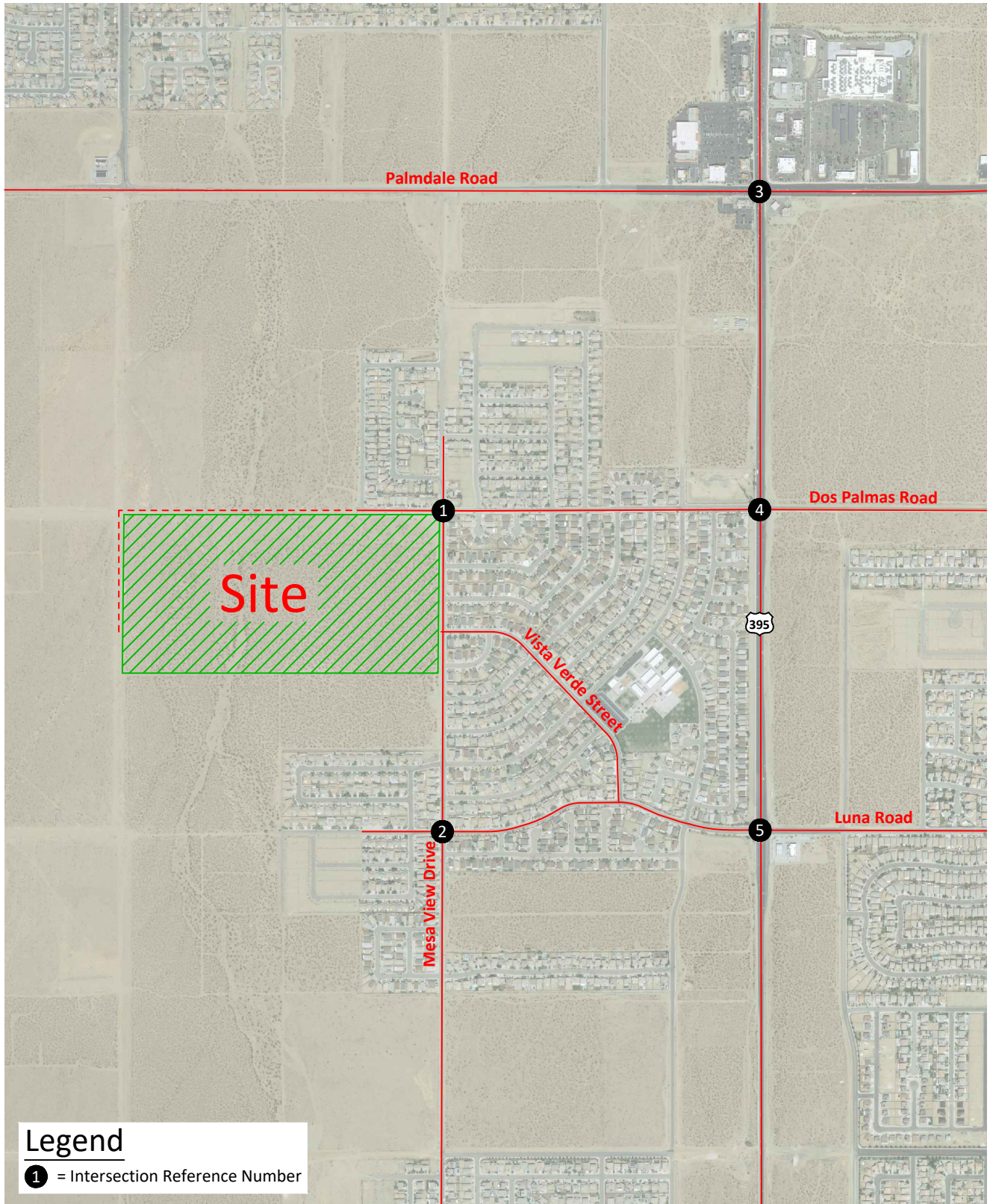


Figure 2  
Site Plan

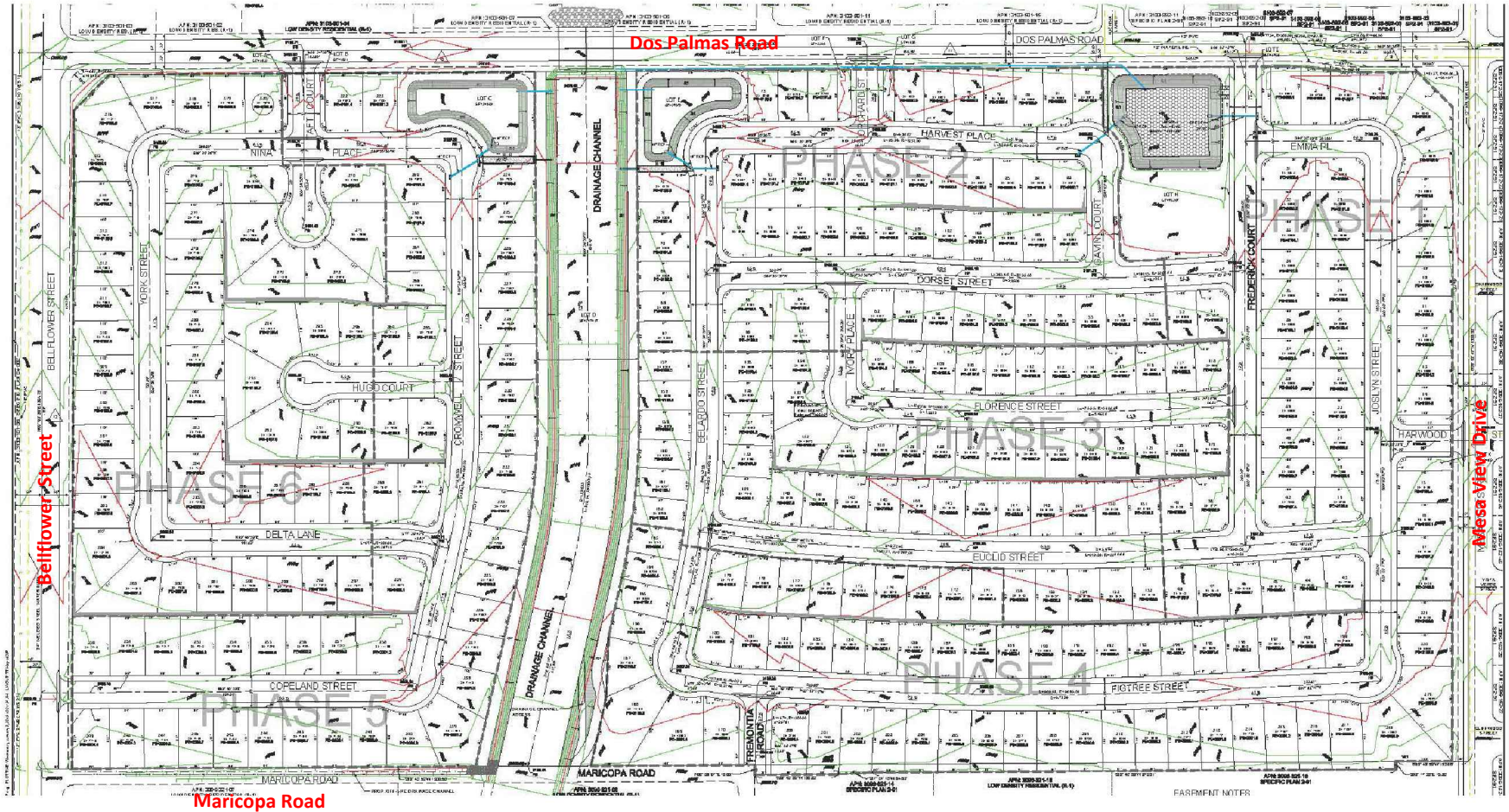
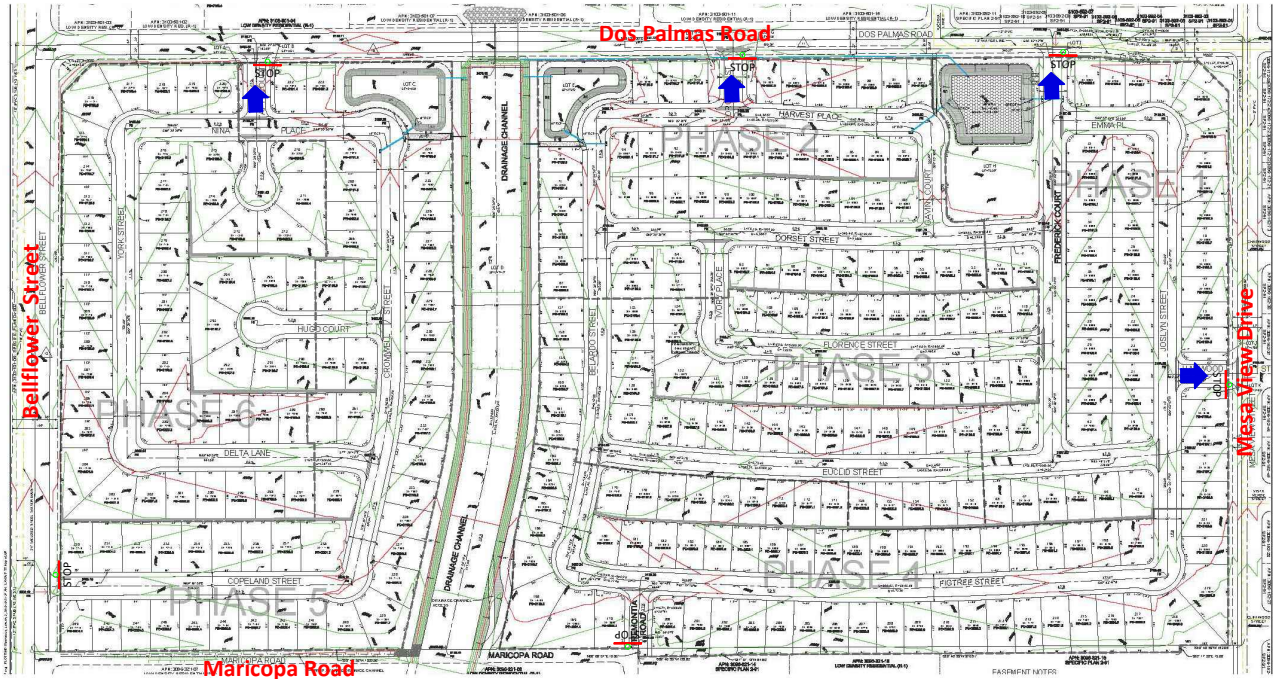


Figure 3  
Circulation Recommendations



On-site improvements and improvements adjacent to the site will be required in conjunction with the proposed development to ensure adequate circulation within the project itself (see Figure 3).

The project site should provide sufficient parking spaces to meet City of Victorville 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 the project accesses should be reviewed with respect to California Department of Transportation/City of Victorville 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 Victorville should periodically review traffic operations in the vicinity of the project once the project is constructed to see if traffic operations are satisfactory.

## Legend

-  = Stop Sign
-  = Full Access Driveway

## **II. EXISTING CONDITIONS**

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

Figure 4 identifies the existing conditions for study area roadways. The number of through lanes for existing roadways and the existing intersection controls are identified.

Local access is provided by various roadways in the vicinity of the site. The north-south roadways which will be most affected by the project are Mesa View Drive, Vista Verde Street, and US-395. The east-west roadways which will be most affected by the project are Palmdale Road, Dos Palmas Road, Vista Verde Street, and Luna Road.

### **B. Existing Volumes**

Figure 5 depicts the existing average daily traffic volumes. The existing average daily traffic volumes were factored from peak hour counts (see Appendix C) 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 overestimate the average daily traffic volumes.

Existing intersection traffic conditions were established through morning and evening peak hour traffic counts obtained by Kunzman Associates from June 2019 (see Appendix C). It is important to note that these traffic counts were conducted prior to the panic and restrictions imposed on the general public because of the COVID-19 pandemic. Appendix D includes morning and evening vehicle turning movement diagrams. 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 technique used to assess the capacity needs of an intersection is known as the Intersection Delay Method (see Appendix D) 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:

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

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 (see Appendix C).

The existing delay and Level of Service for intersections 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 D.

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

The City of Victorville General Plan Circulation Element is shown on Figure 6. The City of Victorville General Plan roadway cross-sections are illustrated on Figure 7.

**E. Transit Service**

The study area is currently served by Victor Valley Transit Routes 31, 33, and 54 along Mesa View Drive, US-395, Palmdale Road, Palmdale Road, Dos Palmas Road, and Luna Road. The existing bus routes provided within the study area are shown on Figure 8.

**F. Bicycle Facilities**

The City of Victorville General Plan Trail System is illustrated on Figure 9. The City of Victorville General Plan Bikeway System is illustrated on Figure 10.

**G. Pedestrian Facilities**

Existing pedestrian facilities are illustrated on Figure 11.

**Table 1**

**Existing Intersection Delay and Level of Service**

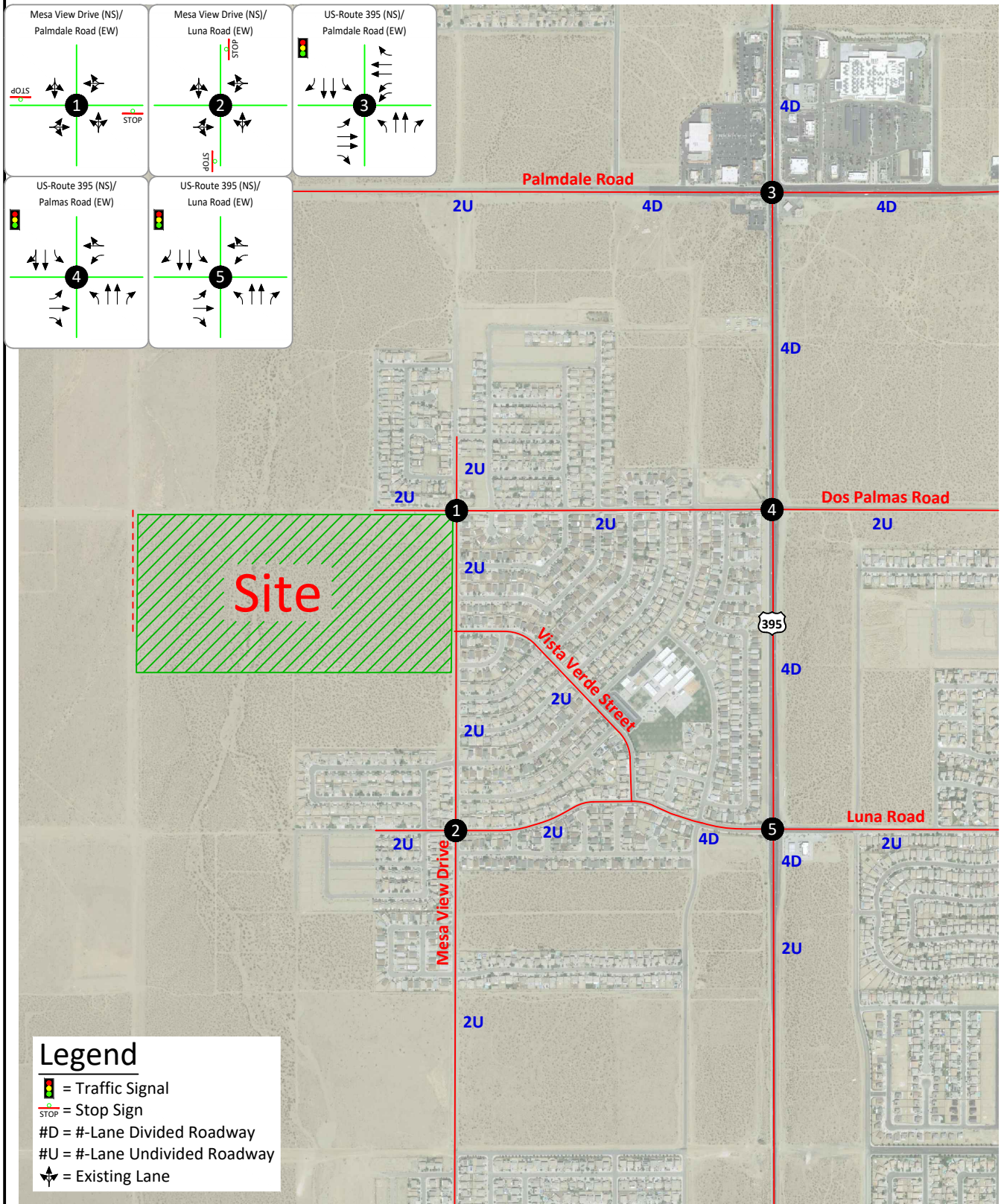
| Intersection              | Jurisdiction  | Traffic Control <sup>3</sup> | Intersection Approach Lanes <sup>1</sup> |     |   |            |     |     |           |     |   |           |     |     | Peak Hour Delay-LOS <sup>2</sup> |         |
|---------------------------|---|------------------------------|--|-----|---|------------|-----|-----|-----------|-----|---|-----------|-----|-----|----------------------------------|---------|
|                           |   |                              | Northbound                               |     |   | Southbound |     |     | Eastbound |     |   | Westbound |     |     | Morning                          | Evening |
|                           |   |                              | L  | T   | R | L          | T   | R   | L         | T   | R | L         | T   | R   |                                  |         |
| Mesa View Drive (NS) at:  |   |                              |  |     |   |            |     |     |           |     |   |           |     |     |                                  |         |
| Dos Palmas Road (EW) - #1 | City of Victorville   | CSS                          | 0  | <1> | 0 | 0          | <1> | 0   | 0         | <1> | 0 | 0         | <1> | 0   | A                                | B       |
| Luna Road (EW) - #2       | City of Victorville   | CSS                          | 0  | <1> | 0 | 0          | <1> | 0   | 0         | <1> | 0 | 0         | <1> | 0   | A                                | B       |
| US-Route 395 (NS) at:     |   |                              |  |     |   |            |     |     |           |     |   |           |     |     |                                  |         |
| Palmdale Road (EW) - #3   | California Department of Transportation/City of Victorville | TS                           | 1  | 2   | 1 | 1          | 2   | 1   | 1         | 2   | 1 | 2         | 2   | 1   | C                                | D       |
| Dos Palmas Road (EW) - #4 | California Department of Transportation/City of Victorville | TS                           | 1  | 2   | 1 | 1          | 1.5 | 0.5 | 1         | 1   | 1 | 1         | 0.5 | 0.5 | B                                | B       |
| Luna Road (EW) - #5       | California Department of Transportation/City of Victorville | TS                           | 1  | 2   | 1 | 1          | 2   | 1   | 1         | 1   | 1 | 1         | 0.5 | 0.5 | C                                | D       |

<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

<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> CSS = Cross Street Stop; TS = Traffic Signal

Figure 4  
Existing Through Travel Lanes and Intersection Controls



**Legend**




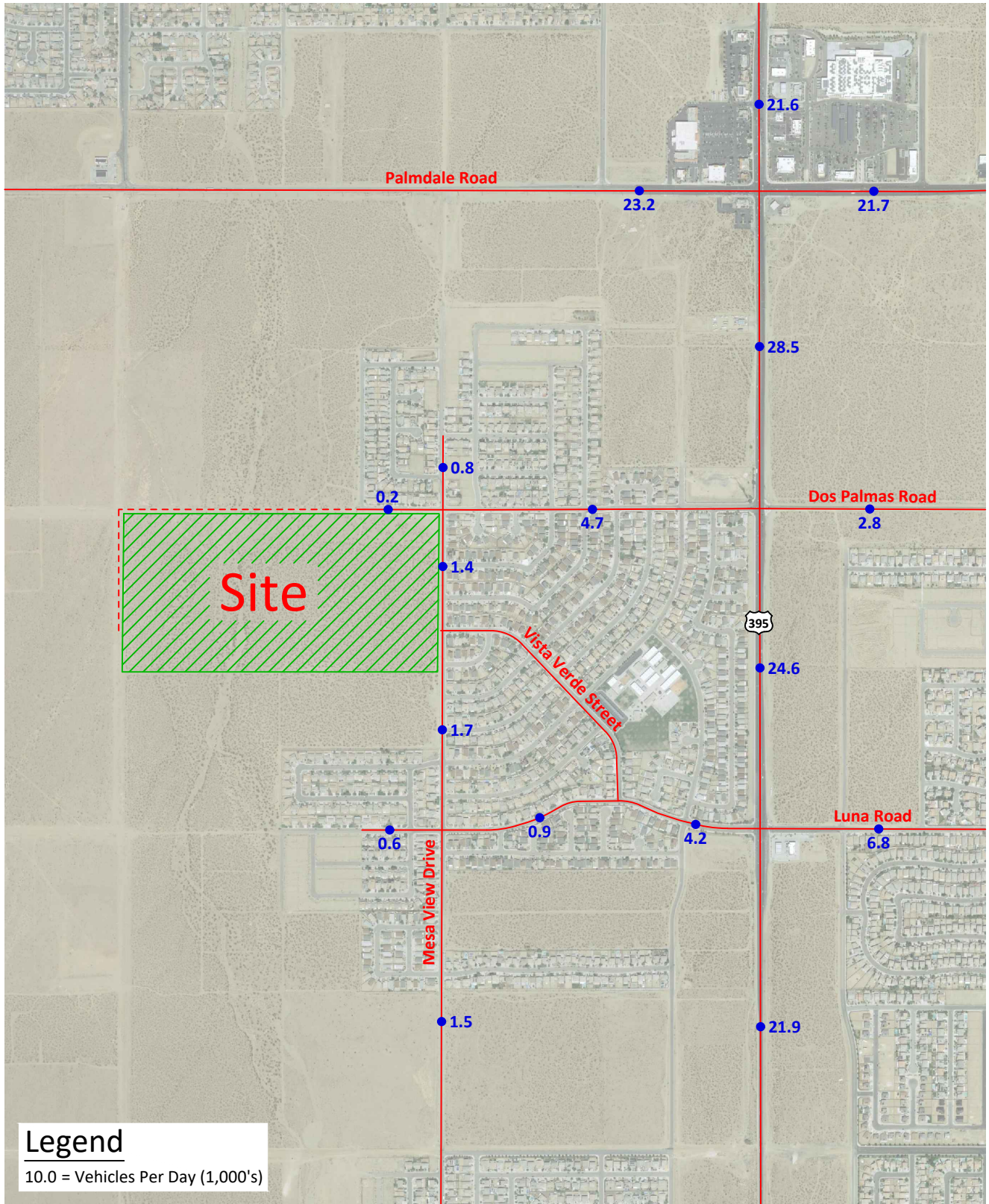
-  = Traffic Signal
-  = Stop Sign
- #D = #-Lane Divided Roadway
- #U = #-Lane Undivided Roadway
-  = Existing Lane





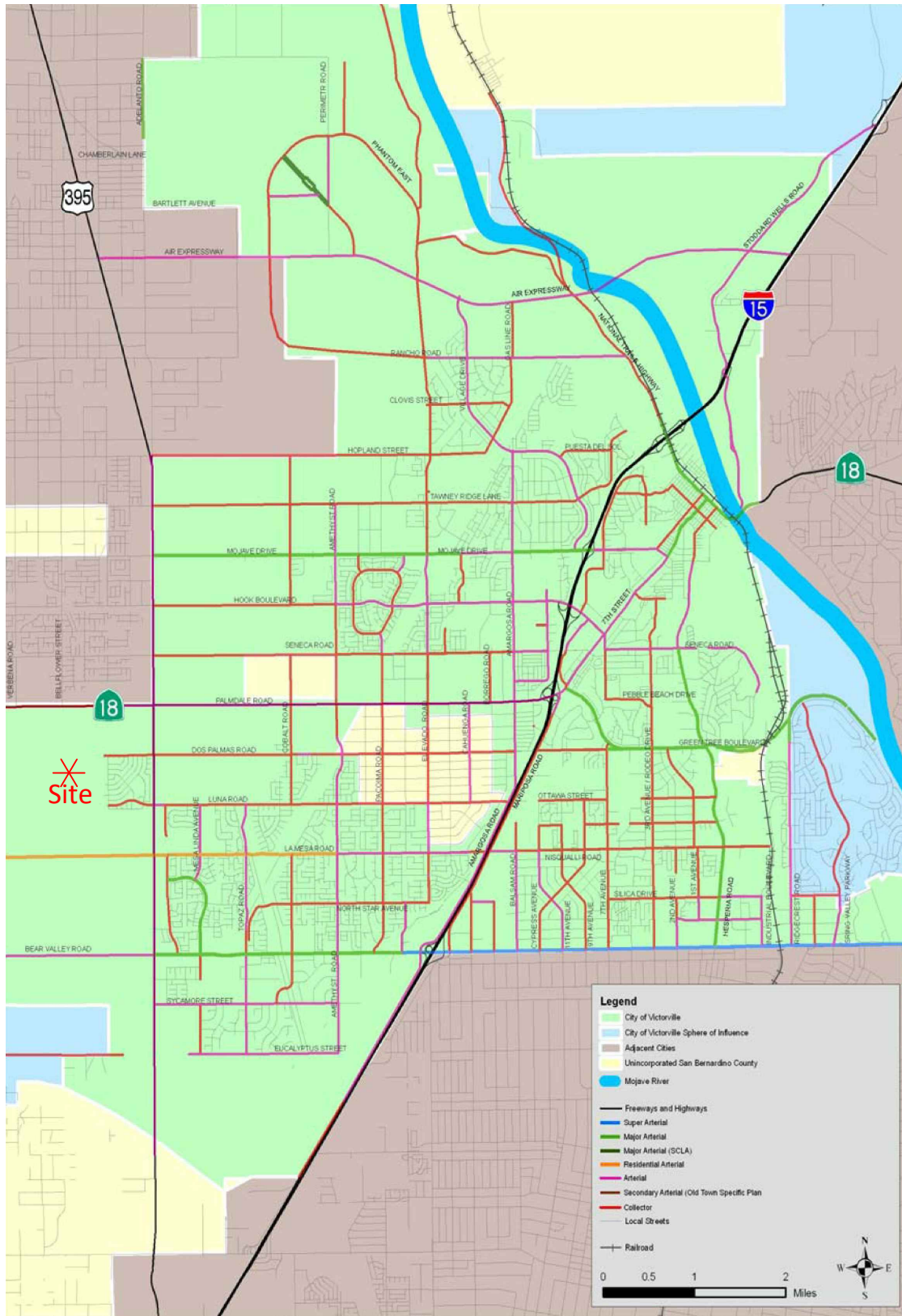
Figure 5  
Existing Average Daily Traffic Volumes



**Legend**  
10.0 = Vehicles Per Day (1,000's)



Figure 6  
 City of Victorville General Plan Circulation Element



# Figure 7 City of Victorville General Plan Roadway Cross-Sections

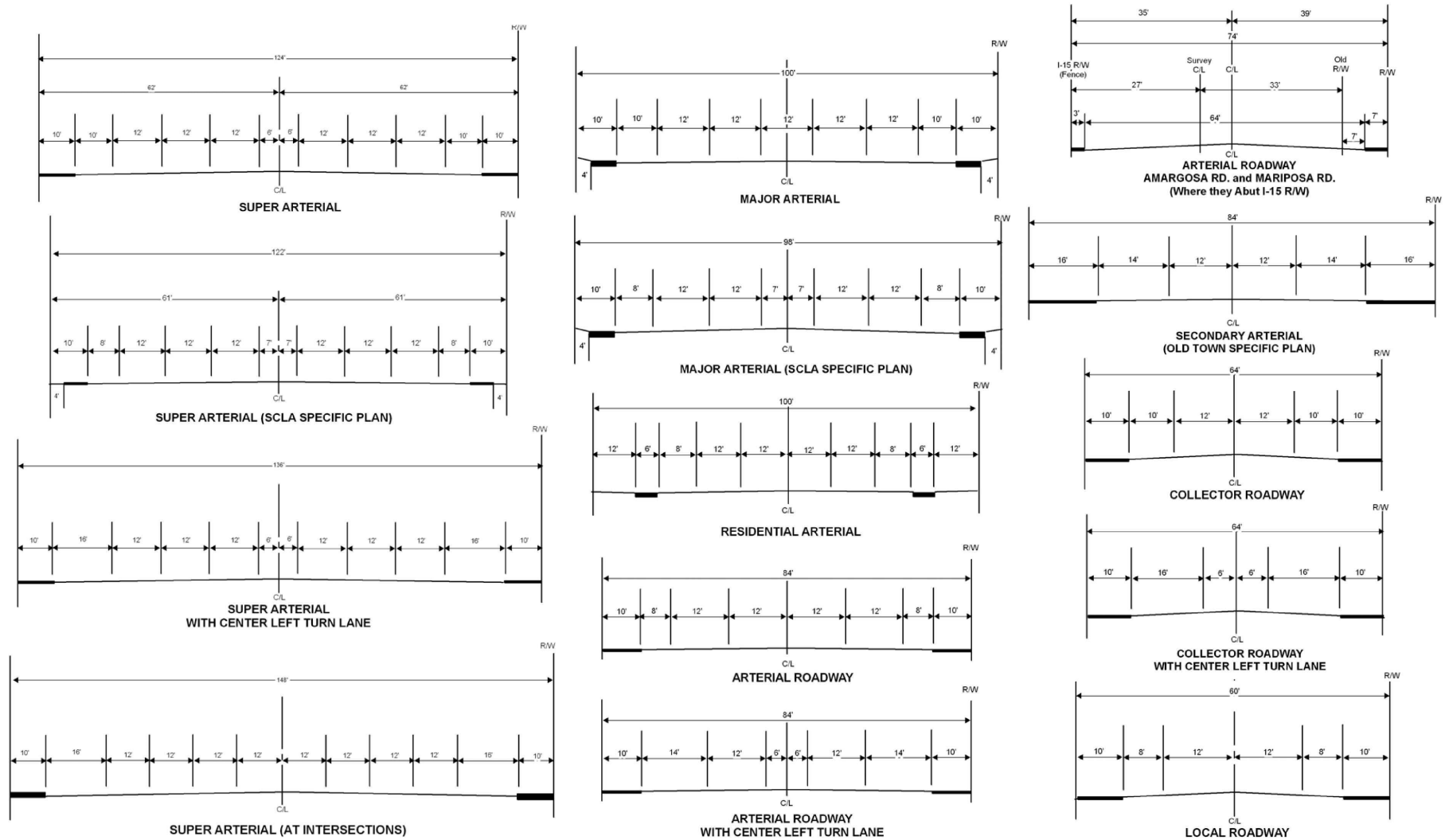
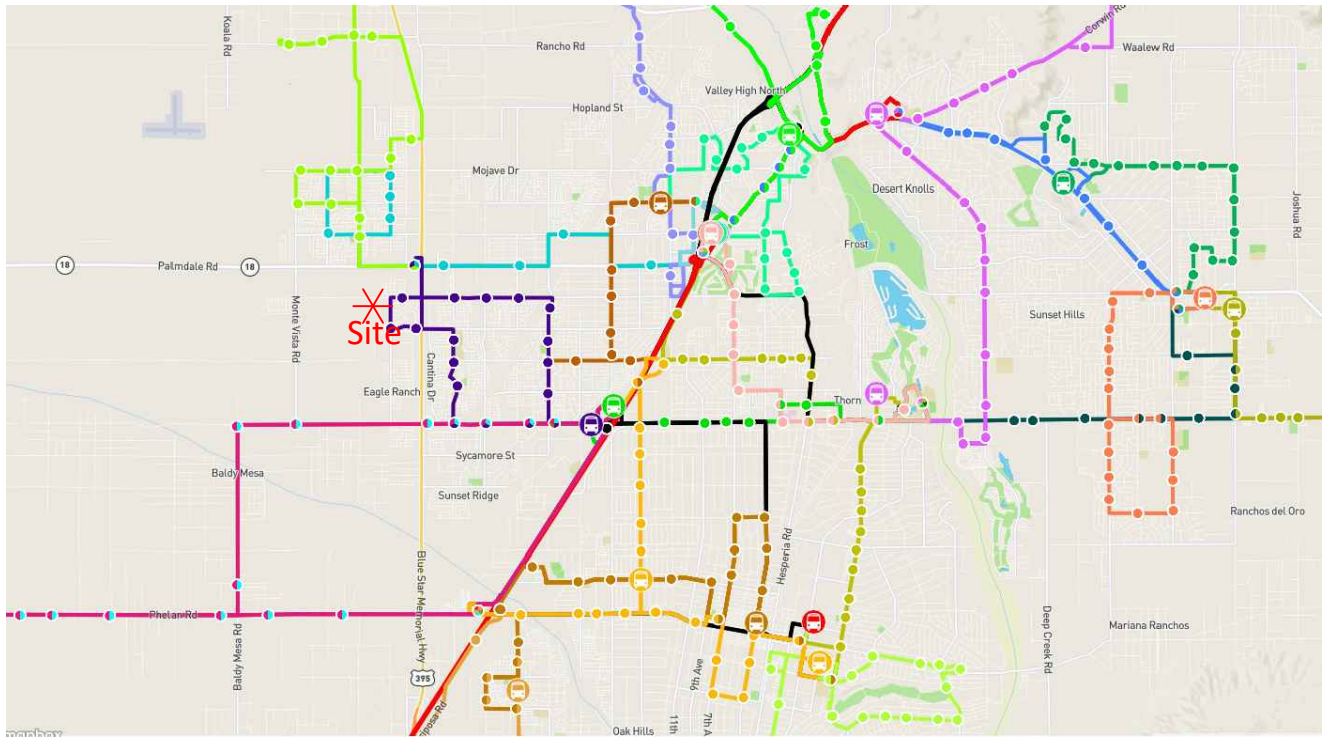


Figure 8  
City of Victorville Transit Routes



Legend

|  |  |  |
|--|--|--|
| 1: Central Barstow<br><a href="#">see schedule</a>                     | 31: Victorville - Adelanto South<br><a href="#">see schedule</a>                     |  |
| 2: Barstow Library - Barstow College<br><a href="#">see schedule</a>   | 32: Victorville - Adelanto North<br><a href="#">see schedule</a>                     | 52: Lorene-7th - Victor Valley Mall<br><a href="#">see schedule</a>            |
| 3: Barstow Library - Lenwood<br><a href="#">see schedule</a>           | 33: Adelanto Circulator<br><a href="#">see schedule</a>                              | 53: Victor Valley Mall - Victor Valley College<br><a href="#">see schedule</a> |
| 6: Barstow Library - College<br><a href="#">see schedule</a>           | 40: Apple Valley North Deviation<br><a href="#">see schedule</a>                     | 54: Hwy 395-Palmdale - Victor Valley Mall<br><a href="#">see schedule</a>      |
| 15: B-V Link<br><a href="#">see schedule</a>                           | 41: Lorene-7th - Apple Valley Post Office<br><a href="#">see schedule</a>            | 55: Lorene-7th - Victor Valley College<br><a href="#">see schedule</a>         |
| 21P: Victor Valley Mall - Pinon Hills<br><a href="#">see schedule</a>  | 42: Apple Valley Road<br><a href="#">see schedule</a>                                | 64: Super Target - Hesperia Post Office<br><a href="#">see schedule</a>        |
| 21W: Victor Valley Mall - Wrightwood<br><a href="#">see schedule</a>   | 43: Apple Valley Post Office - Victor Valley College<br><a href="#">see schedule</a> | 66: Hesperia East Deviation<br><a href="#">see schedule</a>                    |
| 22: Victorville - Helendale<br><a href="#">see schedule</a>            | 47: Apple Valley South Deviation<br><a href="#">see schedule</a>                     | 68: Hesperia - Victor Valley Mall<br><a href="#">see schedule</a>              |
| 23: Apple Valley - Lucerne Valley<br><a href="#">see schedule</a>      | 50: Victorville - Hesperia Post Office<br><a href="#">see schedule</a>               | 200: Needles Link<br><a href="#">see schedule</a>                              |
| 25: Oak Hills to Hesperia Super Target<br><a href="#">see schedule</a> | 50X: Express VV to VVC<br><a href="#">see schedule</a>                               | Barstow to NTC   |
| 28: Barstow - Hinkley - Helendale<br><a href="#">see schedule</a>      | 51: Lorene-7th - Victor Valley Hospital<br><a href="#">see schedule</a>              | Hesperia/Victorville to NTC  |
| 29: Newberry Springs - Barstow<br><a href="#">see schedule</a>         |  |  |

Figure 9  
 City of Victorville General Plan Bikeway System

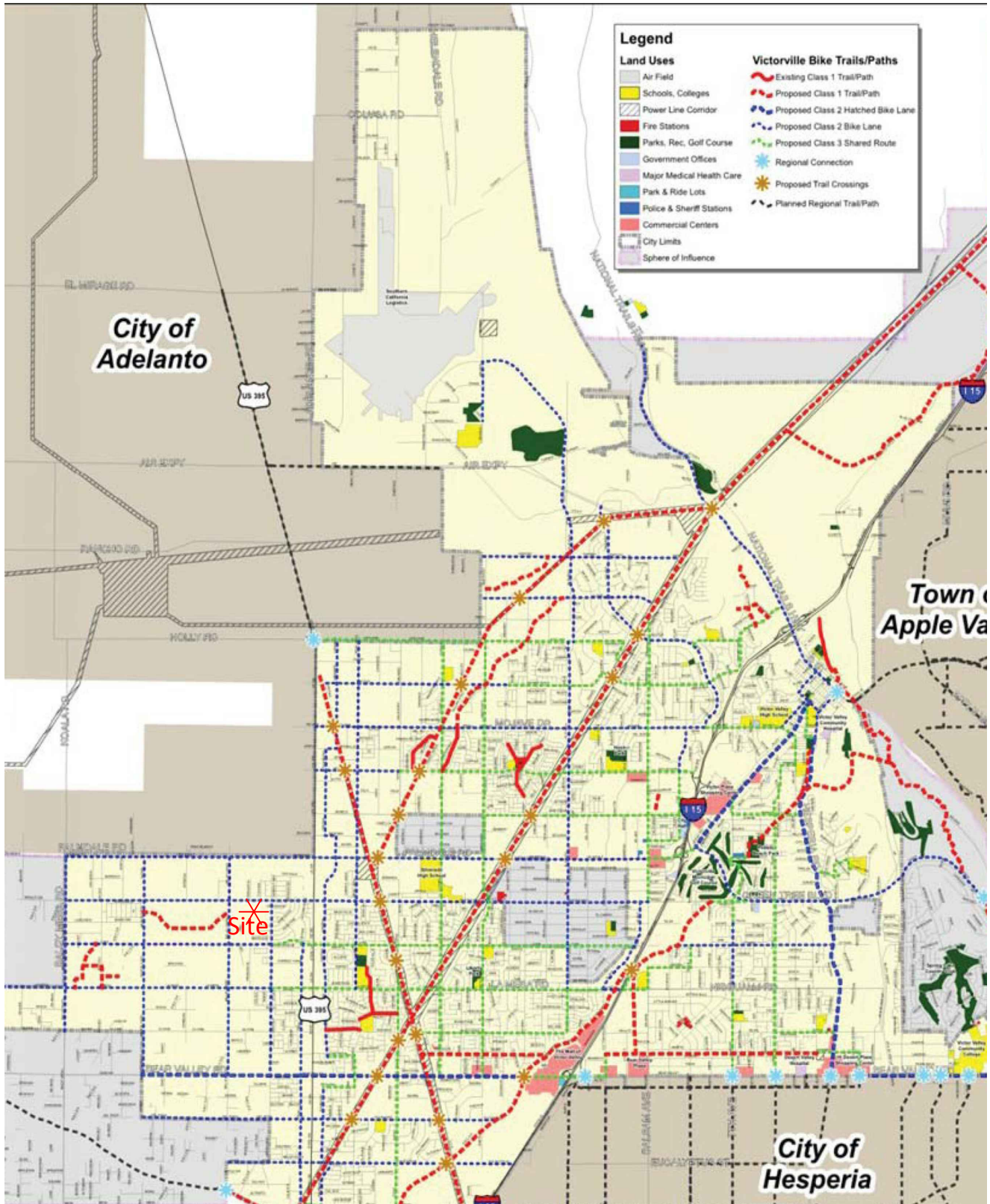


Figure 10  
 City of Victorville General Plan Bikeway System

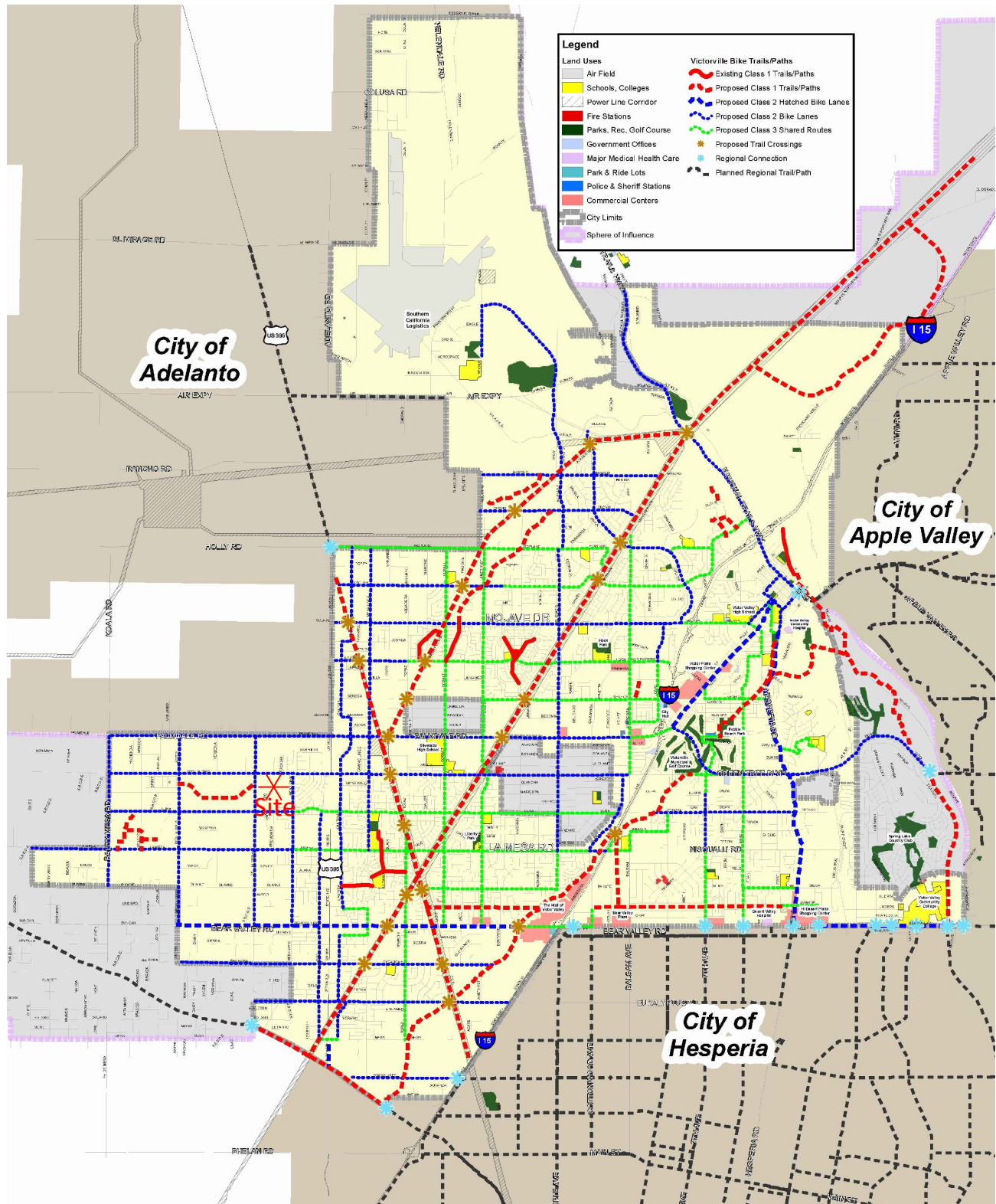
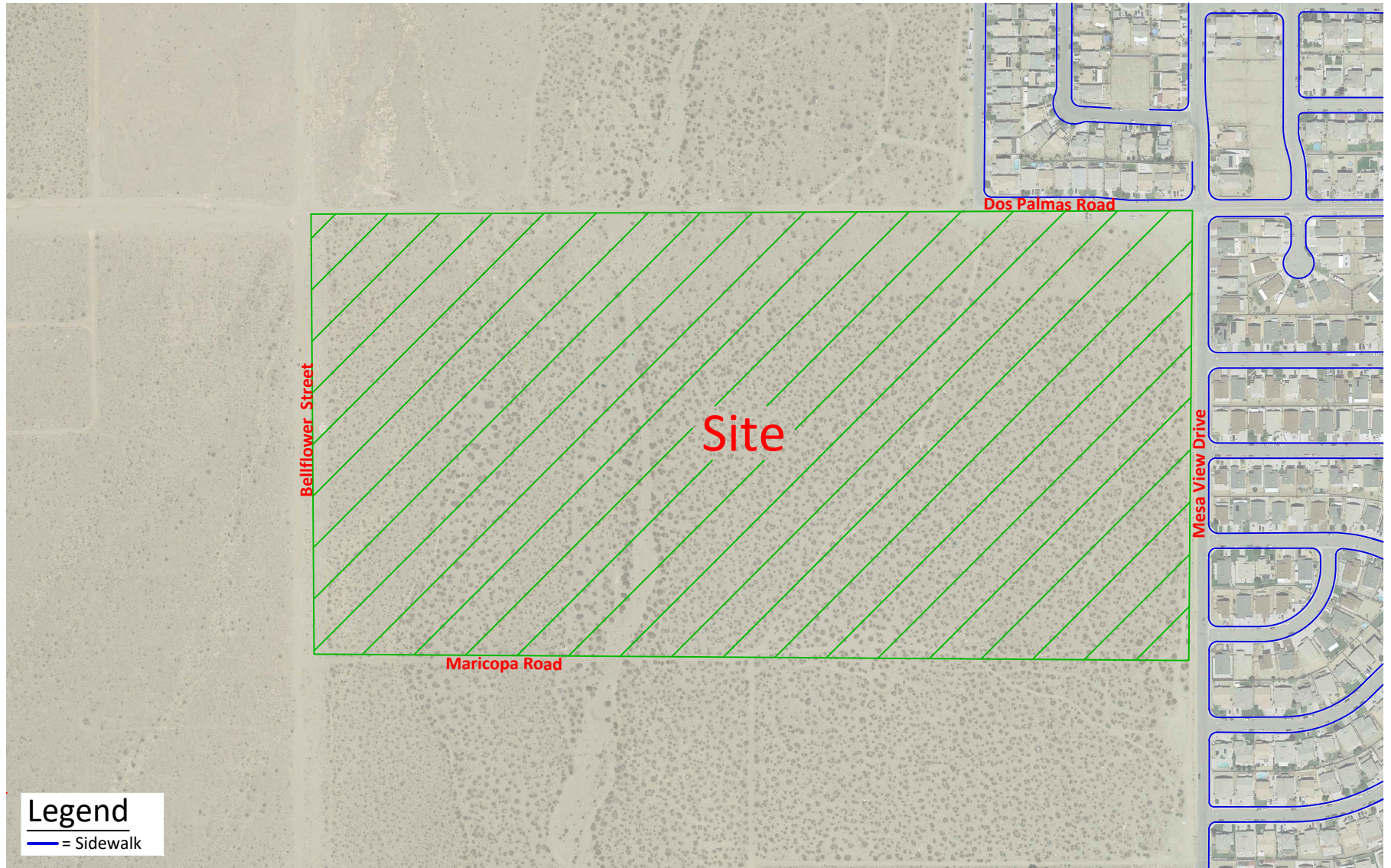


Figure 11  
Existing Pedestrian Facilities



### **III. PROJECT TRIPS**

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

The proposed development is located in the southwest corner of Mesa View Drive and Dos Palmas Road in the City of Victorville. The project site is proposed to be developed 320 single-family residential dwelling units. The project site is proposed to provide access to Bellflower Street, Mesa View Drive, and Dos Palmas Road.

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

The traffic generated by the project is determined by multiplying an appropriate trip generation rate by the quantity of land use. Trip generation rates are predicated on the assumption that energy costs, the availability of roadway capacity, the availability of vehicles to drive, and our life styles remain similar to what we know 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 traffic generation rates by the land use quantities, the traffic volumes are determined.

Table 2 shows the project trip generation based upon rates obtained from the Institute of Transportation Engineers, Trip Generation, 10th Edition, 2017. As shown in Table 2, the proposed development is projected to generate a total of approximately 3,021 daily vehicle trips, 237 which will occur during the morning peak hour and 317 of which will occur during the evening peak hour.

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

Figure 12 contain the directional distributions of the project trips for the proposed land use. 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 13.

#### **E. Traffic Contribution Test**

No analysis is required further than 5 miles from the project site per the San Bernardino County Congestion Management Program. The roadway elements that must be analyzed are dependent on both the analysis year (project Opening Year or Year 2040) and project generated trips. The identification of the study area, and the intersections and highway segments requiring analysis, was based on an estimate of the two-way traffic volumes on the roadway segments near the project site. All arterial segments have been included in the analysis when the anticipated project



volume equals or exceeds 50 two-way trips in the peak hours. The requirement is 100 two-way peak hour trips for freeways. Figure 14 graphically depicts the project traffic contribution test volumes on all of the roadway segments adjacent to the potential intersection analysis locations until the project volume contribution has clearly dropped below the 50 trip threshold.

The project does not contribute trips greater than the freeway threshold volume of 100 two-way peak hour trips. The project does not contribute trips greater than the arterial link threshold volume of 50 two-way trips in the peak hours on intersections outside of the City of San Bernardino.

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

| Land Use                       | Quantity | Units <sup>2</sup> | Peak Hour |          |       |         |          |       | Daily |
|--------------------------------|----------|--------------------|-----------|----------|-------|---------|----------|-------|-------|
|                                |          |                    | Morning   |          |       | Evening |          |       |       |
|                                |          |                    | Inbound   | Outbound | Total | Inbound | Outbound | Total |       |
| <u>Trip Generation Rates</u>   |          |                    |           |          |       |         |          |       |       |
| Single-Family Detached Housing |          | DU                 | 0.18      | 0.56     | 0.74  | 0.63    | 0.36     | 0.99  | 9.44  |
| <u>Trips Generated</u>         |          |                    |           |          |       |         |          |       |       |
| Single-Family Detached Housing | 320      | DU                 | 58        | 179      | 237   | 202     | 115      | 317   | 3,021 |

<sup>1</sup> Source: Institute of Transportation Engineers, Trip Generation, 10th Edition, 2017, Land Use Category 210.

<sup>2</sup> DU = Dwelling Unit

Figure 12  
Project Trip Distribution

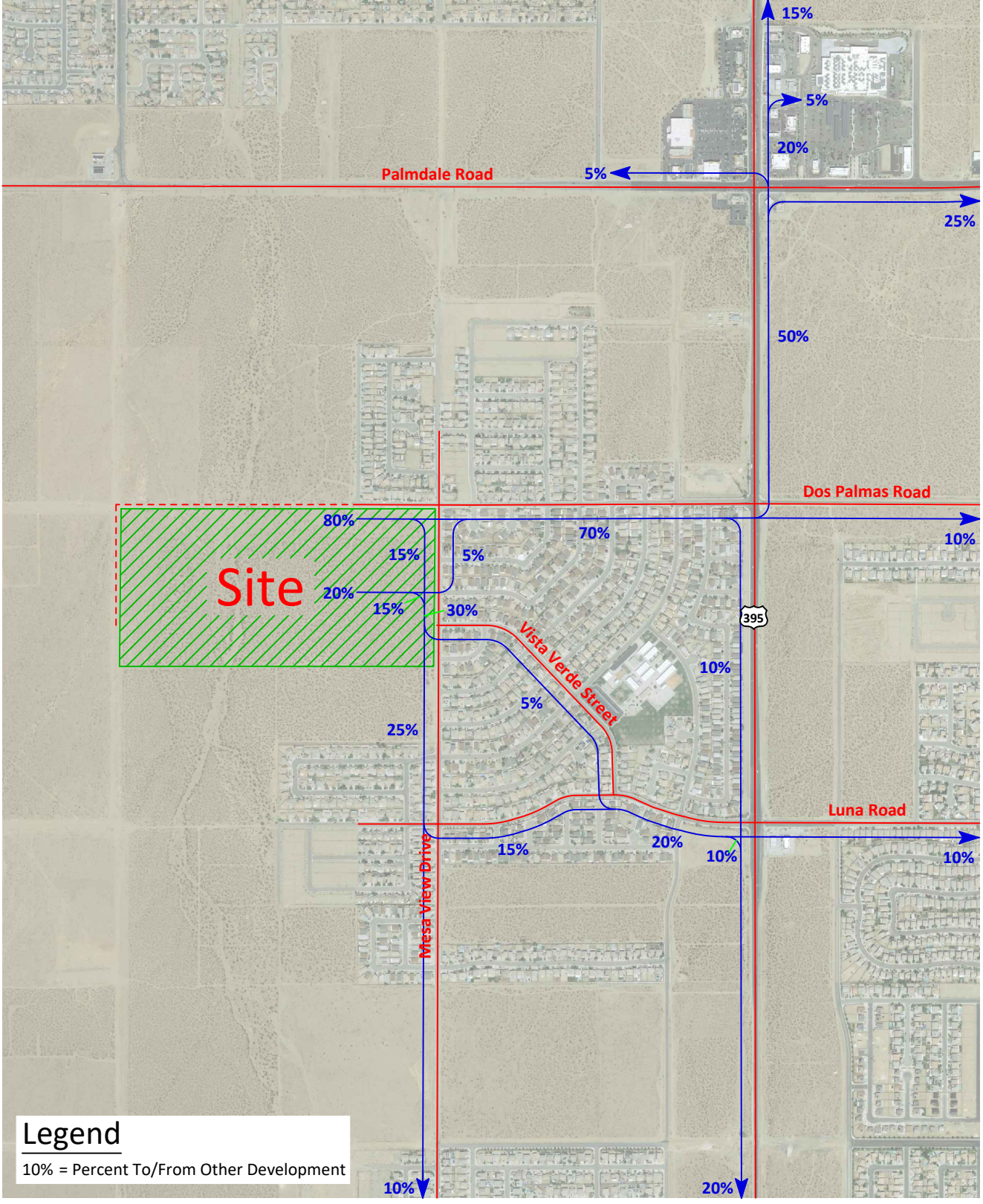


Figure 13  
Project Average Daily Traffic Volumes

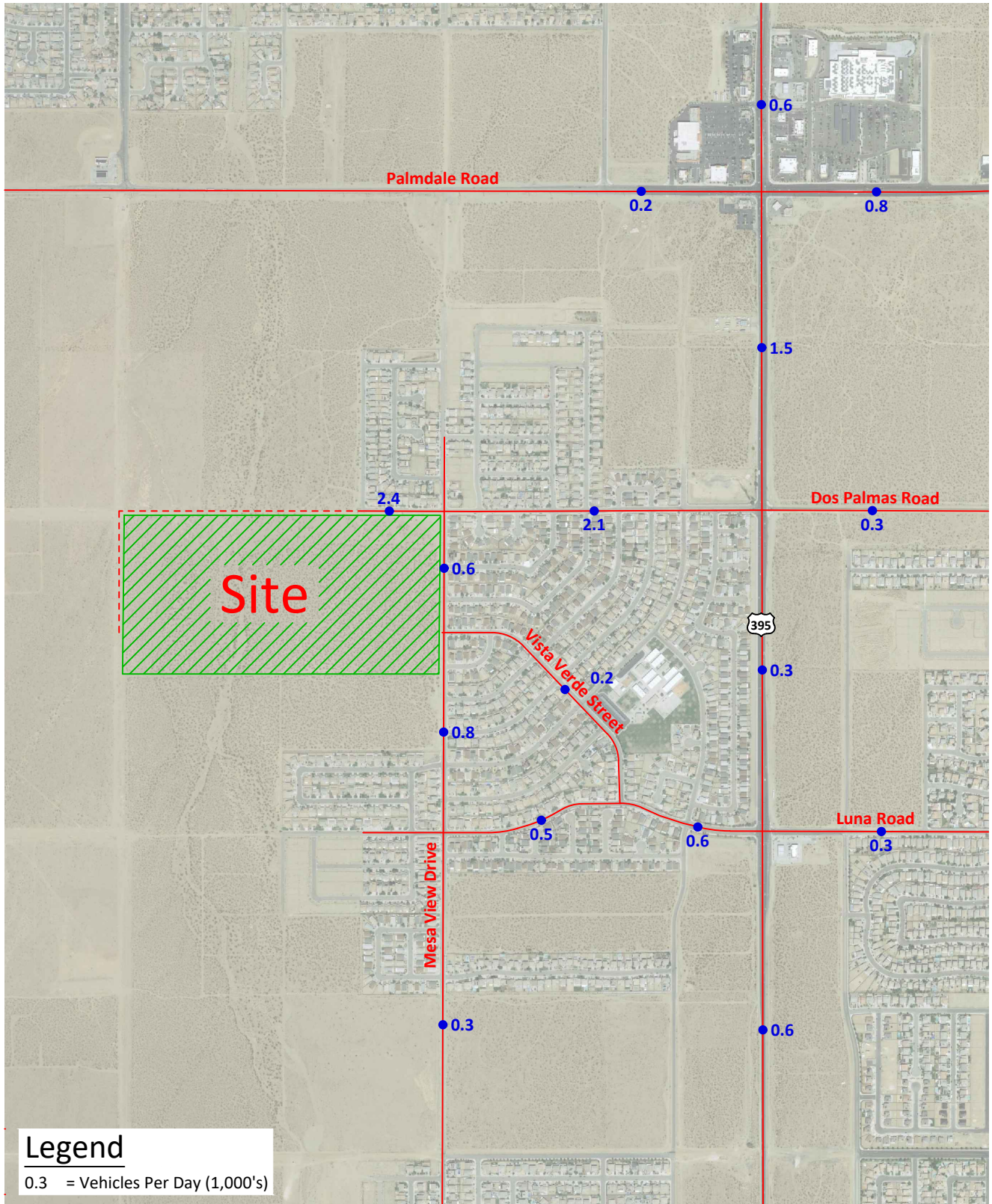
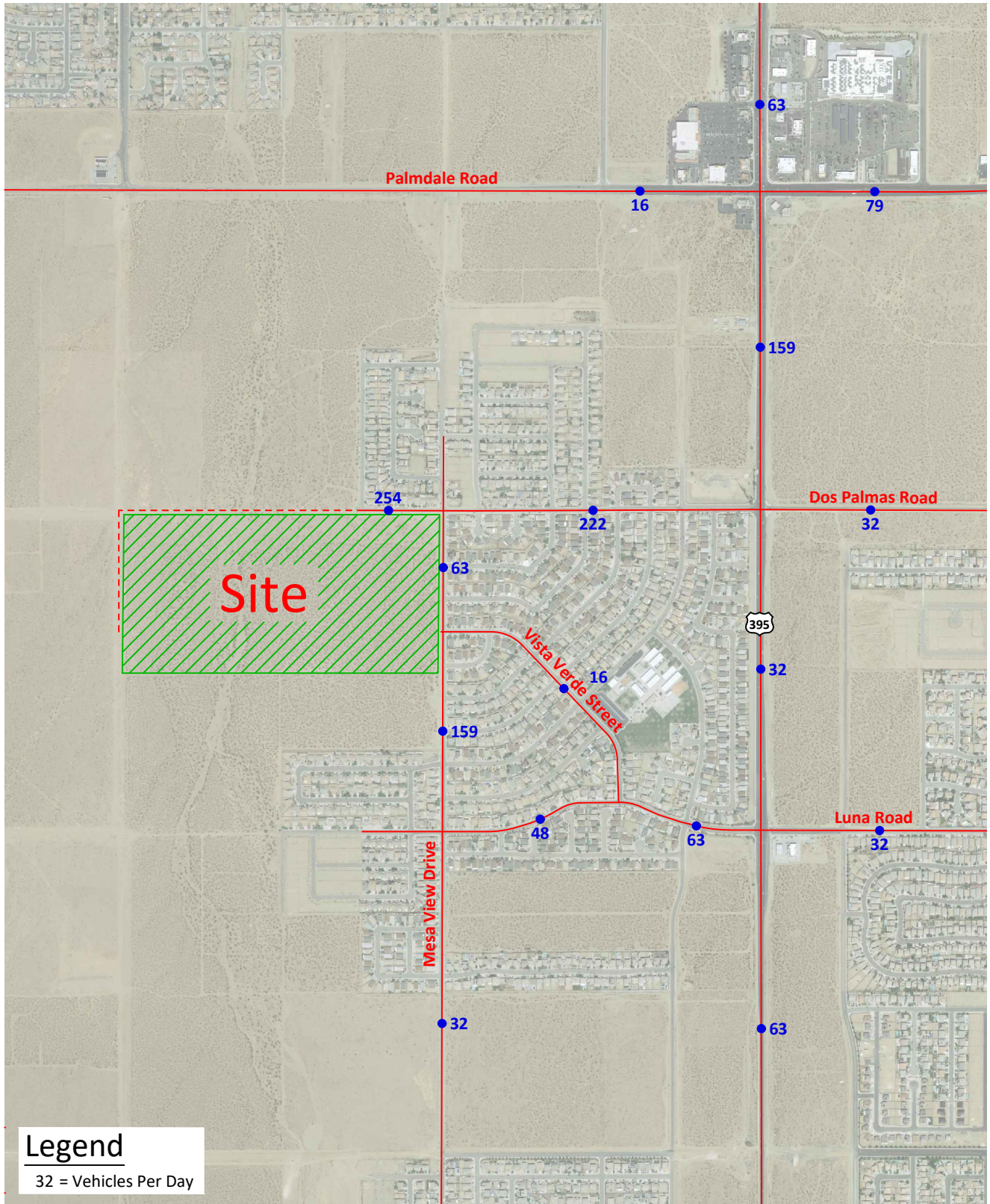


Figure 14  
Project Trip Contribution Test Volumes



## **IV. FUTURE CONDITIONS**

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### **A. Future Volumes**

Based on discussions with the City of Victorville staff, future volumes for both Opening Year (2022) and Year 2040 have been calculated using straight line growth based on a 2% annual growth rate over existing and proposed other development within the study area.

Table 3 provides the other development trip generation. Figure 15 provides the other development trip distribution. Other development average daily traffic volumes are shown on Figure 16.

#### 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 17. Appendix D includes morning and evening vehicle turning movement diagrams.

#### 2. Opening Year (2022) Without Project

The average daily traffic volumes for Opening Year (2022) without project traffic conditions have been determined by using the San Bernardino County Transportation Area Model. Opening Year (2022) without project average daily traffic volumes are shown on Figure 18. Appendix D includes morning and evening vehicle turning movement diagrams.

#### 3. Opening Year (2022) With Project

The average daily traffic volumes for Opening Year (2022) with project traffic conditions have been determined by adding project traffic to Opening Year (2020) without project conditions. Opening Year (2022) with project average daily traffic volumes are shown on Figure 19. Appendix D includes morning and evening vehicle turning movement diagrams.

#### 4. Year 2040 Without Project

The average daily traffic volumes for Year 2040 without project traffic conditions have been determined using the San Bernardino County Transportation Area Model. Year 2040 without project average daily traffic volumes are shown on Figure 20. Appendix D includes morning and evening vehicle turning movement diagrams.

#### 5. Year 2040 With Project

The average daily traffic volumes for Year 2040 with project traffic conditions have been determined by adding project traffic to Year 2040 without. Year 2040 with project average daily traffic volumes are shown on Figure 21.

Appendix D includes morning and evening vehicle turning movement diagrams.

## **B. 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 4. Table 4 shows delay values based on the geometrics at the study area intersections. Existing plus project delay calculation worksheets are provided in Appendix D. Existing plus project morning and evening peak hour intersection turning movement volumes are shown in Appendix D.

As shown in Table 4, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours for existing plus project traffic conditions.

### **2. Opening Year (2022) Without Project**

The Opening Year (2022) delay and Level of Service for the study area roadway network without the proposed project are shown in Table 5. Table 5 shows delay values based on the geometrics at the study area intersections. Opening Year (2022) without project delay calculation worksheets are provided in Appendix D. Opening Year (2022) without project morning and evening peak hour intersection turning movement volumes are shown in Appendix D.

As shown in Table 5, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours for Opening Year (2020) without project traffic conditions.

### **3. Opening Year (2022) With Project**

The Opening Year (2022) delay and Level of Service for the study area roadway network with the proposed project are shown in Table 6. Table 6 shows delay values based on the geometrics at the study area intersections. Opening Year (2022) with project delay calculation worksheets are provided in Appendix D. Opening Year (2022) with project morning and evening peak hour intersection turning movement volumes are shown in Appendix D.

As shown in Table 6, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours for Opening Year (2020) with project traffic conditions.

### **4. Year 2040 Without Project**

The Year 2040 delay and Level of Service for the study area roadway network without the proposed project are shown in Table 7. Table 7 shows delay values based on the geometrics at the study area intersections, without and with improvements. Year 2040 without project delay calculation worksheets

are provided in Appendix D. Year 2040 without project morning and evening peak hour intersection turning movement volumes are shown in Appendix D.

The following study area intersections are projected to operate at unacceptable Levels of Service during the peak hours for Year 2040 without project traffic conditions (see Table 7).

US-395 (NS) at:  
Palmdale Road (EW) - #3  
Dos Palmas Road (EW) - #4  
Luna Road (EW) - #5

As shown in Table 7, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours for Year 2040 without project traffic conditions, with improvements.

#### 5. Year 2040 With Project

The Year 2040 delay and Level of Service for the study area roadway network with the proposed project are shown in Table 8. Table 8 shows delay values based on the geometrics at the study area intersections, without and with improvements. Year 2040 with project delay calculation worksheets are provided in Appendix D. Year 2040 with project morning and evening peak hour intersection turning movement volumes are shown in Appendix D.

The following study area intersections are projected to operate at unacceptable Levels of Service during the peak hours for Year 2040 with project traffic conditions (see Table 8).

US-395 (NS) at:  
Palmdale Road (EW) - #3  
Dos Palmas Road (EW) - #4  
Luna Road (EW) - #5

As shown in Table 8, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours for Year 2040 with project traffic conditions, with improvements.

### C. Freeway Evaluation

The project does not contribute trips greater than the freeway threshold of 100 two-way trips.



**Table 3**

**Other Development Trip Generation<sup>1</sup>**

| Land Use                       | Quantity | Units <sup>2</sup> | Peak Hour |          |       |         |          |       | Daily |
|--------------------------------|----------|--------------------|-----------|----------|-------|---------|----------|-------|-------|
|                                |          |                    | Morning   |          |       | Evening |          |       |       |
|                                |          |                    | Inbound   | Outbound | Total | Inbound | Outbound | Total |       |
| <b>Trip Generation Rates</b>   |          |                    |           |          |       |         |          |       |       |
| Single-Family Detached Housing |          | DU                 | 0.18      | 0.56     | 0.74  | 0.63    | 0.36     | 0.99  | 9.44  |
| <b>Trips Generated</b>         |          |                    |           |          |       |         |          |       |       |
| Single-Family Detached Housing | 50       | DU                 | 9         | 28       | 37    | 32      | 18       | 50    | 472   |

<sup>1</sup> Source: Institute of Transportation Engineers, Trip Generation, 10th Edition, 2017, Land Use Category 210.

<sup>2</sup> DU = Dwelling Unit

**Table 4**

**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   |                                  |         |
| Mesa View Drive (NS) at:<br>Dos Palmas Road (EW) - #1<br>Luna Road (EW) - #2                         | City of Victorville<br>City of Victorville  | CSS<br>CSS                   | 0  | <1> | 0 | 0          | <1> | 0   | 0         | <1> | 0 | 0         | <1> | 0   | B                                | B       |
| US-Route 395 (NS) at:<br>Palmdale Road (EW) - #3<br>Dos Palmas Road (EW) - #4<br>Luna Road (EW) - #5 | California Department of Transportation/City of Victorville<br>California Department of Transportation/City of Victorville<br>California Department of Transportation/City of Victorville | TS<br>TS<br>TS               | 1  | 2   | 1 | 1          | 2   | 1   | 1         | 2   | 1 | 2         | 2   | 1   | C                                | D       |
|  |   |                              | 1  | 2   | 1 | 1          | 1.5 | 0.5 | 1         | 1   | 1 | 1         | 0.5 | 0.5 | B                                | C       |
|  |   |                              | 1  | 2   | 1 | 1          | 2   | 1   | 1         | 1   | 1 | 1         | 0.5 | 0.5 | C                                | D       |

<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

<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> CSS = Cross Street Stop; TS = Traffic Signal

**Table 5**

**Opening Year (2022) 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   |                                  |         |
| Mesa View Drive (NS) at:  |   |                              |  |     |   |            |     |     |           |     |   |           |     |     |                                  |         |
| Dos Palmas Road (EW) - #1 | City of Victorville   | CSS                          | 0  | <1> | 0 | 0          | <1> | 0   | 0         | <1> | 0 | 0         | <1> | 0   | A                                | B       |
| Luna Road (EW) - #2       | City of Victorville   | CSS                          | 0  | <1> | 0 | 0          | <1> | 0   | 0         | <1> | 0 | 0         | <1> | 0   | A                                | B       |
| US-Route 395 (NS) at:     |   |                              |  |     |   |            |     |     |           |     |   |           |     |     |                                  |         |
| Palmdale Road (EW) - #3   | California Department of Transportation/City of Victorville | TS                           | 1  | 2   | 1 | 1          | 2   | 1   | 1         | 2   | 1 | 2         | 2   | 1   | C                                | D       |
| Dos Palmas Road (EW) - #4 | California Department of Transportation/City of Victorville | TS                           | 1  | 2   | 1 | 1          | 1.5 | 0.5 | 1         | 1   | 1 | 1         | 0.5 | 0.5 | B                                | B       |
| Luna Road (EW) - #5       | California Department of Transportation/City of Victorville | TS                           | 1  | 2   | 1 | 1          | 2   | 1   | 1         | 1   | 1 | 1         | 0.5 | 0.5 | C                                | D       |

<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

<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> CSS = Cross Street Stop; TS = Traffic Signal

**Table 6**

**Opening Year (2022) 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   |                                  |         |
| Mesa View Drive (NS) at:  |   |                              |  |     |   |            |     |     |           |     |   |           |     |     |                                  |         |
| Dos Palmas Road (EW) - #1 | City of Victorville   | CSS                          | 0  | <1> | 0 | 0          | <1> | 0   | 0         | <1> | 0 | 0         | <1> | 0   | B                                | B       |
| Luna Road (EW) - #2       | City of Victorville   | CSS                          | 0  | <1> | 0 | 0          | <1> | 0   | 0         | <1> | 0 | 0         | <1> | 0   | B                                | B       |
| US-Route 395 (NS) at:     |   |                              |  |     |   |            |     |     |           |     |   |           |     |     |                                  |         |
| Palmdale Road (EW) - #3   | California Department of Transportation/City of Victorville | TS                           | 1  | 2   | 1 | 1          | 2   | 1   | 1         | 2   | 1 | 2         | 2   | 1   | C                                | D       |
| Dos Palmas Road (EW) - #4 | California Department of Transportation/City of Victorville | TS                           | 1  | 2   | 1 | 1          | 1.5 | 0.5 | 1         | 1   | 1 | 1         | 0.5 | 0.5 | B                                | C       |
| Luna Road (EW) - #5       | California Department of Transportation/City of Victorville | TS                           | 1  | 2   | 1 | 1          | 2   | 1   | 1         | 1   | 1 | 1         | 0.5 | 0.5 | C                                | D       |

<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

<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> CSS = Cross Street Stop; TS = Traffic Signal

**Table 7**

**Year 2040 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        |                                  |         |
| Mesa View Drive (NS) at:<br>Dos Palmas Road (EW) - #1<br>Luna Road (EW) - #2  | City of Victorville<br>City of Victorville   | CSS<br>CSS                       | 0  | <1>           | 0      | 0             | <1>           | 0      | 0             | <1>           | 0             | 0             | <1>    | 0        | A                                | B       |
| US-Route 395 (NS) at:<br>Palmdale Road (EW) - #3<br>- Without Improvements<br>- With Improvements<br>Dos Palmas Road (EW) - #4<br>- Without Improvements<br>- With Improvements<br>Luna Road (EW) - #5<br>- Without Improvements<br>- With Improvements | California Department of Transportation/City of Victorville<br>California Department of Transportation/City of Victorville | TS<br>TS<br>TS<br>TS<br>TS<br>TS | 1<br><u>2</u>                            | 2<br><u>3</u> | 1<br>1 | 1<br><u>2</u> | 2<br><u>3</u> | 1<br>1 | 1<br><u>2</u> | 2<br><u>3</u> | 1<br><u>2</u> | 2<br><u>3</u> | 1<br>1 | D<br>C   | F<br>D                           |         |
|   |  |                                  | 1  | 2             | 1      | 1             | 1.5           | 0.5    | 1             | 1             | 1             | 1             | 0.5    | 0.5      | C                                | D       |
|   |  |                                  | 1  | <u>3</u>      | 1      | 1             | <u>2.5</u>    | 0.5    | 1             | 1             | 1             | 1             | 0.5    | 0.5      | B                                | C       |
|   |  |                                  | 1  | 2             | 1      | 1             | 2             | 1      | 1             | 1             | 1             | 1             | 0.5    | 0.5      | E                                | F       |
|   |  |                                  | 1  | <u>3</u>      | 1      | <u>2</u>      | <u>3</u>      | 1      | 1             | 1             | 1             | 1             | 1      | <u>1</u> | A                                | D       |

<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; 1 = Improvement

<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> CSS = Cross Street Stop; TS = Traffic Signal

**Table 8**

**Year 2040 With Project Intersection Delay and Level of Service**

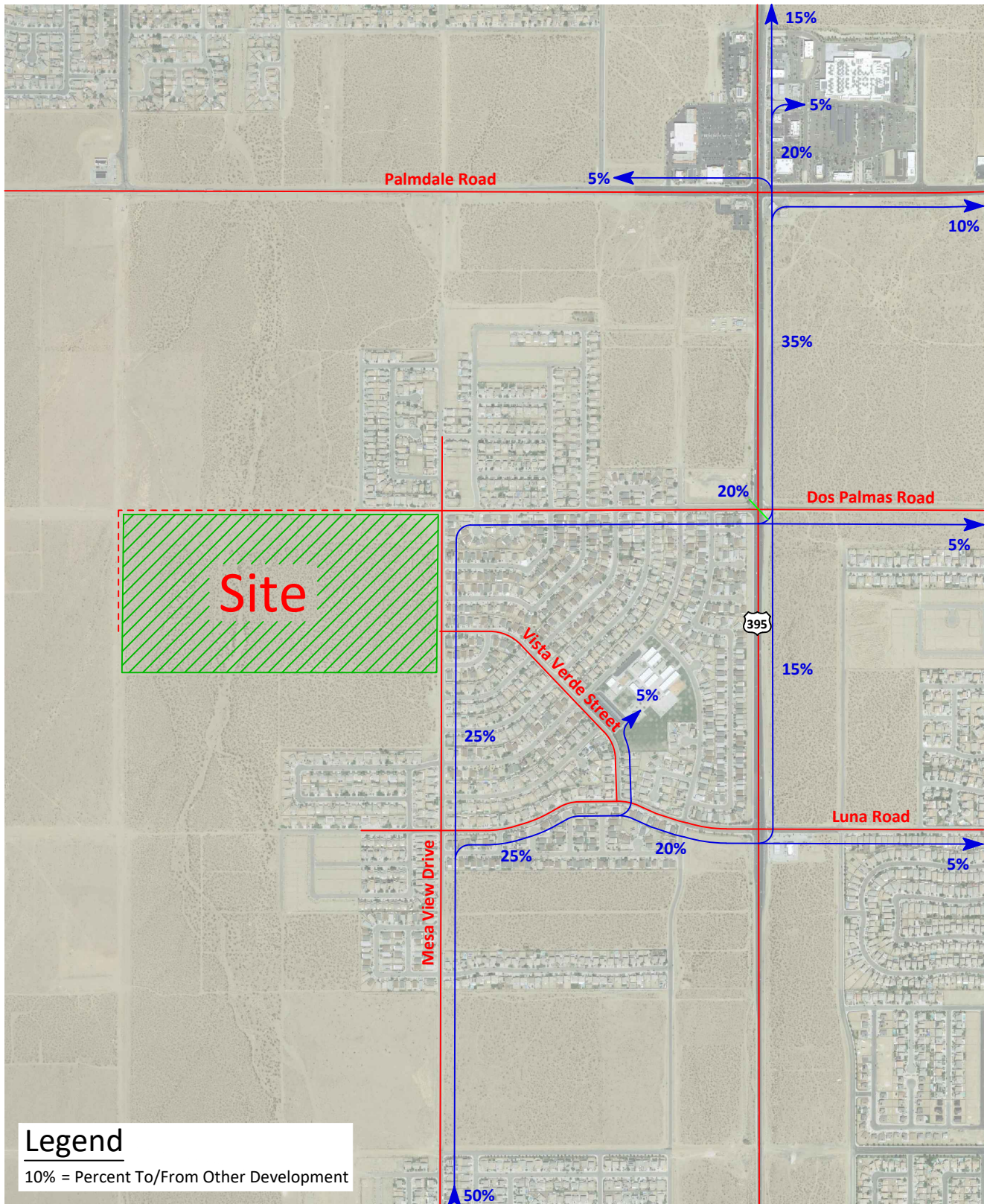
| Intersection  | Jurisdiction  | Traffic Control <sup>3</sup> | Intersection Approach Lanes <sup>1</sup> |          |   |            |            |     |           |          |          |           |          |     | Peak Hour Delay-LOS <sup>2</sup> |         |
|---|---|------------------------------|--|----------|---|------------|------------|-----|-----------|----------|----------|-----------|----------|-----|----------------------------------|---------|
|   |   |                              | Northbound                               |          |   | Southbound |            |     | Eastbound |          |          | Westbound |          |     | Morning                          | Evening |
|   |   |                              | L  | T        | R | L          | T          | R   | L         | T        | R        | L         | T        | R   |                                  |         |
| Mesa View Drive (NS) at:<br>Dos Palmas Road (EW) - #1 | City of Victorville   | CSS                          | 0  | <1>      | 0 | 0          | <1>        | 0   | 0         | <1>      | 0        | 0         | <1>      | 0   | B                                | B       |
| Luna Road (EW) - #2                                   | City of Victorville   | CSS                          | 0  | <1>      | 0 | 0          | <1>        | 0   | 0         | <1>      | 0        | 0         | <1>      | 0   | B                                | B       |
| US-Route 395 (NS) at:<br>Palmdale Road (EW) - #3      | California Department of Transportation/City of Victorville | TS                           | 1  | 2        | 1 | 1          | 2          | 1   | 1         | 2        | 1        | 2         | 2        | 1   | D                                | F       |
| - Without Improvements                                |   | TS                           | <u>2</u>                                 | <u>3</u> | 1 | <u>2</u>   | <u>3</u>   | 1   | <u>2</u>  | <u>3</u> | <u>2</u> | 2         | <u>3</u> | 1   | C                                | D       |
| - With Improvements                                   | California Department of Transportation/City of Victorville | TS                           | 1  | 2        | 1 | 1          | 1.5        | 0.5 | 1         | 1        | 1        | 1         | 0.5      | 0.5 | C                                | E       |
| Dos Palmas Road (EW) - #4                             |   | TS                           | 1  | <u>3</u> | 1 | 1          | <u>2.5</u> | 0.5 | 1         | 1        | 1        | 1         | 0.5      | 0.5 | C                                | C       |
| - Without Improvements                                | California Department of Transportation/City of Victorville | TS                           | 1  | 2        | 1 | 1          | 2          | 1   | 1         | 1        | 1        | 1         | 0.5      | 0.5 | E                                | F       |
| - With Improvements                                   |   | TS                           | 1  | <u>3</u> | 1 | <u>2</u>   | <u>3</u>   | 1   | 1         | 1        | 1        | 1         | 0.5      | 0.5 | C                                | D       |
| Luna Road (EW) - #5                                   | California Department of Transportation/City of Victorville | TS                           | 1  | 2        | 1 | 1          | 2          | 1   | 1         | 1        | 1        | 1         | 0.5      | 0.5 | E                                | F       |
| - Without Improvements                                |   | TS                           | 1  | <u>3</u> | 1 | <u>2</u>   | <u>3</u>   | 1   | 1         | 1        | 1        | 1         | 0.5      | 0.5 | C                                | D       |
| - With Improvements                                   | California Department of Transportation/City of Victorville | TS                           | 1  | <u>3</u> | 1 | <u>2</u>   | <u>3</u>   | 1   | 1         | 1        | 1        | 1         | 0.5      | 0.5 | C                                | D       |

<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

<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 of 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> CSS = Cross Street Stop; TS = Traffic Signal

Figure 15  
Other Development "TT-06-009" Trip Distribution

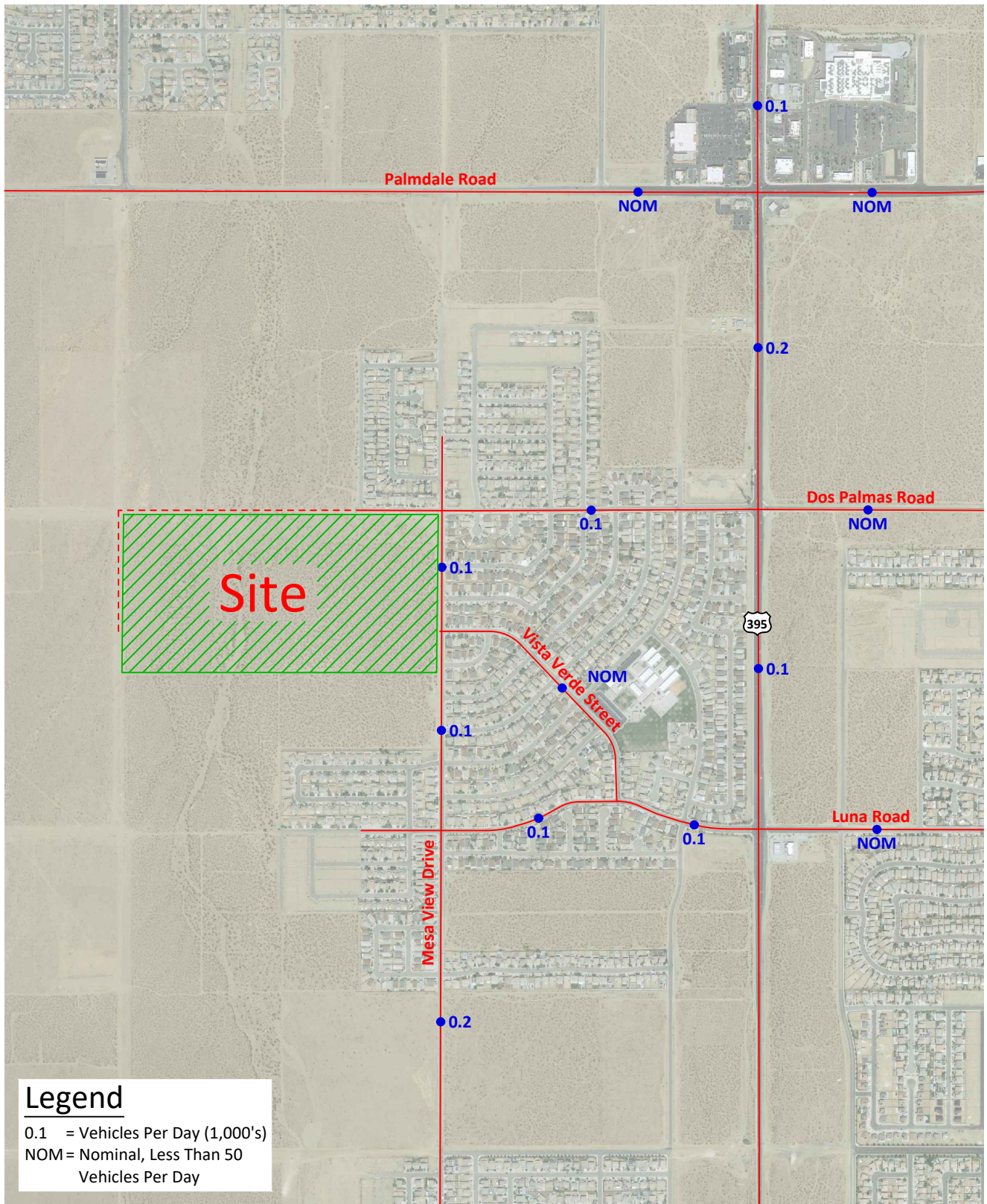


**Legend**

10% = Percent To/From Other Development



Figure 16  
Other Development Average Daily Traffic Volumes



**Legend**

0.1 = Vehicles Per Day (1,000's)  
 NOM = Nominal, Less Than 50  
 Vehicles Per Day





Figure 17  
Existing Plus Project Average Daily Traffic Volumes

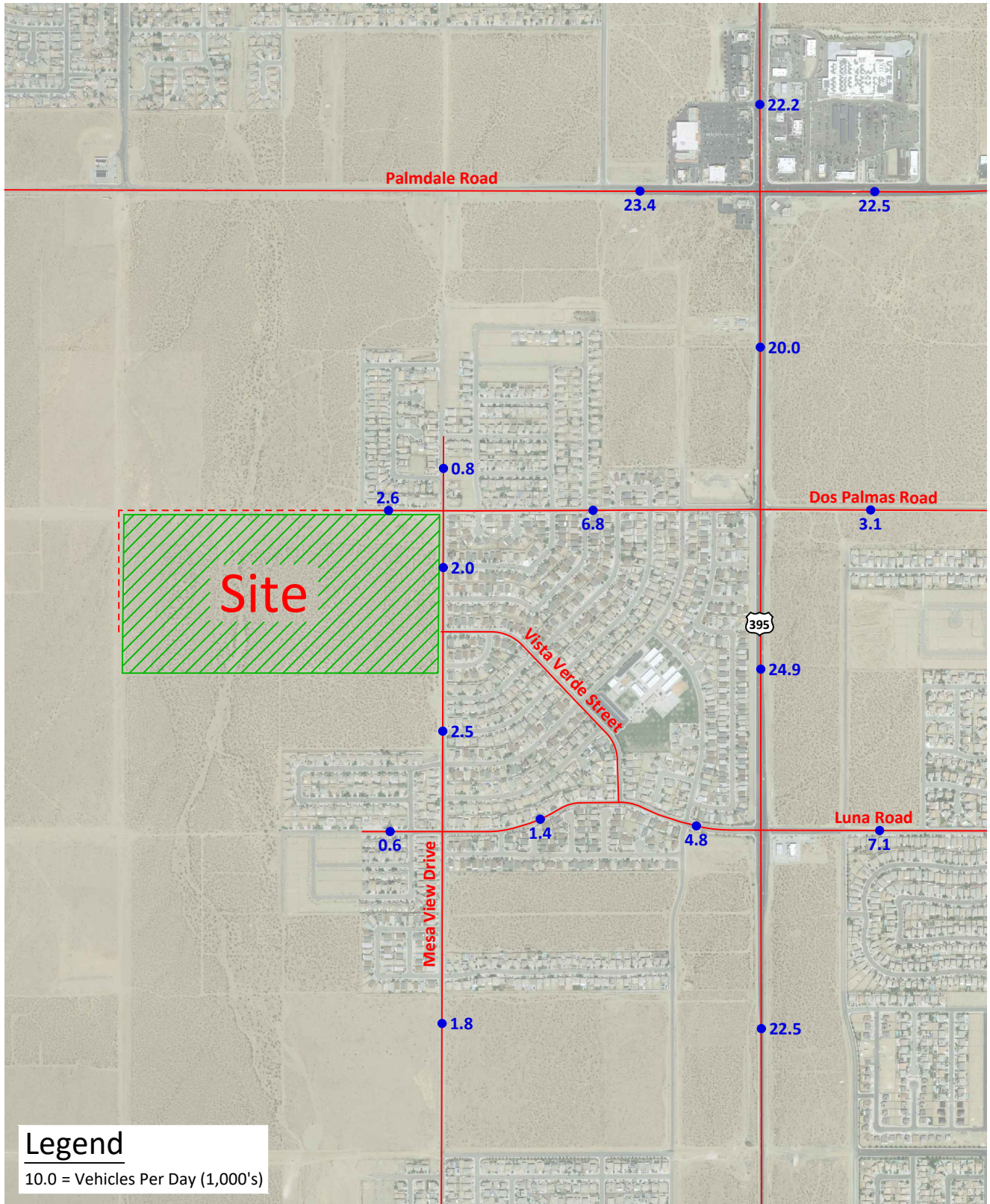
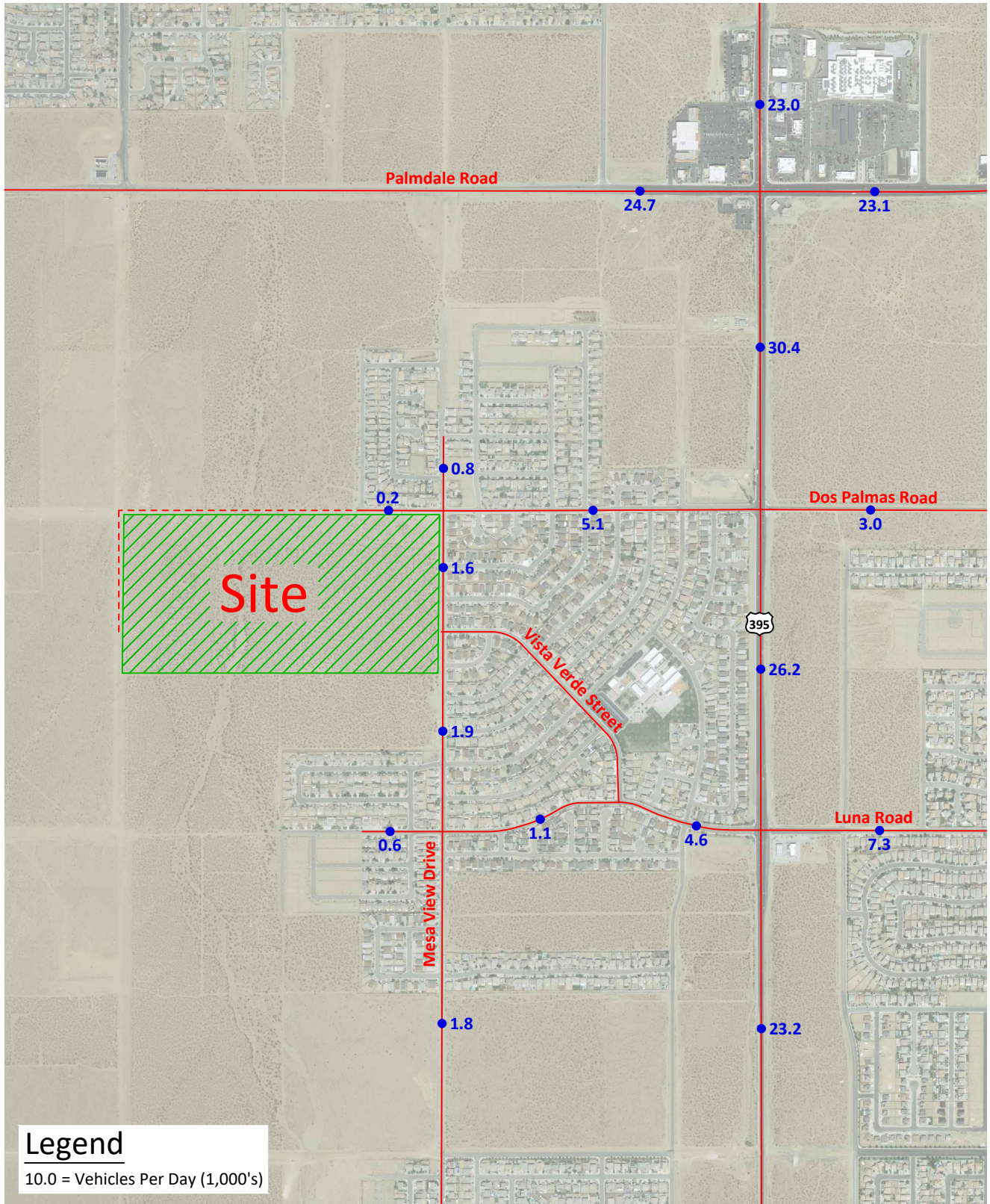


Figure 18  
Opening Year (2022) Without Project Average Daily Traffic Volumes



**Legend**

10.0 = Vehicles Per Day (1,000's)



Figure 19  
 Opening Year (2022) With Project Average Daily Traffic Volumes

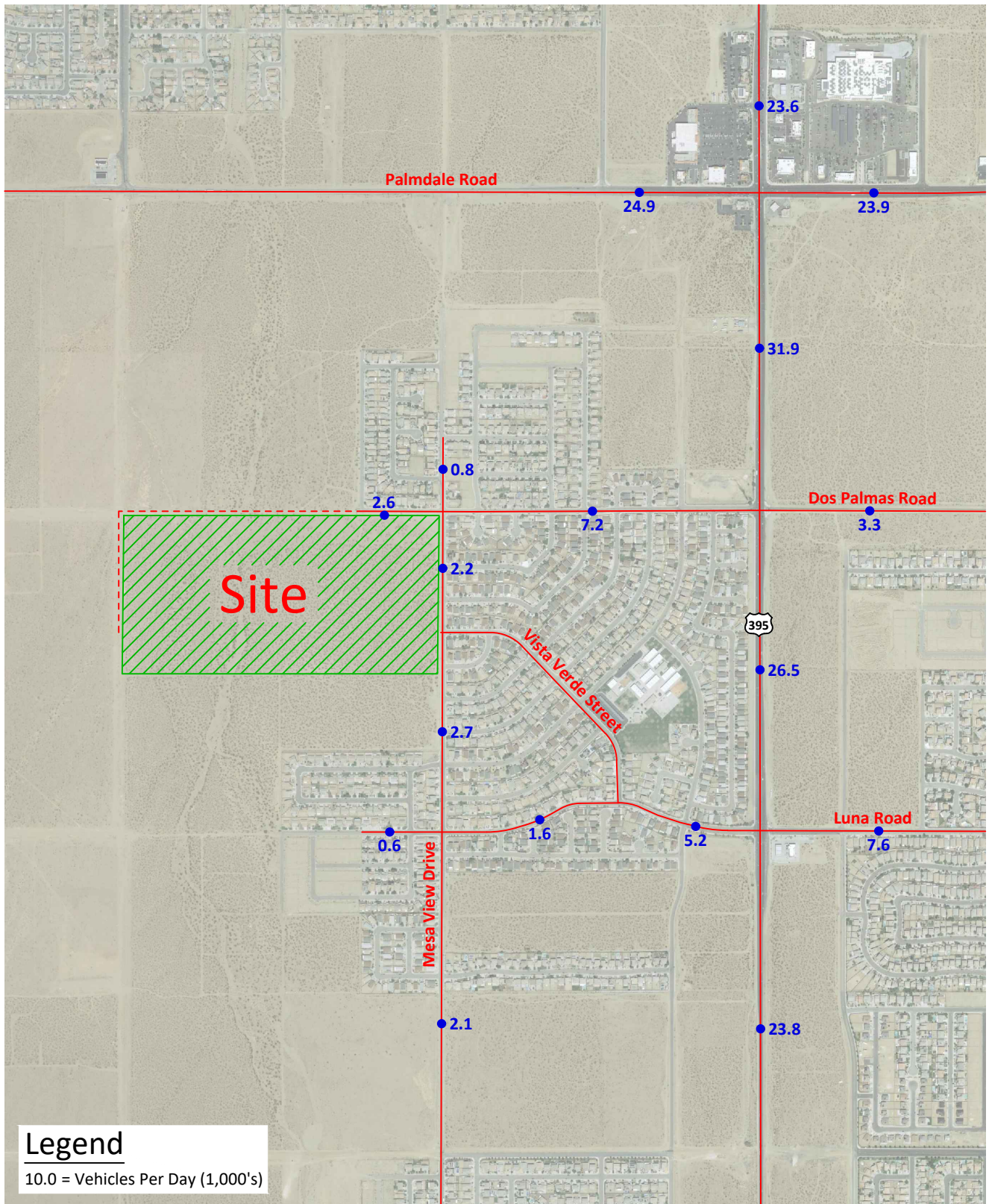


Figure 20  
 Year 2040 Without Project Average Daily Traffic Volumes

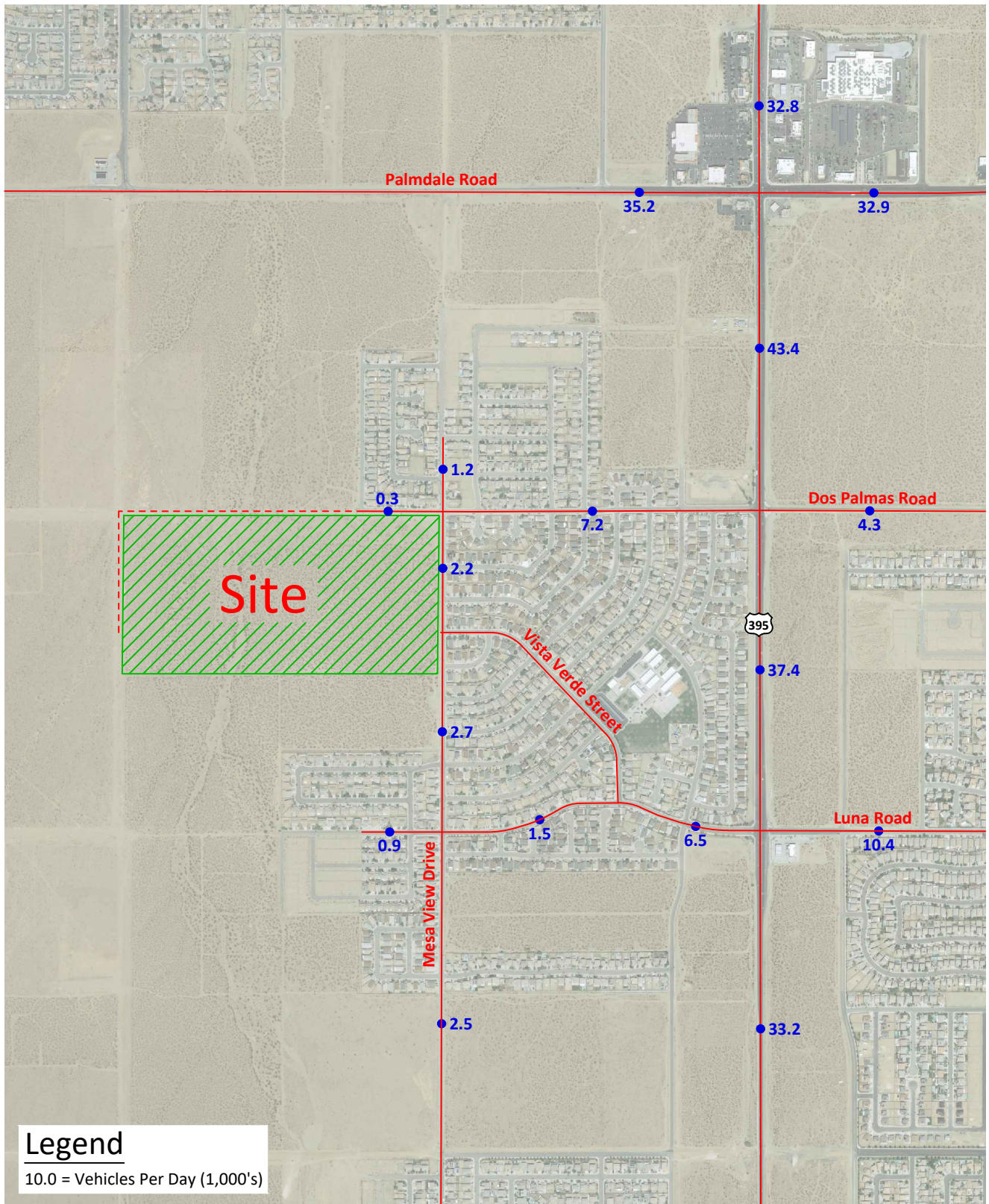
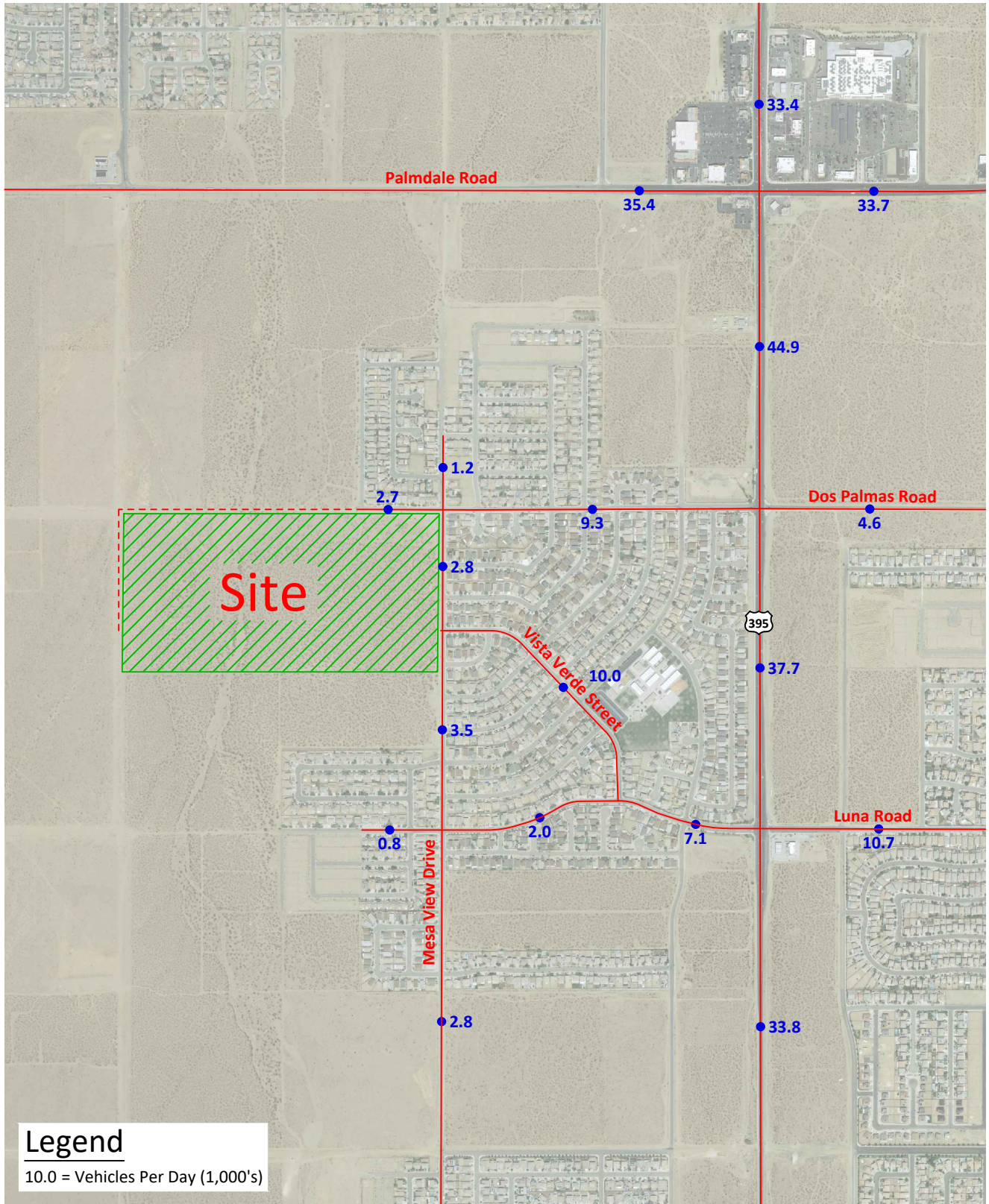


Figure 21  
 Year 2040 With Project Average Daily Traffic Volumes



## V. RECOMMENDATIONS

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### A. Roadway Improvements

The recommendations in this section address on-site improvements, off-site improvements and the phasing of all necessary study area transportation improvements.

#### 1. On-Site Improvements

On-site improvements and improvements adjacent to the site will be required in conjunction with the proposed development to ensure adequate circulation within the project itself (see Figure 3).

The project site should provide sufficient parking spaces to meet City of Victorville 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 the project accesses should be reviewed with respect to California Department of Transportation/City of Victorville 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 Victorville should periodically review traffic operations in the vicinity of the project once the project is constructed to see if traffic operations are satisfactory.

## **APPENDICES**

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**Appendix A – Glossary of Transportation Terms**

**Appendix B – Scoping Data Packet**

**Appendix C – Traffic Count Worksheets**

**Appendix D – 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.

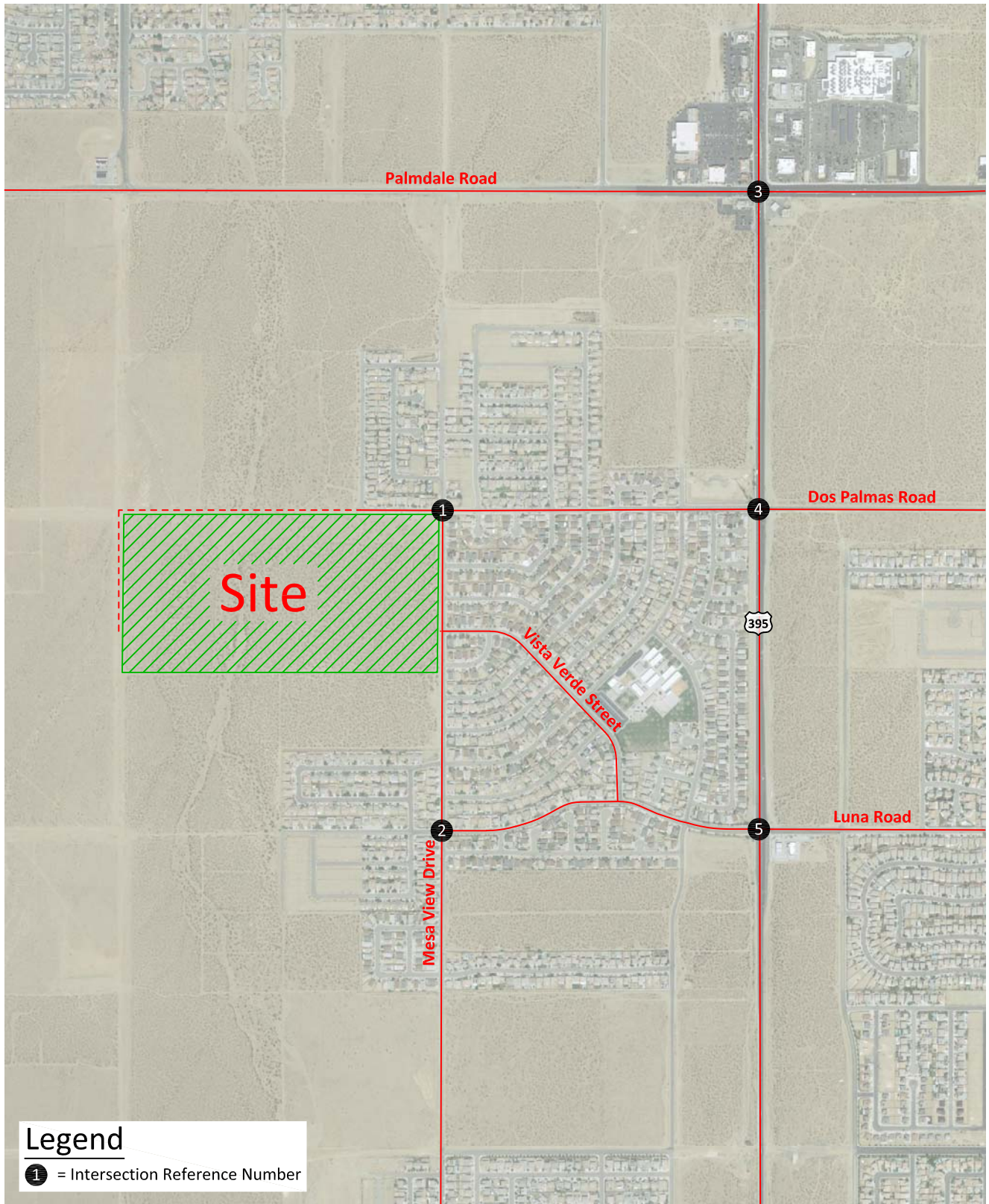
**UNBALANCED FLOW:** Heavier traffic flow in one direction than the other. On a daily basis, most facilities have balanced flow. During the peak hours, flow is seldom balanced in an urban area.

**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**

**Scoping Data Packet**

Figure 1  
Project Location Map

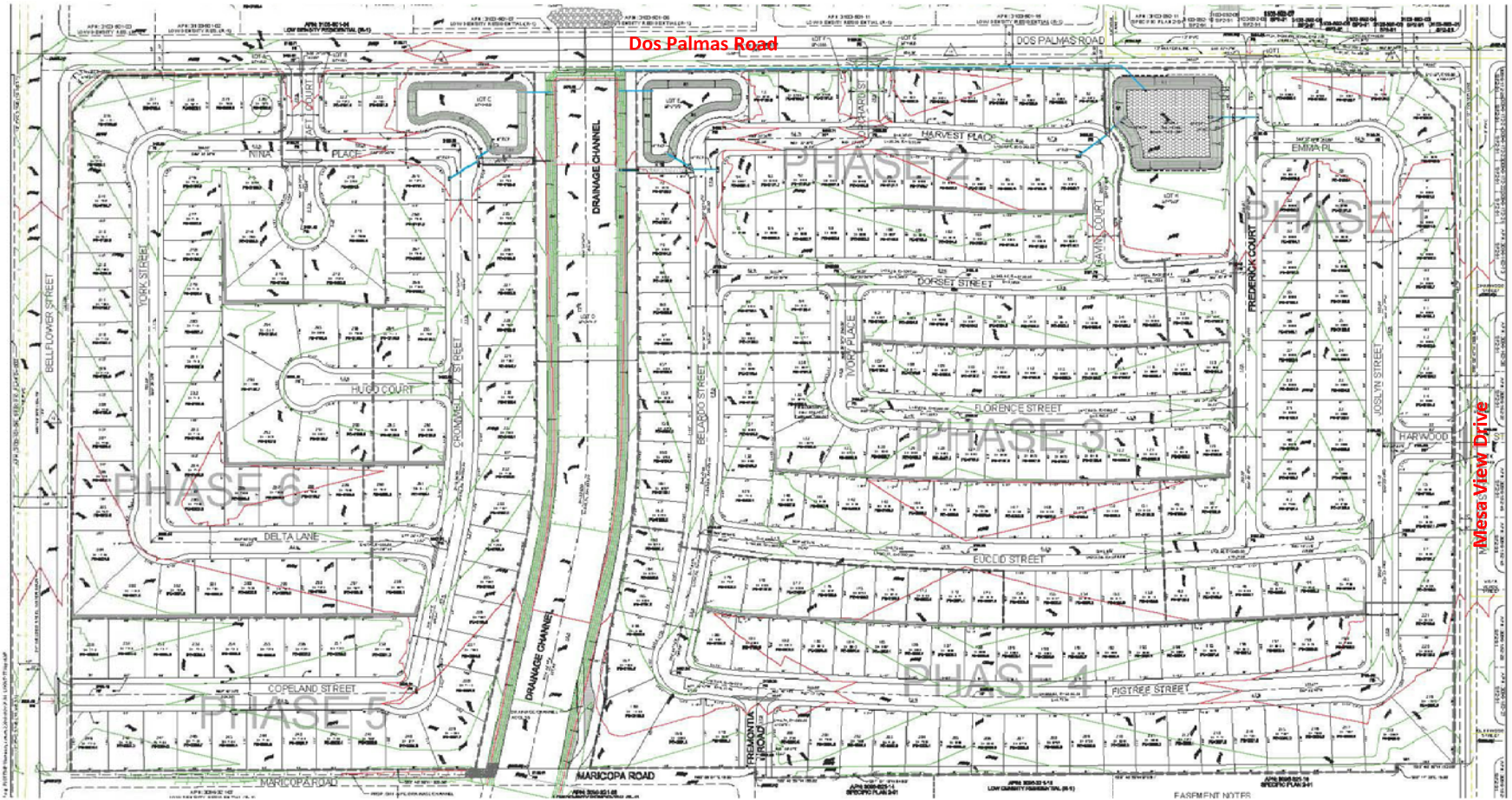


**Legend**

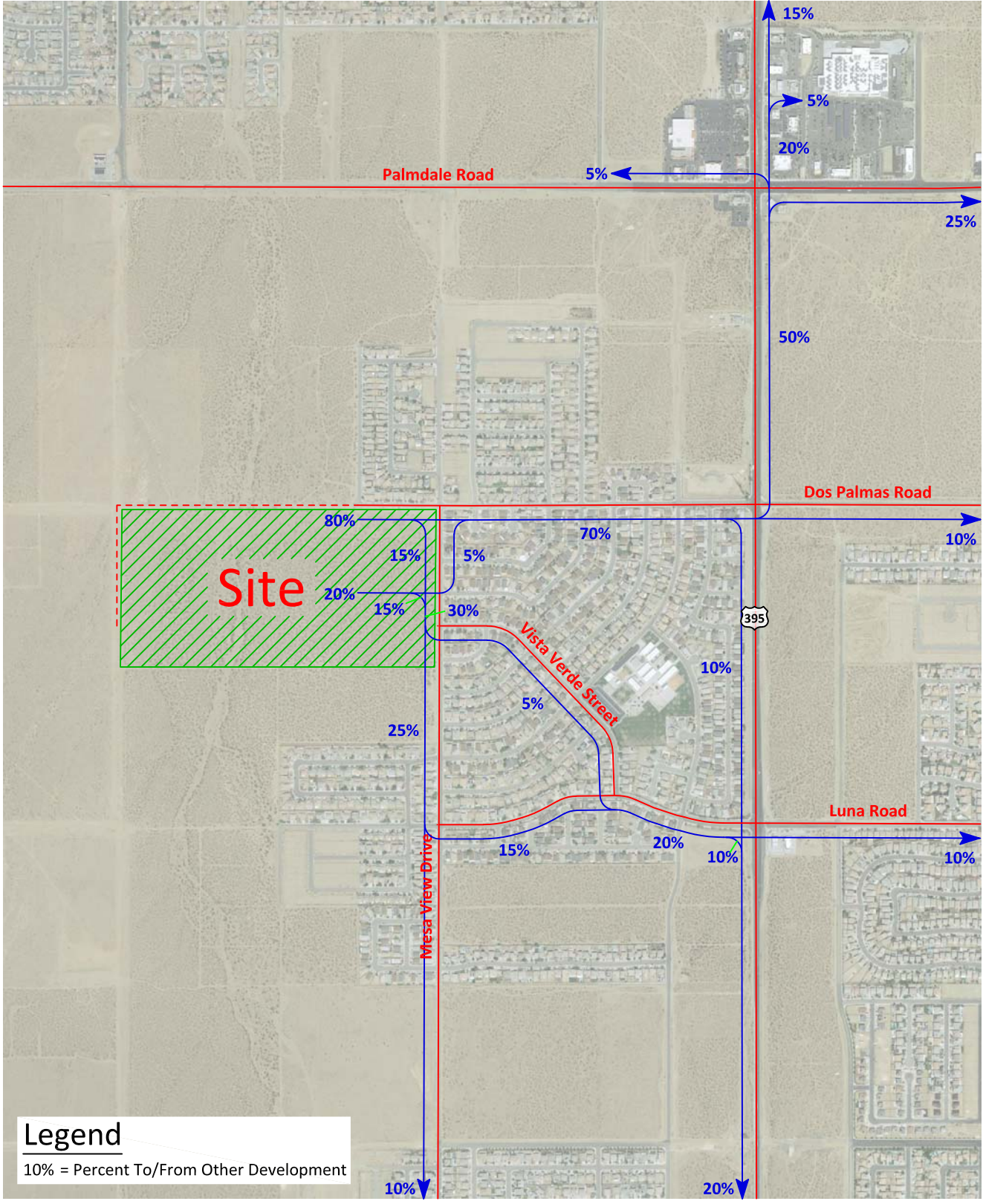
① = Intersection Reference Number



Figure 2  
Site Plan



### Figure 3 Project Trip Distribution



**Legend**  
 10% = Percent To/From Other Development





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

| Land Use                       | Quantity | Units <sup>2</sup> | Peak Hour |          |       |         |          |       | Daily |
|--------------------------------|----------|--------------------|-----------|----------|-------|---------|----------|-------|-------|
|                                |          |                    | Morning   |          |       | Evening |          |       |       |
|                                |          |                    | Inbound   | Outbound | Total | Inbound | Outbound | Total |       |
| <u>Trip Generation Rates</u>   |          |                    |           |          |       |         |          |       |       |
| Single-Family Detached Housing |          | DU                 | 0.18      | 0.56     | 0.74  | 0.63    | 0.36     | 0.99  | 9.44  |
| <u>Trips Generated</u>         |          |                    |           |          |       |         |          |       |       |
| Single-Family Detached Housing | 320      | DU                 | 58        | 179      | 237   | 202     | 115      | 317   | 3,021 |

<sup>1</sup> Source: Institute of Transportation Engineers, Trip Generation, 10th Edition, 2017, Land Use Category 210.

<sup>2</sup> DU = Dwelling Unit

**APPENDIX C**

**Traffic Count Worksheets**

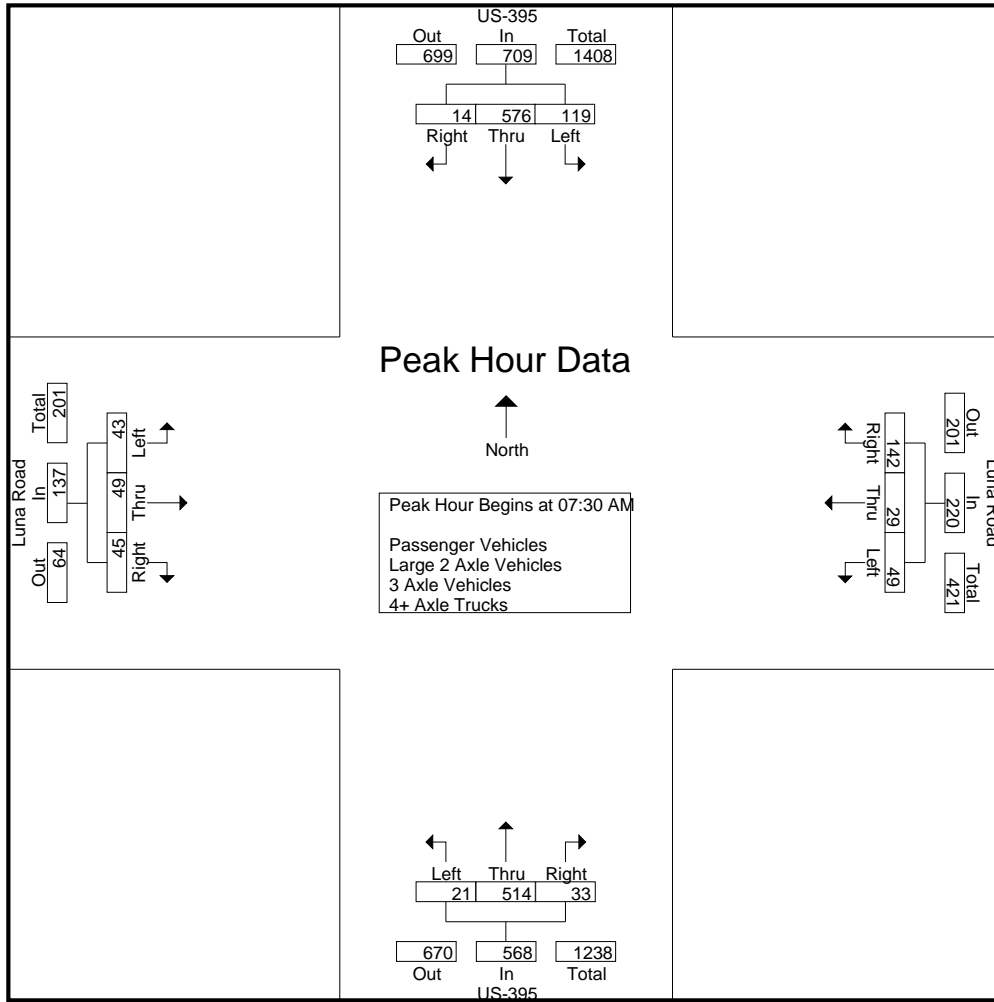
City of Victorville  
 N/S: US-395  
 E/W: Luna Road  
 Weather: Clear

File Name : 05\_VIC\_US-395\_Luna AM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 1

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

| Start Time              | US-395 Southbound |             |           |             | Luna Road Westbound |           |            |            | US-395 Northbound |            |           |             | Luna Road Eastbound |           |           |            | Int. Total  |
|-------------------------|-------------------|-------------|-----------|-------------|---------------------|-----------|------------|------------|-------------------|------------|-----------|-------------|---------------------|-----------|-----------|------------|-------------|
|                         | Left              | Thru        | Right     | App. Total  | Left                | Thru      | Right      | App. Total | Left              | Thru       | Right     | App. Total  | Left                | Thru      | Right     | App. Total |             |
| 07:00 AM                | 12                | 146         | 1         | 159         | 15                  | 5         | 13         | 33         | 8                 | 124        | 10        | 142         | 6                   | 5         | 12        | 23         | 357         |
| 07:15 AM                | 9                 | 142         | 4         | 155         | 17                  | 5         | 18         | 40         | 8                 | 133        | 7         | 148         | 12                  | 6         | 12        | 30         | 373         |
| 07:30 AM                | 20                | 138         | 5         | 163         | 12                  | 4         | 39         | 55         | 5                 | 151        | 9         | 165         | 11                  | 13        | 8         | 32         | 415         |
| 07:45 AM                | 45                | 136         | 3         | 184         | 14                  | 9         | 40         | 63         | 6                 | 133        | 12        | 151         | 17                  | 15        | 16        | 48         | 446         |
| <b>Total</b>            | <b>86</b>         | <b>562</b>  | <b>13</b> | <b>661</b>  | <b>58</b>           | <b>23</b> | <b>110</b> | <b>191</b> | <b>27</b>         | <b>541</b> | <b>38</b> | <b>606</b>  | <b>46</b>           | <b>39</b> | <b>48</b> | <b>133</b> | <b>1591</b> |
| 08:00 AM                | 36                | 151         | 2         | 189         | 9                   | 5         | 37         | 51         | 3                 | 119        | 9         | 131         | 8                   | 10        | 9         | 27         | 398         |
| 08:15 AM                | 18                | 151         | 4         | 173         | 14                  | 11        | 26         | 51         | 7                 | 111        | 3         | 121         | 7                   | 11        | 12        | 30         | 375         |
| 08:30 AM                | 15                | 134         | 6         | 155         | 15                  | 5         | 28         | 48         | 5                 | 124        | 5         | 134         | 8                   | 12        | 10        | 30         | 367         |
| 08:45 AM                | 24                | 127         | 5         | 156         | 10                  | 5         | 34         | 49         | 6                 | 99         | 5         | 110         | 10                  | 10        | 6         | 26         | 341         |
| <b>Total</b>            | <b>93</b>         | <b>563</b>  | <b>17</b> | <b>673</b>  | <b>48</b>           | <b>26</b> | <b>125</b> | <b>199</b> | <b>21</b>         | <b>453</b> | <b>22</b> | <b>496</b>  | <b>33</b>           | <b>43</b> | <b>37</b> | <b>113</b> | <b>1481</b> |
| <b>Grand Total</b>      | <b>179</b>        | <b>1125</b> | <b>30</b> | <b>1334</b> | <b>106</b>          | <b>49</b> | <b>235</b> | <b>390</b> | <b>48</b>         | <b>994</b> | <b>60</b> | <b>1102</b> | <b>79</b>           | <b>82</b> | <b>85</b> | <b>246</b> | <b>3072</b> |
| Apprch %                | 13.4              | 84.3        | 2.2       |             | 27.2                | 12.6      | 60.3       |            | 4.4               | 90.2       | 5.4       |             | 32.1                | 33.3      | 34.6      |            |             |
| Total %                 | 5.8               | 36.6        | 1         | 43.4        | 3.5                 | 1.6       | 7.6        | 12.7       | 1.6               | 32.4       | 2         | 35.9        | 2.6                 | 2.7       | 2.8       |            | 8           |
| Passenger Vehicles      | 177               | 990         | 27        | 1194        | 104                 | 48        | 229        | 381        | 46                | 844        | 57        | 947         | 78                  | 79        | 85        | 242        | 2764        |
| % Passenger Vehicles    | 98.9              | 88          | 90        | 89.5        | 98.1                | 98        | 97.4       | 97.7       | 95.8              | 84.9       | 95        | 85.9        | 98.7                | 96.3      | 100       | 98.4       | 90          |
| Large 2 Axle Vehicles   | 2                 | 15          | 3         | 20          | 2                   | 1         | 5          | 8          | 2                 | 23         | 2         | 27          | 1                   | 3         | 0         | 4          | 59          |
| % Large 2 Axle Vehicles | 1.1               | 1.3         | 10        | 1.5         | 1.9                 | 2         | 2.1        | 2.1        | 4.2               | 2.3        | 3.3       | 2.5         | 1.3                 | 3.7       | 0         | 1.6        | 1.9         |
| 3 Axle Vehicles         | 0                 | 3           | 0         | 3           | 0                   | 0         | 1          | 1          | 0                 | 10         | 0         | 10          | 0                   | 0         | 0         | 0          | 14          |
| % 3 Axle Vehicles       | 0                 | 0.3         | 0         | 0.2         | 0                   | 0         | 0.4        | 0.3        | 0                 | 1          | 0         | 0.9         | 0                   | 0         | 0         | 0          | 0.5         |
| 4+ Axle Trucks          | 0                 | 117         | 0         | 117         | 0                   | 0         | 0          | 0          | 0                 | 117        | 1         | 118         | 0                   | 0         | 0         | 0          | 235         |
| % 4+ Axle Trucks        | 0                 | 10.4        | 0         | 8.8         | 0                   | 0         | 0          | 0          | 0                 | 11.8       | 1.7       | 10.7        | 0                   | 0         | 0         | 0          | 7.6         |

| Start Time   | US-395 Southbound |      |       |            | Luna Road Westbound |      |       |            | US-395 Northbound |      |       |            | Luna Road Eastbound |      |       |            | Int. Total |
|--|-------------------|------|-------|------------|---------------------|------|-------|------------|-------------------|------|-------|------------|---------------------|------|-------|------------|------------|
|  | Left              | Thru | Right | App. Total | Left                | Thru | Right | App. Total | Left              | Thru | Right | App. Total | Left                | Thru | Right | App. Total |            |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |                   |      |       |            |                     |      |       |            |                   |      |       |            |                     |      |       |            |            |
| Peak Hour for Entire Intersection Begins at 07:30 AM       |                   |      |       |            |                     |      |       |            |                   |      |       |            |                     |      |       |            |            |
| 07:30 AM   | 20                | 138  | 5     | 163        | 12                  | 4    | 39    | 55         | 5                 | 151  | 9     | 165        | 11                  | 13   | 8     | 32         | 415        |
| 07:45 AM   | 45                | 136  | 3     | 184        | 14                  | 9    | 40    | 63         | 6                 | 133  | 12    | 151        | 17                  | 15   | 16    | 48         | 446        |
| 08:00 AM   | 36                | 151  | 2     | 189        | 9                   | 5    | 37    | 51         | 3                 | 119  | 9     | 131        | 8                   | 10   | 9     | 27         | 398        |
| 08:15 AM   | 18                | 151  | 4     | 173        | 14                  | 11   | 26    | 51         | 7                 | 111  | 3     | 121        | 7                   | 11   | 12    | 30         | 375        |
| Total Volume   | 119               | 576  | 14    | 709        | 49                  | 29   | 142   | 220        | 21                | 514  | 33    | 568        | 43                  | 49   | 45    | 137        | 1634       |
| % App. Total   | 16.8              | 81.2 | 2     |            | 22.3                | 13.2 | 64.5  |            | 3.7               | 90.5 | 5.8   |            | 31.4                | 35.8 | 32.8  |            |            |
| PHF  | .661              | .954 | .700  | .938       | .875                | .659 | .888  | .873       | .750              | .851 | .688  | .861       | .632                | .817 | .703  | .714       | .916       |



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

|              | 07:30 AM |      |      |      | 07:30 AM |      |      |      | 07:00 AM |      |      |      | 07:15 AM |      |      |      |
|--------------|----------|------|------|------|----------|------|------|------|----------|------|------|------|----------|------|------|------|
| +0 mins.     | 20       | 138  | 5    | 163  | 12       | 4    | 39   | 55   | 8        | 124  | 10   | 142  | 12       | 6    | 12   | 30   |
| +15 mins.    | 45       | 136  | 3    | 184  | 14       | 9    | 40   | 63   | 8        | 133  | 7    | 148  | 11       | 13   | 8    | 32   |
| +30 mins.    | 36       | 151  | 2    | 189  | 9        | 5    | 37   | 51   | 5        | 151  | 9    | 165  | 17       | 15   | 16   | 48   |
| +45 mins.    | 18       | 151  | 4    | 173  | 14       | 11   | 26   | 51   | 6        | 133  | 12   | 151  | 8        | 10   | 9    | 27   |
| Total Volume | 119      | 576  | 14   | 709  | 49       | 29   | 142  | 220  | 27       | 541  | 38   | 606  | 48       | 44   | 45   | 137  |
| % App. Total | 16.8     | 81.2 | 2    |      | 22.3     | 13.2 | 64.5 |      | 4.5      | 89.3 | 6.3  |      | 35       | 32.1 | 32.8 |      |
| PHF          | .661     | .954 | .700 | .938 | .875     | .659 | .888 | .873 | .844     | .896 | .792 | .918 | .706     | .733 | .703 | .714 |

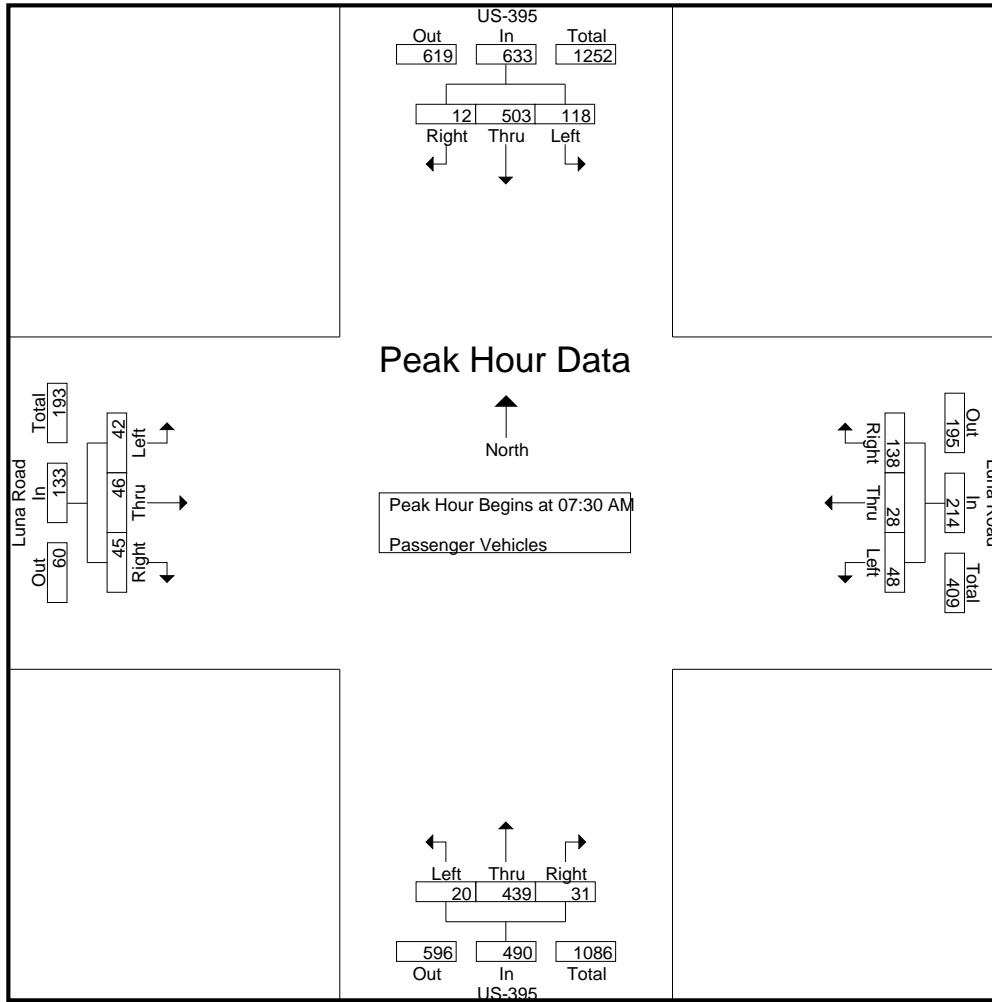
City of Victorville  
 N/S: US-395  
 E/W: Luna Road  
 Weather: Clear

File Name : 05\_VIC\_US-395\_Luna AM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 1

Groups Printed- Passenger Vehicles

| Start Time  | US-395 Southbound |      |       |            | Luna Road Westbound |      |       |            | US-395 Northbound |      |       |            | Luna Road Eastbound |      |       |            | Int. Total |
|-------------|-------------------|------|-------|------------|---------------------|------|-------|------------|-------------------|------|-------|------------|---------------------|------|-------|------------|------------|
|             | Left              | Thru | Right | App. Total | Left                | Thru | Right | App. Total | Left              | Thru | Right | App. Total | Left                | Thru | Right | App. Total |            |
| 07:00 AM    | 12                | 127  | 1     | 140        | 15                  | 5    | 13    | 33         | 8                 | 112  | 9     | 129        | 6                   | 5    | 12    | 23         | 325        |
| 07:15 AM    | 8                 | 131  | 4     | 143        | 17                  | 5    | 16    | 38         | 8                 | 105  | 7     | 120        | 12                  | 6    | 12    | 30         | 331        |
| 07:30 AM    | 19                | 122  | 3     | 144        | 11                  | 4    | 39    | 54         | 5                 | 134  | 8     | 147        | 11                  | 12   | 8     | 31         | 376        |
| 07:45 AM    | 45                | 123  | 3     | 171        | 14                  | 9    | 38    | 61         | 6                 | 110  | 12    | 128        | 16                  | 14   | 16    | 46         | 406        |
| Total       | 84                | 503  | 11    | 598        | 57                  | 23   | 106   | 186        | 27                | 461  | 36    | 524        | 45                  | 37   | 48    | 130        | 1438       |
| 08:00 AM    | 36                | 127  | 2     | 165        | 9                   | 4    | 37    | 50         | 3                 | 101  | 8     | 112        | 8                   | 10   | 9     | 27         | 354        |
| 08:15 AM    | 18                | 131  | 4     | 153        | 14                  | 11   | 24    | 49         | 6                 | 94   | 3     | 103        | 7                   | 10   | 12    | 29         | 334        |
| 08:30 AM    | 15                | 122  | 5     | 142        | 15                  | 5    | 28    | 48         | 5                 | 105  | 5     | 115        | 8                   | 12   | 10    | 30         | 335        |
| 08:45 AM    | 24                | 107  | 5     | 136        | 9                   | 5    | 34    | 48         | 5                 | 83   | 5     | 93         | 10                  | 10   | 6     | 26         | 303        |
| Total       | 93                | 487  | 16    | 596        | 47                  | 25   | 123   | 195        | 19                | 383  | 21    | 423        | 33                  | 42   | 37    | 112        | 1326       |
| Grand Total | 177               | 990  | 27    | 1194       | 104                 | 48   | 229   | 381        | 46                | 844  | 57    | 947        | 78                  | 79   | 85    | 242        | 2764       |
| Apprch %    | 14.8              | 82.9 | 2.3   |            | 27.3                | 12.6 | 60.1  |            | 4.9               | 89.1 | 6     |            | 32.2                | 32.6 | 35.1  |            |            |
| Total %     | 6.4               | 35.8 | 1     | 43.2       | 3.8                 | 1.7  | 8.3   | 13.8       | 1.7               | 30.5 | 2.1   | 34.3       | 2.8                 | 2.9  | 3.1   | 8.8        |            |

| Start Time   | US-395 Southbound |            |          |            | Luna Road Westbound |           |           |            | US-395 Northbound |            |           |            | Luna Road Eastbound |           |           |            | Int. Total |
|--|-------------------|------------|----------|------------|---------------------|-----------|-----------|------------|-------------------|------------|-----------|------------|---------------------|-----------|-----------|------------|------------|
|  | Left              | Thru       | Right    | App. Total | Left                | Thru      | Right     | App. Total | Left              | Thru       | Right     | App. Total | Left                | Thru      | Right     | App. Total |            |
| Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1 |                   |            |          |            |                     |           |           |            |                   |            |           |            |                     |           |           |            |            |
| Peak Hour for Entire Intersection Begins at 07:30 AM       |                   |            |          |            |                     |           |           |            |                   |            |           |            |                     |           |           |            |            |
| 07:30 AM   | 19                | 122        | 3        | 144        | 11                  | 4         | <b>39</b> | 54         | 5                 | <b>134</b> | 8         | <b>147</b> | 11                  | 12        | 8         | 31         | 376        |
| 07:45 AM   | <b>45</b>         | 123        | 3        | <b>171</b> | <b>14</b>           | 9         | 38        | <b>61</b>  | <b>6</b>          | 110        | <b>12</b> | 128        | <b>16</b>           | <b>14</b> | <b>16</b> | <b>46</b>  | <b>406</b> |
| 08:00 AM   | 36                | 127        | 2        | 165        | 9                   | 4         | 37        | 50         | 3                 | 101        | 8         | 112        | 8                   | 10        | 9         | 27         | 354        |
| 08:15 AM   | 18                | <b>131</b> | <b>4</b> | 153        | 14                  | <b>11</b> | 24        | 49         | 6                 | 94         | 3         | 103        | 7                   | 10        | 12        | 29         | 334        |
| Total Volume   | 118               | 503        | 12       | 633        | 48                  | 28        | 138       | 214        | 20                | 439        | 31        | 490        | 42                  | 46        | 45        | 133        | 1470       |
| % App. Total   | 18.6              | 79.5       | 1.9      |            | 22.4                | 13.1      | 64.5      |            | 4.1               | 89.6       | 6.3       |            | 31.6                | 34.6      | 33.8      |            |            |
| PHF  | .656              | .960       | .750     | .925       | .857                | .636      | .885      | .877       | .833              | .819       | .646      | .833       | .656                | .821      | .703      | .723       | .905       |



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

|              | 07:30 AM  |            |          |            | 07:30 AM  |           |           |           | 07:30 AM |            |           |            | 07:30 AM  |           |           |           |
|--------------|-----------|------------|----------|------------|-----------|-----------|-----------|-----------|----------|------------|-----------|------------|-----------|-----------|-----------|-----------|
| +0 mins.     | 19        | 122        | 3        | 144        | 11        | 4         | <b>39</b> | 54        | 5        | <b>134</b> | 8         | <b>147</b> | 11        | 12        | 8         | 31        |
| +15 mins.    | <b>45</b> | 123        | 3        | <b>171</b> | <b>14</b> | 9         | 38        | <b>61</b> | <b>6</b> | 110        | <b>12</b> | 128        | <b>16</b> | <b>14</b> | <b>16</b> | <b>46</b> |
| +30 mins.    | 36        | 127        | 2        | 165        | 9         | 4         | 37        | 50        | 3        | 101        | 8         | 112        | 8         | 10        | 9         | 27        |
| +45 mins.    | 18        | <b>131</b> | <b>4</b> | 153        | 14        | <b>11</b> | 24        | 49        | 6        | 94         | 3         | 103        | 7         | 10        | 12        | 29        |
| Total Volume | 118       | 503        | 12       | 633        | 48        | 28        | 138       | 214       | 20       | 439        | 31        | 490        | 42        | 46        | 45        | 133       |
| % App. Total | 18.6      | 79.5       | 1.9      |            | 22.4      | 13.1      | 64.5      |           | 4.1      | 89.6       | 6.3       |            | 31.6      | 34.6      | 33.8      |           |
| PHF          | .656      | .960       | .750     | .925       | .857      | .636      | .885      | .877      | .833     | .819       | .646      | .833       | .656      | .821      | .703      | .723      |

City of Victorville  
 N/S: US-395  
 E/W: Luna Road  
 Weather: Clear

File Name : 05\_VIC\_US-395\_Luna AM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 1

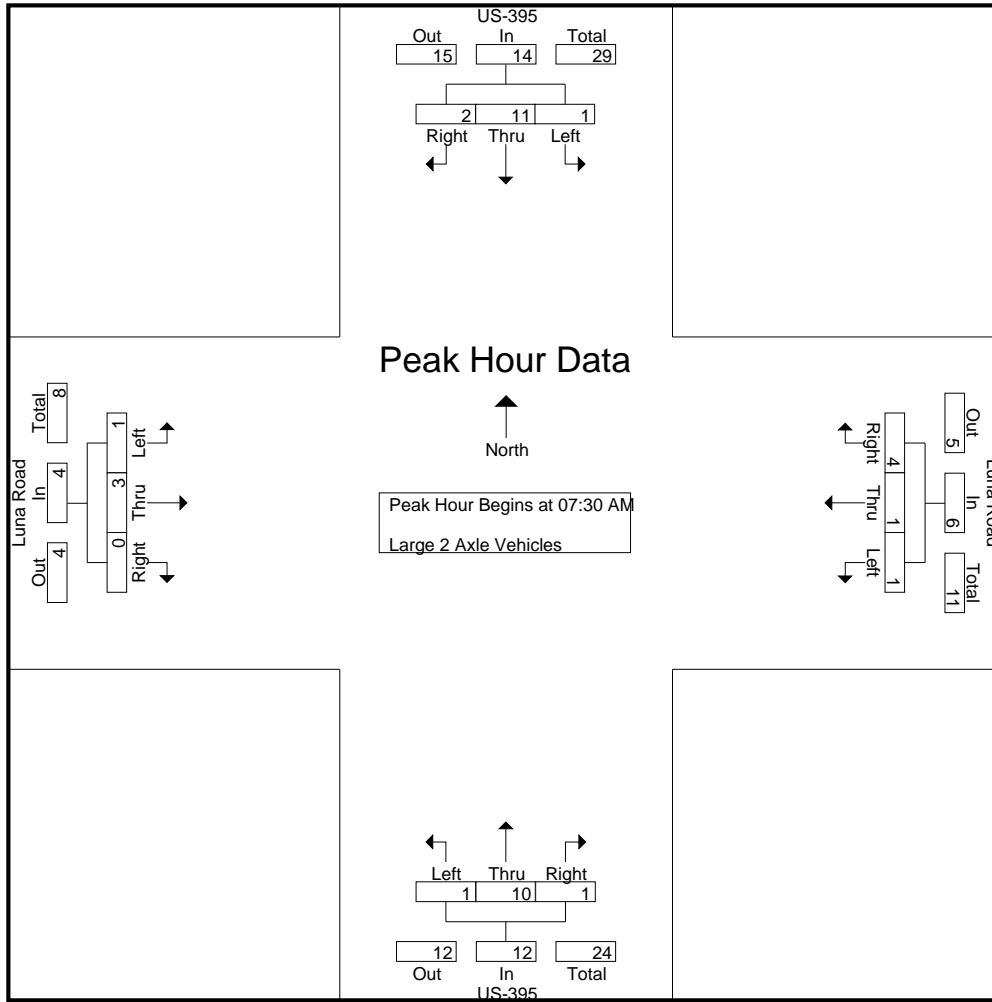
Groups Printed- Large 2 Axle Vehicles

| Start Time  | US-395 Southbound |      |       |            | Luna Road Westbound |      |       |            | US-395 Northbound |      |       |            | Luna Road Eastbound |      |       |            | Int. Total |
|-------------|-------------------|------|-------|------------|---------------------|------|-------|------------|-------------------|------|-------|------------|---------------------|------|-------|------------|------------|
|             | Left              | Thru | Right | App. Total | Left                | Thru | Right | App. Total | Left              | Thru | Right | App. Total | Left                | Thru | Right | App. Total |            |
| 07:00 AM    | 0                 | 1    | 0     | 1          | 0                   | 0    | 0     | 0          | 0                 | 2    | 1     | 3          | 0                   | 0    | 0     | 0          | 4          |
| 07:15 AM    | 1                 | 3    | 0     | 4          | 0                   | 0    | 1     | 1          | 0                 | 6    | 0     | 6          | 0                   | 0    | 0     | 0          | 11         |
| 07:30 AM    | 1                 | 3    | 2     | 6          | 1                   | 0    | 0     | 1          | 0                 | 3    | 1     | 4          | 0                   | 1    | 0     | 1          | 12         |
| 07:45 AM    | 0                 | 3    | 0     | 3          | 0                   | 0    | 2     | 2          | 0                 | 3    | 0     | 3          | 1                   | 1    | 0     | 2          | 10         |
| Total       | 2                 | 10   | 2     | 14         | 1                   | 0    | 3     | 4          | 0                 | 14   | 2     | 16         | 1                   | 2    | 0     | 3          | 37         |
| 08:00 AM    | 0                 | 2    | 0     | 2          | 0                   | 1    | 0     | 1          | 0                 | 2    | 0     | 2          | 0                   | 0    | 0     | 0          | 5          |
| 08:15 AM    | 0                 | 3    | 0     | 3          | 0                   | 0    | 2     | 2          | 1                 | 2    | 0     | 3          | 0                   | 1    | 0     | 1          | 9          |
| 08:30 AM    | 0                 | 0    | 1     | 1          | 0                   | 0    | 0     | 0          | 0                 | 2    | 0     | 2          | 0                   | 0    | 0     | 0          | 3          |
| 08:45 AM    | 0                 | 0    | 0     | 0          | 1                   | 0    | 0     | 1          | 1                 | 3    | 0     | 4          | 0                   | 0    | 0     | 0          | 5          |
| Total       | 0                 | 5    | 1     | 6          | 1                   | 1    | 2     | 4          | 2                 | 9    | 0     | 11         | 0                   | 1    | 0     | 1          | 22         |
| Grand Total | 2                 | 15   | 3     | 20         | 2                   | 1    | 5     | 8          | 2                 | 23   | 2     | 27         | 1                   | 3    | 0     | 4          | 59         |
| Apprch %    | 10                | 75   | 15    |            | 25                  | 12.5 | 62.5  |            | 7.4               | 85.2 | 7.4   |            | 25                  | 75   | 0     |            |            |
| Total %     | 3.4               | 25.4 | 5.1   | 33.9       | 3.4                 | 1.7  | 8.5   | 13.6       | 3.4               | 39   | 3.4   | 45.8       | 1.7                 | 5.1  | 0     | 6.8        |            |

| Start Time   | US-395 Southbound |      |       |            | Luna Road Westbound |      |       |            | US-395 Northbound |      |       |            | Luna Road Eastbound |      |       |            | Int. Total |
|--|-------------------|------|-------|------------|---------------------|------|-------|------------|-------------------|------|-------|------------|---------------------|------|-------|------------|------------|
|  | Left              | Thru | Right | App. Total | Left                | Thru | Right | App. Total | Left              | Thru | Right | App. Total | Left                | Thru | Right | App. Total |            |
| Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1 |                   |      |       |            |                     |      |       |            |                   |      |       |            |                     |      |       |            |            |
| Peak Hour for Entire Intersection Begins at 07:30 AM       |                   |      |       |            |                     |      |       |            |                   |      |       |            |                     |      |       |            |            |
| 07:30 AM   | 1                 | 3    | 2     | 6          | 1                   | 0    | 0     | 1          | 0                 | 3    | 1     | 4          | 0                   | 1    | 0     | 1          | 12         |
| 07:45 AM   | 0                 | 3    | 0     | 3          | 0                   | 0    | 2     | 2          | 0                 | 3    | 0     | 3          | 1                   | 1    | 0     | 2          | 10         |
| 08:00 AM   | 0                 | 2    | 0     | 2          | 0                   | 1    | 0     | 1          | 0                 | 2    | 0     | 2          | 0                   | 0    | 0     | 0          | 5          |
| 08:15 AM   | 0                 | 3    | 0     | 3          | 0                   | 0    | 2     | 2          | 1                 | 2    | 0     | 3          | 0                   | 1    | 0     | 1          | 9          |
| Total Volume   | 1                 | 11   | 2     | 14         | 1                   | 1    | 4     | 6          | 1                 | 10   | 1     | 12         | 1                   | 3    | 0     | 4          | 36         |
| % App. Total   | 7.1               | 78.6 | 14.3  |            | 16.7                | 16.7 | 66.7  |            | 8.3               | 83.3 | 8.3   |            | 25                  | 75   | 0     |            |            |
| PHF  | .250              | .917 | .250  | .583       | .250                | .250 | .500  | .750       | .250              | .833 | .250  | .750       | .250                | .750 | .000  | .500       | .750       |

City of Victorville  
 N/S: US-395  
 E/W: Luna Road  
 Weather: Clear

File Name : 05\_VIC\_US-395\_Luna AM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

|              | 07:30 AM |      |      |      | 07:30 AM |      |      |      | 07:30 AM |      |      |      |      |      |      |      |
|--------------|----------|------|------|------|----------|------|------|------|----------|------|------|------|------|------|------|------|
| +0 mins.     | 1        | 3    | 2    | 6    | 1        | 0    | 0    | 1    | 0        | 3    | 1    | 4    | 0    | 1    | 0    | 1    |
| +15 mins.    | 0        | 3    | 0    | 3    | 0        | 0    | 2    | 2    | 0        | 3    | 0    | 3    | 1    | 1    | 0    | 2    |
| +30 mins.    | 0        | 2    | 0    | 2    | 0        | 1    | 0    | 1    | 0        | 2    | 0    | 2    | 0    | 0    | 0    | 0    |
| +45 mins.    | 0        | 3    | 0    | 3    | 0        | 0    | 2    | 2    | 1        | 2    | 0    | 3    | 0    | 1    | 0    | 1    |
| Total Volume | 1        | 11   | 2    | 14   | 1        | 1    | 4    | 6    | 1        | 10   | 1    | 12   | 1    | 3    | 0    | 4    |
| % App. Total | 7.1      | 78.6 | 14.3 |      | 16.7     | 16.7 | 66.7 |      | 8.3      | 83.3 | 8.3  |      | 25   | 75   | 0    |      |
| PHF          | .250     | .917 | .250 | .583 | .250     | .250 | .500 | .750 | .250     | .833 | .250 | .750 | .250 | .750 | .000 | .500 |



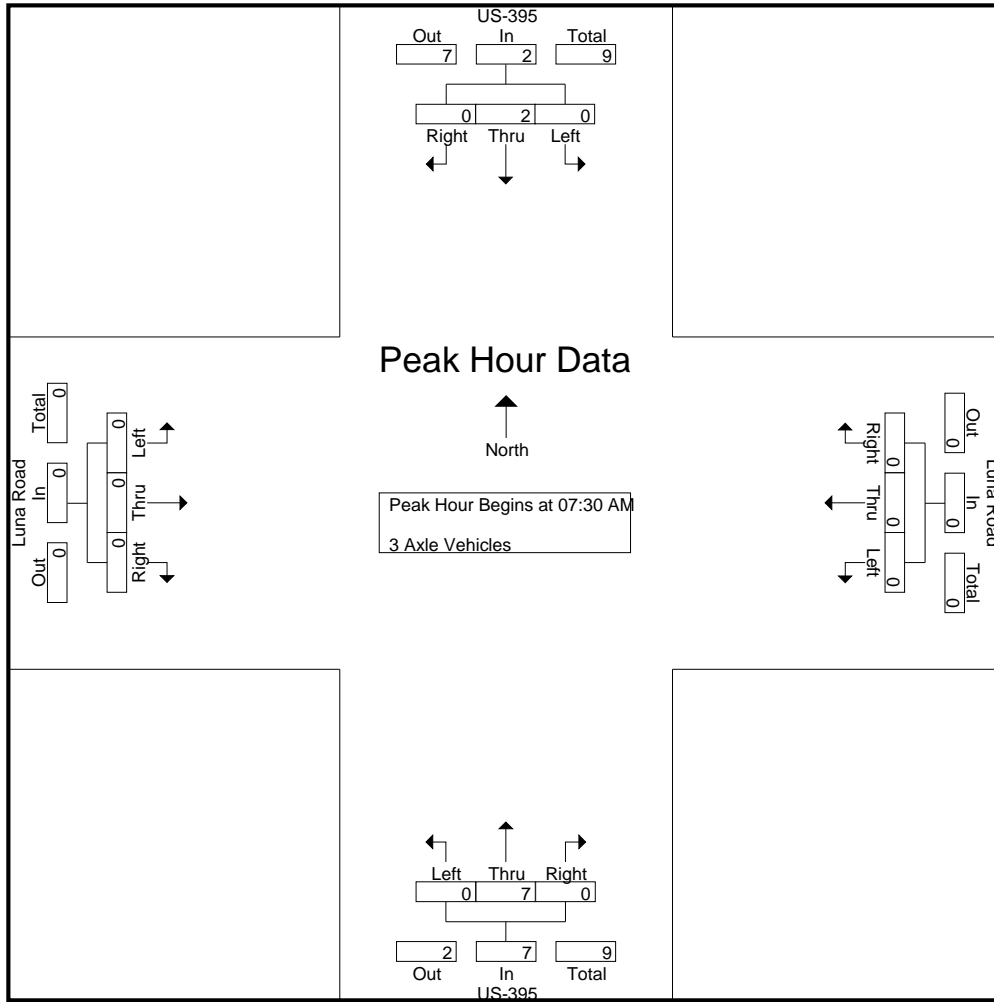
City of Victorville  
 N/S: US-395  
 E/W: Luna Road  
 Weather: Clear

File Name : 05\_VIC\_US-395\_Luna AM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 1

Groups Printed- 3 Axle Vehicles

| Start Time  | US-395 Southbound |      |       |            | Luna Road Westbound |      |       |            | US-395 Northbound |      |       |            | Luna Road Eastbound |      |       |            | Int. Total |    |
|-------------|-------------------|------|-------|------------|---------------------|------|-------|------------|-------------------|------|-------|------------|---------------------|------|-------|------------|------------|----|
|             | Left              | Thru | Right | App. Total | Left                | Thru | Right | App. Total | Left              | Thru | Right | App. Total | Left                | Thru | Right | App. Total |            |    |
| 07:00 AM    | 0                 | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                 | 0    | 1     | 0          | 1                   | 0    | 0     | 0          | 0          | 1  |
| 07:15 AM    | 0                 | 0    | 0     | 0          | 0                   | 0    | 1     | 1          | 0                 | 1    | 0     | 1          | 0                   | 0    | 0     | 0          | 0          | 2  |
| 07:30 AM    | 0                 | 1    | 0     | 1          | 0                   | 0    | 0     | 0          | 0                 | 2    | 0     | 2          | 0                   | 0    | 0     | 0          | 0          | 3  |
| 07:45 AM    | 0                 | 1    | 0     | 1          | 0                   | 0    | 0     | 0          | 0                 | 3    | 0     | 3          | 0                   | 0    | 0     | 0          | 0          | 4  |
| Total       | 0                 | 2    | 0     | 2          | 0                   | 0    | 1     | 1          | 0                 | 7    | 0     | 7          | 0                   | 0    | 0     | 0          | 0          | 10 |
| 08:00 AM    | 0                 | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                 | 2    | 0     | 2          | 0                   | 0    | 0     | 0          | 0          | 2  |
| 08:15 AM    | 0                 | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                 | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          | 0  |
| 08:30 AM    | 0                 | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                 | 1    | 0     | 1          | 0                   | 0    | 0     | 0          | 0          | 1  |
| 08:45 AM    | 0                 | 1    | 0     | 1          | 0                   | 0    | 0     | 0          | 0                 | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          | 1  |
| Total       | 0                 | 1    | 0     | 1          | 0                   | 0    | 0     | 0          | 0                 | 3    | 0     | 3          | 0                   | 0    | 0     | 0          | 0          | 4  |
| Grand Total | 0                 | 3    | 0     | 3          | 0                   | 0    | 1     | 1          | 0                 | 10   | 0     | 10         | 0                   | 0    | 0     | 0          | 0          | 14 |
| Apprch %    | 0                 | 100  | 0     |            | 0                   | 0    | 100   |            | 0                 | 100  | 0     |            | 0                   | 0    | 0     |            |            |    |
| Total %     | 0                 | 21.4 | 0     | 21.4       | 0                   | 0    | 7.1   | 7.1        | 0                 | 71.4 | 0     | 71.4       | 0                   | 0    | 0     | 0          | 0          |    |

| Start Time   | US-395 Southbound |      |       |            | Luna Road Westbound |      |       |            | US-395 Northbound |      |       |            | Luna Road Eastbound |      |       |            | Int. Total |      |
|--|-------------------|------|-------|------------|---------------------|------|-------|------------|-------------------|------|-------|------------|---------------------|------|-------|------------|------------|------|
|  | Left              | Thru | Right | App. Total | Left                | Thru | Right | App. Total | Left              | Thru | Right | App. Total | Left                | Thru | Right | App. Total |            |      |
| Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1 |                   |      |       |            |                     |      |       |            |                   |      |       |            |                     |      |       |            |            |      |
| Peak Hour for Entire Intersection Begins at 07:30 AM       |                   |      |       |            |                     |      |       |            |                   |      |       |            |                     |      |       |            |            |      |
| 07:30 AM   | 0                 | 1    | 0     | 1          | 0                   | 0    | 0     | 0          | 0                 | 0    | 2     | 0          | 2                   | 0    | 0     | 0          | 0          | 3    |
| 07:45 AM   | 0                 | 1    | 0     | 1          | 0                   | 0    | 0     | 0          | 0                 | 0    | 3     | 0          | 3                   | 0    | 0     | 0          | 0          | 4    |
| 08:00 AM   | 0                 | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                 | 0    | 2     | 0          | 2                   | 0    | 0     | 0          | 0          | 2    |
| 08:15 AM   | 0                 | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                 | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          | 0    |
| Total Volume   | 0                 | 2    | 0     | 2          | 0                   | 0    | 0     | 0          | 0                 | 0    | 7     | 0          | 7                   | 0    | 0     | 0          | 0          | 9    |
| % App. Total   | 0                 | 100  | 0     |            | 0                   | 0    | 0     |            | 0                 | 100  | 0     |            | 0                   | 0    | 0     |            |            |      |
| PHF  | .000              | .500 | .000  | .500       | .000                | .000 | .000  | .000       | .000              | .000 | .583  | .000       | .583                | .000 | .000  | .000       | .000       | .563 |



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

|              | 07:30 AM |      |      |      | 07:30 AM |      |      |      | 07:30 AM |      |      |      | 07:30 AM |      |      |      |
|--------------|----------|------|------|------|----------|------|------|------|----------|------|------|------|----------|------|------|------|
| +0 mins.     | 0        | 1    | 0    | 1    | 0        | 0    | 0    | 0    | 0        | 2    | 0    | 2    | 0        | 0    | 0    | 0    |
| +15 mins.    | 0        | 1    | 0    | 1    | 0        | 0    | 0    | 0    | 0        | 3    | 0    | 3    | 0        | 0    | 0    | 0    |
| +30 mins.    | 0        | 0    | 0    | 0    | 0        | 0    | 0    | 0    | 0        | 2    | 0    | 2    | 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        | 2    | 0    | 2    | 0        | 0    | 0    | 0    | 0        | 7    | 0    | 7    | 0        | 0    | 0    | 0    |
| % App. Total | 0        | 100  | 0    | 0    | 0        | 0    | 0    | 0    | 0        | 100  | 0    | 0    | 0        | 0    | 0    | 0    |
| PHF          | .000     | .500 | .000 | .500 | .000     | .000 | .000 | .000 | .000     | .583 | .000 | .583 | .000     | .000 | .000 | .000 |

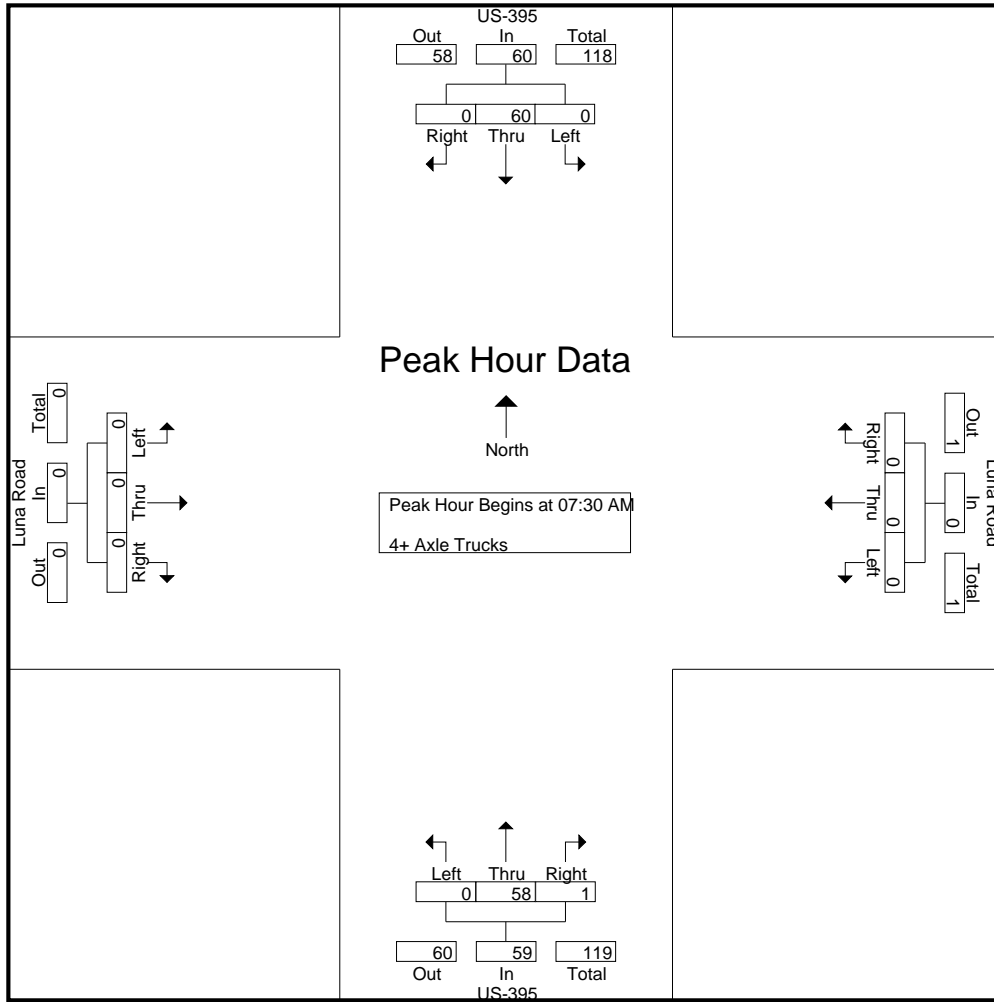
City of Victorville  
 N/S: US-395  
 E/W: Luna Road  
 Weather: Clear

File Name : 05\_VIC\_US-395\_Luna AM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 1

Groups Printed- 4+ Axle Trucks

| Start Time  | US-395 Southbound |      |       |            | Luna Road Westbound |      |       |            | US-395 Northbound |      |       |            | Luna Road Eastbound |      |       |            | Int. Total |
|-------------|-------------------|------|-------|------------|---------------------|------|-------|------------|-------------------|------|-------|------------|---------------------|------|-------|------------|------------|
|             | Left              | Thru | Right | App. Total | Left                | Thru | Right | App. Total | Left              | Thru | Right | App. Total | Left                | Thru | Right | App. Total |            |
| 07:00 AM    | 0                 | 18   | 0     | 18         | 0                   | 0    | 0     | 0          | 0                 | 9    | 0     | 9          | 0                   | 0    | 0     | 0          | 27         |
| 07:15 AM    | 0                 | 8    | 0     | 8          | 0                   | 0    | 0     | 0          | 0                 | 21   | 0     | 21         | 0                   | 0    | 0     | 0          | 29         |
| 07:30 AM    | 0                 | 12   | 0     | 12         | 0                   | 0    | 0     | 0          | 0                 | 12   | 0     | 12         | 0                   | 0    | 0     | 0          | 24         |
| 07:45 AM    | 0                 | 9    | 0     | 9          | 0                   | 0    | 0     | 0          | 0                 | 17   | 0     | 17         | 0                   | 0    | 0     | 0          | 26         |
| Total       | 0                 | 47   | 0     | 47         | 0                   | 0    | 0     | 0          | 0                 | 59   | 0     | 59         | 0                   | 0    | 0     | 0          | 106        |
| 08:00 AM    | 0                 | 22   | 0     | 22         | 0                   | 0    | 0     | 0          | 0                 | 14   | 1     | 15         | 0                   | 0    | 0     | 0          | 37         |
| 08:15 AM    | 0                 | 17   | 0     | 17         | 0                   | 0    | 0     | 0          | 0                 | 15   | 0     | 15         | 0                   | 0    | 0     | 0          | 32         |
| 08:30 AM    | 0                 | 12   | 0     | 12         | 0                   | 0    | 0     | 0          | 0                 | 16   | 0     | 16         | 0                   | 0    | 0     | 0          | 28         |
| 08:45 AM    | 0                 | 19   | 0     | 19         | 0                   | 0    | 0     | 0          | 0                 | 13   | 0     | 13         | 0                   | 0    | 0     | 0          | 32         |
| Total       | 0                 | 70   | 0     | 70         | 0                   | 0    | 0     | 0          | 0                 | 58   | 1     | 59         | 0                   | 0    | 0     | 0          | 129        |
| Grand Total | 0                 | 117  | 0     | 117        | 0                   | 0    | 0     | 0          | 0                 | 117  | 1     | 118        | 0                   | 0    | 0     | 0          | 235        |
| Apprch %    | 0                 | 100  | 0     |            | 0                   | 0    | 0     |            | 0                 | 99.2 | 0.8   |            | 0                   | 0    | 0     |            |            |
| Total %     | 0                 | 49.8 | 0     | 49.8       | 0                   | 0    | 0     | 0          | 0                 | 49.8 | 0.4   | 50.2       | 0                   | 0    | 0     | 0          |            |

| Start Time   | US-395 Southbound |      |       |            | Luna Road Westbound |      |       |            | US-395 Northbound |      |       |            | Luna Road Eastbound |      |       |            | Int. Total |
|--|-------------------|------|-------|------------|---------------------|------|-------|------------|-------------------|------|-------|------------|---------------------|------|-------|------------|------------|
|  | Left              | Thru | Right | App. Total | Left                | Thru | Right | App. Total | Left              | Thru | Right | App. Total | Left                | Thru | Right | App. Total |            |
| Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1 |                   |      |       |            |                     |      |       |            |                   |      |       |            |                     |      |       |            |            |
| Peak Hour for Entire Intersection Begins at 07:30 AM       |                   |      |       |            |                     |      |       |            |                   |      |       |            |                     |      |       |            |            |
| 07:30 AM   | 0                 | 12   | 0     | 12         | 0                   | 0    | 0     | 0          | 0                 | 12   | 0     | 12         | 0                   | 0    | 0     | 0          | 24         |
| 07:45 AM   | 0                 | 9    | 0     | 9          | 0                   | 0    | 0     | 0          | 0                 | 17   | 0     | 17         | 0                   | 0    | 0     | 0          | 26         |
| 08:00 AM   | 0                 | 22   | 0     | 22         | 0                   | 0    | 0     | 0          | 0                 | 14   | 1     | 15         | 0                   | 0    | 0     | 0          | 37         |
| 08:15 AM   | 0                 | 17   | 0     | 17         | 0                   | 0    | 0     | 0          | 0                 | 15   | 0     | 15         | 0                   | 0    | 0     | 0          | 32         |
| Total Volume   | 0                 | 60   | 0     | 60         | 0                   | 0    | 0     | 0          | 0                 | 58   | 1     | 59         | 0                   | 0    | 0     | 0          | 119        |
| % App. Total   | 0                 | 100  | 0     |            | 0                   | 0    | 0     |            | 0                 | 98.3 | 1.7   |            | 0                   | 0    | 0     |            |            |
| PHF  | .000              | .682 | .000  | .682       | .000                | .000 | .000  | .000       | .000              | .853 | .250  | .868       | .000                | .000 | .000  | .000       | .804       |



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

|              | 07:30 AM |      |      |      | 07:30 AM |      |      |      | 07:30 AM |      |      |      |      |      |      |      |
|--------------|----------|------|------|------|----------|------|------|------|----------|------|------|------|------|------|------|------|
| +0 mins.     | 0        | 12   | 0    | 12   | 0        | 0    | 0    | 0    | 0        | 12   | 0    | 12   | 0    | 0    | 0    | 0    |
| +15 mins.    | 0        | 9    | 0    | 9    | 0        | 0    | 0    | 0    | 0        | 17   | 0    | 17   | 0    | 0    | 0    | 0    |
| +30 mins.    | 0        | 22   | 0    | 22   | 0        | 0    | 0    | 0    | 0        | 14   | 1    | 15   | 0    | 0    | 0    | 0    |
| +45 mins.    | 0        | 17   | 0    | 17   | 0        | 0    | 0    | 0    | 0        | 15   | 0    | 15   | 0    | 0    | 0    | 0    |
| Total Volume | 0        | 60   | 0    | 60   | 0        | 0    | 0    | 0    | 0        | 58   | 1    | 59   | 0    | 0    | 0    | 0    |
| % App. Total | 0        | 100  | 0    |      | 0        | 0    | 0    |      | 0        | 98.3 | 1.7  |      | 0    | 0    | 0    |      |
| PHF          | .000     | .682 | .000 | .682 | .000     | .000 | .000 | .000 | .000     | .853 | .250 | .868 | .000 | .000 | .000 | .000 |

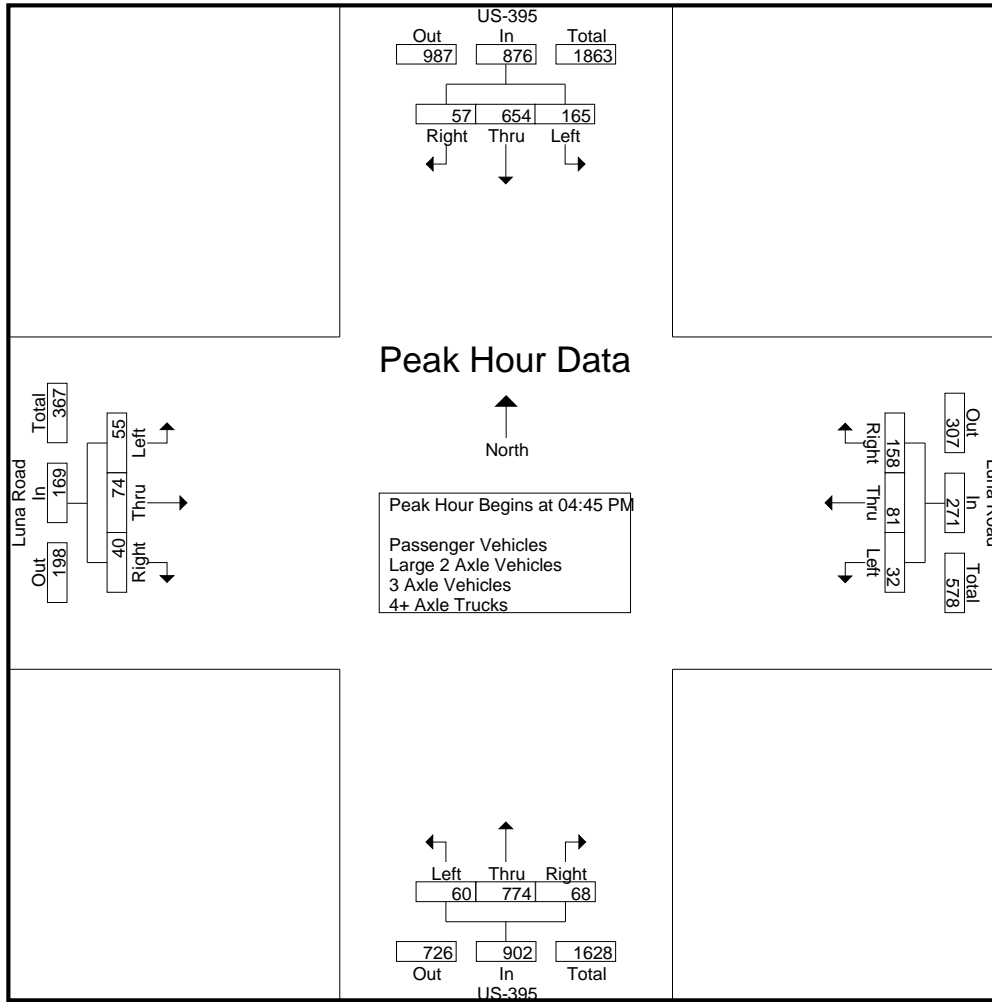
City of Victorville  
 N/S: US-395  
 E/W: Luna Road  
 Weather: Clear

File Name : 05\_VIC\_US-395\_Luna PM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 1

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

| Start Time              | US-395 Southbound |             |            |             | Luna Road Westbound |            |            |            | US-395 Northbound |             |            |             | Luna Road Eastbound |            |           |            | Int. Total  |
|-------------------------|-------------------|-------------|------------|-------------|---------------------|------------|------------|------------|-------------------|-------------|------------|-------------|---------------------|------------|-----------|------------|-------------|
|                         | Left              | Thru        | Right      | App. Total  | Left                | Thru       | Right      | App. Total | Left              | Thru        | Right      | App. Total  | Left                | Thru       | Right     | App. Total |             |
| 04:00 PM                | 42                | 182         | 20         | 244         | 10                  | 18         | 43         | 71         | 14                | 155         | 9          | 178         | 11                  | 13         | 6         | 30         | 523         |
| 04:15 PM                | 36                | 173         | 16         | 225         | 12                  | 23         | 39         | 74         | 14                | 190         | 12         | 216         | 9                   | 24         | 7         | 40         | 555         |
| 04:30 PM                | 26                | 168         | 15         | 209         | 6                   | 9          | 23         | 38         | 16                | 190         | 18         | 224         | 8                   | 15         | 10        | 33         | 504         |
| 04:45 PM                | 47                | 185         | 16         | 248         | 6                   | 20         | 40         | 66         | 14                | 174         | 19         | 207         | 13                  | 22         | 7         | 42         | 563         |
| <b>Total</b>            | <b>151</b>        | <b>708</b>  | <b>67</b>  | <b>926</b>  | <b>34</b>           | <b>70</b>  | <b>145</b> | <b>249</b> | <b>58</b>         | <b>709</b>  | <b>58</b>  | <b>825</b>  | <b>41</b>           | <b>74</b>  | <b>30</b> | <b>145</b> | <b>2145</b> |
| 05:00 PM                | 25                | 143         | 9          | 177         | 4                   | 16         | 37         | 57         | 19                | 207         | 17         | 243         | 14                  | 14         | 10        | 38         | 515         |
| 05:15 PM                | 46                | 173         | 13         | 232         | 13                  | 23         | 47         | 83         | 12                | 200         | 19         | 231         | 15                  | 22         | 11        | 48         | 594         |
| 05:30 PM                | 47                | 153         | 19         | 219         | 9                   | 22         | 34         | 65         | 15                | 193         | 13         | 221         | 13                  | 16         | 12        | 41         | 546         |
| 05:45 PM                | 44                | 146         | 18         | 208         | 10                  | 19         | 55         | 84         | 15                | 173         | 17         | 205         | 11                  | 17         | 9         | 37         | 534         |
| <b>Total</b>            | <b>162</b>        | <b>615</b>  | <b>59</b>  | <b>836</b>  | <b>36</b>           | <b>80</b>  | <b>173</b> | <b>289</b> | <b>61</b>         | <b>773</b>  | <b>66</b>  | <b>900</b>  | <b>53</b>           | <b>69</b>  | <b>42</b> | <b>164</b> | <b>2189</b> |
| <b>Grand Total</b>      | <b>313</b>        | <b>1323</b> | <b>126</b> | <b>1762</b> | <b>70</b>           | <b>150</b> | <b>318</b> | <b>538</b> | <b>119</b>        | <b>1482</b> | <b>124</b> | <b>1725</b> | <b>94</b>           | <b>143</b> | <b>72</b> | <b>309</b> | <b>4334</b> |
| Apprch %                | 17.8              | 75.1        | 7.2        |             | 13                  | 27.9       | 59.1       |            | 6.9               | 85.9        | 7.2        |             | 30.4                | 46.3       | 23.3      |            |             |
| Total %                 | 7.2               | 30.5        | 2.9        | 40.7        | 1.6                 | 3.5        | 7.3        | 12.4       | 2.7               | 34.2        | 2.9        | 39.8        | 2.2                 | 3.3        | 1.7       | 7.1        |             |
| Passenger Vehicles      | 310               | 1166        | 123        | 1599        | 68                  | 150        | 315        | 533        | 119               | 1360        | 121        | 1600        | 94                  | 141        | 70        | 305        | 4037        |
| % Passenger Vehicles    | 99                | 88.1        | 97.6       | 90.7        | 97.1                | 100        | 99.1       | 99.1       | 100               | 91.8        | 97.6       | 92.8        | 100                 | 98.6       | 97.2      | 98.7       | 93.1        |
| Large 2 Axle Vehicles   | 2                 | 15          | 3          | 20          | 2                   | 0          | 3          | 5          | 0                 | 7           | 0          | 7           | 0                   | 2          | 1         | 3          | 35          |
| % Large 2 Axle Vehicles | 0.6               | 1.1         | 2.4        | 1.1         | 2.9                 | 0          | 0.9        | 0.9        | 0                 | 0.5         | 0          | 0.4         | 0                   | 1.4        | 1.4       | 1          | 0.8         |
| 3 Axle Vehicles         | 0                 | 7           | 0          | 7           | 0                   | 0          | 0          | 0          | 0                 | 7           | 1          | 8           | 0                   | 0          | 1         | 1          | 16          |
| % 3 Axle Vehicles       | 0                 | 0.5         | 0          | 0.4         | 0                   | 0          | 0          | 0          | 0                 | 0.5         | 0.8        | 0.5         | 0                   | 0          | 1.4       | 0.3        | 0.4         |
| 4+ Axle Trucks          | 1                 | 135         | 0          | 136         | 0                   | 0          | 0          | 0          | 0                 | 108         | 2          | 110         | 0                   | 0          | 0         | 0          | 246         |
| % 4+ Axle Trucks        | 0.3               | 10.2        | 0          | 7.7         | 0                   | 0          | 0          | 0          | 0                 | 7.3         | 1.6        | 6.4         | 0                   | 0          | 0         | 0          | 5.7         |

| Start Time   | US-395 Southbound |      |       |            | Luna Road Westbound |      |       |            | US-395 Northbound |      |       |            | Luna Road Eastbound |      |       |            | Int. Total |
|--|-------------------|------|-------|------------|---------------------|------|-------|------------|-------------------|------|-------|------------|---------------------|------|-------|------------|------------|
|  | Left              | Thru | Right | App. Total | Left                | Thru | Right | App. Total | Left              | Thru | Right | App. Total | Left                | Thru | Right | App. Total |            |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 |                   |      |       |            |                     |      |       |            |                   |      |       |            |                     |      |       |            |            |
| Peak Hour for Entire Intersection Begins at 04:45 PM       |                   |      |       |            |                     |      |       |            |                   |      |       |            |                     |      |       |            |            |
| 04:45 PM   | 47                | 185  | 16    | 248        | 6                   | 20   | 40    | 66         | 14                | 174  | 19    | 207        | 13                  | 22   | 7     | 42         | 563        |
| 05:00 PM   | 25                | 143  | 9     | 177        | 4                   | 16   | 37    | 57         | 19                | 207  | 17    | 243        | 14                  | 14   | 10    | 38         | 515        |
| 05:15 PM   | 46                | 173  | 13    | 232        | 13                  | 23   | 47    | 83         | 12                | 200  | 19    | 231        | 15                  | 22   | 11    | 48         | 594        |
| 05:30 PM   | 47                | 153  | 19    | 219        | 9                   | 22   | 34    | 65         | 15                | 193  | 13    | 221        | 13                  | 16   | 12    | 41         | 546        |
| Total Volume   | 165               | 654  | 57    | 876        | 32                  | 81   | 158   | 271        | 60                | 774  | 68    | 902        | 55                  | 74   | 40    | 169        | 2218       |
| % App. Total   | 18.8              | 74.7 | 6.5   |            | 11.8                | 29.9 | 58.3  |            | 6.7               | 85.8 | 7.5   |            | 32.5                | 43.8 | 23.7  |            |            |
| PHF  | .878              | .884 | .750  | .883       | .615                | .880 | .840  | .816       | .789              | .935 | .895  | .928       | .917                | .841 | .833  | .880       | .934       |



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

|              | 04:00 PM  |            |           |            | 05:00 PM  |           |           |           | 04:30 PM  |            |           |            | 04:45 PM  |           |           |           |
|--------------|-----------|------------|-----------|------------|-----------|-----------|-----------|-----------|-----------|------------|-----------|------------|-----------|-----------|-----------|-----------|
| +0 mins.     | 42        | 182        | <b>20</b> | 244        | 4         | 16        | 37        | 57        | 16        | 190        | 18        | 224        | 13        | <b>22</b> | 7         | 42        |
| +15 mins.    | 36        | 173        | 16        | 225        | <b>13</b> | <b>23</b> | 47        | 83        | 14        | 174        | <b>19</b> | 207        | 14        | 14        | 10        | 38        |
| +30 mins.    | 26        | 168        | 15        | 209        | 9         | 22        | 34        | 65        | <b>19</b> | <b>207</b> | 17        | <b>243</b> | <b>15</b> | 22        | 11        | <b>48</b> |
| +45 mins.    | <b>47</b> | <b>185</b> | 16        | <b>248</b> | 10        | 19        | <b>55</b> | <b>84</b> | 12        | 200        | 19        | 231        | 13        | 16        | <b>12</b> | 41        |
| Total Volume | 151       | 708        | 67        | 926        | 36        | 80        | 173       | 289       | 61        | 771        | 73        | 905        | 55        | 74        | 40        | 169       |
| % App. Total | 16.3      | 76.5       | 7.2       |            | 12.5      | 27.7      | 59.9      |           | 6.7       | 85.2       | 8.1       |            | 32.5      | 43.8      | 23.7      |           |
| PHF          | .803      | .957       | .838      | .933       | .692      | .870      | .786      | .860      | .803      | .931       | .961      | .931       | .917      | .841      | .833      | .880      |

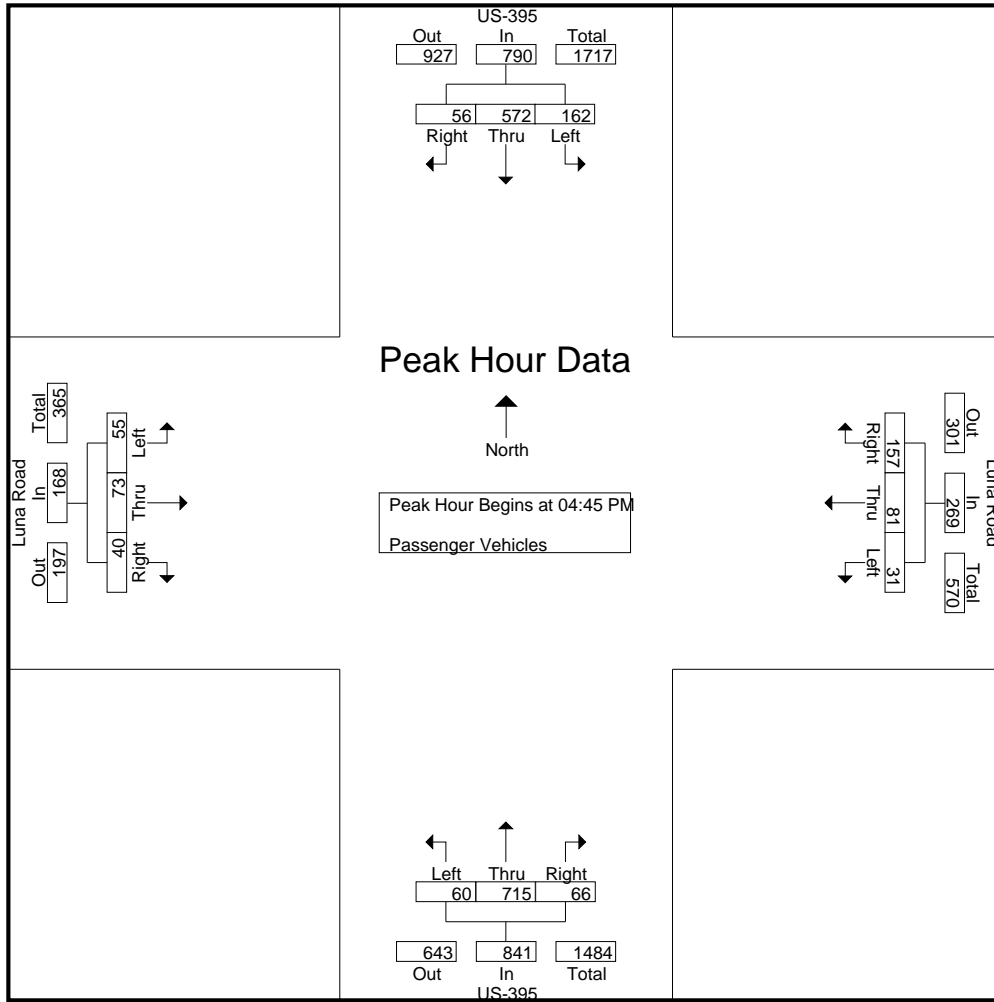
City of Victorville  
 N/S: US-395  
 E/W: Luna Road  
 Weather: Clear

File Name : 05\_VIC\_US-395\_Luna PM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 1

Groups Printed- Passenger Vehicles

| Start Time  | US-395 Southbound |      |       |            | Luna Road Westbound |      |       |            | US-395 Northbound |      |       |            | Luna Road Eastbound |      |       |            | Int. Total |
|-------------|-------------------|------|-------|------------|---------------------|------|-------|------------|-------------------|------|-------|------------|---------------------|------|-------|------------|------------|
|             | Left              | Thru | Right | App. Total | Left                | Thru | Right | App. Total | Left              | Thru | Right | App. Total | Left                | Thru | Right | App. Total |            |
| 04:00 PM    | 42                | 158  | 20    | 220        | 10                  | 18   | 43    | 71         | 14                | 138  | 9     | 161        | 11                  | 13   | 6     | 30         | 482        |
| 04:15 PM    | 36                | 155  | 15    | 206        | 11                  | 23   | 37    | 71         | 14                | 165  | 12    | 191        | 9                   | 23   | 7     | 39         | 507        |
| 04:30 PM    | 26                | 152  | 14    | 192        | 6                   | 9    | 23    | 38         | 16                | 180  | 17    | 213        | 8                   | 15   | 8     | 31         | 474        |
| 04:45 PM    | 47                | 164  | 16    | 227        | 6                   | 20   | 40    | 66         | 14                | 166  | 19    | 199        | 13                  | 22   | 7     | 42         | 534        |
| Total       | 151               | 629  | 65    | 845        | 33                  | 70   | 143   | 246        | 58                | 649  | 57    | 764        | 41                  | 73   | 28    | 142        | 1997       |
| 05:00 PM    | 24                | 121  | 9     | 154        | 4                   | 16   | 37    | 57         | 19                | 186  | 17    | 222        | 14                  | 13   | 10    | 37         | 470        |
| 05:15 PM    | 45                | 147  | 13    | 205        | 12                  | 23   | 46    | 81         | 12                | 190  | 17    | 219        | 15                  | 22   | 11    | 48         | 553        |
| 05:30 PM    | 46                | 140  | 18    | 204        | 9                   | 22   | 34    | 65         | 15                | 173  | 13    | 201        | 13                  | 16   | 12    | 41         | 511        |
| 05:45 PM    | 44                | 129  | 18    | 191        | 10                  | 19   | 55    | 84         | 15                | 162  | 17    | 194        | 11                  | 17   | 9     | 37         | 506        |
| Total       | 159               | 537  | 58    | 754        | 35                  | 80   | 172   | 287        | 61                | 711  | 64    | 836        | 53                  | 68   | 42    | 163        | 2040       |
| Grand Total | 310               | 1166 | 123   | 1599       | 68                  | 150  | 315   | 533        | 119               | 1360 | 121   | 1600       | 94                  | 141  | 70    | 305        | 4037       |
| Apprch %    | 19.4              | 72.9 | 7.7   |            | 12.8                | 28.1 | 59.1  |            | 7.4               | 85   | 7.6   |            | 30.8                | 46.2 | 23    |            |            |
| Total %     | 7.7               | 28.9 | 3     | 39.6       | 1.7                 | 3.7  | 7.8   | 13.2       | 2.9               | 33.7 | 3     | 39.6       | 2.3                 | 3.5  | 1.7   | 7.6        |            |

| Start Time   | US-395 Southbound |      |       |            | Luna Road Westbound |      |       |            | US-395 Northbound |      |       |            | Luna Road Eastbound |      |       |            | Int. Total |
|--|-------------------|------|-------|------------|---------------------|------|-------|------------|-------------------|------|-------|------------|---------------------|------|-------|------------|------------|
|  | Left              | Thru | Right | App. Total | Left                | Thru | Right | App. Total | Left              | Thru | Right | App. Total | Left                | Thru | Right | App. Total |            |
| Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1 |                   |      |       |            |                     |      |       |            |                   |      |       |            |                     |      |       |            |            |
| Peak Hour for Entire Intersection Begins at 04:45 PM       |                   |      |       |            |                     |      |       |            |                   |      |       |            |                     |      |       |            |            |
| 04:45 PM   | 47                | 164  | 16    | 227        | 6                   | 20   | 40    | 66         | 14                | 166  | 19    | 199        | 13                  | 22   | 7     | 42         | 534        |
| 05:00 PM   | 24                | 121  | 9     | 154        | 4                   | 16   | 37    | 57         | 19                | 186  | 17    | 222        | 14                  | 13   | 10    | 37         | 470        |
| 05:15 PM   | 45                | 147  | 13    | 205        | 12                  | 23   | 46    | 81         | 12                | 190  | 17    | 219        | 15                  | 22   | 11    | 48         | 553        |
| 05:30 PM   | 46                | 140  | 18    | 204        | 9                   | 22   | 34    | 65         | 15                | 173  | 13    | 201        | 13                  | 16   | 12    | 41         | 511        |
| Total Volume   | 162               | 572  | 56    | 790        | 31                  | 81   | 157   | 269        | 60                | 715  | 66    | 841        | 55                  | 73   | 40    | 168        | 2068       |
| % App. Total   | 20.5              | 72.4 | 7.1   |            | 11.5                | 30.1 | 58.4  |            | 7.1               | 85   | 7.8   |            | 32.7                | 43.5 | 23.8  |            |            |
| PHF  | .862              | .872 | .778  | .870       | .646                | .880 | .853  | .830       | .789              | .941 | .868  | .947       | .917                | .830 | .833  | .875       | .935       |



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

|              | 04:45 PM  |            |           |            | 04:45 PM  |           |           |           | 04:45 PM  |            |           |            |           |           |           |           |
|--------------|-----------|------------|-----------|------------|-----------|-----------|-----------|-----------|-----------|------------|-----------|------------|-----------|-----------|-----------|-----------|
| +0 mins.     | <b>47</b> | <b>164</b> | 16        | <b>227</b> | 6         | 20        | 40        | 66        | 14        | 166        | <b>19</b> | 199        | 13        | <b>22</b> | 7         | 42        |
| +15 mins.    | 24        | 121        | 9         | 154        | 4         | 16        | 37        | 57        | <b>19</b> | 186        | 17        | <b>222</b> | 14        | 13        | 10        | 37        |
| +30 mins.    | 45        | 147        | 13        | 205        | <b>12</b> | <b>23</b> | <b>46</b> | <b>81</b> | 12        | <b>190</b> | 17        | 219        | <b>15</b> | 22        | 11        | <b>48</b> |
| +45 mins.    | 46        | 140        | <b>18</b> | 204        | 9         | 22        | 34        | 65        | 15        | 173        | 13        | 201        | 13        | 16        | <b>12</b> | 41        |
| Total Volume | 162       | 572        | 56        | 790        | 31        | 81        | 157       | 269       | 60        | 715        | 66        | 841        | 55        | 73        | 40        | 168       |
| % App. Total | 20.5      | 72.4       | 7.1       |            | 11.5      | 30.1      | 58.4      |           | 7.1       | 85         | 7.8       |            | 32.7      | 43.5      | 23.8      |           |
| PHF          | .862      | .872       | .778      | .870       | .646      | .880      | .853      | .830      | .789      | .941       | .868      | .947       | .917      | .830      | .833      | .875      |



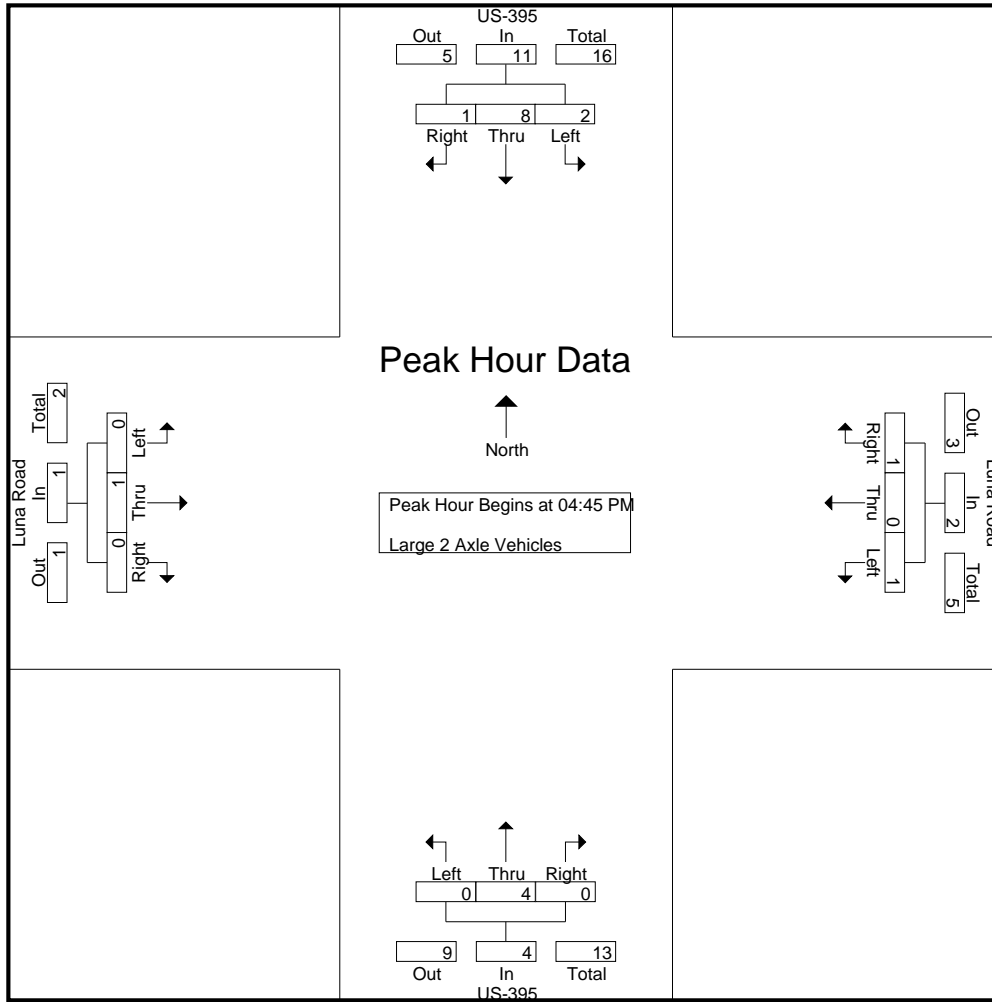
City of Victorville  
 N/S: US-395  
 E/W: Luna Road  
 Weather: Clear

File Name : 05\_VIC\_US-395\_Luna PM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

| Start Time         | US-395 Southbound |           |          |            | Luna Road Westbound |          |          |            | US-395 Northbound |          |          |            | Luna Road Eastbound |          |          |            | Int. Total |
|--------------------|-------------------|-----------|----------|------------|---------------------|----------|----------|------------|-------------------|----------|----------|------------|---------------------|----------|----------|------------|------------|
|                    | Left              | Thru      | Right    | App. Total | Left                | Thru     | Right    | App. Total | Left              | Thru     | Right    | App. Total | Left                | Thru     | Right    | App. Total |            |
| 04:00 PM           | 0                 | 4         | 0        | 4          | 0                   | 0        | 0        | 0          | 0                 | 1        | 0        | 1          | 0                   | 0        | 0        | 0          | 5          |
| 04:15 PM           | 0                 | 2         | 1        | 3          | 1                   | 0        | 2        | 3          | 0                 | 1        | 0        | 1          | 0                   | 1        | 0        | 1          | 8          |
| 04:30 PM           | 0                 | 0         | 1        | 1          | 0                   | 0        | 0        | 0          | 0                 | 0        | 0        | 0          | 0                   | 0        | 1        | 1          | 2          |
| 04:45 PM           | 0                 | 1         | 0        | 1          | 0                   | 0        | 0        | 0          | 0                 | 2        | 0        | 2          | 0                   | 0        | 0        | 0          | 3          |
| <b>Total</b>       | <b>0</b>          | <b>7</b>  | <b>2</b> | <b>9</b>   | <b>1</b>            | <b>0</b> | <b>2</b> | <b>3</b>   | <b>0</b>          | <b>4</b> | <b>0</b> | <b>4</b>   | <b>0</b>            | <b>1</b> | <b>1</b> | <b>2</b>   | <b>18</b>  |
| 05:00 PM           | 1                 | 3         | 0        | 4          | 0                   | 0        | 0        | 0          | 0                 | 0        | 0        | 0          | 0                   | 1        | 0        | 1          | 5          |
| 05:15 PM           | 0                 | 2         | 0        | 2          | 1                   | 0        | 1        | 2          | 0                 | 1        | 0        | 1          | 0                   | 0        | 0        | 0          | 5          |
| 05:30 PM           | 1                 | 2         | 1        | 4          | 0                   | 0        | 0        | 0          | 0                 | 1        | 0        | 1          | 0                   | 0        | 0        | 0          | 5          |
| 05:45 PM           | 0                 | 1         | 0        | 1          | 0                   | 0        | 0        | 0          | 0                 | 1        | 0        | 1          | 0                   | 0        | 0        | 0          | 2          |
| <b>Total</b>       | <b>2</b>          | <b>8</b>  | <b>1</b> | <b>11</b>  | <b>1</b>            | <b>0</b> | <b>1</b> | <b>2</b>   | <b>0</b>          | <b>3</b> | <b>0</b> | <b>3</b>   | <b>0</b>            | <b>1</b> | <b>0</b> | <b>1</b>   | <b>17</b>  |
| <b>Grand Total</b> | <b>2</b>          | <b>15</b> | <b>3</b> | <b>20</b>  | <b>2</b>            | <b>0</b> | <b>3</b> | <b>5</b>   | <b>0</b>          | <b>7</b> | <b>0</b> | <b>7</b>   | <b>0</b>            | <b>2</b> | <b>1</b> | <b>3</b>   | <b>35</b>  |
| Apprch %           | 10                | 75        | 15       |            | 40                  | 0        | 60       |            | 0                 | 100      | 0        |            | 0                   | 66.7     | 33.3     |            |            |
| Total %            | 5.7               | 42.9      | 8.6      | 57.1       | 5.7                 | 0        | 8.6      | 14.3       | 0                 | 20       | 0        | 20         | 0                   | 5.7      | 2.9      | 8.6        |            |

| Start Time   | US-395 Southbound |          |          |            | Luna Road Westbound |          |          |            | US-395 Northbound |          |          |            | Luna Road Eastbound |          |          |            | Int. Total |
|--|-------------------|----------|----------|------------|---------------------|----------|----------|------------|-------------------|----------|----------|------------|---------------------|----------|----------|------------|------------|
|  | Left              | Thru     | Right    | App. Total | Left                | Thru     | Right    | App. Total | Left              | Thru     | Right    | App. Total | Left                | Thru     | Right    | App. Total |            |
| Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1 |                   |          |          |            |                     |          |          |            |                   |          |          |            |                     |          |          |            |            |
| Peak Hour for Entire Intersection Begins at 04:45 PM       |                   |          |          |            |                     |          |          |            |                   |          |          |            |                     |          |          |            |            |
| 04:45 PM   | 0                 | 1        | 0        | 1          | 0                   | 0        | 0        | 0          | 0                 | 2        | 0        | 2          | 0                   | 0        | 0        | 0          | 3          |
| 05:00 PM   | 1                 | 3        | 0        | 4          | 0                   | 0        | 0        | 0          | 0                 | 0        | 0        | 0          | 0                   | 1        | 0        | 1          | 5          |
| 05:15 PM   | 0                 | 2        | 0        | 2          | 1                   | 0        | 1        | 2          | 0                 | 1        | 0        | 1          | 0                   | 0        | 0        | 0          | 5          |
| 05:30 PM   | 1                 | 2        | 1        | 4          | 0                   | 0        | 0        | 0          | 0                 | 1        | 0        | 1          | 0                   | 0        | 0        | 0          | 5          |
| <b>Total Volume</b>  | <b>2</b>          | <b>8</b> | <b>1</b> | <b>11</b>  | <b>1</b>            | <b>0</b> | <b>1</b> | <b>2</b>   | <b>0</b>          | <b>4</b> | <b>0</b> | <b>4</b>   | <b>0</b>            | <b>1</b> | <b>0</b> | <b>1</b>   | <b>18</b>  |
| % App. Total   | 18.2              | 72.7     | 9.1      |            | 50                  | 0        | 50       |            | 0                 | 100      | 0        |            | 0                   | 100      | 0        |            |            |
| PHF  | .500              | .667     | .250     | .688       | .250                | .000     | .250     | .250       | .000              | .500     | .000     | .500       | .000                | .250     | .000     | .250       | .900       |



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

|              | 04:45 PM |          |      |          | 04:45 PM |      |          |          | 04:45 PM |          |      |          | 04:45 PM |          |      |          |
|--------------|----------|----------|------|----------|----------|------|----------|----------|----------|----------|------|----------|----------|----------|------|----------|
| +0 mins.     | 0        | 1        | 0    | 1        | 0        | 0    | 0        | 0        | 0        | <b>2</b> | 0    | <b>2</b> | 0        | 0        | 0    | 0        |
| +15 mins.    | <b>1</b> | <b>3</b> | 0    | <b>4</b> | 0        | 0    | 0        | 0        | 0        | 0        | 0    | 0        | 0        | <b>1</b> | 0    | <b>1</b> |
| +30 mins.    | 0        | 2        | 0    | 2        | <b>1</b> | 0    | <b>1</b> | <b>2</b> | 0        | 1        | 0    | 1        | 0        | 0        | 0    | 0        |
| +45 mins.    | 1        | 2        | 1    | 4        | 0        | 0    | 0        | 0        | 0        | 1        | 0    | 1        | 0        | 0        | 0    | 0        |
| Total Volume | 2        | 8        | 1    | 11       | 1        | 0    | 1        | 2        | 0        | 4        | 0    | 4        | 0        | 1        | 0    | 1        |
| % App. Total | 18.2     | 72.7     | 9.1  |          | 50       | 0    | 50       |          | 0        | 100      | 0    |          | 0        | 100      | 0    |          |
| PHF          | .500     | .667     | .250 | .688     | .250     | .000 | .250     | .250     | .000     | .500     | .000 | .500     | .000     | .250     | .000 | .250     |

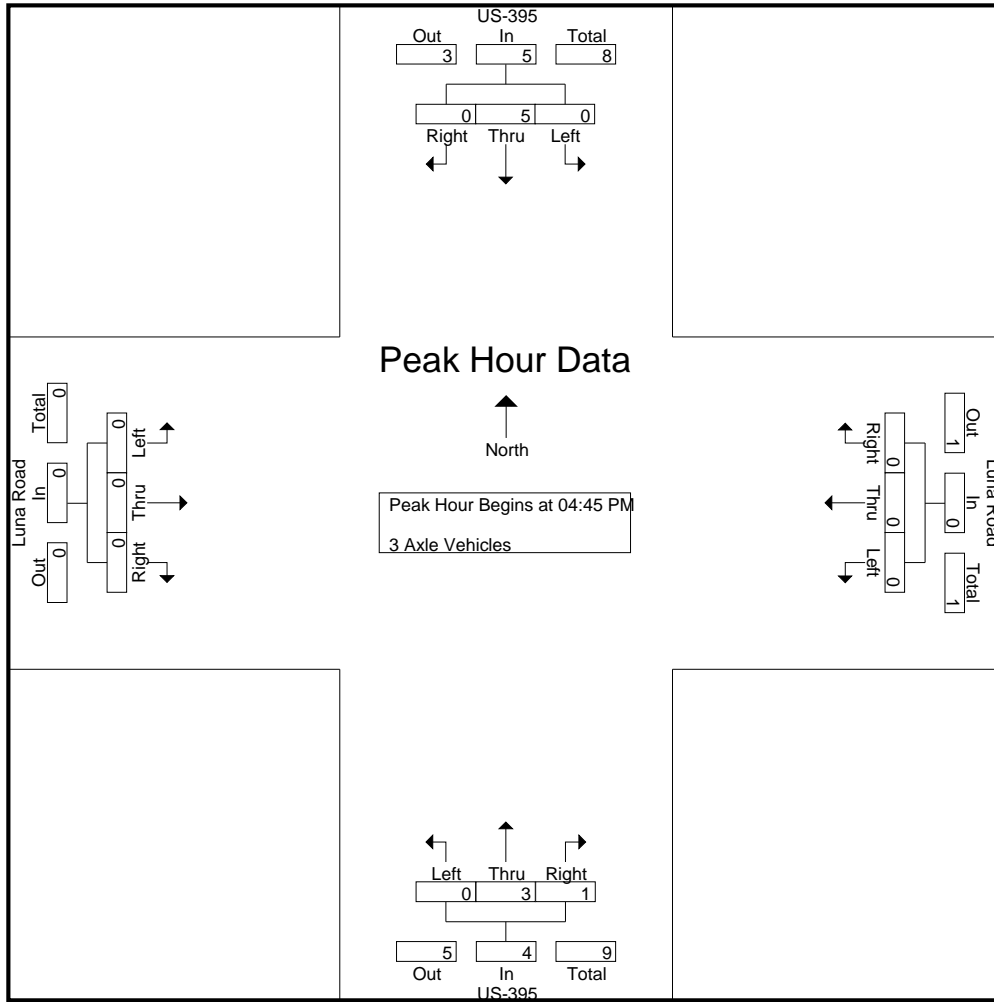
City of Victorville  
 N/S: US-395  
 E/W: Luna Road  
 Weather: Clear

File Name : 05\_VIC\_US-395\_Luna PM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 1

Groups Printed- 3 Axle Vehicles

| Start Time  | US-395 Southbound |      |       |            | Luna Road Westbound |      |       |            | US-395 Northbound |      |       |            | Luna Road Eastbound |      |       |            | Int. Total |
|-------------|-------------------|------|-------|------------|---------------------|------|-------|------------|-------------------|------|-------|------------|---------------------|------|-------|------------|------------|
|             | Left              | Thru | Right | App. Total | Left                | Thru | Right | App. Total | Left              | Thru | Right | App. Total | Left                | Thru | Right | App. Total |            |
| 04:00 PM    | 0                 | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                 | 1    | 0     | 1          | 0                   | 0    | 0     | 0          | 1          |
| 04:15 PM    | 0                 | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                 | 1    | 0     | 1          | 0                   | 0    | 0     | 0          | 1          |
| 04:30 PM    | 0                 | 1    | 0     | 1          | 0                   | 0    | 0     | 0          | 0                 | 1    | 0     | 1          | 0                   | 0    | 1     | 1          | 3          |
| 04:45 PM    | 0                 | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                 | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| Total       | 0                 | 1    | 0     | 1          | 0                   | 0    | 0     | 0          | 0                 | 3    | 0     | 3          | 0                   | 0    | 1     | 1          | 5          |
| 05:00 PM    | 0                 | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                 | 1    | 0     | 1          | 0                   | 0    | 0     | 0          | 1          |
| 05:15 PM    | 0                 | 3    | 0     | 3          | 0                   | 0    | 0     | 0          | 0                 | 0    | 1     | 1          | 0                   | 0    | 0     | 0          | 4          |
| 05:30 PM    | 0                 | 2    | 0     | 2          | 0                   | 0    | 0     | 0          | 0                 | 2    | 0     | 2          | 0                   | 0    | 0     | 0          | 4          |
| 05:45 PM    | 0                 | 1    | 0     | 1          | 0                   | 0    | 0     | 0          | 0                 | 1    | 0     | 1          | 0                   | 0    | 0     | 0          | 2          |
| Total       | 0                 | 6    | 0     | 6          | 0                   | 0    | 0     | 0          | 0                 | 4    | 1     | 5          | 0                   | 0    | 0     | 0          | 11         |
| Grand Total | 0                 | 7    | 0     | 7          | 0                   | 0    | 0     | 0          | 0                 | 7    | 1     | 8          | 0                   | 0    | 1     | 1          | 16         |
| Apprch %    | 0                 | 100  | 0     |            | 0                   | 0    | 0     |            | 0                 | 87.5 | 12.5  |            | 0                   | 0    | 100   |            |            |
| Total %     | 0                 | 43.8 | 0     | 43.8       | 0                   | 0    | 0     | 0          | 0                 | 43.8 | 6.2   | 50         | 0                   | 0    | 6.2   | 6.2        |            |

| Start Time   | US-395 Southbound |      |       |            | Luna Road Westbound |      |       |            | US-395 Northbound |      |       |            | Luna Road Eastbound |      |       |            | Int. Total |
|--|-------------------|------|-------|------------|---------------------|------|-------|------------|-------------------|------|-------|------------|---------------------|------|-------|------------|------------|
|  | Left              | Thru | Right | App. Total | Left                | Thru | Right | App. Total | Left              | Thru | Right | App. Total | Left                | Thru | Right | App. Total |            |
| Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1 |                   |      |       |            |                     |      |       |            |                   |      |       |            |                     |      |       |            |            |
| Peak Hour for Entire Intersection Begins at 04:45 PM       |                   |      |       |            |                     |      |       |            |                   |      |       |            |                     |      |       |            |            |
| 04:45 PM   | 0                 | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                 | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| 05:00 PM   | 0                 | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                 | 1    | 0     | 1          | 0                   | 0    | 0     | 0          | 1          |
| 05:15 PM   | 0                 | 3    | 0     | 3          | 0                   | 0    | 0     | 0          | 0                 | 0    | 1     | 1          | 0                   | 0    | 0     | 0          | 4          |
| 05:30 PM   | 0                 | 2    | 0     | 2          | 0                   | 0    | 0     | 0          | 0                 | 2    | 0     | 2          | 0                   | 0    | 0     | 0          | 4          |
| Total Volume   | 0                 | 5    | 0     | 5          | 0                   | 0    | 0     | 0          | 0                 | 3    | 1     | 4          | 0                   | 0    | 0     | 0          | 9          |
| % App. Total   | 0                 | 100  | 0     |            | 0                   | 0    | 0     |            | 0                 | 75   | 25    |            | 0                   | 0    | 0     |            |            |
| PHF  | .000              | .417 | .000  | .417       | .000                | .000 | .000  | .000       | .000              | .375 | .250  | .500       | .000                | .000 | .000  | .000       | .563       |



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

|              | 04:45 PM |          |      |          | 04:45 PM |      |      |      | 04:45 PM |          |          |          | 04:45 PM |      |      |      |
|--------------|----------|----------|------|----------|----------|------|------|------|----------|----------|----------|----------|----------|------|------|------|
| +0 mins.     | 0        | 0        | 0    | 0        | 0        | 0    | 0    | 0    | 0        | 0        | 0        | 0        | 0        | 0    | 0    | 0    |
| +15 mins.    | 0        | 0        | 0    | 0        | 0        | 0    | 0    | 0    | 0        | 1        | 0        | 1        | 0        | 0    | 0    | 0    |
| +30 mins.    | 0        | <b>3</b> | 0    | <b>3</b> | 0        | 0    | 0    | 0    | 0        | 0        | <b>1</b> | <b>1</b> | 0        | 0    | 0    | 0    |
| +45 mins.    | 0        | 2        | 0    | 2        | 0        | 0    | 0    | 0    | 0        | <b>2</b> | 0        | <b>2</b> | 0        | 0    | 0    | 0    |
| Total Volume | 0        | 5        | 0    | 5        | 0        | 0    | 0    | 0    | 0        | 3        | 1        | 4        | 0        | 0    | 0    | 0    |
| % App. Total | 0        | 100      | 0    | 0        | 0        | 0    | 0    | 0    | 0        | 75       | 25       |          | 0        | 0    | 0    | 0    |
| PHF          | .000     | .417     | .000 | .417     | .000     | .000 | .000 | .000 | .000     | .375     | .250     | .500     | .000     | .000 | .000 | .000 |

City of Victorville  
 N/S: US-395  
 E/W: Luna Road  
 Weather: Clear

File Name : 05\_VIC\_US-395\_Luna PM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 1

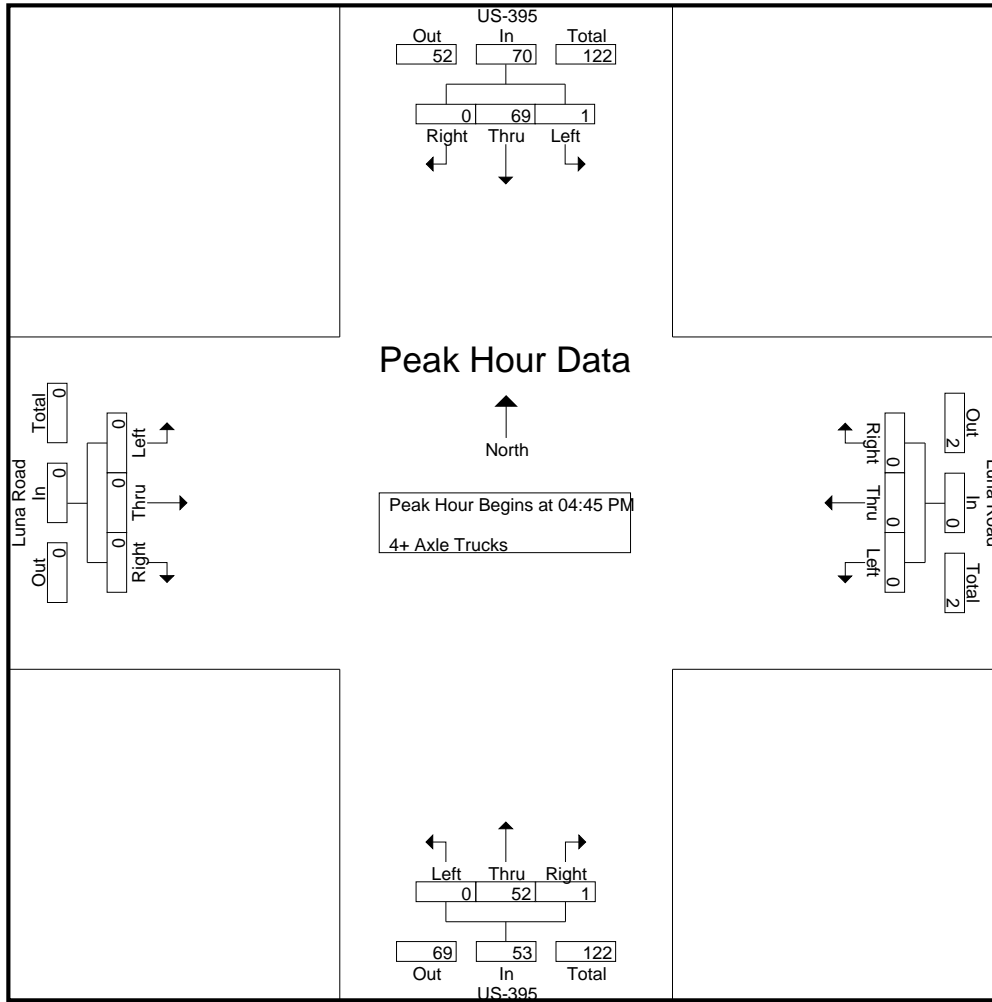
Groups Printed- 4+ Axle Trucks

| Start Time  | US-395 Southbound |      |       |            | Luna Road Westbound |      |       |            | US-395 Northbound |      |       |            | Luna Road Eastbound |      |       |            | Int. Total |
|-------------|-------------------|------|-------|------------|---------------------|------|-------|------------|-------------------|------|-------|------------|---------------------|------|-------|------------|------------|
|             | Left              | Thru | Right | App. Total | Left                | Thru | Right | App. Total | Left              | Thru | Right | App. Total | Left                | Thru | Right | App. Total |            |
| 04:00 PM    | 0                 | 20   | 0     | 20         | 0                   | 0    | 0     | 0          | 0                 | 15   | 0     | 15         | 0                   | 0    | 0     | 0          | 35         |
| 04:15 PM    | 0                 | 16   | 0     | 16         | 0                   | 0    | 0     | 0          | 0                 | 23   | 0     | 23         | 0                   | 0    | 0     | 0          | 39         |
| 04:30 PM    | 0                 | 15   | 0     | 15         | 0                   | 0    | 0     | 0          | 0                 | 9    | 1     | 10         | 0                   | 0    | 0     | 0          | 25         |
| 04:45 PM    | 0                 | 20   | 0     | 20         | 0                   | 0    | 0     | 0          | 0                 | 6    | 0     | 6          | 0                   | 0    | 0     | 0          | 26         |
| Total       | 0                 | 71   | 0     | 71         | 0                   | 0    | 0     | 0          | 0                 | 53   | 1     | 54         | 0                   | 0    | 0     | 0          | 125        |
| 05:00 PM    | 0                 | 19   | 0     | 19         | 0                   | 0    | 0     | 0          | 0                 | 20   | 0     | 20         | 0                   | 0    | 0     | 0          | 39         |
| 05:15 PM    | 1                 | 21   | 0     | 22         | 0                   | 0    | 0     | 0          | 0                 | 9    | 1     | 10         | 0                   | 0    | 0     | 0          | 32         |
| 05:30 PM    | 0                 | 9    | 0     | 9          | 0                   | 0    | 0     | 0          | 0                 | 17   | 0     | 17         | 0                   | 0    | 0     | 0          | 26         |
| 05:45 PM    | 0                 | 15   | 0     | 15         | 0                   | 0    | 0     | 0          | 0                 | 9    | 0     | 9          | 0                   | 0    | 0     | 0          | 24         |
| Total       | 1                 | 64   | 0     | 65         | 0                   | 0    | 0     | 0          | 0                 | 55   | 1     | 56         | 0                   | 0    | 0     | 0          | 121        |
| Grand Total | 1                 | 135  | 0     | 136        | 0                   | 0    | 0     | 0          | 0                 | 108  | 2     | 110        | 0                   | 0    | 0     | 0          | 246        |
| Apprch %    | 0.7               | 99.3 | 0     |            | 0                   | 0    | 0     |            | 0                 | 98.2 | 1.8   |            | 0                   | 0    | 0     |            |            |
| Total %     | 0.4               | 54.9 | 0     | 55.3       | 0                   | 0    | 0     | 0          | 0                 | 43.9 | 0.8   | 44.7       | 0                   | 0    | 0     | 0          |            |

| Start Time   | US-395 Southbound |      |       |            | Luna Road Westbound |      |       |            | US-395 Northbound |           |       |            | Luna Road Eastbound |      |       |            | Int. Total |
|--|-------------------|------|-------|------------|---------------------|------|-------|------------|-------------------|-----------|-------|------------|---------------------|------|-------|------------|------------|
|  | Left              | Thru | Right | App. Total | Left                | Thru | Right | App. Total | Left              | Thru      | Right | App. Total | Left                | Thru | Right | App. Total |            |
| Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1 |                   |      |       |            |                     |      |       |            |                   |           |       |            |                     |      |       |            |            |
| Peak Hour for Entire Intersection Begins at 04:45 PM       |                   |      |       |            |                     |      |       |            |                   |           |       |            |                     |      |       |            |            |
| 04:45 PM   | 0                 | 20   | 0     | 20         | 0                   | 0    | 0     | 0          | 0                 | 6         | 0     | 6          | 0                   | 0    | 0     | 0          | 26         |
| 05:00 PM   | 0                 | 19   | 0     | 19         | 0                   | 0    | 0     | 0          | 0                 | <b>20</b> | 0     | <b>20</b>  | 0                   | 0    | 0     | 0          | <b>39</b>  |
| 05:15 PM   | 1                 | 21   | 0     | 22         | 0                   | 0    | 0     | 0          | 0                 | 9         | 1     | 10         | 0                   | 0    | 0     | 0          | 32         |
| 05:30 PM   | 0                 | 9    | 0     | 9          | 0                   | 0    | 0     | 0          | 0                 | 17        | 0     | 17         | 0                   | 0    | 0     | 0          | 26         |
| Total Volume   | 1                 | 69   | 0     | 70         | 0                   | 0    | 0     | 0          | 0                 | 52        | 1     | 53         | 0                   | 0    | 0     | 0          | 123        |
| % App. Total   | 1.4               | 98.6 | 0     |            | 0                   | 0    | 0     |            | 0                 | 98.1      | 1.9   |            | 0                   | 0    | 0     |            |            |
| PHF  | .250              | .821 | .000  | .795       | .000                | .000 | .000  | .000       | .000              | .650      | .250  | .663       | .000                | .000 | .000  | .000       | .788       |

City of Victorville  
 N/S: US-395  
 E/W: Luna Road  
 Weather: Clear

File Name : 05\_VIC\_US-395\_Luna PM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 2



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

|              | 04:45 PM |           |      |           | 04:45 PM |      |      |      | 04:45 PM |           |          |           | 04:45 PM |      |      |      |
|--------------|----------|-----------|------|-----------|----------|------|------|------|----------|-----------|----------|-----------|----------|------|------|------|
| +0 mins.     | 0        | 20        | 0    | 20        | 0        | 0    | 0    | 0    | 0        | 6         | 0        | 6         | 0        | 0    | 0    | 0    |
| +15 mins.    | 0        | 19        | 0    | 19        | 0        | 0    | 0    | 0    | 0        | <b>20</b> | 0        | <b>20</b> | 0        | 0    | 0    | 0    |
| +30 mins.    | <b>1</b> | <b>21</b> | 0    | <b>22</b> | 0        | 0    | 0    | 0    | 0        | 9         | <b>1</b> | 10        | 0        | 0    | 0    | 0    |
| +45 mins.    | 0        | 9         | 0    | 9         | 0        | 0    | 0    | 0    | 0        | 17        | 0        | 17        | 0        | 0    | 0    | 0    |
| Total Volume | 1        | 69        | 0    | 70        | 0        | 0    | 0    | 0    | 0        | 52        | 1        | 53        | 0        | 0    | 0    | 0    |
| % App. Total | 1.4      | 98.6      | 0    |           | 0        | 0    | 0    |      | 0        | 98.1      | 1.9      |           | 0        | 0    | 0    |      |
| PHF          | .250     | .821      | .000 | .795      | .000     | .000 | .000 | .000 | .000     | .650      | .250     | .663      | .000     | .000 | .000 | .000 |

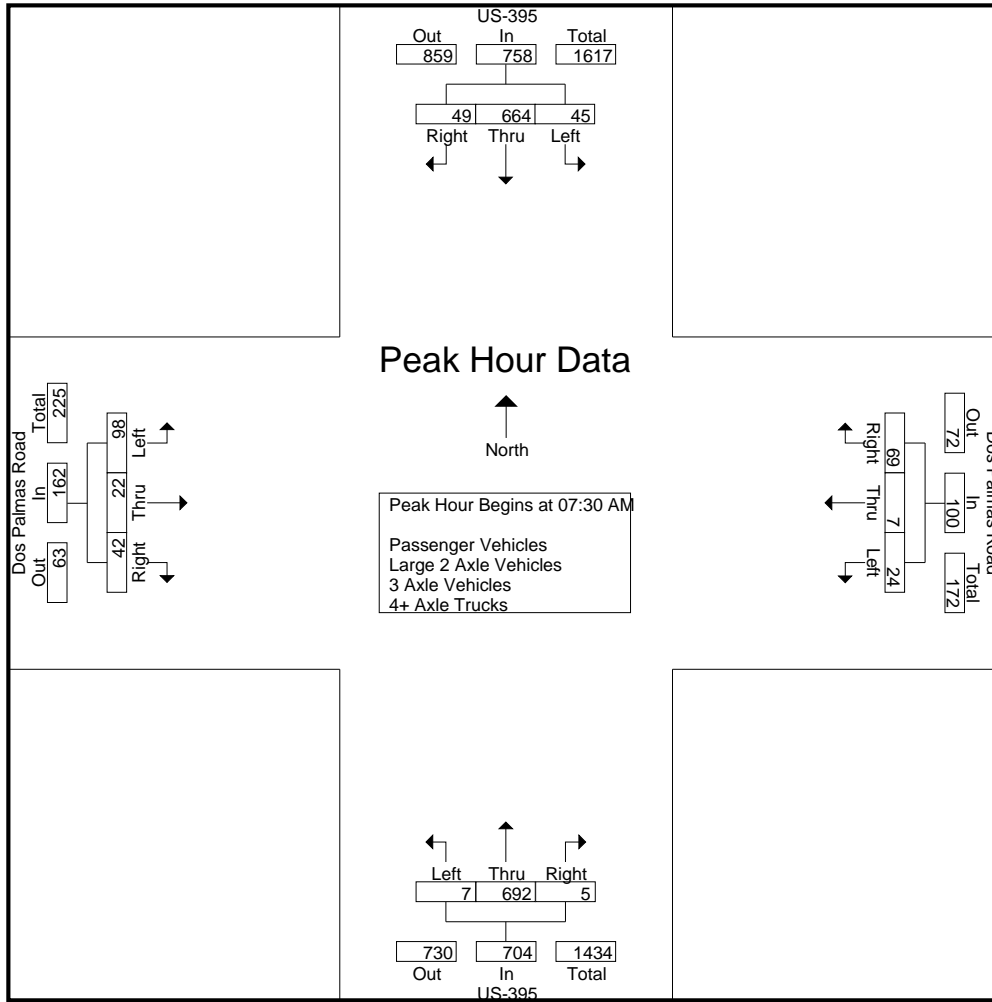
City of Victorville  
 N/S: US-395  
 E/W: Dos Palmas Road  
 Weather: Clear

File Name : 04\_VIC\_US-395\_Dos Palmas AM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 1

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

| Start Time              | US-395 Southbound |             |            |             | Dos Palmas Road Westbound |           |            |            | US-395 Northbound |             |           |             | Dos Palmas Road Eastbound |           |           |            | Int. Total  |
|-------------------------|-------------------|-------------|------------|-------------|---------------------------|-----------|------------|------------|-------------------|-------------|-----------|-------------|---------------------------|-----------|-----------|------------|-------------|
|                         | Left              | Thru        | Right      | App. Total  | Left                      | Thru      | Right      | App. Total | Left              | Thru        | Right     | App. Total  | Left                      | Thru      | Right     | App. Total |             |
| 07:00 AM                | 4                 | 145         | 13         | 162         | 5                         | 2         | 8          | 15         | 3                 | 123         | 1         | 127         | 17                        | 2         | 8         | 27         | 331         |
| 07:15 AM                | 5                 | 152         | 14         | 171         | 3                         | 1         | 17         | 21         | 1                 | 158         | 6         | 165         | 19                        | 7         | 8         | 34         | 391         |
| 07:30 AM                | 14                | 150         | 6          | 170         | 6                         | 1         | 13         | 20         | 3                 | 179         | 1         | 183         | 33                        | 5         | 12        | 50         | 423         |
| 07:45 AM                | 13                | 172         | 10         | 195         | 8                         | 1         | 20         | 29         | 0                 | 208         | 3         | 211         | 25                        | 6         | 12        | 43         | 478         |
| <b>Total</b>            | <b>36</b>         | <b>619</b>  | <b>43</b>  | <b>698</b>  | <b>22</b>                 | <b>5</b>  | <b>58</b>  | <b>85</b>  | <b>7</b>          | <b>668</b>  | <b>11</b> | <b>686</b>  | <b>94</b>                 | <b>20</b> | <b>40</b> | <b>154</b> | <b>1623</b> |
| 08:00 AM                | 5                 | 184         | 18         | 207         | 7                         | 2         | 20         | 29         | 3                 | 160         | 1         | 164         | 19                        | 6         | 6         | 31         | 431         |
| 08:15 AM                | 13                | 158         | 15         | 186         | 3                         | 3         | 16         | 22         | 1                 | 145         | 0         | 146         | 21                        | 5         | 12        | 38         | 392         |
| 08:30 AM                | 4                 | 148         | 17         | 169         | 3                         | 2         | 12         | 17         | 2                 | 153         | 2         | 157         | 17                        | 7         | 11        | 35         | 378         |
| 08:45 AM                | 3                 | 152         | 15         | 170         | 1                         | 1         | 12         | 14         | 1                 | 144         | 1         | 146         | 22                        | 6         | 6         | 34         | 364         |
| <b>Total</b>            | <b>25</b>         | <b>642</b>  | <b>65</b>  | <b>732</b>  | <b>14</b>                 | <b>8</b>  | <b>60</b>  | <b>82</b>  | <b>7</b>          | <b>602</b>  | <b>4</b>  | <b>613</b>  | <b>79</b>                 | <b>24</b> | <b>35</b> | <b>138</b> | <b>1565</b> |
| <b>Grand Total</b>      | <b>61</b>         | <b>1261</b> | <b>108</b> | <b>1430</b> | <b>36</b>                 | <b>13</b> | <b>118</b> | <b>167</b> | <b>14</b>         | <b>1270</b> | <b>15</b> | <b>1299</b> | <b>173</b>                | <b>44</b> | <b>75</b> | <b>292</b> | <b>3188</b> |
| Apprch %                | 4.3               | 88.2        | 7.6        |             | 21.6                      | 7.8       | 70.7       |            | 1.1               | 97.8        | 1.2       |             | 59.2                      | 15.1      | 25.7      |            |             |
| Total %                 | 1.9               | 39.6        | 3.4        | 44.9        | 1.1                       | 0.4       | 3.7        | 5.2        | 0.4               | 39.8        | 0.5       | 40.7        | 5.4                       | 1.4       | 2.4       | 9.2        |             |
| Passenger Vehicles      | 58                | 1099        | 106        | 1263        | 36                        | 13        | 116        | 165        | 13                | 1098        | 10        | 1121        | 171                       | 42        | 74        | 287        | 2836        |
| % Passenger Vehicles    | 95.1              | 87.2        | 98.1       | 88.3        | 100                       | 100       | 98.3       | 98.8       | 92.9              | 86.5        | 66.7      | 86.3        | 98.8                      | 95.5      | 98.7      | 98.3       | 89          |
| Large 2 Axle Vehicles   | 3                 | 36          | 2          | 41          | 0                         | 0         | 1          | 1          | 1                 | 51          | 2         | 54          | 2                         | 2         | 1         | 5          | 101         |
| % Large 2 Axle Vehicles | 4.9               | 2.9         | 1.9        | 2.9         | 0                         | 0         | 0.8        | 0.6        | 7.1               | 4           | 13.3      | 4.2         | 1.2                       | 4.5       | 1.3       | 1.7        | 3.2         |
| 3 Axle Vehicles         | 0                 | 9           | 0          | 9           | 0                         | 0         | 1          | 1          | 0                 | 10          | 3         | 13          | 0                         | 0         | 0         | 0          | 23          |
| % 3 Axle Vehicles       | 0                 | 0.7         | 0          | 0.6         | 0                         | 0         | 0.8        | 0.6        | 0                 | 0.8         | 20        | 1           | 0                         | 0         | 0         | 0          | 0.7         |
| 4+ Axle Trucks          | 0                 | 117         | 0          | 117         | 0                         | 0         | 0          | 0          | 0                 | 111         | 0         | 111         | 0                         | 0         | 0         | 0          | 228         |
| % 4+ Axle Trucks        | 0                 | 9.3         | 0          | 8.2         | 0                         | 0         | 0          | 0          | 0                 | 8.7         | 0         | 8.5         | 0                         | 0         | 0         | 0          | 7.2         |

| Start Time   | US-395 Southbound |      |       |            | Dos Palmas Road Westbound |      |       |            | US-395 Northbound |      |       |            | Dos Palmas Road Eastbound |      |       |            | Int. Total |
|--|-------------------|------|-------|------------|---------------------------|------|-------|------------|-------------------|------|-------|------------|---------------------------|------|-------|------------|------------|
|  | Left              | Thru | Right | App. Total | Left                      | Thru | Right | App. Total | Left              | Thru | Right | App. Total | Left                      | Thru | Right | App. Total |            |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |                   |      |       |            |                           |      |       |            |                   |      |       |            |                           |      |       |            |            |
| Peak Hour for Entire Intersection Begins at 07:30 AM       |                   |      |       |            |                           |      |       |            |                   |      |       |            |                           |      |       |            |            |
| 07:30 AM   | 14                | 150  | 6     | 170        | 6                         | 1    | 13    | 20         | 3                 | 179  | 1     | 183        | 33                        | 5    | 12    | 50         | 423        |
| 07:45 AM   | 13                | 172  | 10    | 195        | 8                         | 1    | 20    | 29         | 0                 | 208  | 3     | 211        | 25                        | 6    | 12    | 43         | 478        |
| 08:00 AM   | 5                 | 184  | 18    | 207        | 7                         | 2    | 20    | 29         | 3                 | 160  | 1     | 164        | 19                        | 6    | 6     | 31         | 431        |
| 08:15 AM   | 13                | 158  | 15    | 186        | 3                         | 3    | 16    | 22         | 1                 | 145  | 0     | 146        | 21                        | 5    | 12    | 38         | 392        |
| Total Volume   | 45                | 664  | 49    | 758        | 24                        | 7    | 69    | 100        | 7                 | 692  | 5     | 704        | 98                        | 22   | 42    | 162        | 1724       |
| % App. Total   | 5.9               | 87.6 | 6.5   |            | 24                        | 7    | 69    |            | 1                 | 98.3 | 0.7   |            | 60.5                      | 13.6 | 25.9  |            |            |
| PHF  | .804              | .902 | .681  | .915       | .750                      | .583 | .863  | .862       | .583              | .832 | .417  | .834       | .742                      | .917 | .875  | .810       | .902       |



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

|              | 07:30 AM |      |      |      | 07:30 AM |      |      |      | 07:15 AM |      |      |      | 07:30 AM |      |      |      |
|--------------|----------|------|------|------|----------|------|------|------|----------|------|------|------|----------|------|------|------|
| +0 mins.     | 14       | 150  | 6    | 170  | 6        | 1    | 13   | 20   | 1        | 158  | 6    | 165  | 33       | 5    | 12   | 50   |
| +15 mins.    | 13       | 172  | 10   | 195  | 8        | 1    | 20   | 29   | 3        | 179  | 1    | 183  | 25       | 6    | 12   | 43   |
| +30 mins.    | 5        | 184  | 18   | 207  | 7        | 2    | 20   | 29   | 0        | 208  | 3    | 211  | 19       | 6    | 6    | 31   |
| +45 mins.    | 13       | 158  | 15   | 186  | 3        | 3    | 16   | 22   | 3        | 160  | 1    | 164  | 21       | 5    | 12   | 38   |
| Total Volume | 45       | 664  | 49   | 758  | 24       | 7    | 69   | 100  | 7        | 705  | 11   | 723  | 98       | 22   | 42   | 162  |
| % App. Total | 5.9      | 87.6 | 6.5  |      | 24       | 7    | 69   |      | 1        | 97.5 | 1.5  |      | 60.5     | 13.6 | 25.9 |      |
| PHF          | .804     | .902 | .681 | .915 | .750     | .583 | .863 | .862 | .583     | .847 | .458 | .857 | .742     | .917 | .875 | .810 |



City of Victorville  
 N/S: US-395  
 E/W: Dos Palmas Road  
 Weather: Clear

File Name : 04\_VIC\_US-395\_Dos Palmas AM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 1

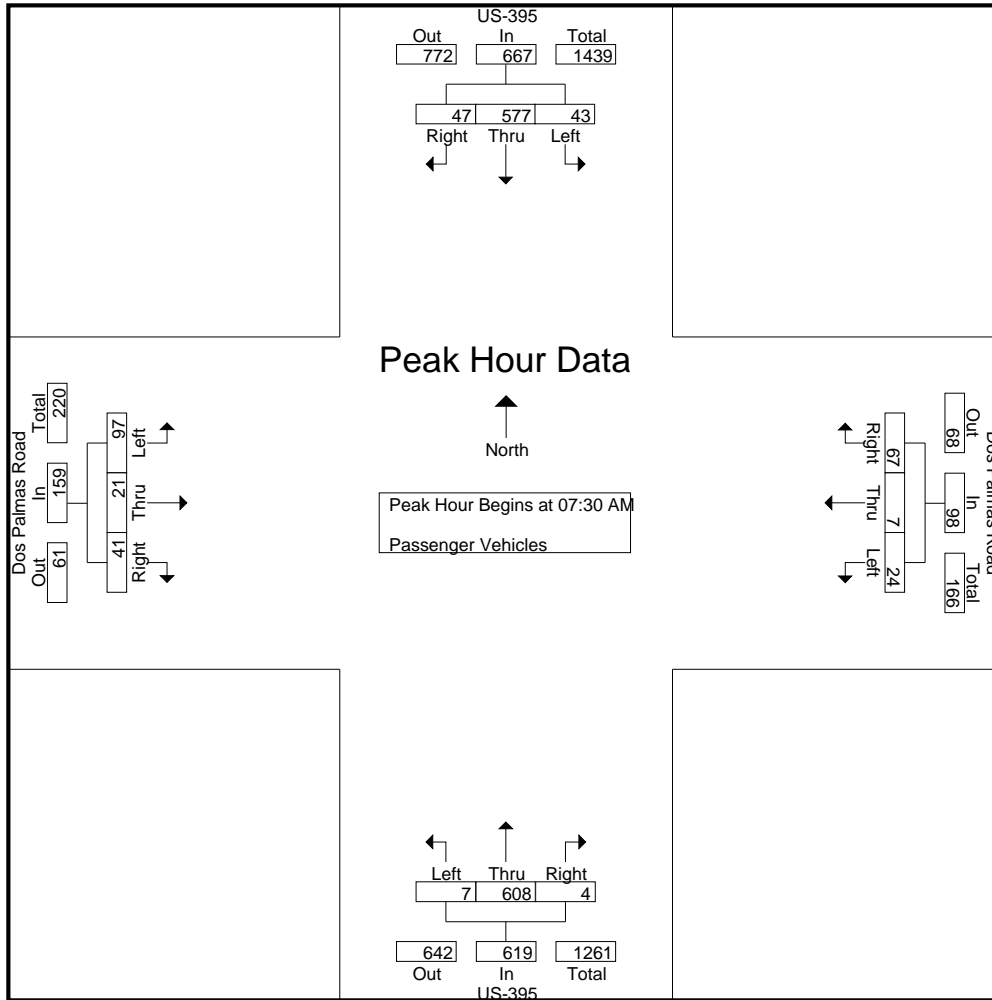
Groups Printed- Passenger Vehicles

| Start Time  | US-395 Southbound |      |       |            | Dos Palmas Road Westbound |      |       |            | US-395 Northbound |      |       |            | Dos Palmas Road Eastbound |      |       |            | Int. Total |
|-------------|-------------------|------|-------|------------|---------------------------|------|-------|------------|-------------------|------|-------|------------|---------------------------|------|-------|------------|------------|
|             | Left              | Thru | Right | App. Total | Left                      | Thru | Right | App. Total | Left              | Thru | Right | App. Total | Left                      | Thru | Right | App. Total |            |
| 07:00 AM    | 4                 | 124  | 13    | 141        | 5                         | 2    | 8     | 15         | 2                 | 109  | 1     | 112        | 17                        | 2    | 8     | 27         | 295        |
| 07:15 AM    | 4                 | 137  | 14    | 155        | 3                         | 1    | 17    | 21         | 1                 | 125  | 2     | 128        | 18                        | 7    | 8     | 33         | 337        |
| 07:30 AM    | 14                | 132  | 5     | 151        | 6                         | 1    | 12    | 19         | 3                 | 164  | 1     | 168        | 33                        | 4    | 11    | 48         | 386        |
| 07:45 AM    | 12                | 156  | 10    | 178        | 8                         | 1    | 19    | 28         | 0                 | 181  | 3     | 184        | 24                        | 6    | 12    | 42         | 432        |
| Total       | 34                | 549  | 42    | 625        | 22                        | 5    | 56    | 83         | 6                 | 579  | 7     | 592        | 92                        | 19   | 39    | 150        | 1450       |
| 08:00 AM    | 5                 | 156  | 18    | 179        | 7                         | 2    | 20    | 29         | 3                 | 140  | 0     | 143        | 19                        | 6    | 6     | 31         | 382        |
| 08:15 AM    | 12                | 133  | 14    | 159        | 3                         | 3    | 16    | 22         | 1                 | 123  | 0     | 124        | 21                        | 5    | 12    | 38         | 343        |
| 08:30 AM    | 4                 | 130  | 17    | 151        | 3                         | 2    | 12    | 17         | 2                 | 130  | 2     | 134        | 17                        | 6    | 11    | 34         | 336        |
| 08:45 AM    | 3                 | 131  | 15    | 149        | 1                         | 1    | 12    | 14         | 1                 | 126  | 1     | 128        | 22                        | 6    | 6     | 34         | 325        |
| Total       | 24                | 550  | 64    | 638        | 14                        | 8    | 60    | 82         | 7                 | 519  | 3     | 529        | 79                        | 23   | 35    | 137        | 1386       |
| Grand Total | 58                | 1099 | 106   | 1263       | 36                        | 13   | 116   | 165        | 13                | 1098 | 10    | 1121       | 171                       | 42   | 74    | 287        | 2836       |
| Apprch %    | 4.6               | 87   | 8.4   |            | 21.8                      | 7.9  | 70.3  |            | 1.2               | 97.9 | 0.9   |            | 59.6                      | 14.6 | 25.8  |            |            |
| Total %     | 2                 | 38.8 | 3.7   | 44.5       | 1.3                       | 0.5  | 4.1   | 5.8        | 0.5               | 38.7 | 0.4   | 39.5       | 6                         | 1.5  | 2.6   | 10.1       |            |

| Start Time   | US-395 Southbound |      |       |            | Dos Palmas Road Westbound |      |       |            | US-395 Northbound |      |       |            | Dos Palmas Road Eastbound |      |       |            | Int. Total |
|--|-------------------|------|-------|------------|---------------------------|------|-------|------------|-------------------|------|-------|------------|---------------------------|------|-------|------------|------------|
|  | Left              | Thru | Right | App. Total | Left                      | Thru | Right | App. Total | Left              | Thru | Right | App. Total | Left                      | Thru | Right | App. Total |            |
| Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1 |                   |      |       |            |                           |      |       |            |                   |      |       |            |                           |      |       |            |            |
| Peak Hour for Entire Intersection Begins at 07:30 AM       |                   |      |       |            |                           |      |       |            |                   |      |       |            |                           |      |       |            |            |
| 07:30 AM   | 14                | 132  | 5     | 151        | 6                         | 1    | 12    | 19         | 3                 | 164  | 1     | 168        | 33                        | 4    | 11    | 48         | 386        |
| 07:45 AM   | 12                | 156  | 10    | 178        | 8                         | 1    | 19    | 28         | 0                 | 181  | 3     | 184        | 24                        | 6    | 12    | 42         | 432        |
| 08:00 AM   | 5                 | 156  | 18    | 179        | 7                         | 2    | 20    | 29         | 3                 | 140  | 0     | 143        | 19                        | 6    | 6     | 31         | 382        |
| 08:15 AM   | 12                | 133  | 14    | 159        | 3                         | 3    | 16    | 22         | 1                 | 123  | 0     | 124        | 21                        | 5    | 12    | 38         | 343        |
| Total Volume   | 43                | 577  | 47    | 667        | 24                        | 7    | 67    | 98         | 7                 | 608  | 4     | 619        | 97                        | 21   | 41    | 159        | 1543       |
| % App. Total   | 6.4               | 86.5 | 7     |            | 24.5                      | 7.1  | 68.4  |            | 1.1               | 98.2 | 0.6   |            | 61                        | 13.2 | 25.8  |            |            |
| PHF  | .768              | .925 | .653  | .932       | .750                      | .583 | .838  | .845       | .583              | .840 | .333  | .841       | .735                      | .875 | .854  | .828       | .893       |

City of Victorville  
 N/S: US-395  
 E/W: Dos Palmas Road  
 Weather: Clear

File Name : 04\_VIC\_US-395\_Dos Palmas AM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

|              | 07:30 AM  |            |           |            | 07:30 AM |          |           |           | 07:30 AM |            |          |            | 07:30 AM  |          |           |           |
|--------------|-----------|------------|-----------|------------|----------|----------|-----------|-----------|----------|------------|----------|------------|-----------|----------|-----------|-----------|
| +0 mins.     | <b>14</b> | 132        | 5         | 151        | <b>6</b> | 1        | 12        | 19        | <b>3</b> | 164        | 1        | 168        | <b>33</b> | 4        | 11        | <b>48</b> |
| +15 mins.    | 12        | <b>156</b> | 10        | 178        | <b>8</b> | 1        | 19        | 28        | 0        | <b>181</b> | <b>3</b> | <b>184</b> | 24        | <b>6</b> | <b>12</b> | 42        |
| +30 mins.    | 5         | 156        | <b>18</b> | <b>179</b> | 7        | 2        | <b>20</b> | <b>29</b> | 3        | 140        | 0        | 143        | 19        | 6        | 6         | 31        |
| +45 mins.    | 12        | 133        | 14        | 159        | 3        | <b>3</b> | 16        | 22        | 1        | 123        | 0        | 124        | 21        | 5        | 12        | 38        |
| Total Volume | 43        | 577        | 47        | 667        | 24       | 7        | 67        | 98        | 7        | 608        | 4        | 619        | 97        | 21       | 41        | 159       |
| % App. Total | 6.4       | 86.5       | 7         |            | 24.5     | 7.1      | 68.4      |           | 1.1      | 98.2       | 0.6      |            | 61        | 13.2     | 25.8      |           |
| PHF          | .768      | .925       | .653      | .932       | .750     | .583     | .838      | .845      | .583     | .840       | .333     | .841       | .735      | .875     | .854      | .828      |

City of Victorville  
 N/S: US-395  
 E/W: Dos Palmas Road  
 Weather: Clear

File Name : 04\_VIC\_US-395\_Dos Palmas AM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 1

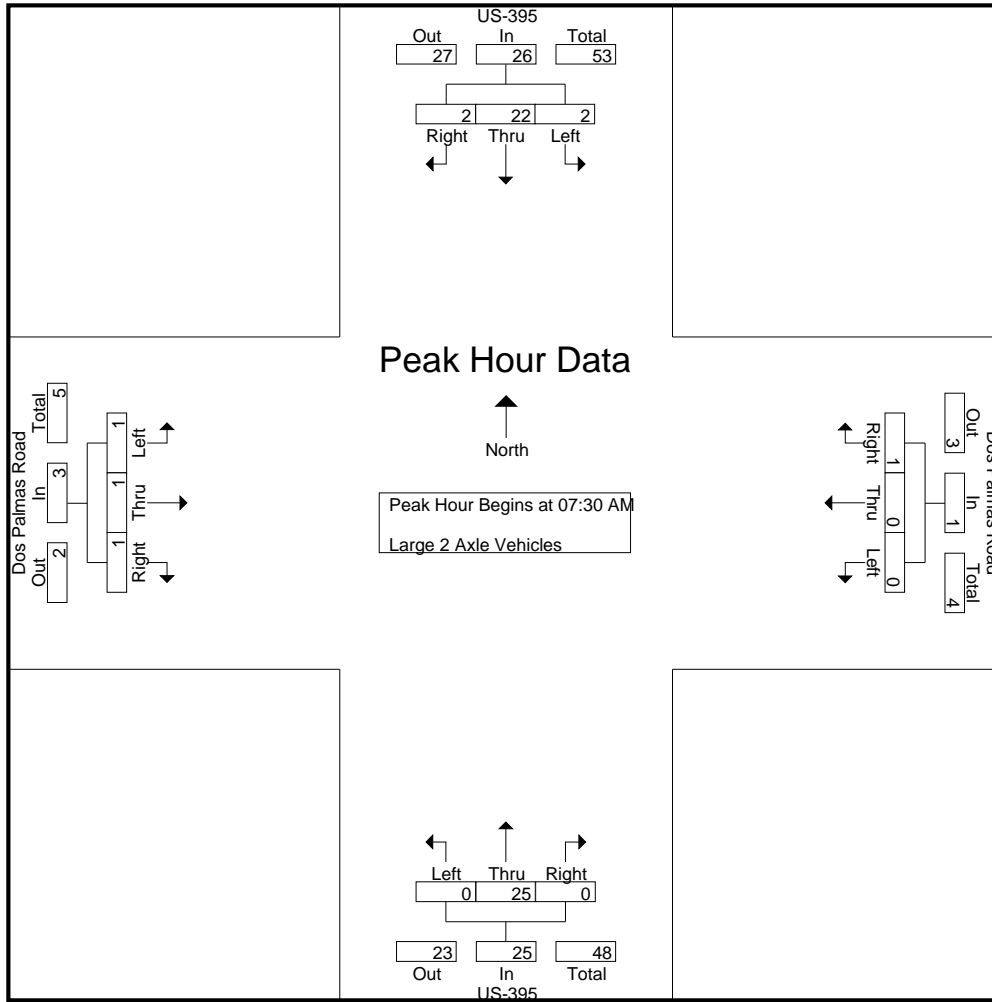
Groups Printed- Large 2 Axle Vehicles

| Start Time  | US-395 Southbound |      |       |            | Dos Palmas Road Westbound |      |       |            | US-395 Northbound |      |       |            | Dos Palmas Road Eastbound |      |       |            | Int. Total |
|-------------|-------------------|------|-------|------------|---------------------------|------|-------|------------|-------------------|------|-------|------------|---------------------------|------|-------|------------|------------|
|             | Left              | Thru | Right | App. Total | Left                      | Thru | Right | App. Total | Left              | Thru | Right | App. Total | Left                      | Thru | Right | App. Total |            |
| 07:00 AM    | 0                 | 3    | 0     | 3          | 0                         | 0    | 0     | 0          | 1                 | 5    | 0     | 6          | 0                         | 0    | 0     | 0          | 9          |
| 07:15 AM    | 1                 | 7    | 0     | 8          | 0                         | 0    | 0     | 0          | 0                 | 13   | 2     | 15         | 1                         | 0    | 0     | 1          | 24         |
| 07:30 AM    | 0                 | 6    | 1     | 7          | 0                         | 0    | 0     | 0          | 0                 | 4    | 0     | 4          | 0                         | 1    | 1     | 2          | 13         |
| 07:45 AM    | 1                 | 5    | 0     | 6          | 0                         | 0    | 1     | 1          | 0                 | 9    | 0     | 9          | 1                         | 0    | 0     | 1          | 17         |
| Total       | 2                 | 21   | 1     | 24         | 0                         | 0    | 1     | 1          | 1                 | 31   | 2     | 34         | 2                         | 1    | 1     | 4          | 63         |
| 08:00 AM    | 0                 | 5    | 0     | 5          | 0                         | 0    | 0     | 0          | 0                 | 4    | 0     | 4          | 0                         | 0    | 0     | 0          | 9          |
| 08:15 AM    | 1                 | 6    | 1     | 8          | 0                         | 0    | 0     | 0          | 0                 | 8    | 0     | 8          | 0                         | 0    | 0     | 0          | 16         |
| 08:30 AM    | 0                 | 3    | 0     | 3          | 0                         | 0    | 0     | 0          | 0                 | 4    | 0     | 4          | 0                         | 1    | 0     | 1          | 8          |
| 08:45 AM    | 0                 | 1    | 0     | 1          | 0                         | 0    | 0     | 0          | 0                 | 4    | 0     | 4          | 0                         | 0    | 0     | 0          | 5          |
| Total       | 1                 | 15   | 1     | 17         | 0                         | 0    | 0     | 0          | 0                 | 20   | 0     | 20         | 0                         | 1    | 0     | 1          | 38         |
| Grand Total | 3                 | 36   | 2     | 41         | 0                         | 0    | 1     | 1          | 1                 | 51   | 2     | 54         | 2                         | 2    | 1     | 5          | 101        |
| Apprch %    | 7.3               | 87.8 | 4.9   |            | 0                         | 0    | 100   |            | 1.9               | 94.4 | 3.7   |            | 40                        | 40   | 20    |            |            |
| Total %     | 3                 | 35.6 | 2     | 40.6       | 0                         | 0    | 1     | 1          | 1                 | 50.5 | 2     | 53.5       | 2                         | 2    | 1     | 5          |            |

| Start Time   | US-395 Southbound |      |       |            | Dos Palmas Road Westbound |      |       |            | US-395 Northbound |      |       |            | Dos Palmas Road Eastbound |      |       |            | Int. Total |
|--|-------------------|------|-------|------------|---------------------------|------|-------|------------|-------------------|------|-------|------------|---------------------------|------|-------|------------|------------|
|  | Left              | Thru | Right | App. Total | Left                      | Thru | Right | App. Total | Left              | Thru | Right | App. Total | Left                      | Thru | Right | App. Total |            |
| Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1 |                   |      |       |            |                           |      |       |            |                   |      |       |            |                           |      |       |            |            |
| Peak Hour for Entire Intersection Begins at 07:30 AM       |                   |      |       |            |                           |      |       |            |                   |      |       |            |                           |      |       |            |            |
| 07:30 AM   | 0                 | 6    | 1     | 7          | 0                         | 0    | 0     | 0          | 0                 | 4    | 0     | 4          | 0                         | 1    | 1     | 2          | 13         |
| 07:45 AM   | 1                 | 5    | 0     | 6          | 0                         | 0    | 1     | 1          | 0                 | 9    | 0     | 9          | 1                         | 0    | 0     | 1          | 17         |
| 08:00 AM   | 0                 | 5    | 0     | 5          | 0                         | 0    | 0     | 0          | 0                 | 4    | 0     | 4          | 0                         | 0    | 0     | 0          | 9          |
| 08:15 AM   | 1                 | 6    | 1     | 8          | 0                         | 0    | 0     | 0          | 0                 | 8    | 0     | 8          | 0                         | 0    | 0     | 0          | 16         |
| Total Volume   | 2                 | 22   | 2     | 26         | 0                         | 0    | 1     | 1          | 0                 | 25   | 0     | 25         | 1                         | 1    | 1     | 3          | 55         |
| % App. Total   | 7.7               | 84.6 | 7.7   |            | 0                         | 0    | 100   |            | 0                 | 100  | 0     |            | 33.3                      | 33.3 | 33.3  |            |            |
| PHF  | .500              | .917 | .500  | .813       | .000                      | .000 | .250  | .250       | .000              | .694 | .000  | .694       | .250                      | .250 | .250  | .375       | .809       |

City of Victorville  
 N/S: US-395  
 E/W: Dos Palmas Road  
 Weather: Clear

File Name : 04\_VIC\_US-395\_Dos Palmas AM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

|              | 07:30 AM |      |      |      | 07:30 AM |      |      |      | 07:30 AM |      |      |      | 07:30 AM |      |      |      |
|--------------|----------|------|------|------|----------|------|------|------|----------|------|------|------|----------|------|------|------|
| +0 mins.     | 0        | 6    | 1    | 7    | 0        | 0    | 0    | 0    | 0        | 4    | 0    | 4    | 0        | 1    | 1    | 2    |
| +15 mins.    | 1        | 5    | 0    | 6    | 0        | 0    | 1    | 1    | 0        | 9    | 0    | 9    | 1        | 0    | 0    | 1    |
| +30 mins.    | 0        | 5    | 0    | 5    | 0        | 0    | 0    | 0    | 0        | 4    | 0    | 4    | 0        | 0    | 0    | 0    |
| +45 mins.    | 1        | 6    | 1    | 8    | 0        | 0    | 0    | 0    | 0        | 8    | 0    | 8    | 0        | 0    | 0    | 0    |
| Total Volume | 2        | 22   | 2    | 26   | 0        | 0    | 1    | 1    | 0        | 25   | 0    | 25   | 1        | 1    | 1    | 3    |
| % App. Total | 7.7      | 84.6 | 7.7  |      | 0        | 0    | 100  |      | 0        | 100  | 0    |      | 33.3     | 33.3 | 33.3 |      |
| PHF          | .500     | .917 | .500 | .813 | .000     | .000 | .250 | .250 | .000     | .694 | .000 | .694 | .250     | .250 | .250 | .375 |

City of Victorville  
 N/S: US-395  
 E/W: Dos Palmas Road  
 Weather: Clear

File Name : 04\_VIC\_US-395\_Dos Palmas AM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 1

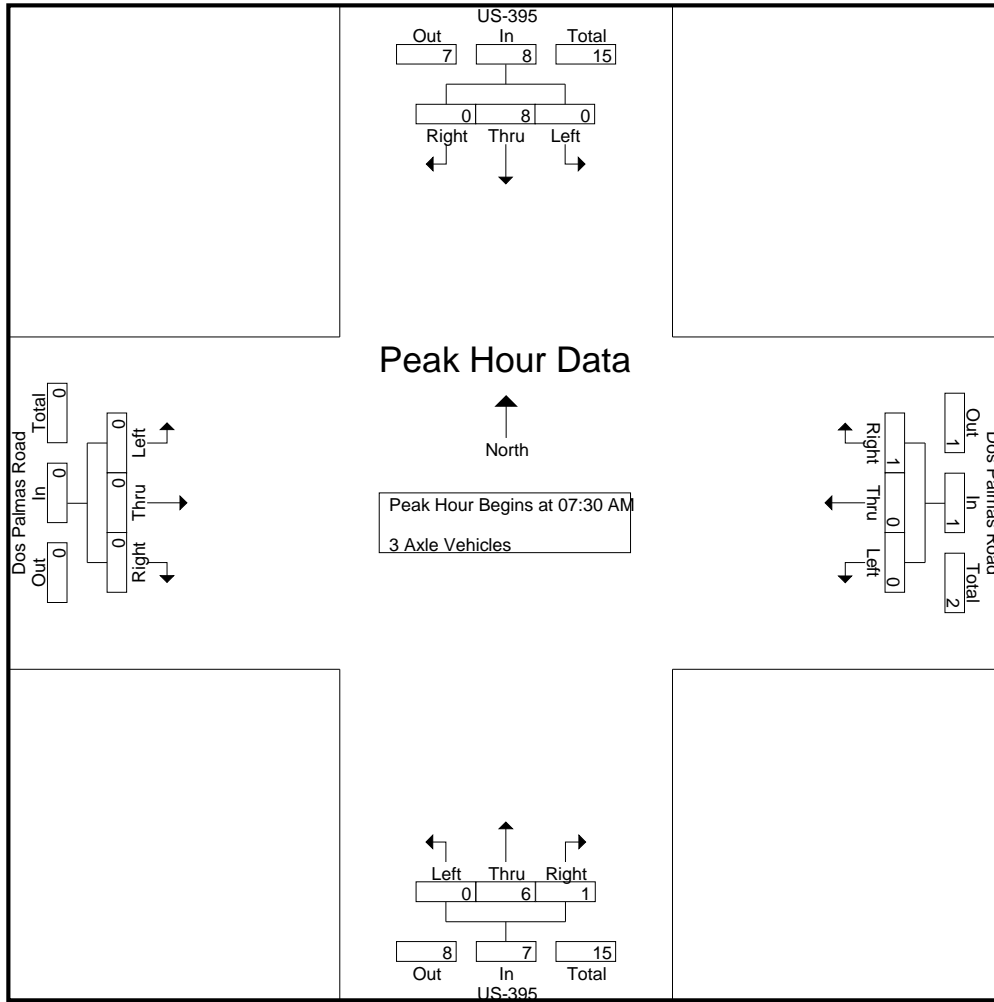
Groups Printed- 3 Axle Vehicles

| Start Time  | US-395 Southbound |      |       |            | Dos Palmas Road Westbound |      |       |            | US-395 Northbound |      |       |            | Dos Palmas Road Eastbound |      |       |            | Int. Total |    |
|-------------|-------------------|------|-------|------------|---------------------------|------|-------|------------|-------------------|------|-------|------------|---------------------------|------|-------|------------|------------|----|
|             | Left              | Thru | Right | App. Total | Left                      | Thru | Right | App. Total | Left              | Thru | Right | App. Total | Left                      | Thru | Right | App. Total |            |    |
| 07:00 AM    | 0                 | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                 | 0    | 1     | 0          | 1                         | 0    | 0     | 0          | 0          | 1  |
| 07:15 AM    | 0                 | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                 | 0    | 2     | 2          | 4                         | 0    | 0     | 0          | 0          | 4  |
| 07:30 AM    | 0                 | 1    | 0     | 1          | 0                         | 0    | 1     | 1          | 0                 | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0          | 2  |
| 07:45 AM    | 0                 | 3    | 0     | 3          | 0                         | 0    | 0     | 0          | 0                 | 4    | 0     | 4          | 4                         | 0    | 0     | 0          | 0          | 7  |
| Total       | 0                 | 4    | 0     | 4          | 0                         | 0    | 1     | 1          | 0                 | 7    | 2     | 9          | 9                         | 0    | 0     | 0          | 0          | 14 |
| 08:00 AM    | 0                 | 1    | 0     | 1          | 0                         | 0    | 0     | 0          | 0                 | 1    | 1     | 2          | 2                         | 0    | 0     | 0          | 0          | 3  |
| 08:15 AM    | 0                 | 3    | 0     | 3          | 0                         | 0    | 0     | 0          | 0                 | 1    | 0     | 1          | 1                         | 0    | 0     | 0          | 0          | 4  |
| 08:30 AM    | 0                 | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                 | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0          | 0  |
| 08:45 AM    | 0                 | 1    | 0     | 1          | 0                         | 0    | 0     | 0          | 0                 | 1    | 0     | 1          | 1                         | 0    | 0     | 0          | 0          | 2  |
| Total       | 0                 | 5    | 0     | 5          | 0                         | 0    | 0     | 0          | 0                 | 3    | 1     | 4          | 4                         | 0    | 0     | 0          | 0          | 9  |
| Grand Total | 0                 | 9    | 0     | 9          | 0                         | 0    | 1     | 1          | 0                 | 10   | 3     | 13         | 13                        | 0    | 0     | 0          | 0          | 23 |
| Apprch %    | 0                 | 100  | 0     |            | 0                         | 0    | 100   |            | 0                 | 76.9 | 23.1  |            |                           | 0    | 0     | 0          |            |    |
| Total %     | 0                 | 39.1 | 0     | 39.1       | 0                         | 0    | 4.3   | 4.3        | 0                 | 43.5 | 13    | 56.5       | 56.5                      | 0    | 0     | 0          | 0          |    |

| Start Time   | US-395 Southbound |      |       |            | Dos Palmas Road Westbound |      |       |            | US-395 Northbound |      |       |            | Dos Palmas Road Eastbound |      |       |            | Int. Total |      |
|--|-------------------|------|-------|------------|---------------------------|------|-------|------------|-------------------|------|-------|------------|---------------------------|------|-------|------------|------------|------|
|  | Left              | Thru | Right | App. Total | Left                      | Thru | Right | App. Total | Left              | Thru | Right | App. Total | Left                      | Thru | Right | App. Total |            |      |
| Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1 |                   |      |       |            |                           |      |       |            |                   |      |       |            |                           |      |       |            |            |      |
| Peak Hour for Entire Intersection Begins at 07:30 AM       |                   |      |       |            |                           |      |       |            |                   |      |       |            |                           |      |       |            |            |      |
| 07:30 AM   | 0                 | 1    | 0     | 1          | 0                         | 0    | 1     | 1          | 0                 | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0          | 2    |
| 07:45 AM   | 0                 | 3    | 0     | 3          | 0                         | 0    | 0     | 0          | 0                 | 4    | 0     | 4          | 4                         | 0    | 0     | 0          | 0          | 7    |
| 08:00 AM   | 0                 | 1    | 0     | 1          | 0                         | 0    | 0     | 0          | 0                 | 1    | 1     | 2          | 2                         | 0    | 0     | 0          | 0          | 3    |
| 08:15 AM   | 0                 | 3    | 0     | 3          | 0                         | 0    | 0     | 0          | 0                 | 1    | 0     | 1          | 1                         | 0    | 0     | 0          | 0          | 4    |
| Total Volume   | 0                 | 8    | 0     | 8          | 0                         | 0    | 1     | 1          | 0                 | 6    | 1     | 7          | 7                         | 0    | 0     | 0          | 0          | 16   |
| % App. Total   | 0                 | 100  | 0     |            | 0                         | 0    | 100   |            | 0                 | 85.7 | 14.3  |            |                           | 0    | 0     | 0          |            |      |
| PHF  | .000              | .667 | .000  | .667       | .000                      | .000 | .250  | .250       | .000              | .375 | .250  | .438       | .438                      | .000 | .000  | .000       | .000       | .571 |

City of Victorville  
 N/S: US-395  
 E/W: Dos Palmas Road  
 Weather: Clear

File Name : 04\_VIC\_US-395\_Dos Palmas AM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

|              | 07:30 AM |      |      |      | 07:30 AM |      |      |      | 07:30 AM |      |      |      | 07:30 AM |      |      |      |
|--------------|----------|------|------|------|----------|------|------|------|----------|------|------|------|----------|------|------|------|
| +0 mins.     | 0        | 1    | 0    | 1    | 0        | 0    | 1    | 1    | 0        | 0    | 0    | 0    | 0        | 0    | 0    | 0    |
| +15 mins.    | 0        | 3    | 0    | 3    | 0        | 0    | 0    | 0    | 0        | 4    | 0    | 4    | 0        | 0    | 0    | 0    |
| +30 mins.    | 0        | 1    | 0    | 1    | 0        | 0    | 0    | 0    | 0        | 1    | 1    | 2    | 0        | 0    | 0    | 0    |
| +45 mins.    | 0        | 3    | 0    | 3    | 0        | 0    | 0    | 0    | 0        | 1    | 0    | 1    | 0        | 0    | 0    | 0    |
| Total Volume | 0        | 8    | 0    | 8    | 0        | 0    | 1    | 1    | 0        | 6    | 1    | 7    | 0        | 0    | 0    | 0    |
| % App. Total | 0        | 100  | 0    |      | 0        | 0    | 100  |      | 0        | 85.7 | 14.3 |      | 0        | 0    | 0    |      |
| PHF          | .000     | .667 | .000 | .667 | .000     | .000 | .250 | .250 | .000     | .375 | .250 | .438 | .000     | .000 | .000 | .000 |

City of Victorville  
 N/S: US-395  
 E/W: Dos Palmas Road  
 Weather: Clear

File Name : 04\_VIC\_US-395\_Dos Palmas AM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 1

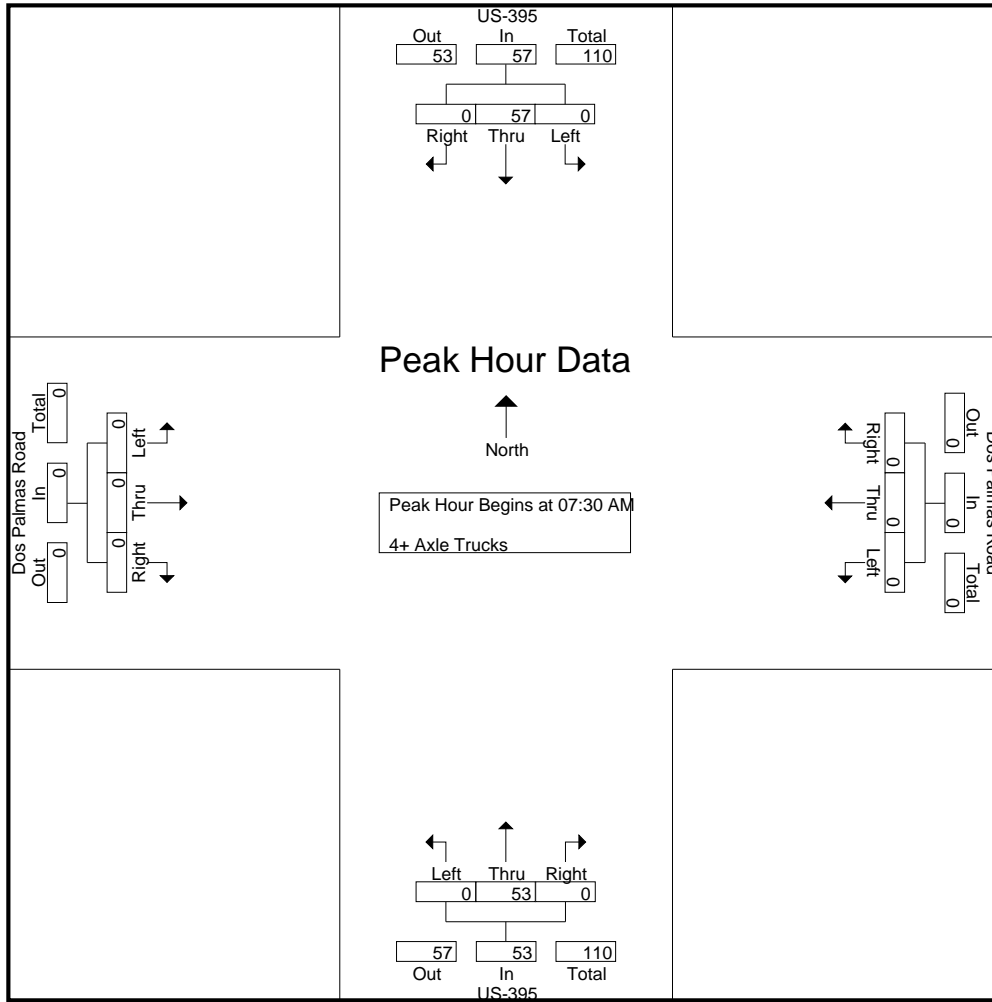
Groups Printed- 4+ Axle Trucks

| Start Time  | US-395 Southbound |      |       |            | Dos Palmas Road Westbound |      |       |            | US-395 Northbound |      |       |            | Dos Palmas Road Eastbound |      |       |            | Int. Total |
|-------------|-------------------|------|-------|------------|---------------------------|------|-------|------------|-------------------|------|-------|------------|---------------------------|------|-------|------------|------------|
|             | Left              | Thru | Right | App. Total | Left                      | Thru | Right | App. Total | Left              | Thru | Right | App. Total | Left                      | Thru | Right | App. Total |            |
| 07:00 AM    | 0                 | 18   | 0     | 18         | 0                         | 0    | 0     | 0          | 0                 | 8    | 0     | 8          | 0                         | 0    | 0     | 0          | 26         |
| 07:15 AM    | 0                 | 8    | 0     | 8          | 0                         | 0    | 0     | 0          | 0                 | 18   | 0     | 18         | 0                         | 0    | 0     | 0          | 26         |
| 07:30 AM    | 0                 | 11   | 0     | 11         | 0                         | 0    | 0     | 0          | 0                 | 11   | 0     | 11         | 0                         | 0    | 0     | 0          | 22         |
| 07:45 AM    | 0                 | 8    | 0     | 8          | 0                         | 0    | 0     | 0          | 0                 | 14   | 0     | 14         | 0                         | 0    | 0     | 0          | 22         |
| Total       | 0                 | 45   | 0     | 45         | 0                         | 0    | 0     | 0          | 0                 | 51   | 0     | 51         | 0                         | 0    | 0     | 0          | 96         |
| 08:00 AM    | 0                 | 22   | 0     | 22         | 0                         | 0    | 0     | 0          | 0                 | 15   | 0     | 15         | 0                         | 0    | 0     | 0          | 37         |
| 08:15 AM    | 0                 | 16   | 0     | 16         | 0                         | 0    | 0     | 0          | 0                 | 13   | 0     | 13         | 0                         | 0    | 0     | 0          | 29         |
| 08:30 AM    | 0                 | 15   | 0     | 15         | 0                         | 0    | 0     | 0          | 0                 | 19   | 0     | 19         | 0                         | 0    | 0     | 0          | 34         |
| 08:45 AM    | 0                 | 19   | 0     | 19         | 0                         | 0    | 0     | 0          | 0                 | 13   | 0     | 13         | 0                         | 0    | 0     | 0          | 32         |
| Total       | 0                 | 72   | 0     | 72         | 0                         | 0    | 0     | 0          | 0                 | 60   | 0     | 60         | 0                         | 0    | 0     | 0          | 132        |
| Grand Total | 0                 | 117  | 0     | 117        | 0                         | 0    | 0     | 0          | 0                 | 111  | 0     | 111        | 0                         | 0    | 0     | 0          | 228        |
| Apprch %    | 0                 | 100  | 0     |            | 0                         | 0    | 0     |            | 0                 | 100  | 0     |            | 0                         | 0    | 0     |            |            |
| Total %     | 0                 | 51.3 | 0     | 51.3       | 0                         | 0    | 0     | 0          | 0                 | 48.7 | 0     | 48.7       | 0                         | 0    | 0     | 0          |            |

| Start Time   | US-395 Southbound |      |       |            | Dos Palmas Road Westbound |      |       |            | US-395 Northbound |      |       |            | Dos Palmas Road Eastbound |      |       |            | Int. Total |
|--|-------------------|------|-------|------------|---------------------------|------|-------|------------|-------------------|------|-------|------------|---------------------------|------|-------|------------|------------|
|  | Left              | Thru | Right | App. Total | Left                      | Thru | Right | App. Total | Left              | Thru | Right | App. Total | Left                      | Thru | Right | App. Total |            |
| Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1 |                   |      |       |            |                           |      |       |            |                   |      |       |            |                           |      |       |            |            |
| Peak Hour for Entire Intersection Begins at 07:30 AM       |                   |      |       |            |                           |      |       |            |                   |      |       |            |                           |      |       |            |            |
| 07:30 AM   | 0                 | 11   | 0     | 11         | 0                         | 0    | 0     | 0          | 0                 | 11   | 0     | 11         | 0                         | 0    | 0     | 0          | 22         |
| 07:45 AM   | 0                 | 8    | 0     | 8          | 0                         | 0    | 0     | 0          | 0                 | 14   | 0     | 14         | 0                         | 0    | 0     | 0          | 22         |
| 08:00 AM   | 0                 | 22   | 0     | 22         | 0                         | 0    | 0     | 0          | 0                 | 15   | 0     | 15         | 0                         | 0    | 0     | 0          | 37         |
| 08:15 AM   | 0                 | 16   | 0     | 16         | 0                         | 0    | 0     | 0          | 0                 | 13   | 0     | 13         | 0                         | 0    | 0     | 0          | 29         |
| Total Volume   | 0                 | 57   | 0     | 57         | 0                         | 0    | 0     | 0          | 0                 | 53   | 0     | 53         | 0                         | 0    | 0     | 0          | 110        |
| % App. Total   | 0                 | 100  | 0     |            | 0                         | 0    | 0     |            | 0                 | 100  | 0     |            | 0                         | 0    | 0     |            |            |
| PHF  | .000              | .648 | .000  | .648       | .000                      | .000 | .000  | .000       | .000              | .883 | .000  | .883       | .000                      | .000 | .000  | .000       | .743       |

City of Victorville  
 N/S: US-395  
 E/W: Dos Palmas Road  
 Weather: Clear

File Name : 04\_VIC\_US-395\_Dos Palmas AM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

|              | 07:30 AM |           |      |           | 07:30 AM |      |      |      | 07:30 AM |           |      |           | 07:30 AM |      |      |      |
|--------------|----------|-----------|------|-----------|----------|------|------|------|----------|-----------|------|-----------|----------|------|------|------|
| +0 mins.     | 0        | 11        | 0    | 11        | 0        | 0    | 0    | 0    | 0        | 11        | 0    | 11        | 0        | 0    | 0    | 0    |
| +15 mins.    | 0        | 8         | 0    | 8         | 0        | 0    | 0    | 0    | 0        | 14        | 0    | 14        | 0        | 0    | 0    | 0    |
| +30 mins.    | 0        | <b>22</b> | 0    | <b>22</b> | 0        | 0    | 0    | 0    | 0        | <b>15</b> | 0    | <b>15</b> | 0        | 0    | 0    | 0    |
| +45 mins.    | 0        | 16        | 0    | 16        | 0        | 0    | 0    | 0    | 0        | 13        | 0    | 13        | 0        | 0    | 0    | 0    |
| Total Volume | 0        | 57        | 0    | 57        | 0        | 0    | 0    | 0    | 0        | 53        | 0    | 53        | 0        | 0    | 0    | 0    |
| % App. Total | 0        | 100       | 0    |           | 0        | 0    | 0    |      | 0        | 100       | 0    |           | 0        | 0    | 0    |      |
| PHF          | .000     | .648      | .000 | .648      | .000     | .000 | .000 | .000 | .000     | .883      | .000 | .883      | .000     | .000 | .000 | .000 |



City of Victorville  
 N/S: US-395  
 E/W: Dos Palmas Road  
 Weather: Clear

File Name : 04\_VIC\_US-395\_Dos Palmas PM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 1

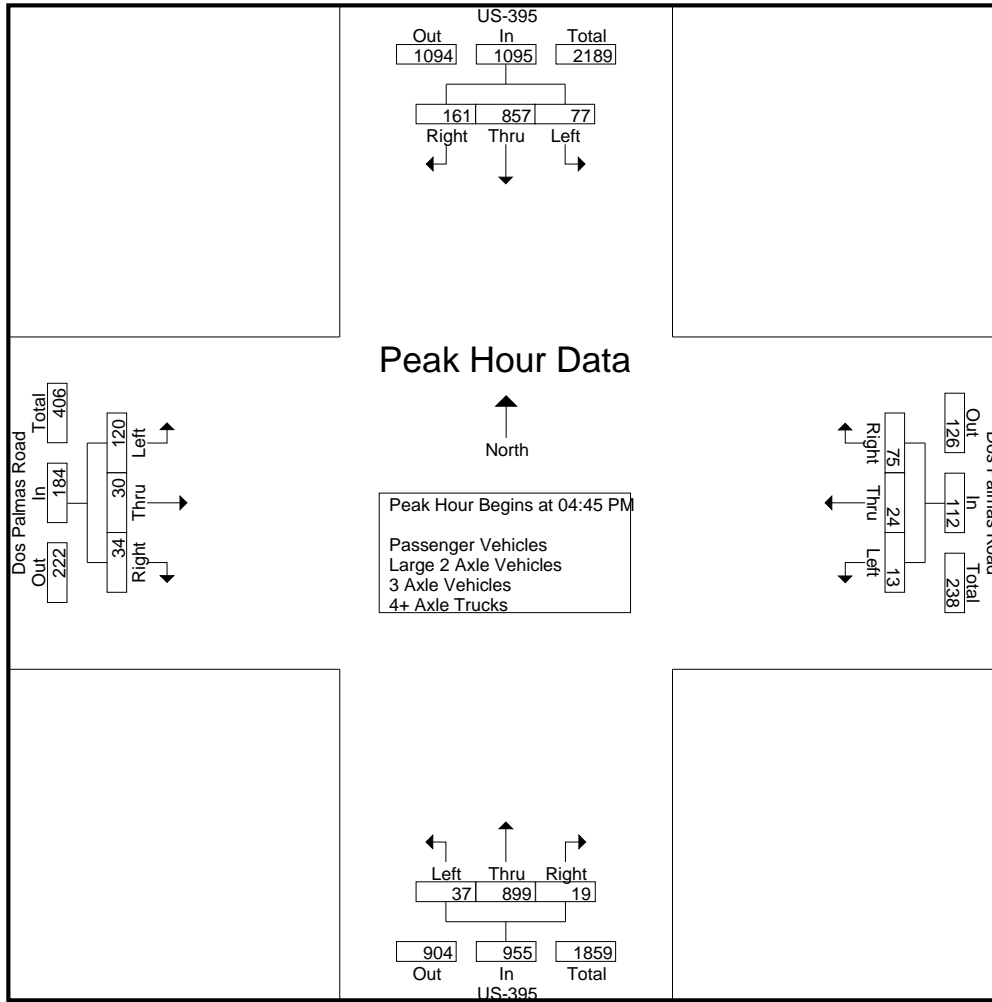
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

| Start Time              | US-395 Southbound |      |       |            | Dos Palmas Road Westbound |      |       |            | US-395 Northbound |      |       |            | Dos Palmas Road Eastbound |      |       |            | Int. Total |
|-------------------------|-------------------|------|-------|------------|---------------------------|------|-------|------------|-------------------|------|-------|------------|---------------------------|------|-------|------------|------------|
|                         | Left              | Thru | Right | App. Total | Left                      | Thru | Right | App. Total | Left              | Thru | Right | App. Total | Left                      | Thru | Right | App. Total |            |
| 04:00 PM                | 11                | 224  | 37    | 272        | 5                         | 7    | 9     | 21         | 13                | 197  | 2     | 212        | 24                        | 6    | 8     | 38         | 543        |
| 04:15 PM                | 13                | 221  | 26    | 260        | 5                         | 12   | 17    | 34         | 10                | 217  | 5     | 232        | 24                        | 7    | 5     | 36         | 562        |
| 04:30 PM                | 17                | 199  | 31    | 247        | 4                         | 16   | 18    | 38         | 7                 | 210  | 5     | 222        | 28                        | 9    | 9     | 46         | 553        |
| 04:45 PM                | 20                | 233  | 37    | 290        | 3                         | 8    | 14    | 25         | 9                 | 204  | 4     | 217        | 29                        | 8    | 6     | 43         | 575        |
| Total                   | 61                | 877  | 131   | 1069       | 17                        | 43   | 58    | 118        | 39                | 828  | 16    | 883        | 105                       | 30   | 28    | 163        | 2233       |
| 05:00 PM                | 16                | 186  | 44    | 246        | 4                         | 4    | 13    | 21         | 9                 | 226  | 5     | 240        | 32                        | 8    | 11    | 51         | 558        |
| 05:15 PM                | 26                | 223  | 50    | 299        | 4                         | 6    | 25    | 35         | 8                 | 251  | 6     | 265        | 33                        | 4    | 5     | 42         | 641        |
| 05:30 PM                | 15                | 215  | 30    | 260        | 2                         | 6    | 23    | 31         | 11                | 218  | 4     | 233        | 26                        | 10   | 12    | 48         | 572        |
| 05:45 PM                | 22                | 189  | 32    | 243        | 4                         | 5    | 16    | 25         | 20                | 214  | 7     | 241        | 38                        | 7    | 8     | 53         | 562        |
| Total                   | 79                | 813  | 156   | 1048       | 14                        | 21   | 77    | 112        | 48                | 909  | 22    | 979        | 129                       | 29   | 36    | 194        | 2333       |
| Grand Total             | 140               | 1690 | 287   | 2117       | 31                        | 64   | 135   | 230        | 87                | 1737 | 38    | 1862       | 234                       | 59   | 64    | 357        | 4566       |
| Apprch %                | 6.6               | 79.8 | 13.6  |            | 13.5                      | 27.8 | 58.7  |            | 4.7               | 93.3 | 2     |            | 65.5                      | 16.5 | 17.9  |            |            |
| Total %                 | 3.1               | 37   | 6.3   | 46.4       | 0.7                       | 1.4  | 3     | 5          | 1.9               | 38   | 0.8   | 40.8       | 5.1                       | 1.3  | 1.4   | 7.8        |            |
| Passenger Vehicles      | 140               | 1510 | 284   | 1934       | 31                        | 64   | 134   | 229        | 87                | 1600 | 38    | 1725       | 233                       | 57   | 63    | 353        | 4241       |
| % Passenger Vehicles    | 100               | 89.3 | 99    | 91.4       | 100                       | 100  | 99.3  | 99.6       | 100               | 92.1 | 100   | 92.6       | 99.6                      | 96.6 | 98.4  | 98.9       | 92.9       |
| Large 2 Axle Vehicles   | 0                 | 42   | 2     | 44         | 0                         | 0    | 1     | 1          | 0                 | 26   | 0     | 26         | 1                         | 2    | 1     | 4          | 75         |
| % Large 2 Axle Vehicles | 0                 | 2.5  | 0.7   | 2.1        | 0                         | 0    | 0.7   | 0.4        | 0                 | 1.5  | 0     | 1.4        | 0.4                       | 3.4  | 1.6   | 1.1        | 1.6        |
| 3 Axle Vehicles         | 0                 | 6    | 0     | 6          | 0                         | 0    | 0     | 0          | 0                 | 7    | 0     | 7          | 0                         | 0    | 0     | 0          | 13         |
| % 3 Axle Vehicles       | 0                 | 0.4  | 0     | 0.3        | 0                         | 0    | 0     | 0          | 0                 | 0.4  | 0     | 0.4        | 0                         | 0    | 0     | 0          | 0.3        |
| 4+ Axle Trucks          | 0                 | 132  | 1     | 133        | 0                         | 0    | 0     | 0          | 0                 | 104  | 0     | 104        | 0                         | 0    | 0     | 0          | 237        |
| % 4+ Axle Trucks        | 0                 | 7.8  | 0.3   | 6.3        | 0                         | 0    | 0     | 0          | 0                 | 6    | 0     | 5.6        | 0                         | 0    | 0     | 0          | 5.2        |

| Start Time   | US-395 Southbound |            |           |            | Dos Palmas Road Westbound |          |           |            | US-395 Northbound |            |          |            | Dos Palmas Road Eastbound |           |           |            | Int. Total |
|--|-------------------|------------|-----------|------------|---------------------------|----------|-----------|------------|-------------------|------------|----------|------------|---------------------------|-----------|-----------|------------|------------|
|  | Left              | Thru       | Right     | App. Total | Left                      | Thru     | Right     | App. Total | Left              | Thru       | Right    | App. Total | Left                      | Thru      | Right     | App. Total |            |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 |                   |            |           |            |                           |          |           |            |                   |            |          |            |                           |           |           |            |            |
| Peak Hour for Entire Intersection Begins at 04:45 PM       |                   |            |           |            |                           |          |           |            |                   |            |          |            |                           |           |           |            |            |
| 04:45 PM   | 20                | <b>233</b> | 37        | 290        | 3                         | <b>8</b> | 14        | 25         | 9                 | 204        | 4        | 217        | 29                        | 8         | 6         | 43         | 575        |
| 05:00 PM   | 16                | 186        | 44        | 246        | 4                         | 4        | 13        | 21         | 9                 | 226        | 5        | 240        | 32                        | 8         | 11        | <b>51</b>  | 558        |
| 05:15 PM   | <b>26</b>         | 223        | <b>50</b> | <b>299</b> | 4                         | 6        | <b>25</b> | <b>35</b>  | 8                 | <b>251</b> | <b>6</b> | <b>265</b> | <b>33</b>                 | 4         | 5         | 42         | <b>641</b> |
| 05:30 PM   | 15                | 215        | 30        | 260        | 2                         | 6        | 23        | 31         | <b>11</b>         | 218        | 4        | 233        | 26                        | <b>10</b> | <b>12</b> | 48         | 572        |
| Total Volume   | 77                | 857        | 161       | 1095       | 13                        | 24       | 75        | 112        | 37                | 899        | 19       | 955        | 120                       | 30        | 34        | 184        | 2346       |
| % App. Total   | 7                 | 78.3       | 14.7      |            | 11.6                      | 21.4     | 67        |            | 3.9               | 94.1       | 2        |            | 65.2                      | 16.3      | 18.5      |            |            |
| PHF  | .740              | .920       | .805      | .916       | .813                      | .750     | .750      | .800       | .841              | .895       | .792     | .901       | .909                      | .750      | .708      | .902       | .915       |

City of Victorville  
 N/S: US-395  
 E/W: Dos Palmas Road  
 Weather: Clear

File Name : 04\_VIC\_US-395\_Dos Palmas PM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 2



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

|              | 04:45 PM  |            |           |            | 04:30 PM |           |           |           | 05:00 PM  |            |          |            | 05:00 PM  |           |           |           |
|--------------|-----------|------------|-----------|------------|----------|-----------|-----------|-----------|-----------|------------|----------|------------|-----------|-----------|-----------|-----------|
| +0 mins.     | 20        | <b>233</b> | 37        | 290        | <b>4</b> | <b>16</b> | 18        | <b>38</b> | 9         | 226        | 5        | 240        | 32        | 8         | 11        | 51        |
| +15 mins.    | 16        | 186        | 44        | 246        | 3        | 8         | 14        | 25        | 8         | <b>251</b> | 6        | <b>265</b> | 33        | 4         | 5         | 42        |
| +30 mins.    | <b>26</b> | 223        | <b>50</b> | <b>299</b> | 4        | 4         | 13        | 21        | 11        | 218        | 4        | 233        | 26        | <b>10</b> | <b>12</b> | 48        |
| +45 mins.    | 15        | 215        | 30        | 260        | 4        | 6         | <b>25</b> | 35        | <b>20</b> | 214        | <b>7</b> | 241        | <b>38</b> | 7         | 8         | <b>53</b> |
| Total Volume | 77        | 857        | 161       | 1095       | 15       | 34        | 70        | 119       | 48        | 909        | 22       | 979        | 129       | 29        | 36        | 194       |
| % App. Total | 7         | 78.3       | 14.7      |            | 12.6     | 28.6      | 58.8      |           | 4.9       | 92.8       | 2.2      |            | 66.5      | 14.9      | 18.6      |           |
| PHF          | .740      | .920       | .805      | .916       | .938     | .531      | .700      | .783      | .600      | .905       | .786     | .924       | .849      | .725      | .750      | .915      |

City of Victorville  
 N/S: US-395  
 E/W: Dos Palmas Road  
 Weather: Clear

File Name : 04\_VIC\_US-395\_Dos Palmas PM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 1

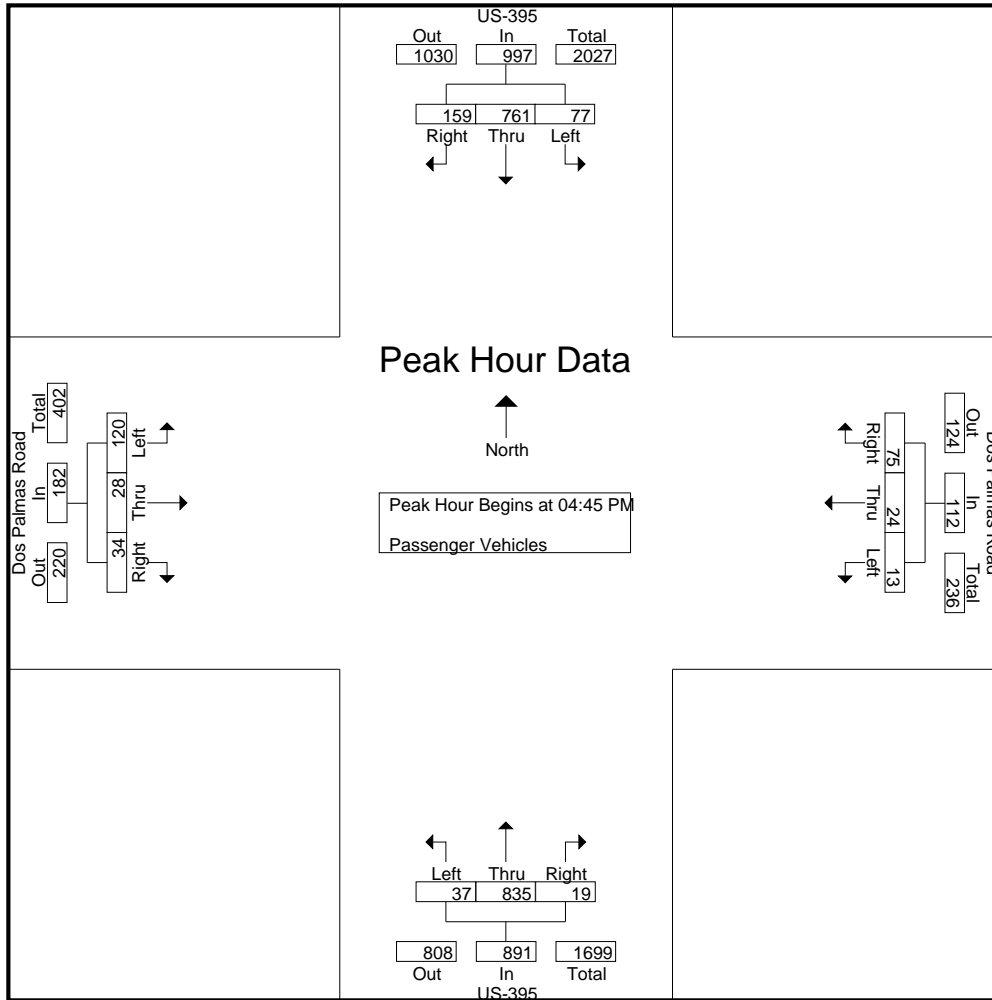
Groups Printed- Passenger Vehicles

| Start Time  | US-395 Southbound |      |       |            | Dos Palmas Road Westbound |      |       |            | US-395 Northbound |      |       |            | Dos Palmas Road Eastbound |      |       |            | Int. Total |
|-------------|-------------------|------|-------|------------|---------------------------|------|-------|------------|-------------------|------|-------|------------|---------------------------|------|-------|------------|------------|
|             | Left              | Thru | Right | App. Total | Left                      | Thru | Right | App. Total | Left              | Thru | Right | App. Total | Left                      | Thru | Right | App. Total |            |
| 04:00 PM    | 11                | 198  | 37    | 246        | 5                         | 7    | 8     | 20         | 13                | 179  | 2     | 194        | 23                        | 6    | 8     | 37         | 497        |
| 04:15 PM    | 13                | 198  | 25    | 236        | 5                         | 12   | 17    | 34         | 10                | 189  | 5     | 204        | 24                        | 7    | 5     | 36         | 510        |
| 04:30 PM    | 17                | 180  | 31    | 228        | 4                         | 16   | 18    | 38         | 7                 | 196  | 5     | 208        | 28                        | 9    | 9     | 46         | 520        |
| 04:45 PM    | 20                | 211  | 37    | 268        | 3                         | 8    | 14    | 25         | 9                 | 192  | 4     | 205        | 29                        | 7    | 6     | 42         | 540        |
| Total       | 61                | 787  | 130   | 978        | 17                        | 43   | 57    | 117        | 39                | 756  | 16    | 811        | 104                       | 29   | 28    | 161        | 2067       |
| 05:00 PM    | 16                | 158  | 43    | 217        | 4                         | 4    | 13    | 21         | 9                 | 208  | 5     | 222        | 32                        | 8    | 11    | 51         | 511        |
| 05:15 PM    | 26                | 196  | 49    | 271        | 4                         | 6    | 25    | 35         | 8                 | 237  | 6     | 251        | 33                        | 4    | 5     | 42         | 599        |
| 05:30 PM    | 15                | 196  | 30    | 241        | 2                         | 6    | 23    | 31         | 11                | 198  | 4     | 213        | 26                        | 9    | 12    | 47         | 532        |
| 05:45 PM    | 22                | 173  | 32    | 227        | 4                         | 5    | 16    | 25         | 20                | 201  | 7     | 228        | 38                        | 7    | 7     | 52         | 532        |
| Total       | 79                | 723  | 154   | 956        | 14                        | 21   | 77    | 112        | 48                | 844  | 22    | 914        | 129                       | 28   | 35    | 192        | 2174       |
| Grand Total | 140               | 1510 | 284   | 1934       | 31                        | 64   | 134   | 229        | 87                | 1600 | 38    | 1725       | 233                       | 57   | 63    | 353        | 4241       |
| Apprch %    | 7.2               | 78.1 | 14.7  |            | 13.5                      | 27.9 | 58.5  |            | 5                 | 92.8 | 2.2   |            | 66                        | 16.1 | 17.8  |            |            |
| Total %     | 3.3               | 35.6 | 6.7   | 45.6       | 0.7                       | 1.5  | 3.2   | 5.4        | 2.1               | 37.7 | 0.9   | 40.7       | 5.5                       | 1.3  | 1.5   | 8.3        |            |

| Start Time   | US-395 Southbound |            |           |            | Dos Palmas Road Westbound |          |           |            | US-395 Northbound |            |          |            | Dos Palmas Road Eastbound |          |           |            | Int. Total |
|--|-------------------|------------|-----------|------------|---------------------------|----------|-----------|------------|-------------------|------------|----------|------------|---------------------------|----------|-----------|------------|------------|
|  | Left              | Thru       | Right     | App. Total | Left                      | Thru     | Right     | App. Total | Left              | Thru       | Right    | App. Total | Left                      | Thru     | Right     | App. Total |            |
| Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1 |                   |            |           |            |                           |          |           |            |                   |            |          |            |                           |          |           |            |            |
| Peak Hour for Entire Intersection Begins at 04:45 PM       |                   |            |           |            |                           |          |           |            |                   |            |          |            |                           |          |           |            |            |
| 04:45 PM   | 20                | <b>211</b> | 37        | 268        | 3                         | <b>8</b> | 14        | 25         | 9                 | 192        | 4        | 205        | 29                        | 7        | 6         | 42         | 540        |
| 05:00 PM   | 16                | 158        | 43        | 217        | 4                         | 4        | 13        | 21         | 9                 | 208        | 5        | 222        | 32                        | 8        | 11        | <b>51</b>  | 511        |
| 05:15 PM   | <b>26</b>         | 196        | <b>49</b> | <b>271</b> | 4                         | 6        | <b>25</b> | <b>35</b>  | 8                 | <b>237</b> | <b>6</b> | <b>251</b> | <b>33</b>                 | 4        | 5         | 42         | <b>599</b> |
| 05:30 PM   | 15                | 196        | 30        | 241        | 2                         | 6        | 23        | 31         | <b>11</b>         | 198        | 4        | 213        | 26                        | <b>9</b> | <b>12</b> | 47         | 532        |
| Total Volume   | 77                | 761        | 159       | 997        | 13                        | 24       | 75        | 112        | 37                | 835        | 19       | 891        | 120                       | 28       | 34        | 182        | 2182       |
| % App. Total   | 7.7               | 76.3       | 15.9      |            | 11.6                      | 21.4     | 67        |            | 4.2               | 93.7       | 2.1      |            | 65.9                      | 15.4     | 18.7      |            |            |
| PHF  | .740              | .902       | .811      | .920       | .813                      | .750     | .750      | .800       | .841              | .881       | .792     | .887       | .909                      | .778     | .708      | .892       | .911       |

City of Victorville  
 N/S: US-395  
 E/W: Dos Palmas Road  
 Weather: Clear

File Name : 04\_VIC\_US-395\_Dos Palmas PM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 2



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

|              | 04:45 PM  |            |           |            | 04:45 PM |          |           |           | 04:45 PM  |            |          |            | 04:45 PM  |          |           |           |
|--------------|-----------|------------|-----------|------------|----------|----------|-----------|-----------|-----------|------------|----------|------------|-----------|----------|-----------|-----------|
| +0 mins.     | 20        | <b>211</b> | 37        | 268        | 3        | <b>8</b> | 14        | 25        | 9         | 192        | 4        | 205        | 29        | 7        | 6         | 42        |
| +15 mins.    | 16        | 158        | 43        | 217        | 4        | 4        | 13        | 21        | 9         | 208        | 5        | 222        | 32        | 8        | 11        | <b>51</b> |
| +30 mins.    | <b>26</b> | 196        | <b>49</b> | <b>271</b> | 4        | 6        | <b>25</b> | <b>35</b> | 8         | <b>237</b> | <b>6</b> | <b>251</b> | <b>33</b> | 4        | 5         | 42        |
| +45 mins.    | 15        | 196        | 30        | 241        | 2        | 6        | 23        | 31        | <b>11</b> | 198        | 4        | 213        | 26        | <b>9</b> | <b>12</b> | 47        |
| Total Volume | 77        | 761        | 159       | 997        | 13       | 24       | 75        | 112       | 37        | 835        | 19       | 891        | 120       | 28       | 34        | 182       |
| % App. Total | 7.7       | 76.3       | 15.9      |            | 11.6     | 21.4     | 67        |           | 4.2       | 93.7       | 2.1      |            | 65.9      | 15.4     | 18.7      |           |
| PHF          | .740      | .902       | .811      | .920       | .813     | .750     | .750      | .800      | .841      | .881       | .792     | .887       | .909      | .778     | .708      | .892      |

City of Victorville  
 N/S: US-395  
 E/W: Dos Palmas Road  
 Weather: Clear

File Name : 04\_VIC\_US-395\_Dos Palmas PM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 1

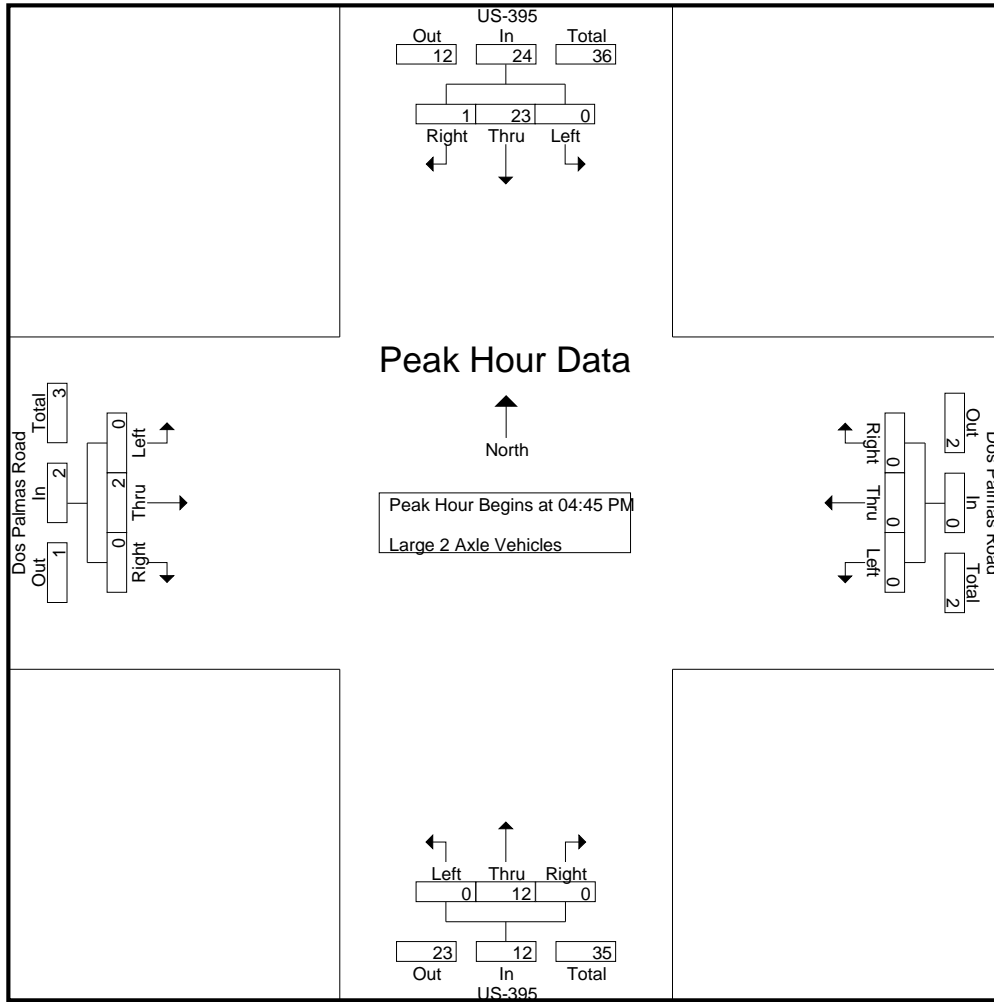
Groups Printed- Large 2 Axle Vehicles

| Start Time  | US-395 Southbound |      |       |            | Dos Palmas Road Westbound |      |       |            | US-395 Northbound |      |       |            | Dos Palmas Road Eastbound |      |       |            | Int. Total |
|-------------|-------------------|------|-------|------------|---------------------------|------|-------|------------|-------------------|------|-------|------------|---------------------------|------|-------|------------|------------|
|             | Left              | Thru | Right | App. Total | Left                      | Thru | Right | App. Total | Left              | Thru | Right | App. Total | Left                      | Thru | Right | App. Total |            |
| 04:00 PM    | 0                 | 6    | 0     | 6          | 0                         | 0    | 1     | 1          | 0                 | 2    | 0     | 2          | 1                         | 0    | 0     | 1          | 10         |
| 04:15 PM    | 0                 | 8    | 1     | 9          | 0                         | 0    | 0     | 0          | 0                 | 6    | 0     | 6          | 0                         | 0    | 0     | 0          | 15         |
| 04:30 PM    | 0                 | 3    | 0     | 3          | 0                         | 0    | 0     | 0          | 0                 | 3    | 0     | 3          | 0                         | 0    | 0     | 0          | 6          |
| 04:45 PM    | 0                 | 3    | 0     | 3          | 0                         | 0    | 0     | 0          | 0                 | 7    | 0     | 7          | 0                         | 1    | 0     | 1          | 11         |
| Total       | 0                 | 20   | 1     | 21         | 0                         | 0    | 1     | 1          | 0                 | 18   | 0     | 18         | 1                         | 1    | 0     | 2          | 42         |
| 05:00 PM    | 0                 | 7    | 1     | 8          | 0                         | 0    | 0     | 0          | 0                 | 1    | 0     | 1          | 0                         | 0    | 0     | 0          | 9          |
| 05:15 PM    | 0                 | 7    | 0     | 7          | 0                         | 0    | 0     | 0          | 0                 | 2    | 0     | 2          | 0                         | 0    | 0     | 0          | 9          |
| 05:30 PM    | 0                 | 6    | 0     | 6          | 0                         | 0    | 0     | 0          | 0                 | 2    | 0     | 2          | 0                         | 1    | 0     | 1          | 9          |
| 05:45 PM    | 0                 | 2    | 0     | 2          | 0                         | 0    | 0     | 0          | 0                 | 3    | 0     | 3          | 0                         | 0    | 1     | 1          | 6          |
| Total       | 0                 | 22   | 1     | 23         | 0                         | 0    | 0     | 0          | 0                 | 8    | 0     | 8          | 0                         | 1    | 1     | 2          | 33         |
| Grand Total | 0                 | 42   | 2     | 44         | 0                         | 0    | 1     | 1          | 0                 | 26   | 0     | 26         | 1                         | 2    | 1     | 4          | 75         |
| Apprch %    | 0                 | 95.5 | 4.5   |            | 0                         | 0    | 100   |            | 0                 | 100  | 0     |            | 25                        | 50   | 25    |            |            |
| Total %     | 0                 | 56   | 2.7   | 58.7       | 0                         | 0    | 1.3   | 1.3        | 0                 | 34.7 | 0     | 34.7       | 1.3                       | 2.7  | 1.3   | 5.3        |            |

| Start Time   | US-395 Southbound |      |       |            | Dos Palmas Road Westbound |      |       |            | US-395 Northbound |      |       |            | Dos Palmas Road Eastbound |      |       |            | Int. Total |
|--|-------------------|------|-------|------------|---------------------------|------|-------|------------|-------------------|------|-------|------------|---------------------------|------|-------|------------|------------|
|  | Left              | Thru | Right | App. Total | Left                      | Thru | Right | App. Total | Left              | Thru | Right | App. Total | Left                      | Thru | Right | App. Total |            |
| Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1 |                   |      |       |            |                           |      |       |            |                   |      |       |            |                           |      |       |            |            |
| Peak Hour for Entire Intersection Begins at 04:45 PM       |                   |      |       |            |                           |      |       |            |                   |      |       |            |                           |      |       |            |            |
| 04:45 PM   | 0                 | 3    | 0     | 3          | 0                         | 0    | 0     | 0          | 0                 | 7    | 0     | 7          | 0                         | 1    | 0     | 1          | 11         |
| 05:00 PM   | 0                 | 7    | 1     | 8          | 0                         | 0    | 0     | 0          | 0                 | 1    | 0     | 1          | 0                         | 0    | 0     | 0          | 9          |
| 05:15 PM   | 0                 | 7    | 0     | 7          | 0                         | 0    | 0     | 0          | 0                 | 2    | 0     | 2          | 0                         | 0    | 0     | 0          | 9          |
| 05:30 PM   | 0                 | 6    | 0     | 6          | 0                         | 0    | 0     | 0          | 0                 | 2    | 0     | 2          | 0                         | 1    | 0     | 1          | 9          |
| Total Volume   | 0                 | 23   | 1     | 24         | 0                         | 0    | 0     | 0          | 0                 | 12   | 0     | 12         | 0                         | 2    | 0     | 2          | 38         |
| % App. Total   | 0                 | 95.8 | 4.2   |            | 0                         | 0    | 0     |            | 0                 | 100  | 0     |            | 0                         | 100  | 0     |            |            |
| PHF  | .000              | .821 | .250  | .750       | .000                      | .000 | .000  | .000       | .000              | .429 | .000  | .429       | .000                      | .500 | .000  | .500       | .864       |

City of Victorville  
 N/S: US-395  
 E/W: Dos Palmas Road  
 Weather: Clear

File Name : 04\_VIC\_US-395\_Dos Palmas PM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 2



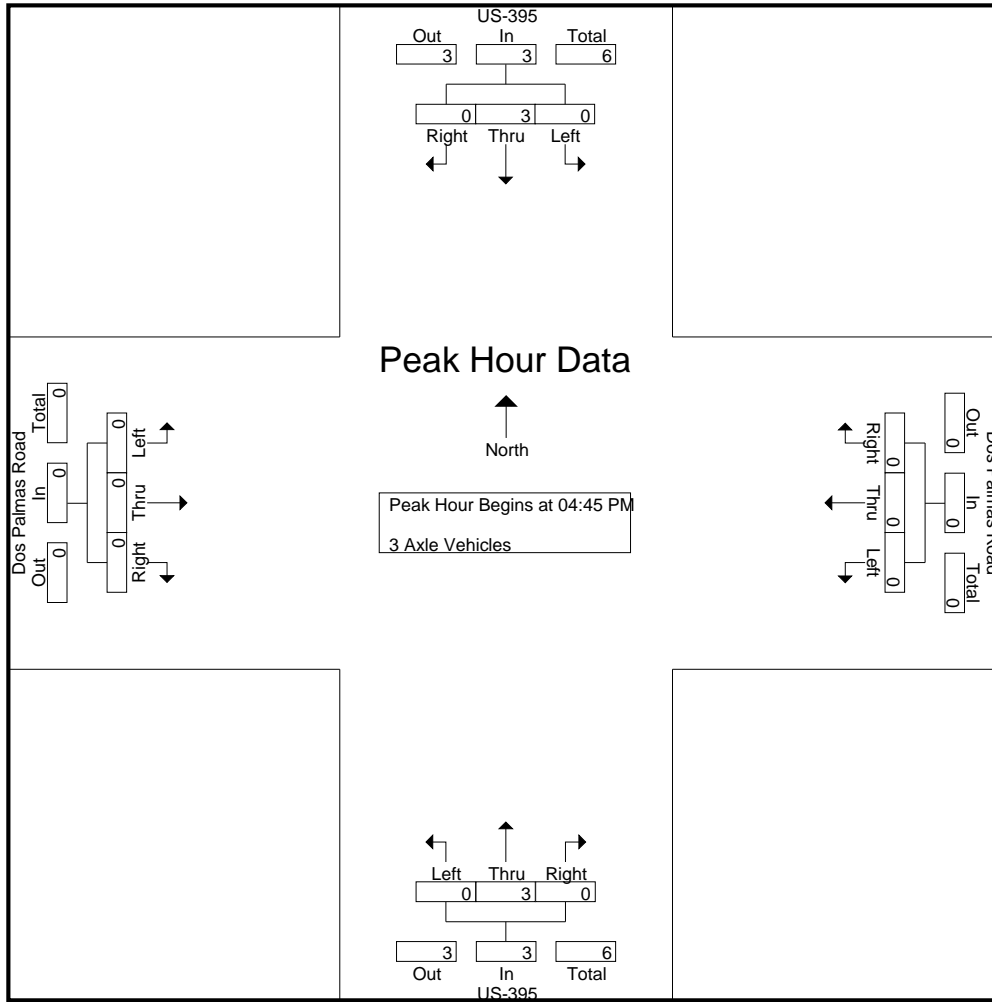
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

|              | 04:45 PM |      |      |      | 04:45 PM |      |      |      | 04:45 PM |      |      |      | 04:45 PM |      |      |      |
|--------------|----------|------|------|------|----------|------|------|------|----------|------|------|------|----------|------|------|------|
| +0 mins.     | 0        | 3    | 0    | 3    | 0        | 0    | 0    | 0    | 0        | 7    | 0    | 7    | 0        | 1    | 0    | 1    |
| +15 mins.    | 0        | 7    | 1    | 8    | 0        | 0    | 0    | 0    | 0        | 1    | 0    | 1    | 0        | 0    | 0    | 0    |
| +30 mins.    | 0        | 7    | 0    | 7    | 0        | 0    | 0    | 0    | 0        | 2    | 0    | 2    | 0        | 0    | 0    | 0    |
| +45 mins.    | 0        | 6    | 0    | 6    | 0        | 0    | 0    | 0    | 0        | 2    | 0    | 2    | 0        | 1    | 0    | 1    |
| Total Volume | 0        | 23   | 1    | 24   | 0        | 0    | 0    | 0    | 0        | 12   | 0    | 12   | 0        | 2    | 0    | 2    |
| % App. Total | 0        | 95.8 | 4.2  |      | 0        | 0    | 0    | 0    | 0        | 100  | 0    |      | 0        | 100  | 0    |      |
| PHF          | .000     | .821 | .250 | .750 | .000     | .000 | .000 | .000 | .000     | .429 | .000 | .429 | .000     | .500 | .000 | .500 |



City of Victorville  
 N/S: US-395  
 E/W: Dos Palmas Road  
 Weather: Clear

File Name : 04\_VIC\_US-395\_Dos Palmas PM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 2



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

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



City of Victorville  
 N/S: US-395  
 E/W: Dos Palmas Road  
 Weather: Clear

File Name : 04\_VIC\_US-395\_Dos Palmas PM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 1

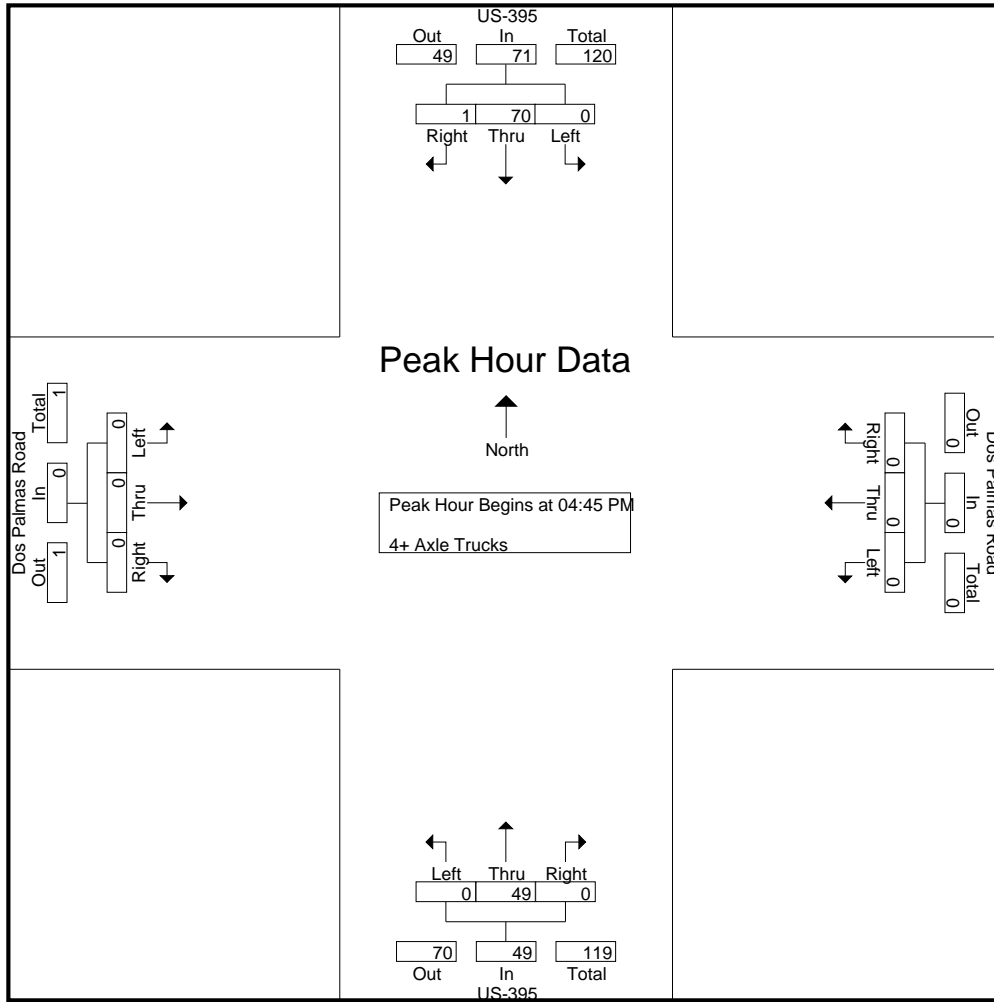
Groups Printed- 4+ Axle Trucks

| Start Time  | US-395 Southbound |      |       |            | Dos Palmas Road Westbound |      |       |            | US-395 Northbound |      |       |            | Dos Palmas Road Eastbound |      |       |            | Int. Total |
|-------------|-------------------|------|-------|------------|---------------------------|------|-------|------------|-------------------|------|-------|------------|---------------------------|------|-------|------------|------------|
|             | Left              | Thru | Right | App. Total | Left                      | Thru | Right | App. Total | Left              | Thru | Right | App. Total | Left                      | Thru | Right | App. Total |            |
| 04:00 PM    | 0                 | 19   | 0     | 19         | 0                         | 0    | 0     | 0          | 0                 | 15   | 0     | 15         | 0                         | 0    | 0     | 0          | 34         |
| 04:15 PM    | 0                 | 15   | 0     | 15         | 0                         | 0    | 0     | 0          | 0                 | 21   | 0     | 21         | 0                         | 0    | 0     | 0          | 36         |
| 04:30 PM    | 0                 | 15   | 0     | 15         | 0                         | 0    | 0     | 0          | 0                 | 10   | 0     | 10         | 0                         | 0    | 0     | 0          | 25         |
| 04:45 PM    | 0                 | 19   | 0     | 19         | 0                         | 0    | 0     | 0          | 0                 | 5    | 0     | 5          | 0                         | 0    | 0     | 0          | 24         |
| Total       | 0                 | 68   | 0     | 68         | 0                         | 0    | 0     | 0          | 0                 | 51   | 0     | 51         | 0                         | 0    | 0     | 0          | 119        |
| 05:00 PM    | 0                 | 20   | 0     | 20         | 0                         | 0    | 0     | 0          | 0                 | 16   | 0     | 16         | 0                         | 0    | 0     | 0          | 36         |
| 05:15 PM    | 0                 | 20   | 1     | 21         | 0                         | 0    | 0     | 0          | 0                 | 12   | 0     | 12         | 0                         | 0    | 0     | 0          | 33         |
| 05:30 PM    | 0                 | 11   | 0     | 11         | 0                         | 0    | 0     | 0          | 0                 | 16   | 0     | 16         | 0                         | 0    | 0     | 0          | 27         |
| 05:45 PM    | 0                 | 13   | 0     | 13         | 0                         | 0    | 0     | 0          | 0                 | 9    | 0     | 9          | 0                         | 0    | 0     | 0          | 22         |
| Total       | 0                 | 64   | 1     | 65         | 0                         | 0    | 0     | 0          | 0                 | 53   | 0     | 53         | 0                         | 0    | 0     | 0          | 118        |
| Grand Total | 0                 | 132  | 1     | 133        | 0                         | 0    | 0     | 0          | 0                 | 104  | 0     | 104        | 0                         | 0    | 0     | 0          | 237        |
| Apprch %    | 0                 | 99.2 | 0.8   |            | 0                         | 0    | 0     |            | 0                 | 100  | 0     |            | 0                         | 0    | 0     |            |            |
| Total %     | 0                 | 55.7 | 0.4   | 56.1       | 0                         | 0    | 0     | 0          | 0                 | 43.9 | 0     | 43.9       | 0                         | 0    | 0     | 0          |            |

| Start Time   | US-395 Southbound |           |       |            | Dos Palmas Road Westbound |      |       |            | US-395 Northbound |           |       |            | Dos Palmas Road Eastbound |      |       |            | Int. Total |
|--|-------------------|-----------|-------|------------|---------------------------|------|-------|------------|-------------------|-----------|-------|------------|---------------------------|------|-------|------------|------------|
|  | Left              | Thru      | Right | App. Total | Left                      | Thru | Right | App. Total | Left              | Thru      | Right | App. Total | Left                      | Thru | Right | App. Total |            |
| Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1 |                   |           |       |            |                           |      |       |            |                   |           |       |            |                           |      |       |            |            |
| Peak Hour for Entire Intersection Begins at 04:45 PM       |                   |           |       |            |                           |      |       |            |                   |           |       |            |                           |      |       |            |            |
| 04:45 PM   | 0                 | 19        | 0     | 19         | 0                         | 0    | 0     | 0          | 0                 | 5         | 0     | 5          | 0                         | 0    | 0     | 0          | 24         |
| 05:00 PM   | 0                 | <b>20</b> | 0     | 20         | 0                         | 0    | 0     | 0          | 0                 | <b>16</b> | 0     | <b>16</b>  | 0                         | 0    | 0     | 0          | <b>36</b>  |
| 05:15 PM   | 0                 | 20        | 1     | 21         | 0                         | 0    | 0     | 0          | 0                 | 12        | 0     | 12         | 0                         | 0    | 0     | 0          | 33         |
| 05:30 PM   | 0                 | 11        | 0     | 11         | 0                         | 0    | 0     | 0          | 0                 | 16        | 0     | 16         | 0                         | 0    | 0     | 0          | 27         |
| Total Volume   | 0                 | 70        | 1     | 71         | 0                         | 0    | 0     | 0          | 0                 | 49        | 0     | 49         | 0                         | 0    | 0     | 0          | 120        |
| % App. Total   | 0                 | 98.6      | 1.4   |            | 0                         | 0    | 0     |            | 0                 | 100       | 0     |            | 0                         | 0    | 0     |            |            |
| PHF  | .000              | .875      | .250  | .845       | .000                      | .000 | .000  | .000       | .000              | .766      | .000  | .766       | .000                      | .000 | .000  | .000       | .833       |

City of Victorville  
 N/S: US-395  
 E/W: Dos Palmas Road  
 Weather: Clear

File Name : 04\_VIC\_US-395\_Dos Palmas PM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 2



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

|              | 04:45 PM |           |          |           | 04:45 PM |      |      |      | 04:45 PM |           |      |           | 04:45 PM |      |      |      |
|--------------|----------|-----------|----------|-----------|----------|------|------|------|----------|-----------|------|-----------|----------|------|------|------|
| +0 mins.     | 0        | 19        | 0        | 19        | 0        | 0    | 0    | 0    | 0        | 5         | 0    | 5         | 0        | 0    | 0    | 0    |
| +15 mins.    | 0        | <b>20</b> | 0        | 20        | 0        | 0    | 0    | 0    | 0        | <b>16</b> | 0    | <b>16</b> | 0        | 0    | 0    | 0    |
| +30 mins.    | 0        | 20        | <b>1</b> | <b>21</b> | 0        | 0    | 0    | 0    | 0        | 12        | 0    | 12        | 0        | 0    | 0    | 0    |
| +45 mins.    | 0        | 11        | 0        | 11        | 0        | 0    | 0    | 0    | 0        | 16        | 0    | 16        | 0        | 0    | 0    | 0    |
| Total Volume | 0        | 70        | 1        | 71        | 0        | 0    | 0    | 0    | 0        | 49        | 0    | 49        | 0        | 0    | 0    | 0    |
| % App. Total | 0        | 98.6      | 1.4      |           | 0        | 0    | 0    |      | 0        | 100       | 0    |           | 0        | 0    | 0    |      |
| PHF          | .000     | .875      | .250     | .845      | .000     | .000 | .000 | .000 | .000     | .766      | .000 | .766      | .000     | .000 | .000 | .000 |

City of Victorville  
 N/S: Mesa View Drive  
 E/W: Luna Road  
 Weather: Clear

File Name : 02\_VIC\_Mesa View\_Luna AM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 1

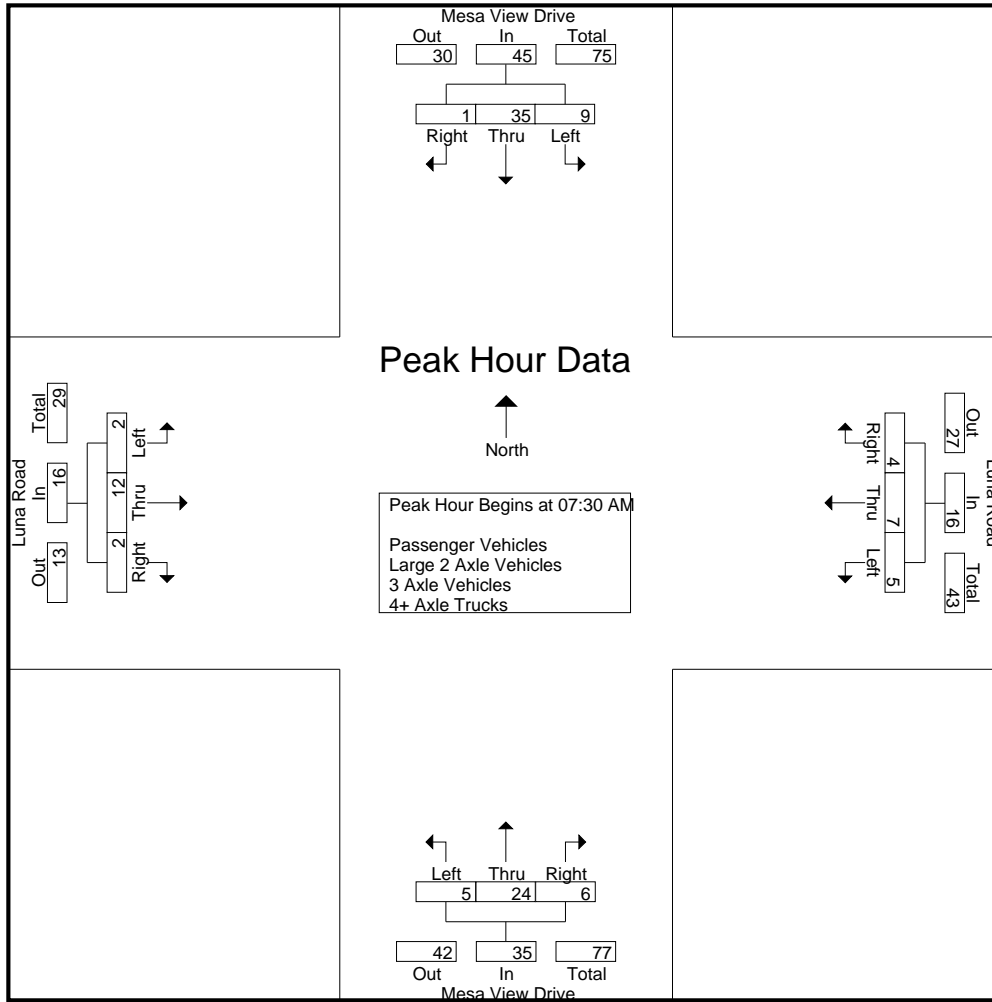
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

| Start Time              | Mesa View Drive Southbound |           |          |            | Luna Road Westbound |           |          |            | Mesa View Drive Northbound |           |           |            | Luna Road Eastbound |           |           |            | Int. Total |
|-------------------------|----------------------------|-----------|----------|------------|---------------------|-----------|----------|------------|----------------------------|-----------|-----------|------------|---------------------|-----------|-----------|------------|------------|
|                         | Left                       | Thru      | Right    | App. Total | Left                | Thru      | Right    | App. Total | Left                       | Thru      | Right     | App. Total | Left                | Thru      | Right     | App. Total |            |
| 07:00 AM                | 0                          | 11        | 0        | 11         | 1                   | 2         | 0        | 3          | 0                          | 5         | 1         | 6          | 0                   | 0         | 3         | 3          | 23         |
| 07:15 AM                | 0                          | 6         | 0        | 6          | 1                   | 2         | 3        | 6          | 0                          | 4         | 0         | 4          | 1                   | 2         | 2         | 5          | 21         |
| 07:30 AM                | 1                          | 13        | 0        | 14         | 1                   | 0         | 2        | 3          | 1                          | 10        | 3         | 14         | 0                   | 4         | 1         | 5          | 36         |
| 07:45 AM                | 4                          | 8         | 0        | 12         | 1                   | 4         | 0        | 5          | 1                          | 7         | 1         | 9          | 0                   | 3         | 1         | 4          | 30         |
| <b>Total</b>            | <b>5</b>                   | <b>38</b> | <b>0</b> | <b>43</b>  | <b>4</b>            | <b>8</b>  | <b>5</b> | <b>17</b>  | <b>2</b>                   | <b>26</b> | <b>5</b>  | <b>33</b>  | <b>1</b>            | <b>9</b>  | <b>7</b>  | <b>17</b>  | <b>110</b> |
| 08:00 AM                | 1                          | 7         | 0        | 8          | 1                   | 1         | 0        | 2          | 2                          | 3         | 1         | 6          | 0                   | 4         | 0         | 4          | 20         |
| 08:15 AM                | 3                          | 7         | 1        | 11         | 2                   | 2         | 2        | 6          | 1                          | 4         | 1         | 6          | 2                   | 1         | 0         | 3          | 26         |
| 08:30 AM                | 3                          | 11        | 0        | 14         | 1                   | 1         | 1        | 3          | 0                          | 6         | 2         | 8          | 0                   | 3         | 5         | 8          | 33         |
| 08:45 AM                | 0                          | 2         | 0        | 2          | 1                   | 2         | 0        | 3          | 2                          | 2         | 2         | 6          | 1                   | 2         | 0         | 3          | 14         |
| <b>Total</b>            | <b>7</b>                   | <b>27</b> | <b>1</b> | <b>35</b>  | <b>5</b>            | <b>6</b>  | <b>3</b> | <b>14</b>  | <b>5</b>                   | <b>15</b> | <b>6</b>  | <b>26</b>  | <b>3</b>            | <b>10</b> | <b>5</b>  | <b>18</b>  | <b>93</b>  |
| <b>Grand Total</b>      | <b>12</b>                  | <b>65</b> | <b>1</b> | <b>78</b>  | <b>9</b>            | <b>14</b> | <b>8</b> | <b>31</b>  | <b>7</b>                   | <b>41</b> | <b>11</b> | <b>59</b>  | <b>4</b>            | <b>19</b> | <b>12</b> | <b>35</b>  | <b>203</b> |
| Apprch %                | 15.4                       | 83.3      | 1.3      |            | 29                  | 45.2      | 25.8     |            | 11.9                       | 69.5      | 18.6      |            | 11.4                | 54.3      | 34.3      |            |            |
| Total %                 | 5.9                        | 32        | 0.5      | 38.4       | 4.4                 | 6.9       | 3.9      | 15.3       | 3.4                        | 20.2      | 5.4       | 29.1       | 2                   | 9.4       | 5.9       | 17.2       |            |
| Passenger Vehicles      | 12                         | 63        | 1        | 76         | 8                   | 13        | 5        | 26         | 7                          | 36        | 10        | 53         | 4                   | 19        | 11        | 34         | 189        |
| % Passenger Vehicles    | 100                        | 96.9      | 100      | 97.4       | 88.9                | 92.9      | 62.5     | 83.9       | 100                        | 87.8      | 90.9      | 89.8       | 100                 | 100       | 91.7      | 97.1       | 93.1       |
| Large 2 Axle Vehicles   | 0                          | 1         | 0        | 1          | 0                   | 1         | 3        | 4          | 0                          | 3         | 1         | 4          | 0                   | 0         | 1         | 1          | 10         |
| % Large 2 Axle Vehicles | 0                          | 1.5       | 0        | 1.3        | 0                   | 7.1       | 37.5     | 12.9       | 0                          | 7.3       | 9.1       | 6.8        | 0                   | 0         | 8.3       | 2.9        | 4.9        |
| 3 Axle Vehicles         | 0                          | 1         | 0        | 1          | 1                   | 0         | 0        | 1          | 0                          | 2         | 0         | 2          | 0                   | 0         | 0         | 0          | 4          |
| % 3 Axle Vehicles       | 0                          | 1.5       | 0        | 1.3        | 11.1                | 0         | 0        | 3.2        | 0                          | 4.9       | 0         | 3.4        | 0                   | 0         | 0         | 0          | 2          |
| 4+ Axle Trucks          | 0                          | 0         | 0        | 0          | 0                   | 0         | 0        | 0          | 0                          | 0         | 0         | 0          | 0                   | 0         | 0         | 0          | 0          |
| % 4+ Axle Trucks        | 0                          | 0         | 0        | 0          | 0                   | 0         | 0        | 0          | 0                          | 0         | 0         | 0          | 0                   | 0         | 0         | 0          | 0          |

| Start Time   | Mesa View Drive Southbound |      |       |            | Luna Road Westbound |      |       |            | Mesa View Drive Northbound |      |       |            | Luna Road Eastbound |      |       |            | Int. Total |
|--|----------------------------|------|-------|------------|---------------------|------|-------|------------|----------------------------|------|-------|------------|---------------------|------|-------|------------|------------|
|  | Left                       | Thru | Right | App. Total | Left                | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Left                | Thru | Right | App. Total |            |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |                            |      |       |            |                     |      |       |            |                            |      |       |            |                     |      |       |            |            |
| Peak Hour for Entire Intersection Begins at 07:30 AM       |                            |      |       |            |                     |      |       |            |                            |      |       |            |                     |      |       |            |            |
| 07:30 AM   | 1                          | 13   | 0     | 14         | 1                   | 0    | 2     | 3          | 1                          | 10   | 3     | 14         | 0                   | 4    | 1     | 5          | 36         |
| 07:45 AM   | 4                          | 8    | 0     | 12         | 1                   | 4    | 0     | 5          | 1                          | 7    | 1     | 9          | 0                   | 3    | 1     | 4          | 30         |
| 08:00 AM   | 1                          | 7    | 0     | 8          | 1                   | 1    | 0     | 2          | 2                          | 3    | 1     | 6          | 0                   | 4    | 0     | 4          | 20         |
| 08:15 AM   | 3                          | 7    | 1     | 11         | 2                   | 2    | 2     | 6          | 1                          | 4    | 1     | 6          | 2                   | 1    | 0     | 3          | 26         |
| Total Volume   | 9                          | 35   | 1     | 45         | 5                   | 7    | 4     | 16         | 5                          | 24   | 6     | 35         | 2                   | 12   | 2     | 16         | 112        |
| % App. Total   | 20                         | 77.8 | 2.2   |            | 31.2                | 43.8 | 25    |            | 14.3                       | 68.6 | 17.1  |            | 12.5                | 75   | 12.5  |            |            |
| PHF  | .563                       | .673 | .250  | .804       | .625                | .438 | .500  | .667       | .625                       | .600 | .500  | .625       | .250                | .750 | .500  | .800       | .778       |

City of Victorville  
 N/S: Mesa View Drive  
 E/W: Luna Road  
 Weather: Clear

File Name : 02\_VIC\_Mesa View\_Luna AM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 2



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

|              | 07:30 AM |      |      |      | 07:00 AM |      |      |      | 07:30 AM |      |      |      | 07:45 AM |      |      |      |
|--------------|----------|------|------|------|----------|------|------|------|----------|------|------|------|----------|------|------|------|
| +0 mins.     | 1        | 13   | 0    | 14   | 1        | 2    | 0    | 3    | 1        | 10   | 3    | 14   | 0        | 3    | 1    | 4    |
| +15 mins.    | 4        | 8    | 0    | 12   | 1        | 2    | 3    | 6    | 1        | 7    | 1    | 9    | 0        | 4    | 0    | 4    |
| +30 mins.    | 1        | 7    | 0    | 8    | 1        | 0    | 2    | 3    | 2        | 3    | 1    | 6    | 2        | 1    | 0    | 3    |
| +45 mins.    | 3        | 7    | 1    | 11   | 1        | 4    | 0    | 5    | 1        | 4    | 1    | 6    | 0        | 3    | 5    | 8    |
| Total Volume | 9        | 35   | 1    | 45   | 4        | 8    | 5    | 17   | 5        | 24   | 6    | 35   | 2        | 11   | 6    | 19   |
| % App. Total | 20       | 77.8 | 2.2  |      | 23.5     | 47.1 | 29.4 |      | 14.3     | 68.6 | 17.1 |      | 10.5     | 57.9 | 31.6 |      |
| PHF          | .563     | .673 | .250 | .804 | 1.000    | .500 | .417 | .708 | .625     | .600 | .500 | .625 | .250     | .688 | .300 | .594 |

City of Victorville  
 N/S: Mesa View Drive  
 E/W: Luna Road  
 Weather: Clear

File Name : 02\_VIC\_Mesa View\_Luna AM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 1

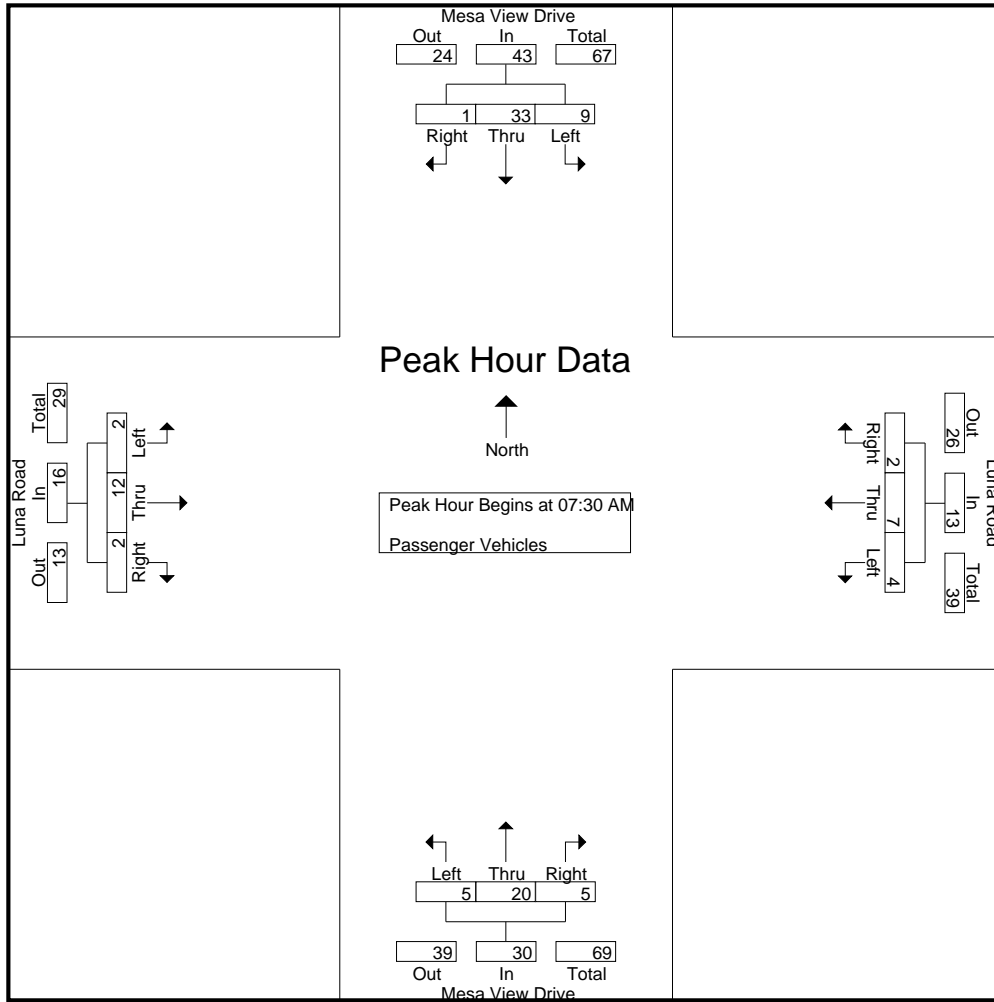
Groups Printed- Passenger Vehicles

| Start Time  | Mesa View Drive Southbound |      |       |            | Luna Road Westbound |      |       |            | Mesa View Drive Northbound |      |       |            | Luna Road Eastbound |      |       |            | Int. Total |
|-------------|----------------------------|------|-------|------------|---------------------|------|-------|------------|----------------------------|------|-------|------------|---------------------|------|-------|------------|------------|
|             | Left                       | Thru | Right | App. Total | Left                | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Left                | Thru | Right | App. Total |            |
| 07:00 AM    | 0                          | 11   | 0     | 11         | 1                   | 2    | 0     | 3          | 0                          | 4    | 1     | 5          | 0                   | 0    | 2     | 2          | 21         |
| 07:15 AM    | 0                          | 6    | 0     | 6          | 1                   | 2    | 3     | 6          | 0                          | 4    | 0     | 4          | 1                   | 2    | 2     | 5          | 21         |
| 07:30 AM    | 1                          | 13   | 0     | 14         | 1                   | 0    | 1     | 2          | 1                          | 8    | 2     | 11         | 0                   | 4    | 1     | 5          | 32         |
| 07:45 AM    | 4                          | 8    | 0     | 12         | 1                   | 4    | 0     | 5          | 1                          | 7    | 1     | 9          | 0                   | 3    | 1     | 4          | 30         |
| Total       | 5                          | 38   | 0     | 43         | 4                   | 8    | 4     | 16         | 2                          | 23   | 4     | 29         | 1                   | 9    | 6     | 16         | 104        |
| 08:00 AM    | 1                          | 6    | 0     | 7          | 0                   | 1    | 0     | 1          | 2                          | 1    | 1     | 4          | 0                   | 4    | 0     | 4          | 16         |
| 08:15 AM    | 3                          | 6    | 1     | 10         | 2                   | 2    | 1     | 5          | 1                          | 4    | 1     | 6          | 2                   | 1    | 0     | 3          | 24         |
| 08:30 AM    | 3                          | 11   | 0     | 14         | 1                   | 1    | 0     | 2          | 0                          | 6    | 2     | 8          | 0                   | 3    | 5     | 8          | 32         |
| 08:45 AM    | 0                          | 2    | 0     | 2          | 1                   | 1    | 0     | 2          | 2                          | 2    | 2     | 6          | 1                   | 2    | 0     | 3          | 13         |
| Total       | 7                          | 25   | 1     | 33         | 4                   | 5    | 1     | 10         | 5                          | 13   | 6     | 24         | 3                   | 10   | 5     | 18         | 85         |
| Grand Total | 12                         | 63   | 1     | 76         | 8                   | 13   | 5     | 26         | 7                          | 36   | 10    | 53         | 4                   | 19   | 11    | 34         | 189        |
| Apprch %    | 15.8                       | 82.9 | 1.3   |            | 30.8                | 50   | 19.2  |            | 13.2                       | 67.9 | 18.9  |            | 11.8                | 55.9 | 32.4  |            |            |
| Total %     | 6.3                        | 33.3 | 0.5   | 40.2       | 4.2                 | 6.9  | 2.6   | 13.8       | 3.7                        | 19   | 5.3   | 28         | 2.1                 | 10.1 | 5.8   | 18         |            |

| Start Time   | Mesa View Drive Southbound |      |       |            | Luna Road Westbound |      |       |            | Mesa View Drive Northbound |      |       |            | Luna Road Eastbound |      |       |            | Int. Total |
|--|----------------------------|------|-------|------------|---------------------|------|-------|------------|----------------------------|------|-------|------------|---------------------|------|-------|------------|------------|
|  | Left                       | Thru | Right | App. Total | Left                | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Left                | Thru | Right | App. Total |            |
| Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1 |                            |      |       |            |                     |      |       |            |                            |      |       |            |                     |      |       |            |            |
| Peak Hour for Entire Intersection Begins at 07:30 AM       |                            |      |       |            |                     |      |       |            |                            |      |       |            |                     |      |       |            |            |
| 07:30 AM   | 1                          | 13   | 0     | 14         | 1                   | 0    | 1     | 2          | 1                          | 8    | 2     | 11         | 0                   | 4    | 1     | 5          | 32         |
| 07:45 AM   | 4                          | 8    | 0     | 12         | 1                   | 4    | 0     | 5          | 1                          | 7    | 1     | 9          | 0                   | 3    | 1     | 4          | 30         |
| 08:00 AM   | 1                          | 6    | 0     | 7          | 0                   | 1    | 0     | 1          | 2                          | 1    | 1     | 4          | 0                   | 4    | 0     | 4          | 16         |
| 08:15 AM   | 3                          | 6    | 1     | 10         | 2                   | 2    | 1     | 5          | 1                          | 4    | 1     | 6          | 2                   | 1    | 0     | 3          | 24         |
| Total Volume   | 9                          | 33   | 1     | 43         | 4                   | 7    | 2     | 13         | 5                          | 20   | 5     | 30         | 2                   | 12   | 2     | 16         | 102        |
| % App. Total   | 20.9                       | 76.7 | 2.3   |            | 30.8                | 53.8 | 15.4  |            | 16.7                       | 66.7 | 16.7  |            | 12.5                | 75   | 12.5  |            |            |
| PHF  | .563                       | .635 | .250  | .768       | .500                | .438 | .500  | .650       | .625                       | .625 | .625  | .682       | .250                | .750 | .500  | .800       | .797       |

City of Victorville  
 N/S: Mesa View Drive  
 E/W: Luna Road  
 Weather: Clear

File Name : 02\_VIC\_Mesa View\_Luna AM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

|              | 07:30 AM |      |      |      | 07:30 AM |      |      |      | 07:30 AM |      |      |      | 07:30 AM |      |      |      |
|--------------|----------|------|------|------|----------|------|------|------|----------|------|------|------|----------|------|------|------|
| +0 mins.     | 1        | 13   | 0    | 14   | 1        | 0    | 1    | 2    | 1        | 8    | 2    | 11   | 0        | 4    | 1    | 5    |
| +15 mins.    | 4        | 8    | 0    | 12   | 1        | 4    | 0    | 5    | 1        | 7    | 1    | 9    | 0        | 3    | 1    | 4    |
| +30 mins.    | 1        | 6    | 0    | 7    | 0        | 1    | 0    | 1    | 2        | 1    | 1    | 4    | 0        | 4    | 0    | 4    |
| +45 mins.    | 3        | 6    | 1    | 10   | 2        | 2    | 1    | 5    | 1        | 4    | 1    | 6    | 2        | 1    | 0    | 3    |
| Total Volume | 9        | 33   | 1    | 43   | 4        | 7    | 2    | 13   | 5        | 20   | 5    | 30   | 2        | 12   | 2    | 16   |
| % App. Total | 20.9     | 76.7 | 2.3  |      | 30.8     | 53.8 | 15.4 |      | 16.7     | 66.7 | 16.7 |      | 12.5     | 75   | 12.5 |      |
| PHF          | .563     | .635 | .250 | .768 | .500     | .438 | .500 | .650 | .625     | .625 | .625 | .682 | .250     | .750 | .500 | .800 |

City of Victorville  
 N/S: Mesa View Drive  
 E/W: Luna Road  
 Weather: Clear

File Name : 02\_VIC\_Mesa View\_Luna AM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 1

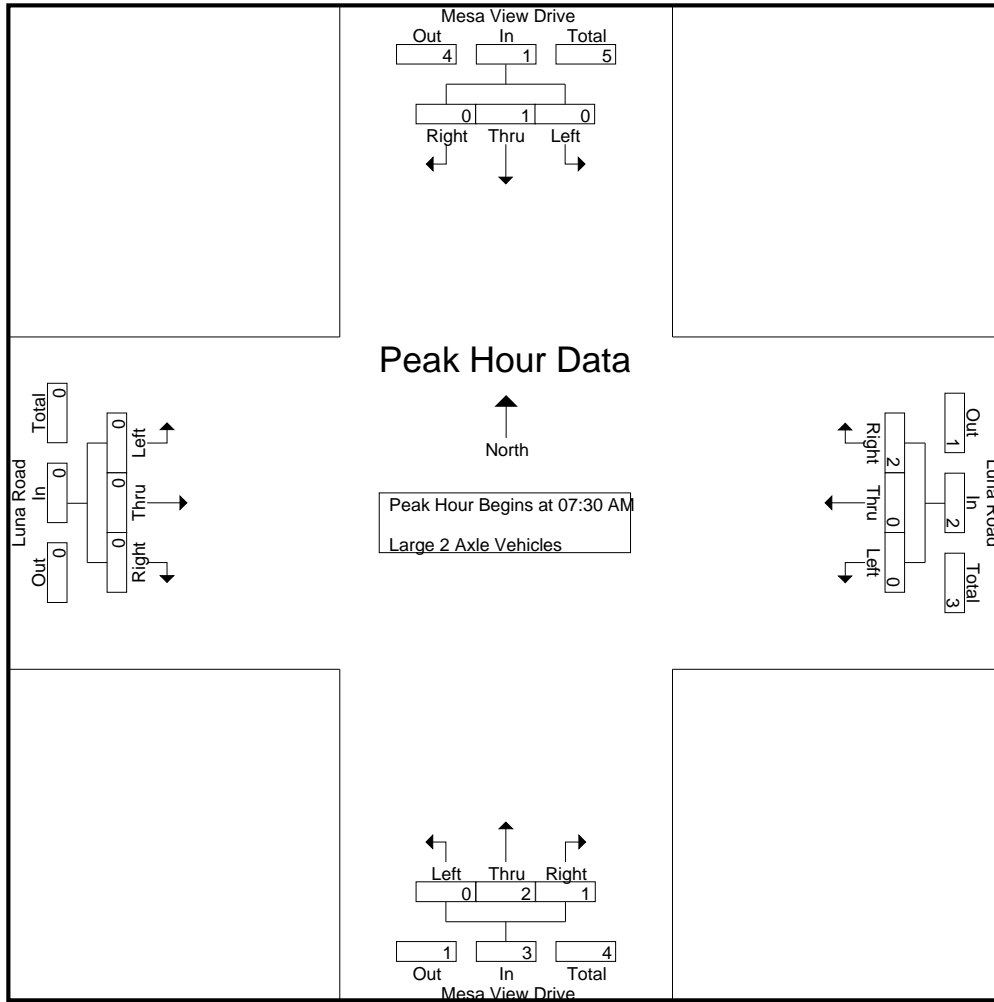
Groups Printed- Large 2 Axle Vehicles

| Start Time  | Mesa View Drive Southbound |      |       |            | Luna Road Westbound |      |       |            | Mesa View Drive Northbound |      |       |            | Luna Road Eastbound |      |       |            | Int. Total |
|-------------|----------------------------|------|-------|------------|---------------------|------|-------|------------|----------------------------|------|-------|------------|---------------------|------|-------|------------|------------|
|             | Left                       | Thru | Right | App. Total | Left                | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Left                | Thru | Right | App. Total |            |
| 07:00 AM    | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 1    | 0     | 1          | 0                   | 0    | 1     | 1          | 2          |
| 07:15 AM    | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| 07:30 AM    | 0                          | 0    | 0     | 0          | 0                   | 0    | 1     | 1          | 0                          | 1    | 1     | 2          | 0                   | 0    | 0     | 0          | 3          |
| 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    | 1     | 1          | 0                          | 2    | 1     | 3          | 0                   | 0    | 1     | 1          | 5          |
| 08:00 AM    | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 1    | 0     | 1          | 0                   | 0    | 0     | 0          | 1          |
| 08:15 AM    | 0                          | 1    | 0     | 1          | 0                   | 0    | 1     | 1          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 2          |
| 08:30 AM    | 0                          | 0    | 0     | 0          | 0                   | 0    | 1     | 1          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 1          |
| 08:45 AM    | 0                          | 0    | 0     | 0          | 0                   | 1    | 0     | 1          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 1          |
| Total       | 0                          | 1    | 0     | 1          | 0                   | 1    | 2     | 3          | 0                          | 1    | 0     | 1          | 0                   | 0    | 0     | 0          | 5          |
| Grand Total | 0                          | 1    | 0     | 1          | 0                   | 1    | 3     | 4          | 0                          | 3    | 1     | 4          | 0                   | 0    | 1     | 1          | 10         |
| Apprch %    | 0                          | 100  | 0     |            | 0                   | 25   | 75    |            | 0                          | 75   | 25    |            | 0                   | 0    | 100   |            |            |
| Total %     | 0                          | 10   | 0     | 10         | 0                   | 10   | 30    | 40         | 0                          | 30   | 10    | 40         | 0                   | 0    | 10    | 10         |            |

| Start Time   | Mesa View Drive Southbound |      |       |            | Luna Road Westbound |      |       |            | Mesa View Drive Northbound |      |       |            | Luna Road Eastbound |      |       |            | Int. Total |
|--|----------------------------|------|-------|------------|---------------------|------|-------|------------|----------------------------|------|-------|------------|---------------------|------|-------|------------|------------|
|  | Left                       | Thru | Right | App. Total | Left                | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Left                | Thru | Right | App. Total |            |
| Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1 |                            |      |       |            |                     |      |       |            |                            |      |       |            |                     |      |       |            |            |
| Peak Hour for Entire Intersection Begins at 07:30 AM       |                            |      |       |            |                     |      |       |            |                            |      |       |            |                     |      |       |            |            |
| 07:30 AM   | 0                          | 0    | 0     | 0          | 0                   | 0    | 1     | 1          | 0                          | 1    | 1     | 2          | 0                   | 0    | 0     | 0          | 3          |
| 07:45 AM   | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| 08:00 AM   | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 1    | 0     | 1          | 0                   | 0    | 0     | 0          | 1          |
| 08:15 AM   | 0                          | 1    | 0     | 1          | 0                   | 0    | 1     | 1          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 2          |
| Total Volume   | 0                          | 1    | 0     | 1          | 0                   | 0    | 2     | 2          | 0                          | 2    | 1     | 3          | 0                   | 0    | 0     | 0          | 6          |
| % App. Total   | 0                          | 100  | 0     |            | 0                   | 0    | 100   |            | 0                          | 66.7 | 33.3  |            | 0                   | 0    | 0     |            |            |
| PHF  | .000                       | .250 | .000  | .250       | .000                | .000 | .500  | .500       | .000                       | .500 | .250  | .375       | .000                | .000 | .000  | .000       | .500       |

City of Victorville  
 N/S: Mesa View Drive  
 E/W: Luna Road  
 Weather: Clear

File Name : 02\_VIC\_Mesa View\_Luna AM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

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



City of Victorville  
 N/S: Mesa View Drive  
 E/W: Luna Road  
 Weather: Clear

File Name : 02\_VIC\_Mesa View\_Luna AM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 1

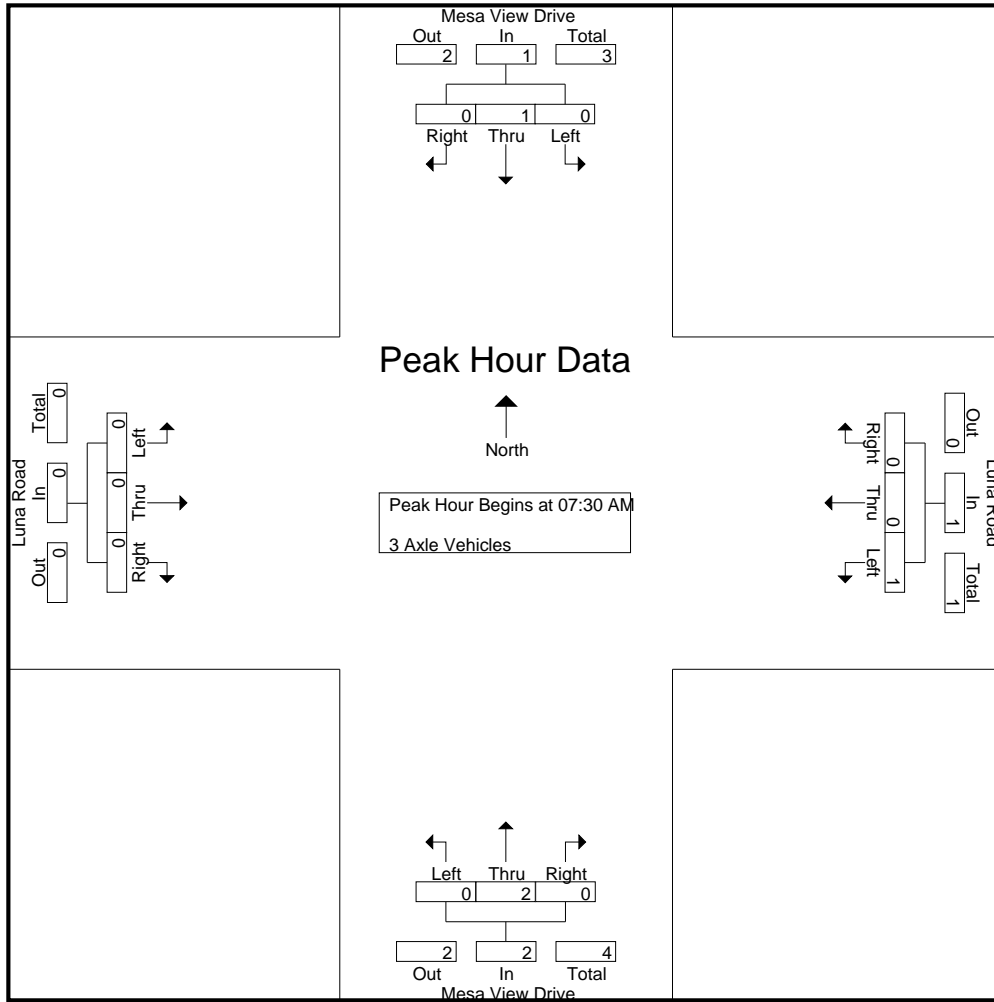
Groups Printed- 3 Axle Vehicles

| Start Time  | Mesa View Drive Southbound |      |       |            | Luna Road Westbound |      |       |            | Mesa View Drive Northbound |      |       |            | Luna Road Eastbound |      |       |            | Int. Total |
|-------------|----------------------------|------|-------|------------|---------------------|------|-------|------------|----------------------------|------|-------|------------|---------------------|------|-------|------------|------------|
|             | Left                       | Thru | Right | App. Total | Left                | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Left                | Thru | Right | App. Total |            |
| 07:00 AM    | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| 07:15 AM    | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| 07:30 AM    | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 1    | 0     | 1          | 0                   | 0    | 0     | 0          | 1          |
| 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                          | 1    | 0     | 1          | 0                   | 0    | 0     | 0          | 1          |
| 08:00 AM    | 0                          | 1    | 0     | 1          | 1                   | 0    | 0     | 1          | 0                          | 1    | 0     | 1          | 0                   | 0    | 0     | 0          | 3          |
| 08:15 AM    | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| 08:30 AM    | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| 08:45 AM    | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| Total       | 0                          | 1    | 0     | 1          | 1                   | 0    | 0     | 1          | 0                          | 1    | 0     | 1          | 0                   | 0    | 0     | 0          | 3          |
| Grand Total | 0                          | 1    | 0     | 1          | 1                   | 0    | 0     | 1          | 0                          | 2    | 0     | 2          | 0                   | 0    | 0     | 0          | 4          |
| Apprch %    | 0                          | 100  | 0     |            | 100                 | 0    | 0     |            | 0                          | 100  | 0     |            | 0                   | 0    | 0     |            |            |
| Total %     | 0                          | 25   | 0     | 25         | 25                  | 0    | 0     | 25         | 0                          | 50   | 0     | 50         | 0                   | 0    | 0     | 0          |            |

| Start Time   | Mesa View Drive Southbound |      |       |            | Luna Road Westbound |      |       |            | Mesa View Drive Northbound |      |       |            | Luna Road Eastbound |      |       |            | Int. Total |
|--|----------------------------|------|-------|------------|---------------------|------|-------|------------|----------------------------|------|-------|------------|---------------------|------|-------|------------|------------|
|  | Left                       | Thru | Right | App. Total | Left                | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Left                | Thru | Right | App. Total |            |
| Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1 |                            |      |       |            |                     |      |       |            |                            |      |       |            |                     |      |       |            |            |
| Peak Hour for Entire Intersection Begins at 07:30 AM       |                            |      |       |            |                     |      |       |            |                            |      |       |            |                     |      |       |            |            |
| 07:30 AM   | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 1    | 0     | 1          | 0                   | 0    | 0     | 0          | 1          |
| 07:45 AM   | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| 08:00 AM   | 0                          | 1    | 0     | 1          | 1                   | 0    | 0     | 1          | 0                          | 1    | 0     | 1          | 0                   | 0    | 0     | 0          | 3          |
| 08:15 AM   | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| Total Volume   | 0                          | 1    | 0     | 1          | 1                   | 0    | 0     | 1          | 0                          | 2    | 0     | 2          | 0                   | 0    | 0     | 0          | 4          |
| % App. Total   | 0                          | 100  | 0     |            | 100                 | 0    | 0     |            | 0                          | 100  | 0     |            | 0                   | 0    | 0     |            |            |
| PHF  | .000                       | .250 | .000  | .250       | .250                | .000 | .000  | .250       | .000                       | .500 | .000  | .500       | .000                | .000 | .000  | .000       | .333       |

City of Victorville  
 N/S: Mesa View Drive  
 E/W: Luna Road  
 Weather: Clear

File Name : 02\_VIC\_Mesa View\_Luna AM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

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

City of Victorville  
 N/S: Mesa View Drive  
 E/W: Luna Road  
 Weather: Clear

File Name : 02\_VIC\_Mesa View\_Luna AM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 1

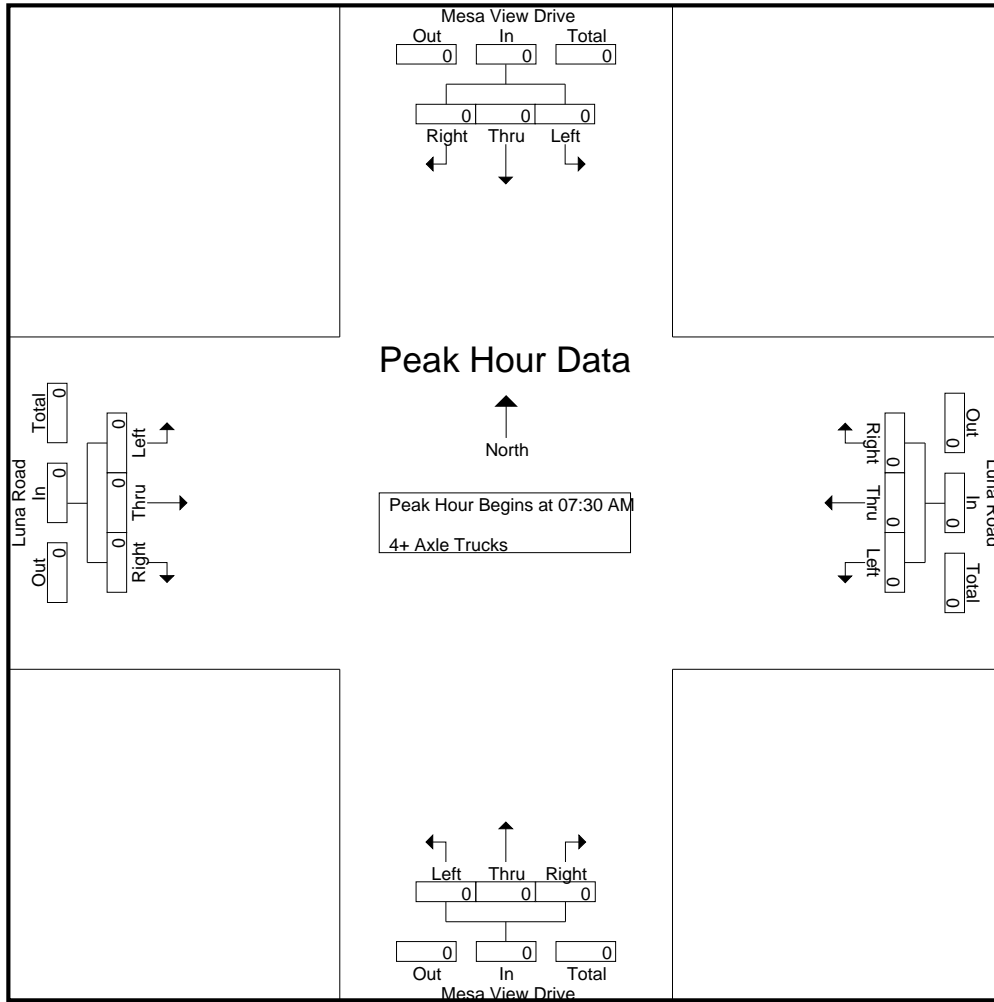
Groups Printed- 4+ Axle Trucks

| Start Time  | Mesa View Drive Southbound |      |       |            | Luna Road Westbound |      |       |            | Mesa View Drive Northbound |      |       |            | Luna Road Eastbound |      |       |            | Int. Total |
|-------------|----------------------------|------|-------|------------|---------------------|------|-------|------------|----------------------------|------|-------|------------|---------------------|------|-------|------------|------------|
|             | Left                       | Thru | Right | App. Total | Left                | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Left                | Thru | Right | App. Total |            |
| 07:00 AM    | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| 07:15 AM    | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| 07:30 AM    | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| 07:45 AM    | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| Total       | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| 08:00 AM    | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| 08:15 AM    | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| 08:30 AM    | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| 08:45 AM    | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| Total       | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| Grand Total | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| Apprch %    | 0                          | 0    | 0     |            | 0                   | 0    | 0     |            | 0                          | 0    | 0     |            | 0                   | 0    | 0     |            |            |
| Total %     |                            |      |       |            |                     |      |       |            |                            |      |       |            |                     |      |       |            |            |

| Start Time   | Mesa View Drive Southbound |      |       |            | Luna Road Westbound |      |       |            | Mesa View Drive Northbound |      |       |            | Luna Road Eastbound |      |       |            | Int. Total |
|--|----------------------------|------|-------|------------|---------------------|------|-------|------------|----------------------------|------|-------|------------|---------------------|------|-------|------------|------------|
|  | Left                       | Thru | Right | App. Total | Left                | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Left                | Thru | Right | App. Total |            |
| Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1 |                            |      |       |            |                     |      |       |            |                            |      |       |            |                     |      |       |            |            |
| Peak Hour for Entire Intersection Begins at 07:30 AM       |                            |      |       |            |                     |      |       |            |                            |      |       |            |                     |      |       |            |            |
| 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          |
| 08:00 AM   | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| 08:15 AM   | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| Total Volume   | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| % App. Total   | 0                          | 0    | 0     |            | 0                   | 0    | 0     |            | 0                          | 0    | 0     |            | 0                   | 0    | 0     |            |            |
| PHF  | .000                       | .000 | .000  | .000       | .000                | .000 | .000  | .000       | .000                       | .000 | .000  | .000       | .000                | .000 | .000  | .000       | .000       |

City of Victorville  
 N/S: Mesa View Drive  
 E/W: Luna Road  
 Weather: Clear

File Name : 02\_VIC\_Mesa View\_Luna AM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

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

City of Victorville  
 N/S: Mesa View Drive  
 E/W: Luna Road  
 Weather: Clear

File Name : 02\_VIC\_Mesa View\_Luna PM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 1

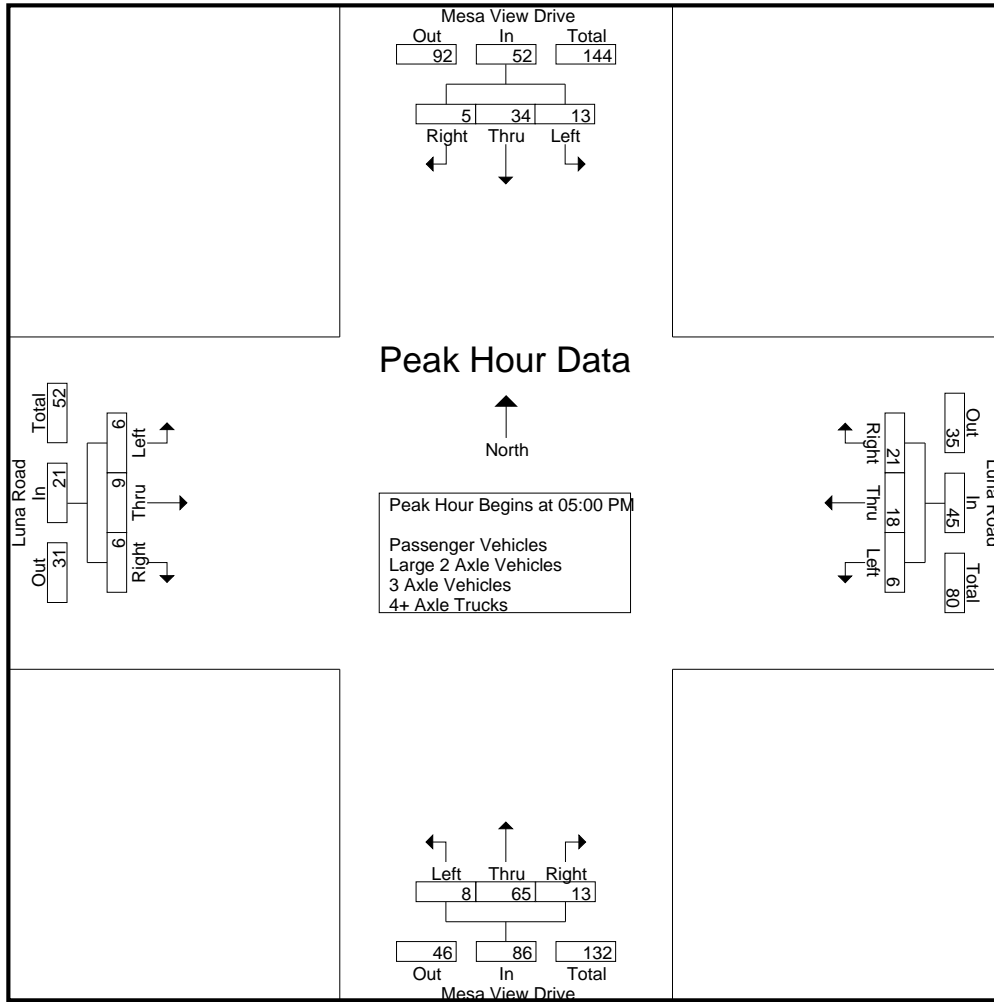
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

| Start Time              | Mesa View Drive Southbound |           |           |            | Luna Road Westbound |           |           |            | Mesa View Drive Northbound |            |           |            | Luna Road Eastbound |           |           |            | Int. Total |
|-------------------------|----------------------------|-----------|-----------|------------|---------------------|-----------|-----------|------------|----------------------------|------------|-----------|------------|---------------------|-----------|-----------|------------|------------|
|                         | Left                       | Thru      | Right     | App. Total | Left                | Thru      | Right     | App. Total | Left                       | Thru       | Right     | App. Total | Left                | Thru      | Right     | App. Total |            |
| 04:00 PM                | 1                          | 9         | 1         | 11         | 5                   | 1         | 4         | 10         | 2                          | 9          | 3         | 14         | 0                   | 4         | 0         | 4          | 39         |
| 04:15 PM                | 1                          | 7         | 1         | 9          | 2                   | 2         | 1         | 5          | 1                          | 18         | 3         | 22         | 2                   | 1         | 3         | 6          | 42         |
| 04:30 PM                | 3                          | 10        | 3         | 16         | 1                   | 2         | 5         | 8          | 3                          | 20         | 3         | 26         | 0                   | 5         | 0         | 5          | 55         |
| 04:45 PM                | 3                          | 9         | 1         | 13         | 4                   | 2         | 6         | 12         | 2                          | 13         | 2         | 17         | 2                   | 2         | 2         | 6          | 48         |
| <b>Total</b>            | <b>8</b>                   | <b>35</b> | <b>6</b>  | <b>49</b>  | <b>12</b>           | <b>7</b>  | <b>16</b> | <b>35</b>  | <b>8</b>                   | <b>60</b>  | <b>11</b> | <b>79</b>  | <b>4</b>            | <b>12</b> | <b>5</b>  | <b>21</b>  | <b>184</b> |
| 05:00 PM                | 6                          | 9         | 3         | 18         | 1                   | 5         | 3         | 9          | 1                          | 19         | 3         | 23         | 0                   | 4         | 3         | 7          | 57         |
| 05:15 PM                | 1                          | 6         | 1         | 8          | 2                   | 3         | 3         | 8          | 4                          | 12         | 3         | 19         | 2                   | 1         | 1         | 4          | 39         |
| 05:30 PM                | 1                          | 12        | 0         | 13         | 1                   | 6         | 7         | 14         | 2                          | 10         | 5         | 17         | 2                   | 3         | 2         | 7          | 51         |
| 05:45 PM                | 5                          | 7         | 1         | 13         | 2                   | 4         | 8         | 14         | 1                          | 24         | 2         | 27         | 2                   | 1         | 0         | 3          | 57         |
| <b>Total</b>            | <b>13</b>                  | <b>34</b> | <b>5</b>  | <b>52</b>  | <b>6</b>            | <b>18</b> | <b>21</b> | <b>45</b>  | <b>8</b>                   | <b>65</b>  | <b>13</b> | <b>86</b>  | <b>6</b>            | <b>9</b>  | <b>6</b>  | <b>21</b>  | <b>204</b> |
| <b>Grand Total</b>      | <b>21</b>                  | <b>69</b> | <b>11</b> | <b>101</b> | <b>18</b>           | <b>25</b> | <b>37</b> | <b>80</b>  | <b>16</b>                  | <b>125</b> | <b>24</b> | <b>165</b> | <b>10</b>           | <b>21</b> | <b>11</b> | <b>42</b>  | <b>388</b> |
| Apprch %                | 20.8                       | 68.3      | 10.9      |            | 22.5                | 31.2      | 46.2      |            | 9.7                        | 75.8       | 14.5      |            | 23.8                | 50        | 26.2      |            |            |
| Total %                 | 5.4                        | 17.8      | 2.8       | 26         | 4.6                 | 6.4       | 9.5       | 20.6       | 4.1                        | 32.2       | 6.2       | 42.5       | 2.6                 | 5.4       | 2.8       | 10.8       |            |
| Passenger Vehicles      | 21                         | 69        | 11        | 101        | 18                  | 24        | 35        | 77         | 16                         | 125        | 24        | 165        | 10                  | 20        | 11        | 41         | 384        |
| % Passenger Vehicles    | 100                        | 100       | 100       | 100        | 100                 | 96        | 94.6      | 96.2       | 100                        | 100        | 100       | 100        | 100                 | 95.2      | 100       | 97.6       | 99         |
| Large 2 Axle Vehicles   | 0                          | 0         | 0         | 0          | 0                   | 1         | 2         | 3          | 0                          | 0          | 0         | 0          | 0                   | 1         | 0         | 1          | 4          |
| % Large 2 Axle Vehicles | 0                          | 0         | 0         | 0          | 0                   | 4         | 5.4       | 3.8        | 0                          | 0          | 0         | 0          | 0                   | 4.8       | 0         | 2.4        | 1          |
| 3 Axle Vehicles         | 0                          | 0         | 0         | 0          | 0                   | 0         | 0         | 0          | 0                          | 0          | 0         | 0          | 0                   | 0         | 0         | 0          | 0          |
| % 3 Axle Vehicles       | 0                          | 0         | 0         | 0          | 0                   | 0         | 0         | 0          | 0                          | 0          | 0         | 0          | 0                   | 0         | 0         | 0          | 0          |
| 4+ Axle Trucks          | 0                          | 0         | 0         | 0          | 0                   | 0         | 0         | 0          | 0                          | 0          | 0         | 0          | 0                   | 0         | 0         | 0          | 0          |
| % 4+ Axle Trucks        | 0                          | 0         | 0         | 0          | 0                   | 0         | 0         | 0          | 0                          | 0          | 0         | 0          | 0                   | 0         | 0         | 0          | 0          |

| Start Time   | Mesa View Drive Southbound |           |          |            | Luna Road Westbound |           |           |            | Mesa View Drive Northbound |           |           |            | Luna Road Eastbound |          |          |            | Int. Total |
|--|----------------------------|-----------|----------|------------|---------------------|-----------|-----------|------------|----------------------------|-----------|-----------|------------|---------------------|----------|----------|------------|------------|
|  | Left                       | Thru      | Right    | App. Total | Left                | Thru      | Right     | App. Total | Left                       | Thru      | Right     | App. Total | Left                | Thru     | Right    | App. Total |            |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 |                            |           |          |            |                     |           |           |            |                            |           |           |            |                     |          |          |            |            |
| Peak Hour for Entire Intersection Begins at 05:00 PM       |                            |           |          |            |                     |           |           |            |                            |           |           |            |                     |          |          |            |            |
| 05:00 PM   | 6                          | 9         | 3        | 18         | 1                   | 5         | 3         | 9          | 1                          | 19        | 3         | 23         | 0                   | 4        | 3        | 7          | 57         |
| 05:15 PM   | 1                          | 6         | 1        | 8          | 2                   | 3         | 3         | 8          | 4                          | 12        | 3         | 19         | 2                   | 1        | 1        | 4          | 39         |
| 05:30 PM   | 1                          | 12        | 0        | 13         | 1                   | 6         | 7         | 14         | 2                          | 10        | 5         | 17         | 2                   | 3        | 2        | 7          | 51         |
| 05:45 PM   | 5                          | 7         | 1        | 13         | 2                   | 4         | 8         | 14         | 1                          | 24        | 2         | 27         | 2                   | 1        | 0        | 3          | 57         |
| <b>Total Volume</b>  | <b>13</b>                  | <b>34</b> | <b>5</b> | <b>52</b>  | <b>6</b>            | <b>18</b> | <b>21</b> | <b>45</b>  | <b>8</b>                   | <b>65</b> | <b>13</b> | <b>86</b>  | <b>6</b>            | <b>9</b> | <b>6</b> | <b>21</b>  | <b>204</b> |
| % App. Total   | 25                         | 65.4      | 9.6      |            | 13.3                | 40        | 46.7      |            | 9.3                        | 75.6      | 15.1      |            | 28.6                | 42.9     | 28.6     |            |            |
| PHF  | .542                       | .708      | .417     | .722       | .750                | .750      | .656      | .804       | .500                       | .677      | .650      | .796       | .750                | .563     | .500     | .750       | .895       |

City of Victorville  
 N/S: Mesa View Drive  
 E/W: Luna Road  
 Weather: Clear

File Name : 02\_VIC\_Mesa View\_Luna PM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 2



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

|              | 04:15 PM |      |      |      | 05:00 PM |      |      |      | 04:15 PM |      |      |      | 04:15 PM |      |      |      |
|--------------|----------|------|------|------|----------|------|------|------|----------|------|------|------|----------|------|------|------|
| +0 mins.     | 1        | 7    | 1    | 9    | 1        | 5    | 3    | 9    | 1        | 18   | 3    | 22   | 2        | 1    | 3    | 6    |
| +15 mins.    | 3        | 10   | 3    | 16   | 2        | 3    | 3    | 8    | 3        | 20   | 3    | 26   | 0        | 5    | 0    | 5    |
| +30 mins.    | 3        | 9    | 1    | 13   | 1        | 6    | 7    | 14   | 2        | 13   | 2    | 17   | 2        | 2    | 2    | 6    |
| +45 mins.    | 6        | 9    | 3    | 18   | 2        | 4    | 8    | 14   | 1        | 19   | 3    | 23   | 0        | 4    | 3    | 7    |
| Total Volume | 13       | 35   | 8    | 56   | 6        | 18   | 21   | 45   | 7        | 70   | 11   | 88   | 4        | 12   | 8    | 24   |
| % App. Total | 23.2     | 62.5 | 14.3 |      | 13.3     | 40   | 46.7 |      | 8        | 79.5 | 12.5 |      | 16.7     | 50   | 33.3 |      |
| PHF          | .542     | .875 | .667 | .778 | .750     | .750 | .656 | .804 | .583     | .875 | .917 | .846 | .500     | .600 | .667 | .857 |

City of Victorville  
 N/S: Mesa View Drive  
 E/W: Luna Road  
 Weather: Clear

File Name : 02\_VIC\_Mesa View\_Luna PM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 1

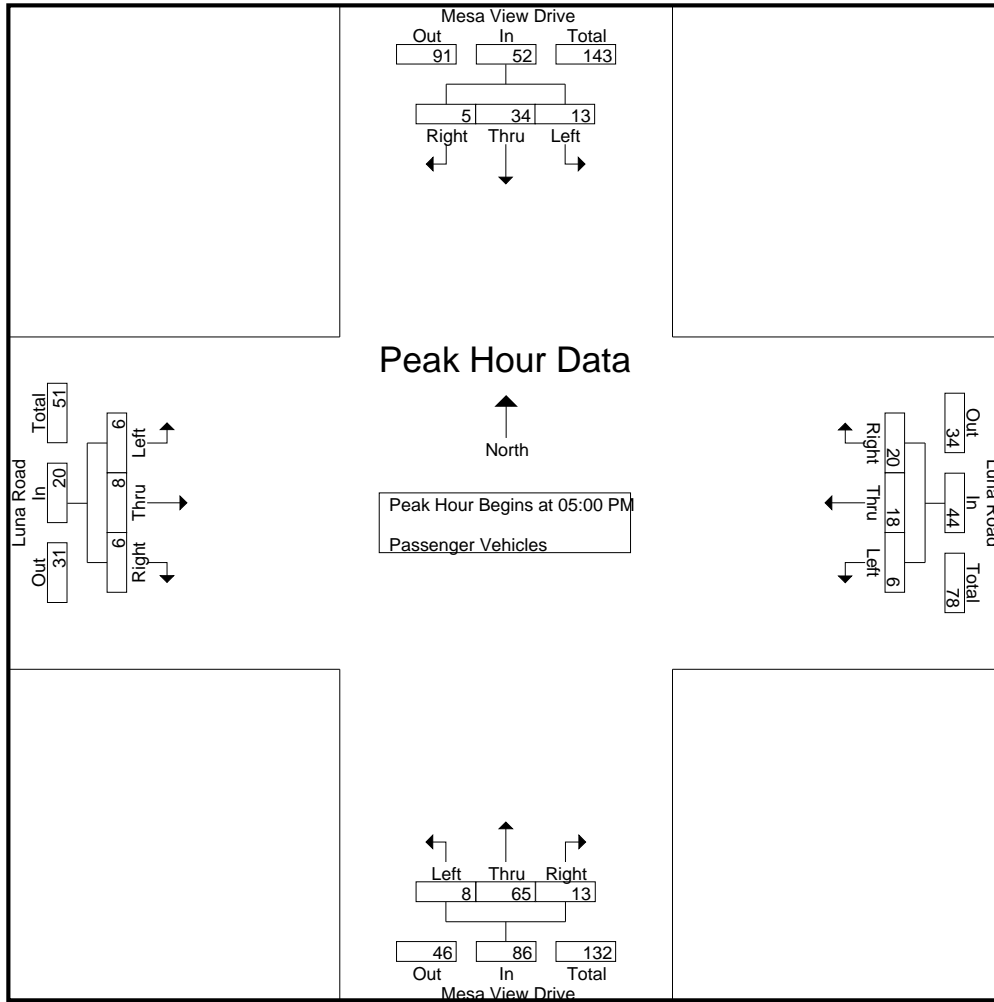
Groups Printed- Passenger Vehicles

| Start Time  | Mesa View Drive Southbound |      |       |            | Luna Road Westbound |      |       |            | Mesa View Drive Northbound |      |       |            | Luna Road Eastbound |      |       |            | Int. Total |
|-------------|----------------------------|------|-------|------------|---------------------|------|-------|------------|----------------------------|------|-------|------------|---------------------|------|-------|------------|------------|
|             | Left                       | Thru | Right | App. Total | Left                | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Left                | Thru | Right | App. Total |            |
| 04:00 PM    | 1                          | 9    | 1     | 11         | 5                   | 1    | 4     | 10         | 2                          | 9    | 3     | 14         | 0                   | 4    | 0     | 4          | 39         |
| 04:15 PM    | 1                          | 7    | 1     | 9          | 2                   | 2    | 1     | 5          | 1                          | 18   | 3     | 22         | 2                   | 1    | 3     | 6          | 42         |
| 04:30 PM    | 3                          | 10   | 3     | 16         | 1                   | 2    | 4     | 7          | 3                          | 20   | 3     | 26         | 0                   | 5    | 0     | 5          | 54         |
| 04:45 PM    | 3                          | 9    | 1     | 13         | 4                   | 1    | 6     | 11         | 2                          | 13   | 2     | 17         | 2                   | 2    | 2     | 6          | 47         |
| Total       | 8                          | 35   | 6     | 49         | 12                  | 6    | 15    | 33         | 8                          | 60   | 11    | 79         | 4                   | 12   | 5     | 21         | 182        |
| 05:00 PM    | 6                          | 9    | 3     | 18         | 1                   | 5    | 3     | 9          | 1                          | 19   | 3     | 23         | 0                   | 3    | 3     | 6          | 56         |
| 05:15 PM    | 1                          | 6    | 1     | 8          | 2                   | 3    | 3     | 8          | 4                          | 12   | 3     | 19         | 2                   | 1    | 1     | 4          | 39         |
| 05:30 PM    | 1                          | 12   | 0     | 13         | 1                   | 6    | 6     | 13         | 2                          | 10   | 5     | 17         | 2                   | 3    | 2     | 7          | 50         |
| 05:45 PM    | 5                          | 7    | 1     | 13         | 2                   | 4    | 8     | 14         | 1                          | 24   | 2     | 27         | 2                   | 1    | 0     | 3          | 57         |
| Total       | 13                         | 34   | 5     | 52         | 6                   | 18   | 20    | 44         | 8                          | 65   | 13    | 86         | 6                   | 8    | 6     | 20         | 202        |
| Grand Total | 21                         | 69   | 11    | 101        | 18                  | 24   | 35    | 77         | 16                         | 125  | 24    | 165        | 10                  | 20   | 11    | 41         | 384        |
| Apprch %    | 20.8                       | 68.3 | 10.9  |            | 23.4                | 31.2 | 45.5  |            | 9.7                        | 75.8 | 14.5  |            | 24.4                | 48.8 | 26.8  |            |            |
| Total %     | 5.5                        | 18   | 2.9   | 26.3       | 4.7                 | 6.2  | 9.1   | 20.1       | 4.2                        | 32.6 | 6.2   | 43         | 2.6                 | 5.2  | 2.9   | 10.7       |            |

| Start Time   | Mesa View Drive Southbound |      |       |            | Luna Road Westbound |      |       |            | Mesa View Drive Northbound |      |       |            | Luna Road Eastbound |      |       |            | Int. Total |
|--|----------------------------|------|-------|------------|---------------------|------|-------|------------|----------------------------|------|-------|------------|---------------------|------|-------|------------|------------|
|  | Left                       | Thru | Right | App. Total | Left                | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Left                | Thru | Right | App. Total |            |
| Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1 |                            |      |       |            |                     |      |       |            |                            |      |       |            |                     |      |       |            |            |
| Peak Hour for Entire Intersection Begins at 05:00 PM       |                            |      |       |            |                     |      |       |            |                            |      |       |            |                     |      |       |            |            |
| 05:00 PM   | 6                          | 9    | 3     | 18         | 1                   | 5    | 3     | 9          | 1                          | 19   | 3     | 23         | 0                   | 3    | 3     | 6          | 56         |
| 05:15 PM   | 1                          | 6    | 1     | 8          | 2                   | 3    | 3     | 8          | 4                          | 12   | 3     | 19         | 2                   | 1    | 1     | 4          | 39         |
| 05:30 PM   | 1                          | 12   | 0     | 13         | 1                   | 6    | 6     | 13         | 2                          | 10   | 5     | 17         | 2                   | 3    | 2     | 7          | 50         |
| 05:45 PM   | 5                          | 7    | 1     | 13         | 2                   | 4    | 8     | 14         | 1                          | 24   | 2     | 27         | 2                   | 1    | 0     | 3          | 57         |
| Total Volume   | 13                         | 34   | 5     | 52         | 6                   | 18   | 20    | 44         | 8                          | 65   | 13    | 86         | 6                   | 8    | 6     | 20         | 202        |
| % App. Total   | 25                         | 65.4 | 9.6   |            | 13.6                | 40.9 | 45.5  |            | 9.3                        | 75.6 | 15.1  |            | 30                  | 40   | 30    |            |            |
| PHF  | .542                       | .708 | .417  | .722       | .750                | .750 | .625  | .786       | .500                       | .677 | .650  | .796       | .750                | .667 | .500  | .714       | .886       |

City of Victorville  
 N/S: Mesa View Drive  
 E/W: Luna Road  
 Weather: Clear

File Name : 02\_VIC\_Mesa View\_Luna PM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 2



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

|              | 05:00 PM |           |          |           | 05:00 PM |          |          |           | 05:00 PM |           |          |           | 05:00 PM |          |          |          |
|--------------|----------|-----------|----------|-----------|----------|----------|----------|-----------|----------|-----------|----------|-----------|----------|----------|----------|----------|
| +0 mins.     | <b>6</b> | 9         | <b>3</b> | <b>18</b> | 1        | 5        | 3        | 9         | 1        | 19        | 3        | 23        | 0        | <b>3</b> | <b>3</b> | 6        |
| +15 mins.    | 1        | 6         | 1        | 8         | <b>2</b> | 3        | 3        | 8         | <b>4</b> | 12        | 3        | 19        | <b>2</b> | 1        | 1        | 4        |
| +30 mins.    | 1        | <b>12</b> | 0        | 13        | 1        | <b>6</b> | 6        | 13        | 2        | 10        | <b>5</b> | 17        | 2        | 3        | 2        | <b>7</b> |
| +45 mins.    | 5        | 7         | 1        | 13        | 2        | 4        | <b>8</b> | <b>14</b> | 1        | <b>24</b> | 2        | <b>27</b> | 2        | 1        | 0        | 3        |
| Total Volume | 13       | 34        | 5        | 52        | 6        | 18       | 20       | 44        | 8        | 65        | 13       | 86        | 6        | 8        | 6        | 20       |
| % App. Total | 25       | 65.4      | 9.6      |           | 13.6     | 40.9     | 45.5     |           | 9.3      | 75.6      | 15.1     |           | 30       | 40       | 30       |          |
| PHF          | .542     | .708      | .417     | .722      | .750     | .750     | .625     | .786      | .500     | .677      | .650     | .796      | .750     | .667     | .500     | .714     |



City of Victorville  
 N/S: Mesa View Drive  
 E/W: Luna Road  
 Weather: Clear

File Name : 02\_VIC\_Mesa View\_Luna PM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
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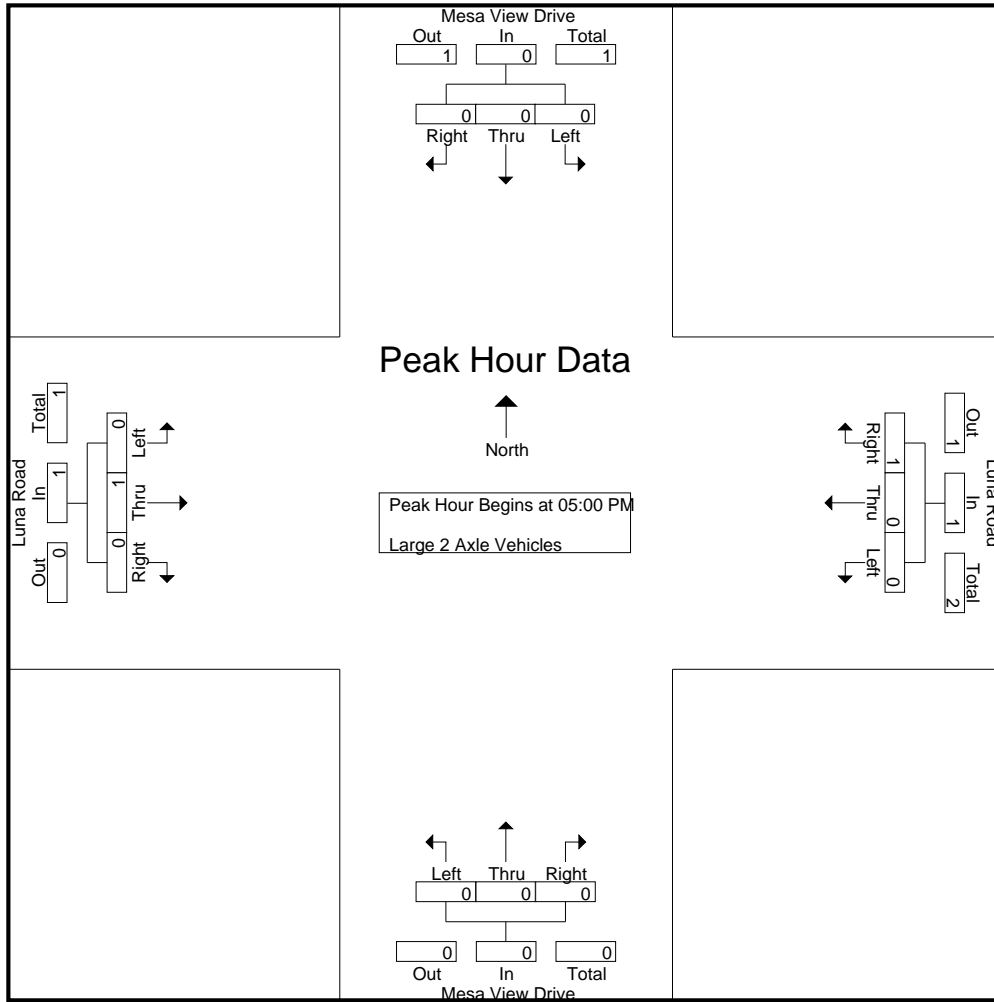
Groups Printed- Large 2 Axle Vehicles

| Start Time  | Mesa View Drive Southbound |      |       |            | Luna Road Westbound |      |       |            | Mesa View Drive Northbound |      |       |            | Luna Road Eastbound |      |       |            | Int. Total |
|-------------|----------------------------|------|-------|------------|---------------------|------|-------|------------|----------------------------|------|-------|------------|---------------------|------|-------|------------|------------|
|             | Left                       | Thru | Right | App. Total | Left                | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Left                | Thru | Right | App. Total |            |
| 04:00 PM    | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| 04:15 PM    | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| 04:30 PM    | 0                          | 0    | 0     | 0          | 0                   | 0    | 1     | 1          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 1          |
| 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                   | 1    | 1     | 2          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 2          |
| 05:00 PM    | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 1    | 0     | 1          | 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    | 1     | 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          | 0                   | 0    | 1     | 1          | 0                          | 0    | 0     | 0          | 0                   | 1    | 0     | 1          | 2          |
| Grand Total | 0                          | 0    | 0     | 0          | 0                   | 1    | 2     | 3          | 0                          | 0    | 0     | 0          | 0                   | 1    | 0     | 1          | 4          |
| Apprch %    | 0                          | 0    | 0     |            | 0                   | 33.3 | 66.7  |            | 0                          | 0    | 0     |            | 0                   | 100  | 0     |            |            |
| Total %     | 0                          | 0    | 0     |            | 0                   | 25   | 50    | 75         | 0                          | 0    | 0     |            | 0                   | 25   | 0     | 25         |            |

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

City of Victorville  
 N/S: Mesa View Drive  
 E/W: Luna Road  
 Weather: Clear

File Name : 02\_VIC\_Mesa View\_Luna PM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 2



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

|              | 05:00 PM |      |      |      | 05:00 PM |      |      |      | 05:00 PM |      |      |      | 05:00 PM |      |      |      |
|--------------|----------|------|------|------|----------|------|------|------|----------|------|------|------|----------|------|------|------|
| +0 mins.     | 0        | 0    | 0    | 0    | 0        | 0    | 0    | 0    | 0        | 0    | 0    | 0    | 0        | 1    | 0    | 1    |
| +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    | 1    | 1    | 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    | 1    | 1    | 0        | 0    | 0    | 0    | 0        | 1    | 0    | 1    |
| % App. Total | 0        | 0    | 0    | 0    | 0        | 0    | 100  | 100  | 0        | 0    | 0    | 0    | 0        | 100  | 0    | 0    |
| PHF          | .000     | .000 | .000 | .000 | .000     | .000 | .250 | .250 | .000     | .000 | .000 | .000 | .000     | .250 | .000 | .250 |

City of Victorville  
 N/S: Mesa View Drive  
 E/W: Luna Road  
 Weather: Clear

File Name : 02\_VIC\_Mesa View\_Luna PM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 1

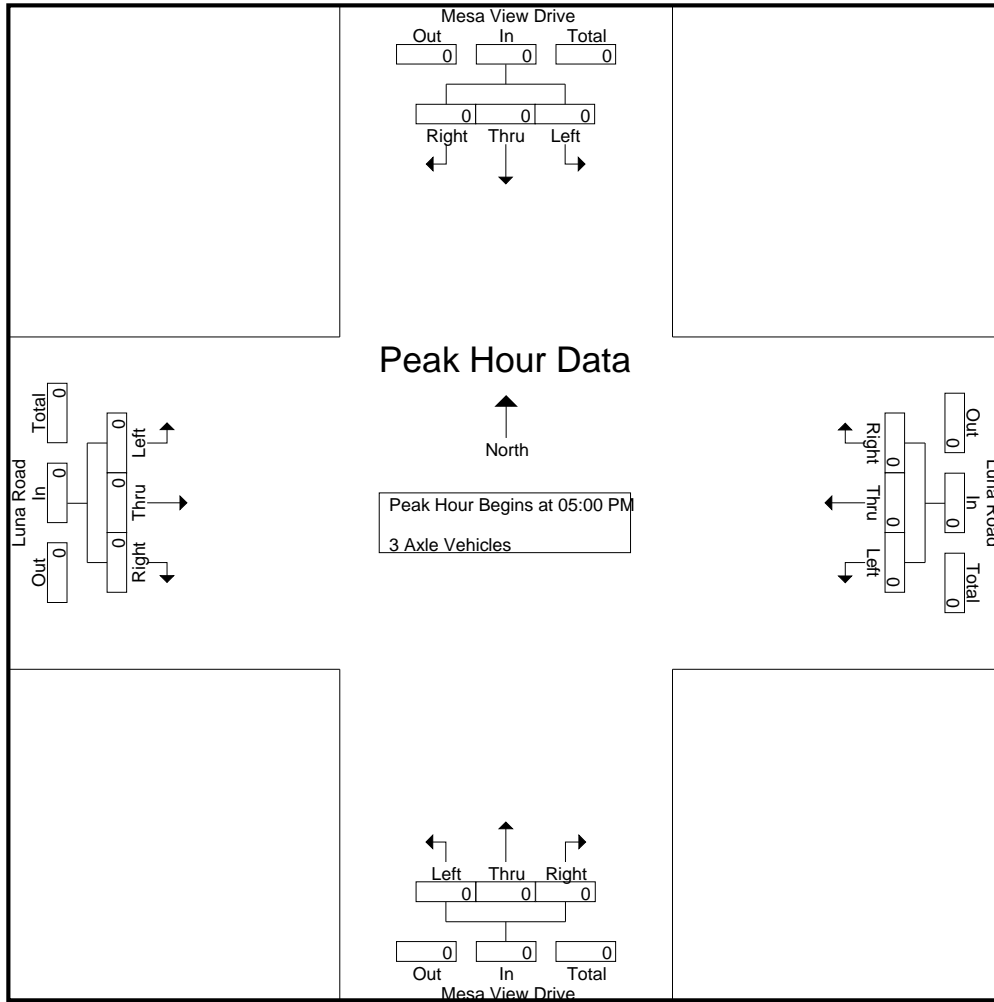
Groups Printed- 3 Axle Vehicles

| Start Time  | Mesa View Drive Southbound |      |       |            | Luna Road Westbound |      |       |            | Mesa View Drive Northbound |      |       |            | Luna Road Eastbound |      |       |            | Int. Total |
|-------------|----------------------------|------|-------|------------|---------------------|------|-------|------------|----------------------------|------|-------|------------|---------------------|------|-------|------------|------------|
|             | Left                       | Thru | Right | App. Total | Left                | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Left                | Thru | Right | App. Total |            |
| 04:00 PM    | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| 04:15 PM    | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| 04:30 PM    | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| 04:45 PM    | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| Total       | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| 05:00 PM    | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| 05:15 PM    | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| 05:30 PM    | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| 05:45 PM    | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| Total       | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| Grand Total | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| Apprch %    | 0                          | 0    | 0     |            | 0                   | 0    | 0     |            | 0                          | 0    | 0     |            | 0                   | 0    | 0     |            |            |
| Total %     |                            |      |       |            |                     |      |       |            |                            |      |       |            |                     |      |       |            |            |

| Start Time   | Mesa View Drive Southbound |      |       |            | Luna Road Westbound |      |       |            | Mesa View Drive Northbound |      |       |            | Luna Road Eastbound |      |       |            | Int. Total |
|--|----------------------------|------|-------|------------|---------------------|------|-------|------------|----------------------------|------|-------|------------|---------------------|------|-------|------------|------------|
|  | Left                       | Thru | Right | App. Total | Left                | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Left                | Thru | Right | App. Total |            |
| Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1 |                            |      |       |            |                     |      |       |            |                            |      |       |            |                     |      |       |            |            |
| Peak Hour for Entire Intersection Begins at 05:00 PM       |                            |      |       |            |                     |      |       |            |                            |      |       |            |                     |      |       |            |            |
| 05:00 PM   | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| 05:15 PM   | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| 05:30 PM   | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| 05:45 PM   | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| Total Volume   | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| % App. Total   | 0                          | 0    | 0     |            | 0                   | 0    | 0     |            | 0                          | 0    | 0     |            | 0                   | 0    | 0     |            |            |
| PHF  | .000                       | .000 | .000  | .000       | .000                | .000 | .000  | .000       | .000                       | .000 | .000  | .000       | .000                | .000 | .000  | .000       | .000       |

City of Victorville  
 N/S: Mesa View Drive  
 E/W: Luna Road  
 Weather: Clear

File Name : 02\_VIC\_Mesa View\_Luna PM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 2



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

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

City of Victorville  
 N/S: Mesa View Drive  
 E/W: Luna Road  
 Weather: Clear

File Name : 02\_VIC\_Mesa View\_Luna PM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 1

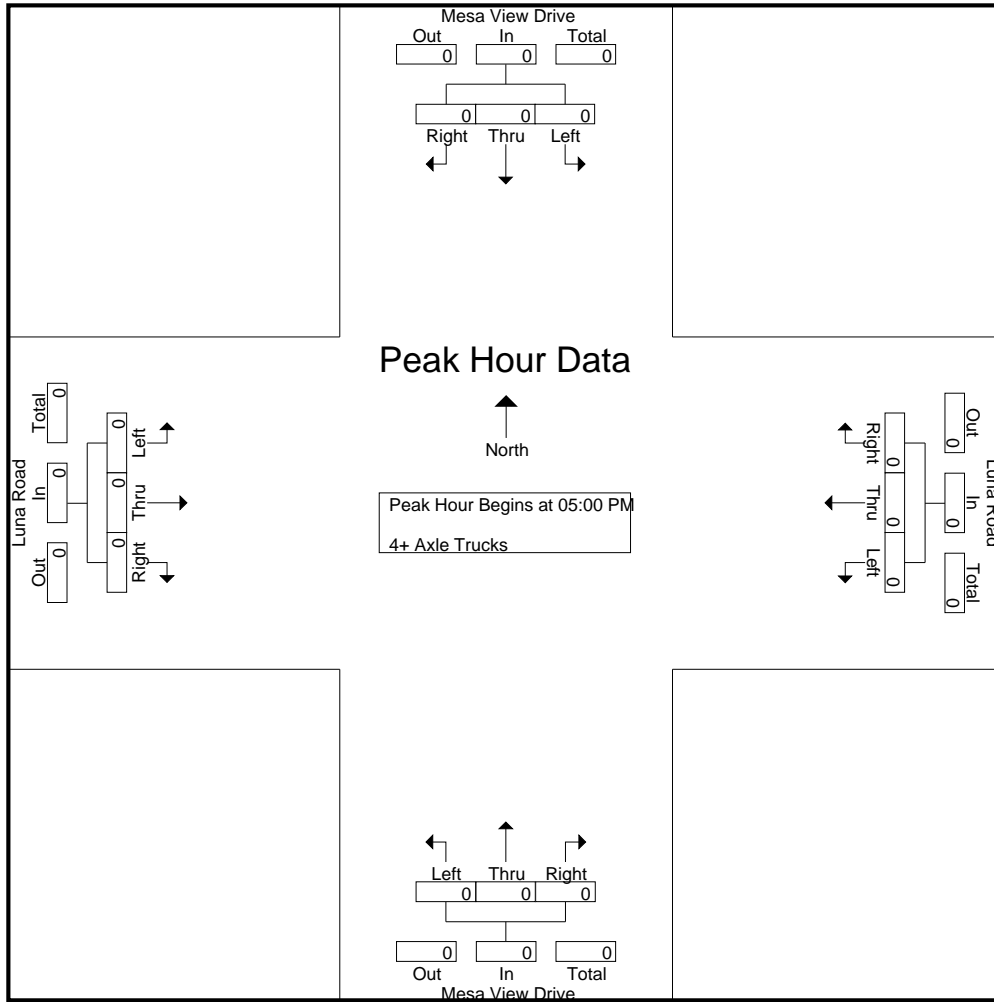
Groups Printed- 4+ Axle Trucks

| Start Time  | Mesa View Drive Southbound |      |       |            | Luna Road Westbound |      |       |            | Mesa View Drive Northbound |      |       |            | Luna Road Eastbound |      |       |            | Int. Total |
|-------------|----------------------------|------|-------|------------|---------------------|------|-------|------------|----------------------------|------|-------|------------|---------------------|------|-------|------------|------------|
|             | Left                       | Thru | Right | App. Total | Left                | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Left                | Thru | Right | App. Total |            |
| 04:00 PM    | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| 04:15 PM    | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| 04:30 PM    | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| 04:45 PM    | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| Total       | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| 05:00 PM    | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| 05:15 PM    | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| 05:30 PM    | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| 05:45 PM    | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| Total       | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| Grand Total | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| Apprch %    | 0                          | 0    | 0     |            | 0                   | 0    | 0     |            | 0                          | 0    | 0     |            | 0                   | 0    | 0     |            |            |
| Total %     |                            |      |       |            |                     |      |       |            |                            |      |       |            |                     |      |       |            |            |

| Start Time   | Mesa View Drive Southbound |      |       |            | Luna Road Westbound |      |       |            | Mesa View Drive Northbound |      |       |            | Luna Road Eastbound |      |       |            | Int. Total |
|--|----------------------------|------|-------|------------|---------------------|------|-------|------------|----------------------------|------|-------|------------|---------------------|------|-------|------------|------------|
|  | Left                       | Thru | Right | App. Total | Left                | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Left                | Thru | Right | App. Total |            |
| Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1 |                            |      |       |            |                     |      |       |            |                            |      |       |            |                     |      |       |            |            |
| Peak Hour for Entire Intersection Begins at 05:00 PM       |                            |      |       |            |                     |      |       |            |                            |      |       |            |                     |      |       |            |            |
| 05:00 PM   | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| 05:15 PM   | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| 05:30 PM   | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| 05:45 PM   | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| Total Volume   | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                   | 0    | 0     | 0          | 0          |
| % App. Total   | 0                          | 0    | 0     |            | 0                   | 0    | 0     |            | 0                          | 0    | 0     |            | 0                   | 0    | 0     |            |            |
| PHF  | .000                       | .000 | .000  | .000       | .000                | .000 | .000  | .000       | .000                       | .000 | .000  | .000       | .000                | .000 | .000  | .000       | .000       |

City of Victorville  
 N/S: Mesa View Drive  
 E/W: Luna Road  
 Weather: Clear

File Name : 02\_VIC\_Mesa View\_Luna PM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 2



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

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

City of Victorville  
 N/S: Mesa View Drive  
 E/W: Dos Palmas Road  
 Weather: Clear

File Name : 01\_VIC\_Mesa View\_Dos Palmas AM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 1

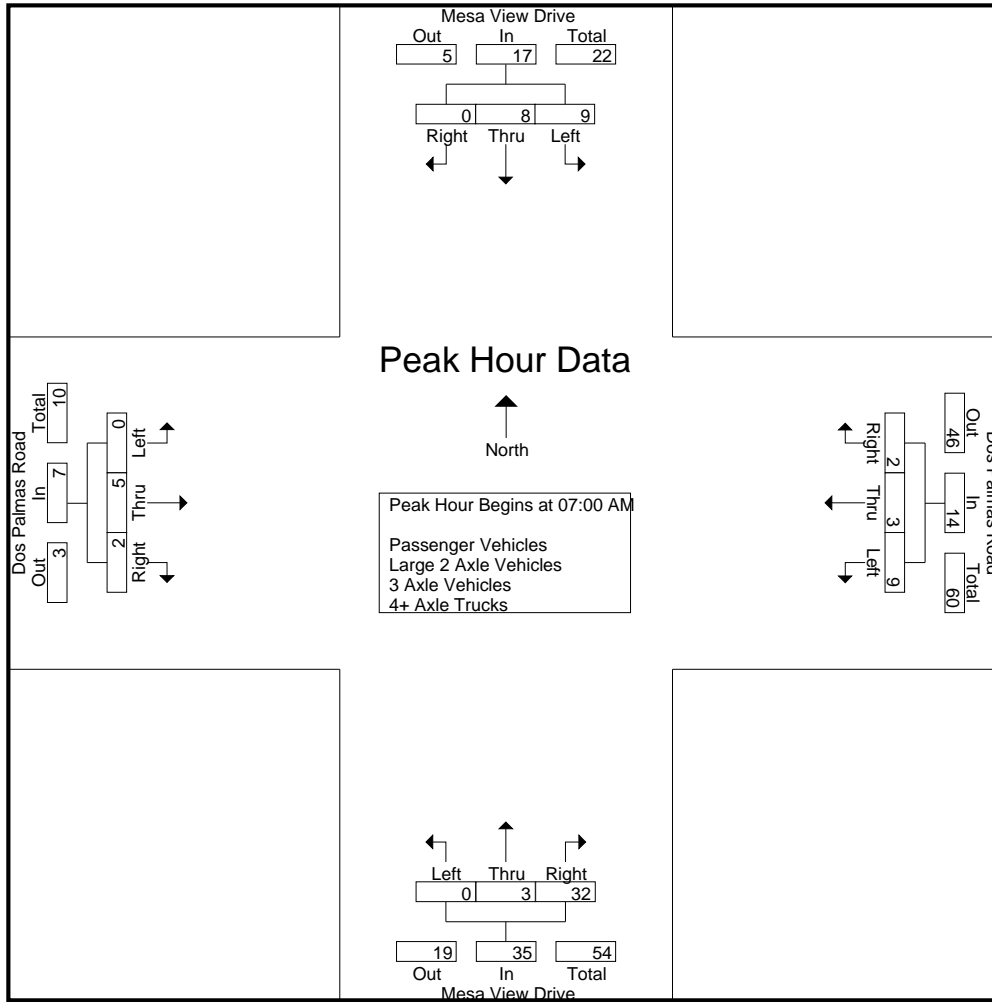
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

| Start Time              | Mesa View Drive Southbound |           |          |            | Dos Palmas Road Westbound |          |          |            | Mesa View Drive Northbound |          |           |            | Dos Palmas Road Eastbound |          |          |            | Int. Total |
|-------------------------|----------------------------|-----------|----------|------------|---------------------------|----------|----------|------------|----------------------------|----------|-----------|------------|---------------------------|----------|----------|------------|------------|
|                         | Left                       | Thru      | Right    | App. Total | Left                      | Thru     | Right    | App. Total | Left                       | Thru     | Right     | App. Total | Left                      | Thru     | Right    | App. Total |            |
| 07:00 AM                | 4                          | 1         | 0        | 5          | 4                         | 2        | 1        | 7          | 0                          | 0        | 5         | 5          | 0                         | 3        | 0        | 3          | 20         |
| 07:15 AM                | 0                          | 1         | 0        | 1          | 2                         | 0        | 0        | 2          | 0                          | 0        | 9         | 9          | 0                         | 2        | 1        | 3          | 15         |
| 07:30 AM                | 3                          | 3         | 0        | 6          | 3                         | 1        | 1        | 5          | 0                          | 2        | 9         | 11         | 0                         | 0        | 1        | 1          | 23         |
| 07:45 AM                | 2                          | 3         | 0        | 5          | 0                         | 0        | 0        | 0          | 0                          | 1        | 9         | 10         | 0                         | 0        | 0        | 0          | 15         |
| <b>Total</b>            | <b>9</b>                   | <b>8</b>  | <b>0</b> | <b>17</b>  | <b>9</b>                  | <b>3</b> | <b>2</b> | <b>14</b>  | <b>0</b>                   | <b>3</b> | <b>32</b> | <b>35</b>  | <b>0</b>                  | <b>5</b> | <b>2</b> | <b>7</b>   | <b>73</b>  |
| 08:00 AM                | 1                          | 2         | 0        | 3          | 3                         | 0        | 1        | 4          | 0                          | 0        | 3         | 3          | 0                         | 0        | 0        | 0          | 10         |
| 08:15 AM                | 3                          | 2         | 0        | 5          | 6                         | 0        | 2        | 8          | 1                          | 2        | 7         | 10         | 0                         | 0        | 0        | 0          | 23         |
| 08:30 AM                | 3                          | 5         | 0        | 8          | 4                         | 1        | 0        | 5          | 0                          | 0        | 9         | 9          | 0                         | 0        | 1        | 1          | 23         |
| 08:45 AM                | 2                          | 1         | 0        | 3          | 4                         | 1        | 2        | 7          | 0                          | 0        | 6         | 6          | 0                         | 0        | 1        | 1          | 17         |
| <b>Total</b>            | <b>9</b>                   | <b>10</b> | <b>0</b> | <b>19</b>  | <b>17</b>                 | <b>2</b> | <b>5</b> | <b>24</b>  | <b>1</b>                   | <b>2</b> | <b>25</b> | <b>28</b>  | <b>0</b>                  | <b>0</b> | <b>2</b> | <b>2</b>   | <b>73</b>  |
| <b>Grand Total</b>      | <b>18</b>                  | <b>18</b> | <b>0</b> | <b>36</b>  | <b>26</b>                 | <b>5</b> | <b>7</b> | <b>38</b>  | <b>1</b>                   | <b>5</b> | <b>57</b> | <b>63</b>  | <b>0</b>                  | <b>5</b> | <b>4</b> | <b>9</b>   | <b>146</b> |
| Apprch %                | 50                         | 50        | 0        |            | 68.4                      | 13.2     | 18.4     |            | 1.6                        | 7.9      | 90.5      |            | 0                         | 55.6     | 44.4     |            |            |
| Total %                 | 12.3                       | 12.3      | 0        | 24.7       | 17.8                      | 3.4      | 4.8      | 26         | 0.7                        | 3.4      | 39        | 43.2       | 0                         | 3.4      | 2.7      | 6.2        |            |
| Passenger Vehicles      | 18                         | 18        | 0        | 36         | 24                        | 5        | 7        | 36         | 1                          | 5        | 53        | 59         | 0                         | 5        | 4        | 9          | 140        |
| % Passenger Vehicles    | 100                        | 100       | 0        | 100        | 92.3                      | 100      | 100      | 94.7       | 100                        | 100      | 93        | 93.7       | 0                         | 100      | 100      | 100        | 95.9       |
| Large 2 Axle Vehicles   | 0                          | 0         | 0        | 0          | 2                         | 0        | 0        | 2          | 0                          | 0        | 4         | 4          | 0                         | 0        | 0        | 0          | 6          |
| % Large 2 Axle Vehicles | 0                          | 0         | 0        | 0          | 7.7                       | 0        | 0        | 5.3        | 0                          | 0        | 7         | 6.3        | 0                         | 0        | 0        | 0          | 4.1        |
| 3 Axle Vehicles         | 0                          | 0         | 0        | 0          | 0                         | 0        | 0        | 0          | 0                          | 0        | 0         | 0          | 0                         | 0        | 0        | 0          | 0          |
| % 3 Axle Vehicles       | 0                          | 0         | 0        | 0          | 0                         | 0        | 0        | 0          | 0                          | 0        | 0         | 0          | 0                         | 0        | 0        | 0          | 0          |
| 4+ Axle Trucks          | 0                          | 0         | 0        | 0          | 0                         | 0        | 0        | 0          | 0                          | 0        | 0         | 0          | 0                         | 0        | 0        | 0          | 0          |
| % 4+ Axle Trucks        | 0                          | 0         | 0        | 0          | 0                         | 0        | 0        | 0          | 0                          | 0        | 0         | 0          | 0                         | 0        | 0        | 0          | 0          |

| Start Time   | Mesa View Drive Southbound |          |          |            | Dos Palmas Road Westbound |          |          |            | Mesa View Drive Northbound |          |           |            | Dos Palmas Road Eastbound |          |          |            | Int. Total |
|--|----------------------------|----------|----------|------------|---------------------------|----------|----------|------------|----------------------------|----------|-----------|------------|---------------------------|----------|----------|------------|------------|
|  | Left                       | Thru     | Right    | App. Total | Left                      | Thru     | Right    | App. Total | Left                       | Thru     | Right     | App. Total | Left                      | Thru     | Right    | App. Total |            |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |                            |          |          |            |                           |          |          |            |                            |          |           |            |                           |          |          |            |            |
| Peak Hour for Entire Intersection Begins at 07:00 AM       |                            |          |          |            |                           |          |          |            |                            |          |           |            |                           |          |          |            |            |
| 07:00 AM   | 4                          | 1        | 0        | 5          | 4                         | 2        | 1        | 7          | 0                          | 0        | 5         | 5          | 0                         | 3        | 0        | 3          | 20         |
| 07:15 AM   | 0                          | 1        | 0        | 1          | 2                         | 0        | 0        | 2          | 0                          | 0        | 9         | 9          | 0                         | 2        | 1        | 3          | 15         |
| 07:30 AM   | 3                          | 3        | 0        | 6          | 3                         | 1        | 1        | 5          | 0                          | 2        | 9         | 11         | 0                         | 0        | 1        | 1          | 23         |
| 07:45 AM   | 2                          | 3        | 0        | 5          | 0                         | 0        | 0        | 0          | 0                          | 1        | 9         | 10         | 0                         | 0        | 0        | 0          | 15         |
| <b>Total Volume</b>  | <b>9</b>                   | <b>8</b> | <b>0</b> | <b>17</b>  | <b>9</b>                  | <b>3</b> | <b>2</b> | <b>14</b>  | <b>0</b>                   | <b>3</b> | <b>32</b> | <b>35</b>  | <b>0</b>                  | <b>5</b> | <b>2</b> | <b>7</b>   | <b>73</b>  |
| % App. Total   | 52.9                       | 47.1     | 0        |            | 64.3                      | 21.4     | 14.3     |            | 0                          | 8.6      | 91.4      |            | 0                         | 71.4     | 28.6     |            |            |
| PHF  | .563                       | .667     | .000     | .708       | .563                      | .375     | .500     | .500       | .000                       | .375     | .889      | .795       | .000                      | .417     | .500     | .583       | .793       |

City of Victorville  
 N/S: Mesa View Drive  
 E/W: Dos Palmas Road  
 Weather: Clear

File Name : 01\_VIC\_Mesa View\_Dos Palmas AM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 2



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

|              | 07:45 AM |      |      |      | 08:00 AM |      |      |      | 07:00 AM |      |      |      | 07:00 AM |      |      |      |
|--------------|----------|------|------|------|----------|------|------|------|----------|------|------|------|----------|------|------|------|
| +0 mins.     | 2        | 3    | 0    | 5    | 3        | 0    | 1    | 4    | 0        | 0    | 5    | 5    | 0        | 3    | 0    | 3    |
| +15 mins.    | 1        | 2    | 0    | 3    | 6        | 0    | 2    | 8    | 0        | 0    | 9    | 9    | 0        | 2    | 1    | 3    |
| +30 mins.    | 3        | 2    | 0    | 5    | 4        | 1    | 0    | 5    | 0        | 2    | 9    | 11   | 0        | 0    | 1    | 1    |
| +45 mins.    | 3        | 5    | 0    | 8    | 4        | 1    | 2    | 7    | 0        | 1    | 9    | 10   | 0        | 0    | 0    | 0    |
| Total Volume | 9        | 12   | 0    | 21   | 17       | 2    | 5    | 24   | 0        | 3    | 32   | 35   | 0        | 5    | 2    | 7    |
| % App. Total | 42.9     | 57.1 | 0    |      | 70.8     | 8.3  | 20.8 |      | 0        | 8.6  | 91.4 |      | 0        | 71.4 | 28.6 |      |
| PHF          | .750     | .600 | .000 | .656 | .708     | .500 | .625 | .750 | .000     | .375 | .889 | .795 | .000     | .417 | .500 | .583 |



City of Victorville  
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File Name : 01\_VIC\_Mesa View\_Dos Palmas AM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 1

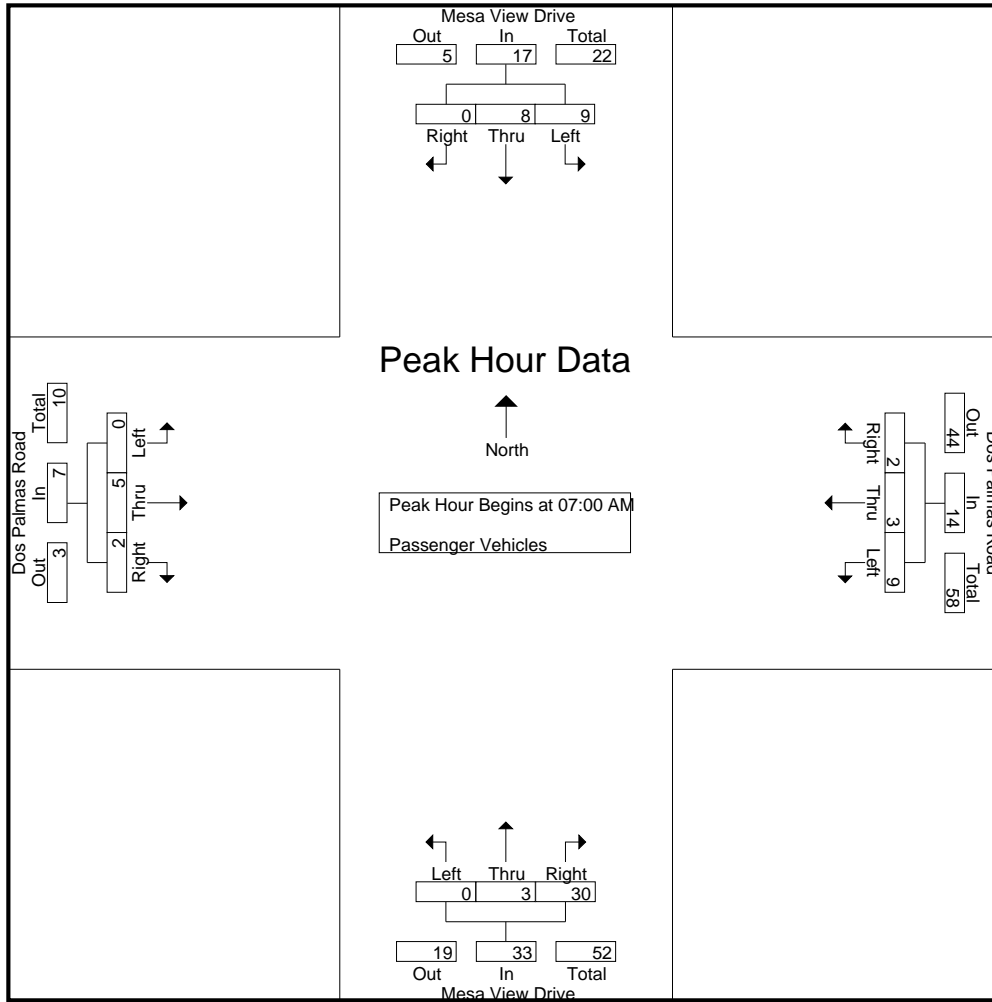
Groups Printed- Passenger Vehicles

| Start Time  | Mesa View Drive Southbound |      |       |            | Dos Palmas Road Westbound |      |       |            | Mesa View Drive Northbound |      |       |            | Dos Palmas Road Eastbound |      |       |            | Int. Total |
|-------------|----------------------------|------|-------|------------|---------------------------|------|-------|------------|----------------------------|------|-------|------------|---------------------------|------|-------|------------|------------|
|             | Left                       | Thru | Right | App. Total | Left                      | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Left                      | Thru | Right | App. Total |            |
| 07:00 AM    | 4                          | 1    | 0     | 5          | 4                         | 2    | 1     | 7          | 0                          | 0    | 5     | 5          | 0                         | 3    | 0     | 3          | 20         |
| 07:15 AM    | 0                          | 1    | 0     | 1          | 2                         | 0    | 0     | 2          | 0                          | 0    | 9     | 9          | 0                         | 2    | 1     | 3          | 15         |
| 07:30 AM    | 3                          | 3    | 0     | 6          | 3                         | 1    | 1     | 5          | 0                          | 2    | 8     | 10         | 0                         | 0    | 1     | 1          | 22         |
| 07:45 AM    | 2                          | 3    | 0     | 5          | 0                         | 0    | 0     | 0          | 0                          | 1    | 8     | 9          | 0                         | 0    | 0     | 0          | 14         |
| Total       | 9                          | 8    | 0     | 17         | 9                         | 3    | 2     | 14         | 0                          | 3    | 30    | 33         | 0                         | 5    | 2     | 7          | 71         |
| 08:00 AM    | 1                          | 2    | 0     | 3          | 3                         | 0    | 1     | 4          | 0                          | 0    | 3     | 3          | 0                         | 0    | 0     | 0          | 10         |
| 08:15 AM    | 3                          | 2    | 0     | 5          | 4                         | 0    | 2     | 6          | 1                          | 2    | 6     | 9          | 0                         | 0    | 0     | 0          | 20         |
| 08:30 AM    | 3                          | 5    | 0     | 8          | 4                         | 1    | 0     | 5          | 0                          | 0    | 8     | 8          | 0                         | 0    | 1     | 1          | 22         |
| 08:45 AM    | 2                          | 1    | 0     | 3          | 4                         | 1    | 2     | 7          | 0                          | 0    | 6     | 6          | 0                         | 0    | 1     | 1          | 17         |
| Total       | 9                          | 10   | 0     | 19         | 15                        | 2    | 5     | 22         | 1                          | 2    | 23    | 26         | 0                         | 0    | 2     | 2          | 69         |
| Grand Total | 18                         | 18   | 0     | 36         | 24                        | 5    | 7     | 36         | 1                          | 5    | 53    | 59         | 0                         | 5    | 4     | 9          | 140        |
| Apprch %    | 50                         | 50   | 0     |            | 66.7                      | 13.9 | 19.4  |            | 1.7                        | 8.5  | 89.8  |            | 0                         | 55.6 | 44.4  |            |            |
| Total %     | 12.9                       | 12.9 | 0     | 25.7       | 17.1                      | 3.6  | 5     | 25.7       | 0.7                        | 3.6  | 37.9  | 42.1       | 0                         | 3.6  | 2.9   | 6.4        |            |

| Start Time   | Mesa View Drive Southbound |      |       |            | Dos Palmas Road Westbound |      |       |            | Mesa View Drive Northbound |      |       |            | Dos Palmas Road Eastbound |      |       |            | Int. Total |
|--|----------------------------|------|-------|------------|---------------------------|------|-------|------------|----------------------------|------|-------|------------|---------------------------|------|-------|------------|------------|
|  | Left                       | Thru | Right | App. Total | Left                      | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Left                      | Thru | Right | App. Total |            |
| Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1 |                            |      |       |            |                           |      |       |            |                            |      |       |            |                           |      |       |            |            |
| Peak Hour for Entire Intersection Begins at 07:00 AM       |                            |      |       |            |                           |      |       |            |                            |      |       |            |                           |      |       |            |            |
| 07:00 AM   | 4                          | 1    | 0     | 5          | 4                         | 2    | 1     | 7          | 0                          | 0    | 5     | 5          | 0                         | 3    | 0     | 3          | 20         |
| 07:15 AM   | 0                          | 1    | 0     | 1          | 2                         | 0    | 0     | 2          | 0                          | 0    | 9     | 9          | 0                         | 2    | 1     | 3          | 15         |
| 07:30 AM   | 3                          | 3    | 0     | 6          | 3                         | 1    | 1     | 5          | 0                          | 2    | 8     | 10         | 0                         | 0    | 1     | 1          | 22         |
| 07:45 AM   | 2                          | 3    | 0     | 5          | 0                         | 0    | 0     | 0          | 0                          | 1    | 8     | 9          | 0                         | 0    | 0     | 0          | 14         |
| Total Volume   | 9                          | 8    | 0     | 17         | 9                         | 3    | 2     | 14         | 0                          | 3    | 30    | 33         | 0                         | 5    | 2     | 7          | 71         |
| % App. Total   | 52.9                       | 47.1 | 0     |            | 64.3                      | 21.4 | 14.3  |            | 0                          | 9.1  | 90.9  |            | 0                         | 71.4 | 28.6  |            |            |
| PHF  | .563                       | .667 | .000  | .708       | .563                      | .375 | .500  | .500       | .000                       | .375 | .833  | .825       | .000                      | .417 | .500  | .583       | .807       |

City of Victorville  
 N/S: Mesa View Drive  
 E/W: Dos Palmas Road  
 Weather: Clear

File Name : 01\_VIC\_Mesa View\_Dos Palmas AM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 2



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

|              | 07:00 AM |      |      |      | 07:00 AM |      |      |      | 07:00 AM |      |      |      | 07:00 AM |      |      |      |
|--------------|----------|------|------|------|----------|------|------|------|----------|------|------|------|----------|------|------|------|
| +0 mins.     | 4        | 1    | 0    | 5    | 4        | 2    | 1    | 7    | 0        | 0    | 5    | 5    | 0        | 3    | 0    | 3    |
| +15 mins.    | 0        | 1    | 0    | 1    | 2        | 0    | 0    | 2    | 0        | 0    | 9    | 9    | 0        | 2    | 1    | 3    |
| +30 mins.    | 3        | 3    | 0    | 6    | 3        | 1    | 1    | 5    | 0        | 2    | 8    | 10   | 0        | 0    | 1    | 1    |
| +45 mins.    | 2        | 3    | 0    | 5    | 0        | 0    | 0    | 0    | 0        | 1    | 8    | 9    | 0        | 0    | 0    | 0    |
| Total Volume | 9        | 8    | 0    | 17   | 9        | 3    | 2    | 14   | 0        | 3    | 30   | 33   | 0        | 5    | 2    | 7    |
| % App. Total | 52.9     | 47.1 | 0    |      | 64.3     | 21.4 | 14.3 |      | 0        | 9.1  | 90.9 |      | 0        | 71.4 | 28.6 |      |
| PHF          | .563     | .667 | .000 | .708 | .563     | .375 | .500 | .500 | .000     | .375 | .833 | .825 | .000     | .417 | .500 | .583 |

City of Victorville  
 N/S: Mesa View Drive  
 E/W: Dos Palmas Road  
 Weather: Clear

File Name : 01\_VIC\_Mesa View\_Dos Palmas AM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 1

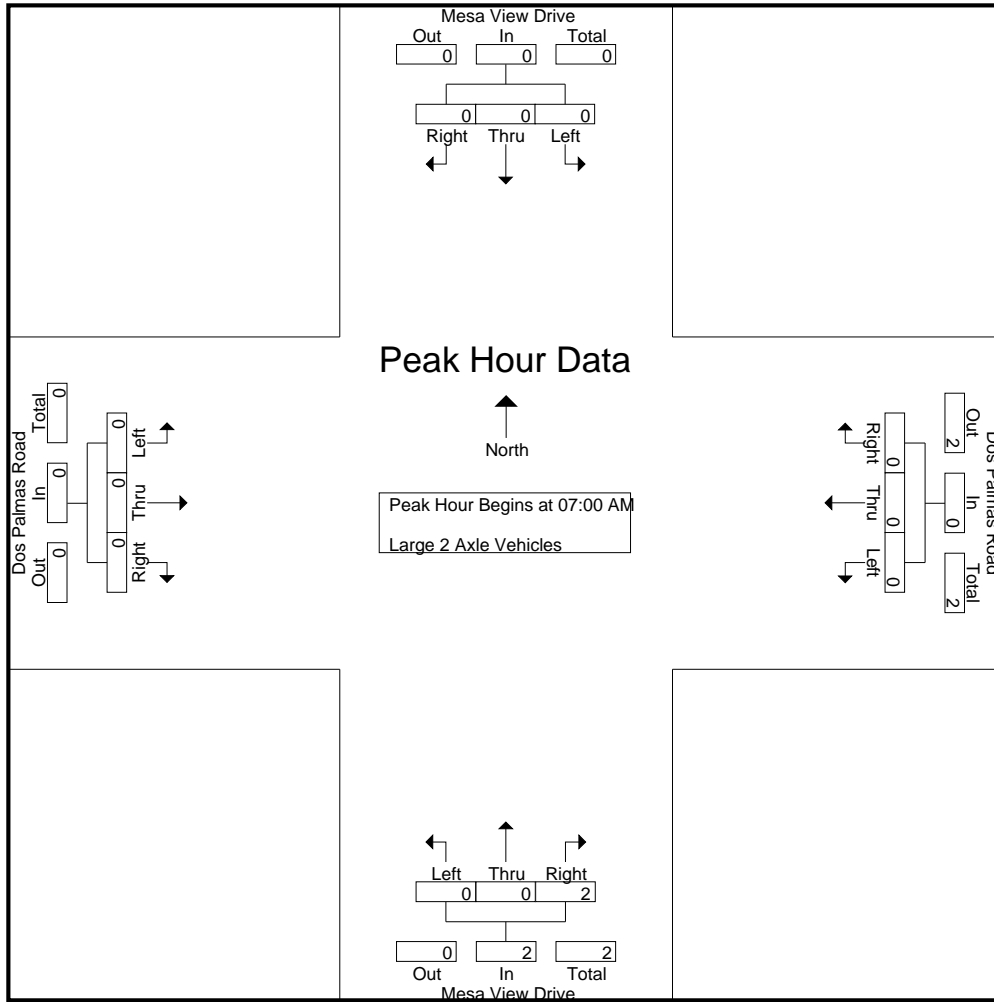
Groups Printed- Large 2 Axle Vehicles

| Start Time  | Mesa View Drive Southbound |      |       |            | Dos Palmas Road Westbound |      |       |            | Mesa View Drive Northbound |      |       |            | Dos Palmas Road Eastbound |      |       |            | Int. Total |
|-------------|----------------------------|------|-------|------------|---------------------------|------|-------|------------|----------------------------|------|-------|------------|---------------------------|------|-------|------------|------------|
|             | Left                       | Thru | Right | App. Total | Left                      | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Left                      | Thru | Right | App. Total |            |
| 07:00 AM    | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0          |
| 07:15 AM    | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0          |
| 07:30 AM    | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                          | 0    | 1     | 1          | 0                         | 0    | 0     | 0          | 1          |
| 07:45 AM    | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                          | 0    | 1     | 1          | 0                         | 0    | 0     | 0          | 1          |
| 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    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0          |
| 08:15 AM    | 0                          | 0    | 0     | 0          | 2                         | 0    | 0     | 2          | 0                          | 0    | 1     | 1          | 0                         | 0    | 0     | 0          | 3          |
| 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          | 0                         | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0          |
| Total       | 0                          | 0    | 0     | 0          | 2                         | 0    | 0     | 2          | 0                          | 0    | 2     | 2          | 0                         | 0    | 0     | 0          | 4          |
| Grand Total | 0                          | 0    | 0     | 0          | 2                         | 0    | 0     | 2          | 0                          | 0    | 4     | 4          | 0                         | 0    | 0     | 0          | 6          |
| Apprch %    | 0                          | 0    | 0     |            | 100                       | 0    | 0     |            | 0                          | 0    | 100   |            | 0                         | 0    | 0     |            |            |
| Total %     | 0                          | 0    | 0     | 0          | 33.3                      | 0    | 0     | 33.3       | 0                          | 0    | 66.7  | 66.7       | 0                         | 0    | 0     | 0          |            |

| Start Time   | Mesa View Drive Southbound |      |       |            | Dos Palmas Road Westbound |      |       |            | Mesa View Drive Northbound |      |       |            | Dos Palmas Road Eastbound |      |       |            | Int. Total |
|--|----------------------------|------|-------|------------|---------------------------|------|-------|------------|----------------------------|------|-------|------------|---------------------------|------|-------|------------|------------|
|  | Left                       | Thru | Right | App. Total | Left                      | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Left                      | Thru | Right | App. Total |            |
| Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1 |                            |      |       |            |                           |      |       |            |                            |      |       |            |                           |      |       |            |            |
| Peak Hour for Entire Intersection Begins at 07:00 AM       |                            |      |       |            |                           |      |       |            |                            |      |       |            |                           |      |       |            |            |
| 07:00 AM   | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0          |
| 07:15 AM   | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0          |
| 07:30 AM   | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                          | 0    | 1     | 1          | 0                         | 0    | 0     | 0          | 1          |
| 07:45 AM   | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                          | 0    | 1     | 1          | 0                         | 0    | 0     | 0          | 1          |
| 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 | .500  | .500       | .000                      | .000 | .000  | .000       | .500       |

City of Victorville  
 N/S: Mesa View Drive  
 E/W: Dos Palmas Road  
 Weather: Clear

File Name : 01\_VIC\_Mesa View\_Dos Palmas AM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 2



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

|              | 07:00 AM |      |      |      | 07:00 AM |      |      |      | 07:00 AM |      |      |      | 07:00 AM |      |      |      |
|--------------|----------|------|------|------|----------|------|------|------|----------|------|------|------|----------|------|------|------|
| +0 mins.     | 0        | 0    | 0    | 0    | 0        | 0    | 0    | 0    | 0        | 0    | 0    | 0    | 0        | 0    | 0    | 0    |
| +15 mins.    | 0        | 0    | 0    | 0    | 0        | 0    | 0    | 0    | 0        | 0    | 0    | 0    | 0        | 0    | 0    | 0    |
| +30 mins.    | 0        | 0    | 0    | 0    | 0        | 0    | 0    | 0    | 0        | 0    | 1    | 1    | 0        | 0    | 0    | 0    |
| +45 mins.    | 0        | 0    | 0    | 0    | 0        | 0    | 0    | 0    | 0        | 0    | 1    | 1    | 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    | 0    |
| PHF          | .000     | .000 | .000 | .000 | .000     | .000 | .000 | .000 | .000     | .000 | .500 | .500 | .000     | .000 | .000 | .000 |

City of Victorville  
 N/S: Mesa View Drive  
 E/W: Dos Palmas Road  
 Weather: Clear

File Name : 01\_VIC\_Mesa View\_Dos Palmas AM  
 Site Code : 07519468  
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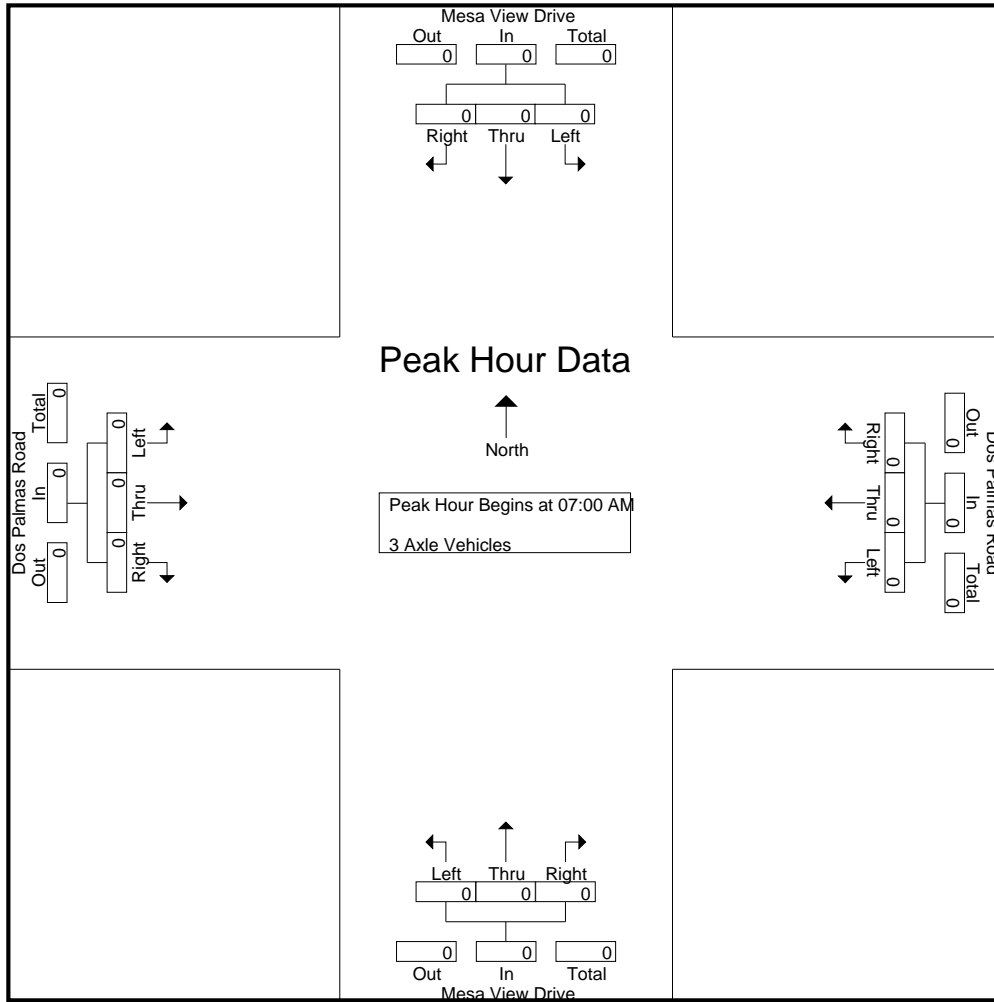
Groups Printed- 3 Axle Vehicles

| Start Time  | Mesa View Drive Southbound |      |       |            | Dos Palmas Road Westbound |      |       |            | Mesa View Drive Northbound |      |       |            | Dos Palmas Road Eastbound |      |       |            | Int. Total |
|-------------|----------------------------|------|-------|------------|---------------------------|------|-------|------------|----------------------------|------|-------|------------|---------------------------|------|-------|------------|------------|
|             | Left                       | Thru | Right | App. Total | Left                      | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Left                      | Thru | Right | App. Total |            |
| 07:00 AM    | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0          |
| 07:15 AM    | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0          |
| 07:30 AM    | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0          |
| 07:45 AM    | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0          |
| Total       | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0          |
| 08:00 AM    | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0          |
| 08:15 AM    | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0          |
| 08:30 AM    | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0          |
| 08:45 AM    | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0          |
| Total       | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0          |
| Grand Total | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0          |
| Apprch %    | 0                          | 0    | 0     |            | 0                         | 0    | 0     |            | 0                          | 0    | 0     |            | 0                         | 0    | 0     |            |            |
| Total %     |                            |      |       |            |                           |      |       |            |                            |      |       |            |                           |      |       |            |            |

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

City of Victorville  
 N/S: Mesa View Drive  
 E/W: Dos Palmas Road  
 Weather: Clear

File Name : 01\_VIC\_Mesa View\_Dos Palmas AM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 2



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

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

City of Victorville  
 N/S: Mesa View Drive  
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 Weather: Clear

File Name : 01\_VIC\_Mesa View\_Dos Palmas AM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 1

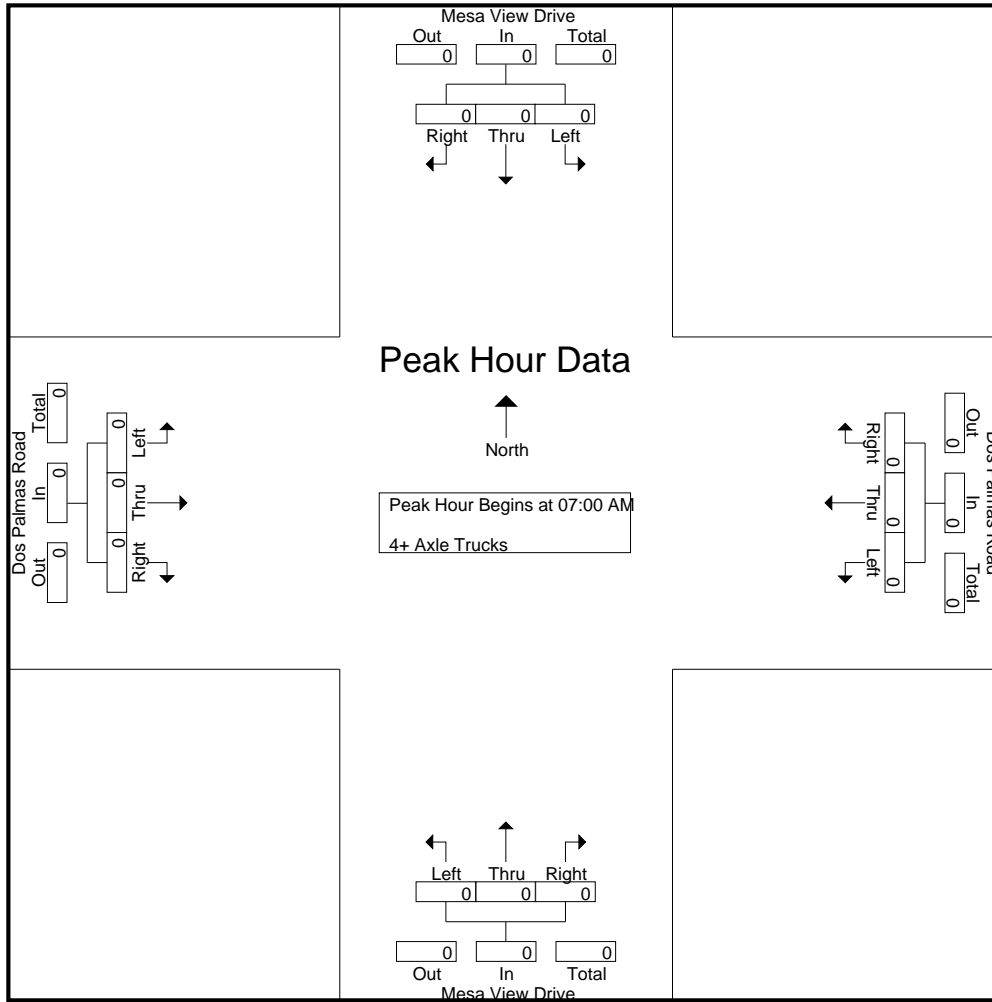
Groups Printed- 4+ Axle Trucks

| Start Time  | Mesa View Drive Southbound |      |       |            | Dos Palmas Road Westbound |      |       |            | Mesa View Drive Northbound |      |       |            | Dos Palmas Road Eastbound |      |       |            | Int. Total |
|-------------|----------------------------|------|-------|------------|---------------------------|------|-------|------------|----------------------------|------|-------|------------|---------------------------|------|-------|------------|------------|
|             | Left                       | Thru | Right | App. Total | Left                      | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Left                      | Thru | Right | App. Total |            |
| 07:00 AM    | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0          |
| 07:15 AM    | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0          |
| 07:30 AM    | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0          |
| 07:45 AM    | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0          |
| Total       | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0          |
| 08:00 AM    | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0          |
| 08:15 AM    | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0          |
| 08:30 AM    | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0          |
| 08:45 AM    | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0          |
| Total       | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0          |
| Grand Total | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0          |
| Apprch %    | 0                          | 0    | 0     |            | 0                         | 0    | 0     |            | 0                          | 0    | 0     |            | 0                         | 0    | 0     |            |            |
| Total %     |                            |      |       |            |                           |      |       |            |                            |      |       |            |                           |      |       |            |            |

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

City of Victorville  
 N/S: Mesa View Drive  
 E/W: Dos Palmas Road  
 Weather: Clear

File Name : 01\_VIC\_Mesa View\_Dos Palmas AM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
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Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

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



City of Victorville  
 N/S: Mesa View Drive  
 E/W: Dos Palmas Road  
 Weather: Clear

File Name : 01\_VIC\_Mesa View\_Dos Palmas PM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 1

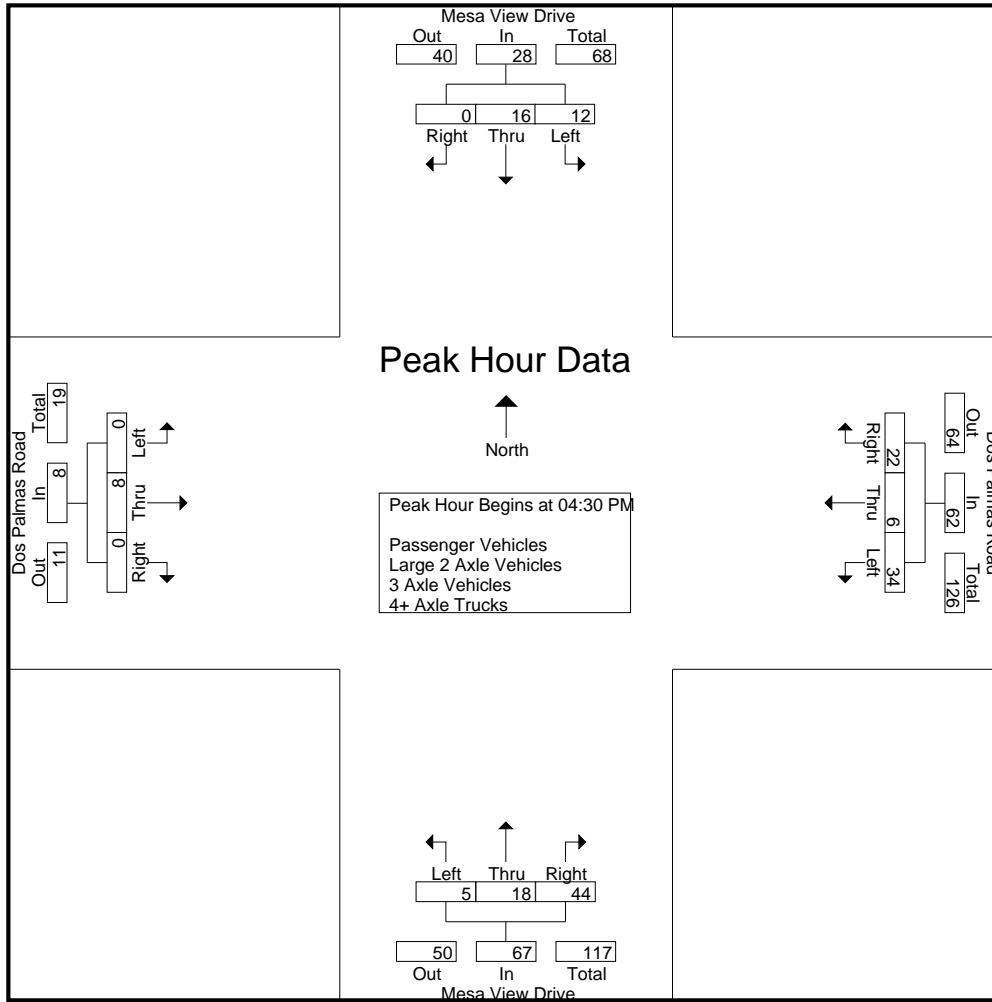
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

| Start Time              | Mesa View Drive Southbound |           |          |            | Dos Palmas Road Westbound |           |           |            | Mesa View Drive Northbound |           |           |            | Dos Palmas Road Eastbound |           |          |            | Int. Total |
|-------------------------|----------------------------|-----------|----------|------------|---------------------------|-----------|-----------|------------|----------------------------|-----------|-----------|------------|---------------------------|-----------|----------|------------|------------|
|                         | Left                       | Thru      | Right    | App. Total | Left                      | Thru      | Right     | App. Total | Left                       | Thru      | Right     | App. Total | Left                      | Thru      | Right    | App. Total |            |
| 04:00 PM                | 8                          | 0         | 0        | 8          | 8                         | 1         | 4         | 13         | 2                          | 2         | 1         | 5          | 0                         | 0         | 0        | 0          | 26         |
| 04:15 PM                | 2                          | 2         | 0        | 4          | 4                         | 1         | 2         | 7          | 2                          | 4         | 7         | 13         | 0                         | 2         | 2        | 4          | 28         |
| 04:30 PM                | 6                          | 3         | 0        | 9          | 8                         | 1         | 7         | 16         | 1                          | 4         | 10        | 15         | 0                         | 2         | 0        | 2          | 42         |
| 04:45 PM                | 2                          | 5         | 0        | 7          | 7                         | 1         | 9         | 17         | 2                          | 3         | 14        | 19         | 0                         | 0         | 0        | 0          | 43         |
| <b>Total</b>            | <b>18</b>                  | <b>10</b> | <b>0</b> | <b>28</b>  | <b>27</b>                 | <b>4</b>  | <b>22</b> | <b>53</b>  | <b>7</b>                   | <b>13</b> | <b>32</b> | <b>52</b>  | <b>0</b>                  | <b>4</b>  | <b>2</b> | <b>6</b>   | <b>139</b> |
| 05:00 PM                | 1                          | 5         | 0        | 6          | 11                        | 1         | 1         | 13         | 0                          | 6         | 9         | 15         | 0                         | 3         | 0        | 3          | 37         |
| 05:15 PM                | 3                          | 3         | 0        | 6          | 8                         | 3         | 5         | 16         | 2                          | 5         | 11        | 18         | 0                         | 3         | 0        | 3          | 43         |
| 05:30 PM                | 3                          | 2         | 0        | 5          | 11                        | 1         | 4         | 16         | 0                          | 3         | 11        | 14         | 0                         | 0         | 0        | 0          | 35         |
| 05:45 PM                | 4                          | 0         | 0        | 4          | 5                         | 6         | 6         | 17         | 2                          | 6         | 9         | 17         | 0                         | 2         | 1        | 3          | 41         |
| <b>Total</b>            | <b>11</b>                  | <b>10</b> | <b>0</b> | <b>21</b>  | <b>35</b>                 | <b>11</b> | <b>16</b> | <b>62</b>  | <b>4</b>                   | <b>20</b> | <b>40</b> | <b>64</b>  | <b>0</b>                  | <b>8</b>  | <b>1</b> | <b>9</b>   | <b>156</b> |
| <b>Grand Total</b>      | <b>29</b>                  | <b>20</b> | <b>0</b> | <b>49</b>  | <b>62</b>                 | <b>15</b> | <b>38</b> | <b>115</b> | <b>11</b>                  | <b>33</b> | <b>72</b> | <b>116</b> | <b>0</b>                  | <b>12</b> | <b>3</b> | <b>15</b>  | <b>295</b> |
| Apprch %                | 59.2                       | 40.8      | 0        |            | 53.9                      | 13        | 33        |            | 9.5                        | 28.4      | 62.1      |            | 0                         | 80        | 20       |            |            |
| Total %                 | 9.8                        | 6.8       | 0        | 16.6       | 21                        | 5.1       | 12.9      | 39         | 3.7                        | 11.2      | 24.4      | 39.3       | 0                         | 4.1       | 1        | 5.1        |            |
| Passenger Vehicles      | 29                         | 20        | 0        | 49         | 61                        | 15        | 37        | 113        | 11                         | 33        | 70        | 114        | 0                         | 12        | 3        | 15         | 291        |
| % Passenger Vehicles    | 100                        | 100       | 0        | 100        | 98.4                      | 100       | 97.4      | 98.3       | 100                        | 100       | 97.2      | 98.3       | 0                         | 100       | 100      | 100        | 98.6       |
| Large 2 Axle Vehicles   | 0                          | 0         | 0        | 0          | 1                         | 0         | 0         | 1          | 0                          | 0         | 2         | 2          | 0                         | 0         | 0        | 0          | 3          |
| % Large 2 Axle Vehicles | 0                          | 0         | 0        | 0          | 1.6                       | 0         | 0         | 0.9        | 0                          | 0         | 2.8       | 1.7        | 0                         | 0         | 0        | 0          | 1          |
| 3 Axle Vehicles         | 0                          | 0         | 0        | 0          | 0                         | 0         | 0         | 0          | 0                          | 0         | 0         | 0          | 0                         | 0         | 0        | 0          | 0          |
| % 3 Axle Vehicles       | 0                          | 0         | 0        | 0          | 0                         | 0         | 0         | 0          | 0                          | 0         | 0         | 0          | 0                         | 0         | 0        | 0          | 0          |
| 4+ Axle Trucks          | 0                          | 0         | 0        | 0          | 0                         | 0         | 1         | 1          | 0                          | 0         | 0         | 0          | 0                         | 0         | 0        | 0          | 1          |
| % 4+ Axle Trucks        | 0                          | 0         | 0        | 0          | 0                         | 0         | 2.6       | 0.9        | 0                          | 0         | 0         | 0          | 0                         | 0         | 0        | 0          | 0.3        |

| Start Time   | Mesa View Drive Southbound |           |          |            | Dos Palmas Road Westbound |          |           |            | Mesa View Drive Northbound |           |           |            | Dos Palmas Road Eastbound |          |          |            | Int. Total |
|--|----------------------------|-----------|----------|------------|---------------------------|----------|-----------|------------|----------------------------|-----------|-----------|------------|---------------------------|----------|----------|------------|------------|
|  | Left                       | Thru      | Right    | App. Total | Left                      | Thru     | Right     | App. Total | Left                       | Thru      | Right     | App. Total | Left                      | Thru     | Right    | App. Total |            |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 |                            |           |          |            |                           |          |           |            |                            |           |           |            |                           |          |          |            |            |
| Peak Hour for Entire Intersection Begins at 04:30 PM       |                            |           |          |            |                           |          |           |            |                            |           |           |            |                           |          |          |            |            |
| 04:30 PM   | 6                          | 3         | 0        | 9          | 8                         | 1        | 7         | 16         | 1                          | 4         | 10        | 15         | 0                         | 2        | 0        | 2          | 42         |
| 04:45 PM   | 2                          | 5         | 0        | 7          | 7                         | 1        | 9         | 17         | 2                          | 3         | 14        | 19         | 0                         | 0        | 0        | 0          | 43         |
| 05:00 PM   | 1                          | 5         | 0        | 6          | 11                        | 1        | 1         | 13         | 0                          | 6         | 9         | 15         | 0                         | 3        | 0        | 3          | 37         |
| 05:15 PM   | 3                          | 3         | 0        | 6          | 8                         | 3        | 5         | 16         | 2                          | 5         | 11        | 18         | 0                         | 3        | 0        | 3          | 43         |
| <b>Total Volume</b>  | <b>12</b>                  | <b>16</b> | <b>0</b> | <b>28</b>  | <b>34</b>                 | <b>6</b> | <b>22</b> | <b>62</b>  | <b>5</b>                   | <b>18</b> | <b>44</b> | <b>67</b>  | <b>0</b>                  | <b>8</b> | <b>0</b> | <b>8</b>   | <b>165</b> |
| % App. Total   | 42.9                       | 57.1      | 0        |            | 54.8                      | 9.7      | 35.5      |            | 7.5                        | 26.9      | 65.7      |            | 0                         | 100      | 0        |            |            |
| PHF  | .500                       | .800      | .000     | .778       | .773                      | .500     | .611      | .912       | .625                       | .750      | .786      | .882       | .000                      | .667     | .000     | .667       | .959       |

City of Victorville  
 N/S: Mesa View Drive  
 E/W: Dos Palmas Road  
 Weather: Clear

File Name : 01\_VIC\_Mesa View\_Dos Palmas PM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 2



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

|              | 04:00 PM |      |      |      | 04:30 PM |      |      |      | 04:30 PM |      |      |      | 04:15 PM |      |      |      |
|--------------|----------|------|------|------|----------|------|------|------|----------|------|------|------|----------|------|------|------|
| +0 mins.     | 8        | 0    | 0    | 8    | 8        | 1    | 7    | 16   | 1        | 4    | 10   | 15   | 0        | 2    | 2    | 4    |
| +15 mins.    | 2        | 2    | 0    | 4    | 7        | 1    | 9    | 17   | 2        | 3    | 14   | 19   | 0        | 2    | 0    | 2    |
| +30 mins.    | 6        | 3    | 0    | 9    | 11       | 1    | 1    | 13   | 0        | 6    | 9    | 15   | 0        | 0    | 0    | 0    |
| +45 mins.    | 2        | 5    | 0    | 7    | 8        | 3    | 5    | 16   | 2        | 5    | 11   | 18   | 0        | 3    | 0    | 3    |
| Total Volume | 18       | 10   | 0    | 28   | 34       | 6    | 22   | 62   | 5        | 18   | 44   | 67   | 0        | 7    | 2    | 9    |
| % App. Total | 64.3     | 35.7 | 0    |      | 54.8     | 9.7  | 35.5 |      | 7.5      | 26.9 | 65.7 |      | 0        | 77.8 | 22.2 |      |
| PHF          | .563     | .500 | .000 | .778 | .773     | .500 | .611 | .912 | .625     | .750 | .786 | .882 | .000     | .583 | .250 | .563 |

City of Victorville  
 N/S: Mesa View Drive  
 E/W: Dos Palmas Road  
 Weather: Clear

File Name : 01\_VIC\_Mesa View\_Dos Palmas PM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 1

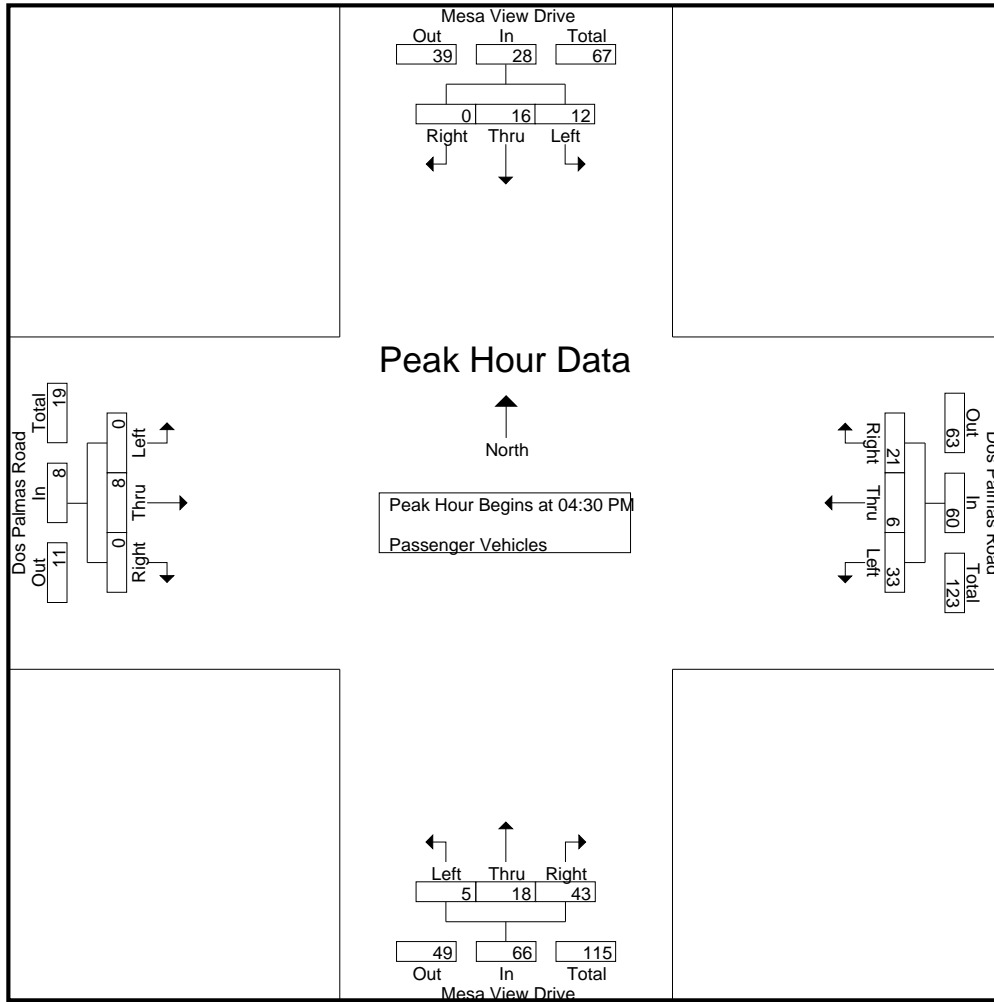
Groups Printed- Passenger Vehicles

| Start Time  | Mesa View Drive Southbound |      |       |            | Dos Palmas Road Westbound |      |       |            | Mesa View Drive Northbound |      |       |            | Dos Palmas Road Eastbound |      |       |            | Int. Total |
|-------------|----------------------------|------|-------|------------|---------------------------|------|-------|------------|----------------------------|------|-------|------------|---------------------------|------|-------|------------|------------|
|             | Left                       | Thru | Right | App. Total | Left                      | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Left                      | Thru | Right | App. Total |            |
| 04:00 PM    | 8                          | 0    | 0     | 8          | 8                         | 1    | 4     | 13         | 2                          | 2    | 1     | 5          | 0                         | 0    | 0     | 0          | 26         |
| 04:15 PM    | 2                          | 2    | 0     | 4          | 4                         | 1    | 2     | 7          | 2                          | 4    | 7     | 13         | 0                         | 2    | 2     | 4          | 28         |
| 04:30 PM    | 6                          | 3    | 0     | 9          | 8                         | 1    | 7     | 16         | 1                          | 4    | 9     | 14         | 0                         | 2    | 0     | 2          | 41         |
| 04:45 PM    | 2                          | 5    | 0     | 7          | 7                         | 1    | 9     | 17         | 2                          | 3    | 14    | 19         | 0                         | 0    | 0     | 0          | 43         |
| Total       | 18                         | 10   | 0     | 28         | 27                        | 4    | 22    | 53         | 7                          | 13   | 31    | 51         | 0                         | 4    | 2     | 6          | 138        |
| 05:00 PM    | 1                          | 5    | 0     | 6          | 10                        | 1    | 1     | 12         | 0                          | 6    | 9     | 15         | 0                         | 3    | 0     | 3          | 36         |
| 05:15 PM    | 3                          | 3    | 0     | 6          | 8                         | 3    | 4     | 15         | 2                          | 5    | 11    | 18         | 0                         | 3    | 0     | 3          | 42         |
| 05:30 PM    | 3                          | 2    | 0     | 5          | 11                        | 1    | 4     | 16         | 0                          | 3    | 10    | 13         | 0                         | 0    | 0     | 0          | 34         |
| 05:45 PM    | 4                          | 0    | 0     | 4          | 5                         | 6    | 6     | 17         | 2                          | 6    | 9     | 17         | 0                         | 2    | 1     | 3          | 41         |
| Total       | 11                         | 10   | 0     | 21         | 34                        | 11   | 15    | 60         | 4                          | 20   | 39    | 63         | 0                         | 8    | 1     | 9          | 153        |
| Grand Total | 29                         | 20   | 0     | 49         | 61                        | 15   | 37    | 113        | 11                         | 33   | 70    | 114        | 0                         | 12   | 3     | 15         | 291        |
| Apprch %    | 59.2                       | 40.8 | 0     |            | 54                        | 13.3 | 32.7  |            | 9.6                        | 28.9 | 61.4  |            | 0                         | 80   | 20    |            |            |
| Total %     | 10                         | 6.9  | 0     | 16.8       | 21                        | 5.2  | 12.7  | 38.8       | 3.8                        | 11.3 | 24.1  | 39.2       | 0                         | 4.1  | 1     | 5.2        |            |

| Start Time   | Mesa View Drive Southbound |      |       |            | Dos Palmas Road Westbound |      |       |            | Mesa View Drive Northbound |      |       |            | Dos Palmas Road Eastbound |      |       |            | Int. Total |
|--|----------------------------|------|-------|------------|---------------------------|------|-------|------------|----------------------------|------|-------|------------|---------------------------|------|-------|------------|------------|
|  | Left                       | Thru | Right | App. Total | Left                      | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Left                      | Thru | Right | App. Total |            |
| Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1 |                            |      |       |            |                           |      |       |            |                            |      |       |            |                           |      |       |            |            |
| Peak Hour for Entire Intersection Begins at 04:30 PM       |                            |      |       |            |                           |      |       |            |                            |      |       |            |                           |      |       |            |            |
| 04:30 PM   | 6                          | 3    | 0     | 9          | 8                         | 1    | 7     | 16         | 1                          | 4    | 9     | 14         | 0                         | 2    | 0     | 2          | 41         |
| 04:45 PM   | 2                          | 5    | 0     | 7          | 7                         | 1    | 9     | 17         | 2                          | 3    | 14    | 19         | 0                         | 0    | 0     | 0          | 43         |
| 05:00 PM   | 1                          | 5    | 0     | 6          | 10                        | 1    | 1     | 12         | 0                          | 6    | 9     | 15         | 0                         | 3    | 0     | 3          | 36         |
| 05:15 PM   | 3                          | 3    | 0     | 6          | 8                         | 3    | 4     | 15         | 2                          | 5    | 11    | 18         | 0                         | 3    | 0     | 3          | 42         |
| Total Volume   | 12                         | 16   | 0     | 28         | 33                        | 6    | 21    | 60         | 5                          | 18   | 43    | 66         | 0                         | 8    | 0     | 8          | 162        |
| % App. Total   | 42.9                       | 57.1 | 0     |            | 55                        | 10   | 35    |            | 7.6                        | 27.3 | 65.2  |            | 0                         | 100  | 0     |            |            |
| PHF  | .500                       | .800 | .000  | .778       | .825                      | .500 | .583  | .882       | .625                       | .750 | .768  | .868       | .000                      | .667 | .000  | .667       | .942       |

City of Victorville  
 N/S: Mesa View Drive  
 E/W: Dos Palmas Road  
 Weather: Clear

File Name : 01\_VIC\_Mesa View\_Dos Palmas PM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 2



Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

|              | 04:30 PM |      |      |      | 04:30 PM |      |      |      | 04:30 PM |      |      |      | 04:30 PM |      |      |      |
|--------------|----------|------|------|------|----------|------|------|------|----------|------|------|------|----------|------|------|------|
| +0 mins.     | 6        | 3    | 0    | 9    | 8        | 1    | 7    | 16   | 1        | 4    | 9    | 14   | 0        | 2    | 0    | 2    |
| +15 mins.    | 2        | 5    | 0    | 7    | 7        | 1    | 9    | 17   | 2        | 3    | 14   | 19   | 0        | 0    | 0    | 0    |
| +30 mins.    | 1        | 5    | 0    | 6    | 10       | 1    | 1    | 12   | 0        | 6    | 9    | 15   | 0        | 3    | 0    | 3    |
| +45 mins.    | 3        | 3    | 0    | 6    | 8        | 3    | 4    | 15   | 2        | 5    | 11   | 18   | 0        | 3    | 0    | 3    |
| Total Volume | 12       | 16   | 0    | 28   | 33       | 6    | 21   | 60   | 5        | 18   | 43   | 66   | 0        | 8    | 0    | 8    |
| % App. Total | 42.9     | 57.1 | 0    |      | 55       | 10   | 35   |      | 7.6      | 27.3 | 65.2 |      | 0        | 100  | 0    |      |
| PHF          | .500     | .800 | .000 | .778 | .825     | .500 | .583 | .882 | .625     | .750 | .768 | .868 | .000     | .667 | .000 | .667 |

City of Victorville  
 N/S: Mesa View Drive  
 E/W: Dos Palmas Road  
 Weather: Clear

File Name : 01\_VIC\_Mesa View\_Dos Palmas PM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 1

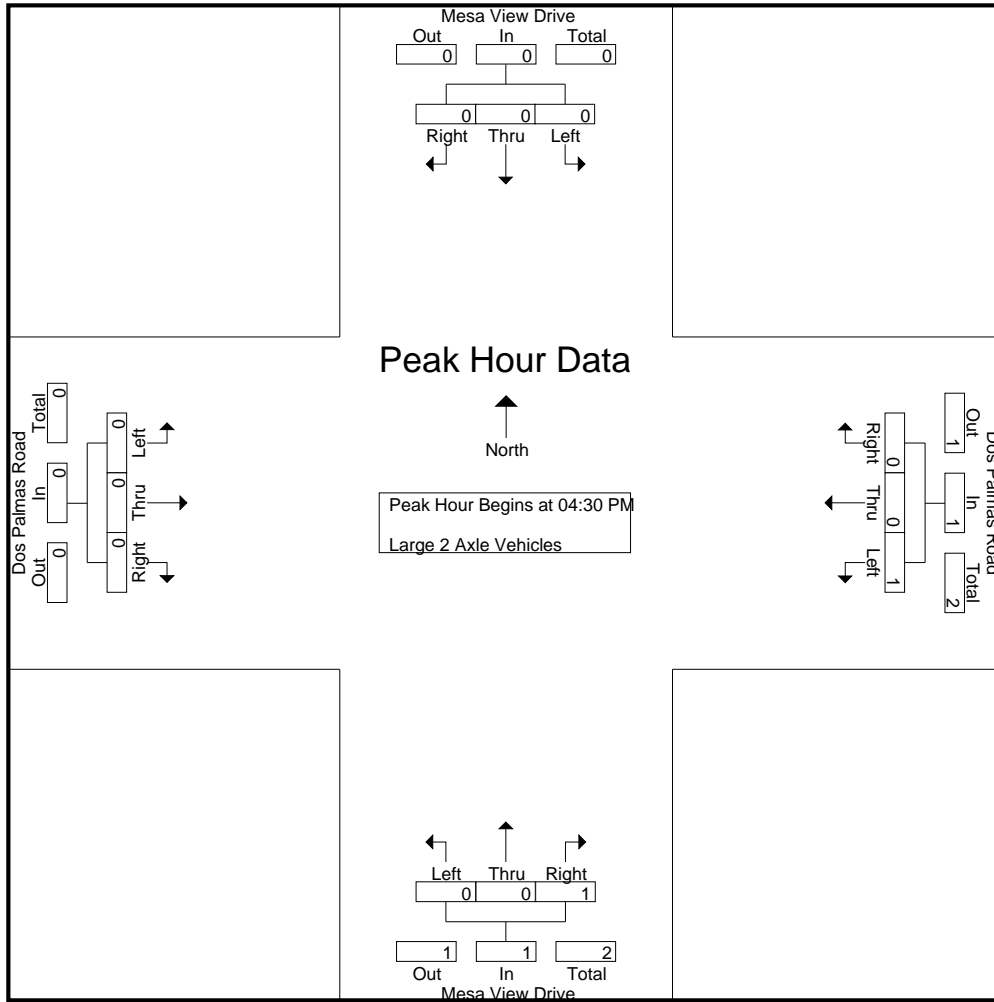
Groups Printed- Large 2 Axle Vehicles

| Start Time  | Mesa View Drive Southbound |      |       |            | Dos Palmas Road Westbound |      |       |            | Mesa View Drive Northbound |      |       |            | Dos Palmas Road Eastbound |      |       |            | Int. Total |
|-------------|----------------------------|------|-------|------------|---------------------------|------|-------|------------|----------------------------|------|-------|------------|---------------------------|------|-------|------------|------------|
|             | Left                       | Thru | Right | App. Total | Left                      | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Left                      | Thru | Right | App. Total |            |
| 04:00 PM    | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0          |
| 04:15 PM    | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0          |
| 04:30 PM    | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                          | 0    | 1     | 1          | 0                         | 0    | 0     | 0          | 1          |
| 04:45 PM    | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0          |
| Total       | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                          | 0    | 1     | 1          | 0                         | 0    | 0     | 0          | 1          |
| 05:00 PM    | 0                          | 0    | 0     | 0          | 1                         | 0    | 0     | 1          | 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    | 1     | 1          | 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    | 1     | 1          | 0                         | 0    | 0     | 0          | 2          |
| Grand Total | 0                          | 0    | 0     | 0          | 1                         | 0    | 0     | 1          | 0                          | 0    | 2     | 2          | 0                         | 0    | 0     | 0          | 3          |
| Apprch %    | 0                          | 0    | 0     |            | 100                       | 0    | 0     |            | 0                          | 0    | 100   |            | 0                         | 0    | 0     |            |            |
| Total %     | 0                          | 0    | 0     | 0          | 33.3                      | 0    | 0     | 33.3       | 0                          | 0    | 66.7  | 66.7       | 0                         | 0    | 0     | 0          |            |

| Start Time   | Mesa View Drive Southbound |      |       |            | Dos Palmas Road Westbound |      |       |            | Mesa View Drive Northbound |      |       |            | Dos Palmas Road Eastbound |      |       |            | Int. Total |
|--|----------------------------|------|-------|------------|---------------------------|------|-------|------------|----------------------------|------|-------|------------|---------------------------|------|-------|------------|------------|
|  | Left                       | Thru | Right | App. Total | Left                      | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Left                      | Thru | Right | App. Total |            |
| Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1 |                            |      |       |            |                           |      |       |            |                            |      |       |            |                           |      |       |            |            |
| Peak Hour for Entire Intersection Begins at 04:30 PM       |                            |      |       |            |                           |      |       |            |                            |      |       |            |                           |      |       |            |            |
| 04:30 PM   | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                          | 0    | 1     | 1          | 0                         | 0    | 0     | 0          | 1          |
| 04:45 PM   | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0          |
| 05:00 PM   | 0                          | 0    | 0     | 0          | 1                         | 0    | 0     | 1          | 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          |
| 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       | .500       |

City of Victorville  
 N/S: Mesa View Drive  
 E/W: Dos Palmas Road  
 Weather: Clear

File Name : 01\_VIC\_Mesa View\_Dos Palmas PM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 2



Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

|              | 04:30 PM |      |      |      | 04:30 PM |      |      |      | 04:30 PM |      |      |      | 04:30 PM |      |      |      |
|--------------|----------|------|------|------|----------|------|------|------|----------|------|------|------|----------|------|------|------|
| +0 mins.     | 0        | 0    | 0    | 0    | 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    | 1        | 0    | 0    | 1    | 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    | 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 |

City of Victorville  
 N/S: Mesa View Drive  
 E/W: Dos Palmas Road  
 Weather: Clear

File Name : 01\_VIC\_Mesa View\_Dos Palmas PM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 1

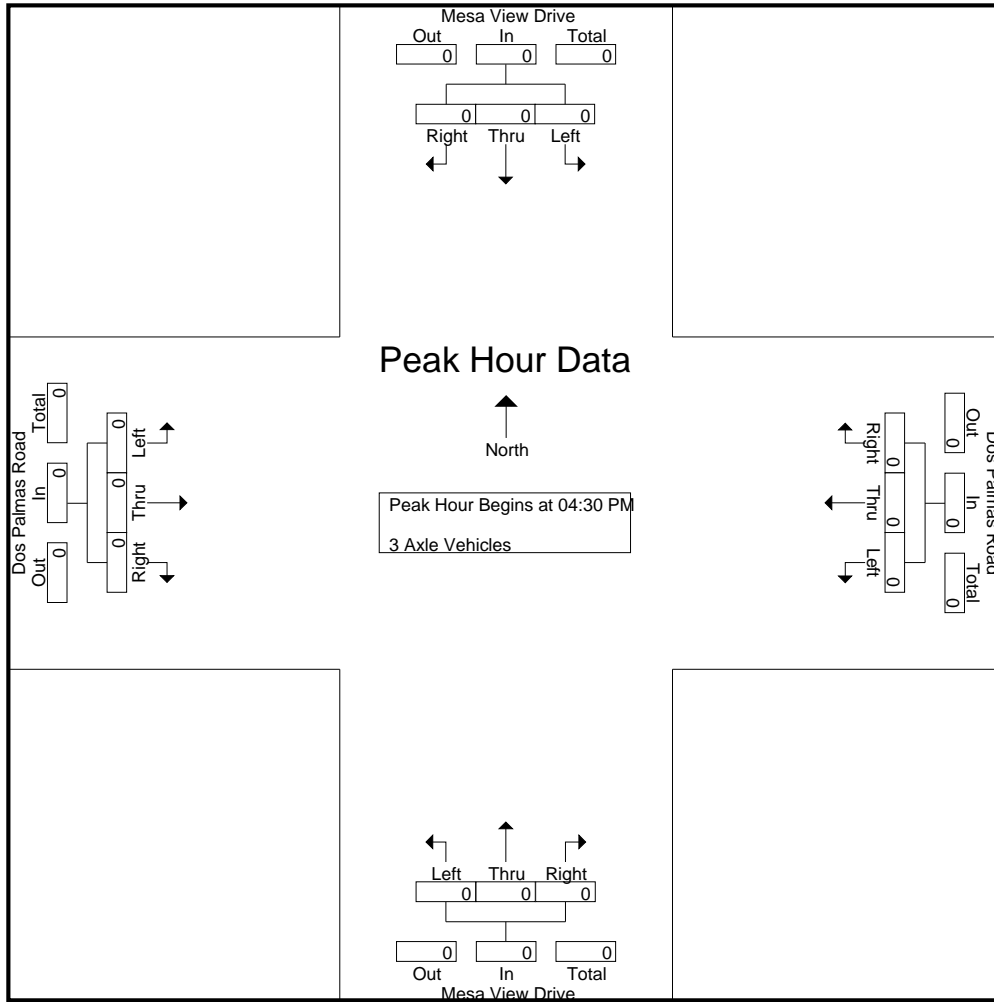
Groups Printed- 3 Axle Vehicles

| Start Time  | Mesa View Drive Southbound |      |       |            | Dos Palmas Road Westbound |      |       |            | Mesa View Drive Northbound |      |       |            | Dos Palmas Road Eastbound |      |       |            | Int. Total |
|-------------|----------------------------|------|-------|------------|---------------------------|------|-------|------------|----------------------------|------|-------|------------|---------------------------|------|-------|------------|------------|
|             | Left                       | Thru | Right | App. Total | Left                      | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Left                      | Thru | Right | App. Total |            |
| 04:00 PM    | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0          |
| 04:15 PM    | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0          |
| 04:30 PM    | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0          |
| 04:45 PM    | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0          |
| Total       | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0          |
| 05:00 PM    | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0          |
| 05:15 PM    | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0          |
| 05:30 PM    | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0          |
| 05:45 PM    | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0          |
| Total       | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0          |
| Grand Total | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0          |
| Apprch %    | 0                          | 0    | 0     |            | 0                         | 0    | 0     |            | 0                          | 0    | 0     |            | 0                         | 0    | 0     |            |            |
| Total %     |                            |      |       |            |                           |      |       |            |                            |      |       |            |                           |      |       |            |            |

| Start Time   | Mesa View Drive Southbound |      |       |            | Dos Palmas Road Westbound |      |       |            | Mesa View Drive Northbound |      |       |            | Dos Palmas Road Eastbound |      |       |            | Int. Total |
|--|----------------------------|------|-------|------------|---------------------------|------|-------|------------|----------------------------|------|-------|------------|---------------------------|------|-------|------------|------------|
|  | Left                       | Thru | Right | App. Total | Left                      | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Left                      | Thru | Right | App. Total |            |
| Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1 |                            |      |       |            |                           |      |       |            |                            |      |       |            |                           |      |       |            |            |
| Peak Hour for Entire Intersection Begins at 04:30 PM       |                            |      |       |            |                           |      |       |            |                            |      |       |            |                           |      |       |            |            |
| 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          |
| 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          |
| Total Volume   | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0          |
| % App. Total   | 0                          | 0    | 0     |            | 0                         | 0    | 0     |            | 0                          | 0    | 0     |            | 0                         | 0    | 0     |            |            |
| PHF  | .000                       | .000 | .000  | .000       | .000                      | .000 | .000  | .000       | .000                       | .000 | .000  | .000       | .000                      | .000 | .000  | .000       | .000       |

City of Victorville  
 N/S: Mesa View Drive  
 E/W: Dos Palmas Road  
 Weather: Clear

File Name : 01\_VIC\_Mesa View\_Dos Palmas PM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 2



Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

|              | 04:30 PM |      |      |      | 04:30 PM |      |      |      | 04:30 PM |      |      |      | 04:30 PM |      |      |      |
|--------------|----------|------|------|------|----------|------|------|------|----------|------|------|------|----------|------|------|------|
| +0 mins.     | 0        | 0    | 0    | 0    | 0        | 0    | 0    | 0    | 0        | 0    | 0    | 0    | 0        | 0    | 0    | 0    |
| +15 mins.    | 0        | 0    | 0    | 0    | 0        | 0    | 0    | 0    | 0        | 0    | 0    | 0    | 0        | 0    | 0    | 0    |
| +30 mins.    | 0        | 0    | 0    | 0    | 0        | 0    | 0    | 0    | 0        | 0    | 0    | 0    | 0        | 0    | 0    | 0    |
| +45 mins.    | 0        | 0    | 0    | 0    | 0        | 0    | 0    | 0    | 0        | 0    | 0    | 0    | 0        | 0    | 0    | 0    |
| Total Volume | 0        | 0    | 0    | 0    | 0        | 0    | 0    | 0    | 0        | 0    | 0    | 0    | 0        | 0    | 0    | 0    |
| % App. Total | 0        | 0    | 0    | 0    | 0        | 0    | 0    | 0    | 0        | 0    | 0    | 0    | 0        | 0    | 0    | 0    |
| PHF          | .000     | .000 | .000 | .000 | .000     | .000 | .000 | .000 | .000     | .000 | .000 | .000 | .000     | .000 | .000 | .000 |



City of Victorville  
 N/S: Mesa View Drive  
 E/W: Dos Palmas Road  
 Weather: Clear

File Name : 01\_VIC\_Mesa View\_Dos Palmas PM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 1

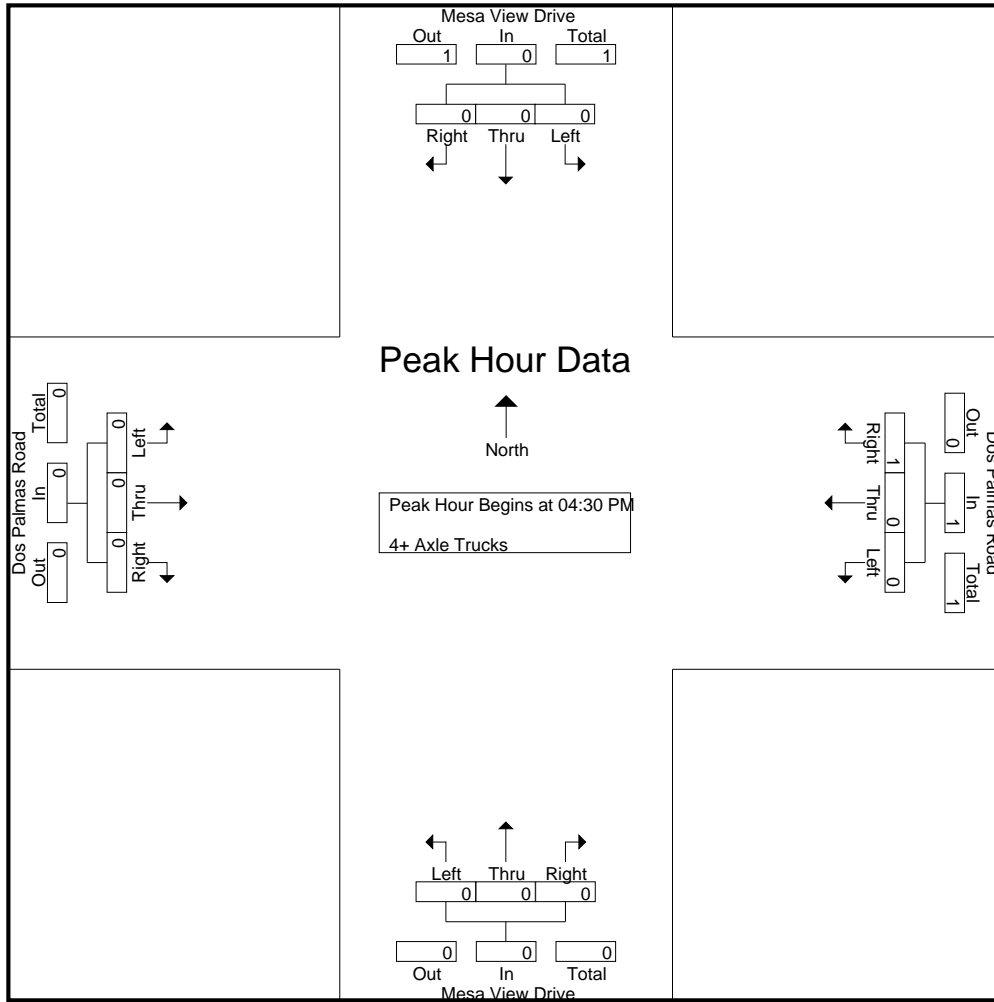
Groups Printed- 4+ Axle Trucks

| Start Time  | Mesa View Drive Southbound |      |       |            | Dos Palmas Road Westbound |      |       |            | Mesa View Drive Northbound |      |       |            | Dos Palmas Road Eastbound |      |       |            | Int. Total |
|-------------|----------------------------|------|-------|------------|---------------------------|------|-------|------------|----------------------------|------|-------|------------|---------------------------|------|-------|------------|------------|
|             | Left                       | Thru | Right | App. Total | Left                      | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Left                      | Thru | Right | App. Total |            |
| 04:00 PM    | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0          |
| 04:15 PM    | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0          |
| 04:30 PM    | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0          |
| 04:45 PM    | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0          |
| Total       | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0          |
| 05:00 PM    | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0          |
| 05:15 PM    | 0                          | 0    | 0     | 0          | 0                         | 0    | 1     | 1          | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 1          |
| 05:30 PM    | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0          |
| 05:45 PM    | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 0          |
| Total       | 0                          | 0    | 0     | 0          | 0                         | 0    | 1     | 1          | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 1          |
| Grand Total | 0                          | 0    | 0     | 0          | 0                         | 0    | 1     | 1          | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 1          |
| Apprch %    | 0                          | 0    | 0     |            | 0                         | 0    | 100   |            | 0                          | 0    | 0     |            | 0                         | 0    | 0     |            |            |
| Total %     | 0                          | 0    | 0     |            | 0                         | 0    | 100   | 100        | 0                          | 0    | 0     |            | 0                         | 0    | 0     |            |            |

| Start Time   | Mesa View Drive Southbound |      |       |            | Dos Palmas Road Westbound |      |       |            | Mesa View Drive Northbound |      |       |            | Dos Palmas Road Eastbound |      |       |            | Int. Total |
|--|----------------------------|------|-------|------------|---------------------------|------|-------|------------|----------------------------|------|-------|------------|---------------------------|------|-------|------------|------------|
|  | Left                       | Thru | Right | App. Total | Left                      | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Left                      | Thru | Right | App. Total |            |
| Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1 |                            |      |       |            |                           |      |       |            |                            |      |       |            |                           |      |       |            |            |
| Peak Hour for Entire Intersection Begins at 04:30 PM       |                            |      |       |            |                           |      |       |            |                            |      |       |            |                           |      |       |            |            |
| 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          |
| 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    | 1     | 1          | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 1          |
| Total Volume   | 0                          | 0    | 0     | 0          | 0                         | 0    | 1     | 1          | 0                          | 0    | 0     | 0          | 0                         | 0    | 0     | 0          | 1          |
| % App. Total   | 0                          | 0    | 0     |            | 0                         | 0    | 100   |            | 0                          | 0    | 0     |            | 0                         | 0    | 0     |            |            |
| PHF  | .000                       | .000 | .000  | .000       | .000                      | .000 | .250  | .250       | .000                       | .000 | .000  | .000       | .000                      | .000 | .000  | .000       | .250       |

City of Victorville  
 N/S: Mesa View Drive  
 E/W: Dos Palmas Road  
 Weather: Clear

File Name : 01\_VIC\_Mesa View\_Dos Palmas PM  
 Site Code : 07519468  
 Start Date : 6/13/2019  
 Page No : 2



Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

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

**APPENDIX D**

**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**

## TTM 16397

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

Scenario 1 Existing

Report File: C:\...\IAM E.pdf

11/1/2019

**Intersection Analysis Summary**

| ID | Intersection Name                            | Control Type | Method   | Worst Mvmt | V/C   | Delay (s/veh) | LOS |
|----|--|--------------|----------|------------|-------|---------------|-----|
| 1  | Mesa View Drive (NS) at Dos Palmas Road (EW) | Two-way stop | HCM 2010 | NB Thru    | 0.003 | 9.3           | A   |
| 2  | Mesa View Drive (NS) at Luna Road (EW)       | Two-way stop | HCM 2010 | EB Thru    | 0.017 | 9.7           | A   |
| 3  | US-Route 395 (NS) at Palmdale Road (EW)      | Signalized   | HCM 2010 | EB Right   | 0.523 | 28.8          | C   |
| 4  | US-Route 395 (NS) at Dos Palmas Road (EW)    | Signalized   | HCM 2010 | NB Left    | 0.410 | 14.0          | B   |
| 5  | US-Route 395 (NS) at Luna Road (EW)          | Signalized   | HCM 2010 | SB Thru    | 0.403 | 31.3          | 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: Mesa View Drive (NS) at Dos Palmas Road (EW)**

|                  |              |                           |       |
|------------------|--------------|---------------------------|-------|
| Control Type:    | Two-way stop | Delay (sec / veh):        | 9.3   |
| Analysis Method: | HCM 2010     | Level Of Service:         | A     |
| Analysis Period: | 15 minutes   | Volume to Capacity (v/c): | 0.003 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| 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      | 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]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | Yes        |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 0          | 3      | 34     | 9          | 8      | 0      | 0         | 5      | 2      | 9         | 3      | 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 [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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          | 3      | 34     | 9          | 8      | 0      | 0         | 5      | 2      | 9         | 3      | 2      |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| 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          | 1      | 9      | 2          | 2      | 0      | 0         | 1      | 1      | 2         | 1      | 1      |
| Total Analysis Volume [veh/h]           | 0          | 3      | 36     | 9          | 8      | 0      | 0         | 5      | 2      | 9         | 3      | 2      |
| Pedestrian Volume [ped/h]               | 0          |        |        | 0          |        |        | 0         |        |        | 0         |        |        |

**Intersection Settings**

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

**Movement, Approach, & Intersection Results**

|                                       |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| V/C, Movement V/C Ratio               | 0.00 | 0.00 | 0.03 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 |
| d_M, Delay for Movement [s/veh]       | 8.84 | 9.30 | 8.45 | 8.99 | 9.25 | 8.40 | 7.21 | 0.00 | 0.00 | 7.23 | 0.00 | 0.00 |
| Movement LOS                          | A    | A    | A    | A    | A    | A    | A    | A    | A    | A    | A    | A    |
| 95th-Percentile Queue Length [veh/ln] | 0.11 | 0.11 | 0.11 | 0.06 | 0.06 | 0.06 | 0.00 | 0.00 | 0.00 | 0.02 | 0.02 | 0.02 |
| 95th-Percentile Queue Length [ft/ln]  | 2.86 | 2.86 | 2.86 | 1.46 | 1.46 | 1.46 | 0.00 | 0.00 | 0.00 | 0.42 | 0.42 | 0.42 |
| d_A, Approach Delay [s/veh]           | 8.52 |      |      | 9.11 |      |      | 0.00 |      |      | 4.64 |      |      |
| Approach LOS                          | A    |      |      | A    |      |      | A    |      |      | A    |      |      |
| d_I, Intersection Delay [s/veh]       | 7.17 |      |      |      |      |      |      |      |      |      |      |      |
| Intersection LOS                      | A    |      |      |      |      |      |      |      |      |      |      |      |

**Intersection Level Of Service Report**  
**Intersection 2: Mesa View Drive (NS) at Luna Road (EW)**

|                  |              |                           |       |
|------------------|--------------|---------------------------|-------|
| Control Type:    | Two-way stop | Delay (sec / veh):        | 9.7   |
| Analysis Method: | HCM 2010     | Level Of Service:         | A     |
| Analysis Period: | 15 minutes   | Volume to Capacity (v/c): | 0.017 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| 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      | 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]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | Yes        |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 5          | 29     | 7      | 9          | 38     | 1      | 2         | 12     | 2      | 7         | 7      | 6      |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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]             | 5          | 29     | 7      | 9          | 38     | 1      | 2         | 12     | 2      | 7         | 7      | 6      |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| Other Adjustment Factor                 | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h]          | 1          | 8      | 2      | 2          | 10     | 0      | 1         | 3      | 1      | 2         | 2      | 2      |
| Total Analysis Volume [veh/h]           | 5          | 31     | 7      | 9          | 40     | 1      | 2         | 13     | 2      | 7         | 7      | 6      |
| Pedestrian Volume [ped/h]               | 0          |        |        | 0          |        |        | 0         |        |        | 0         |        |        |

**Intersection Settings**

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

**Movement, Approach, & Intersection Results**

|                                       |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| V/C, Movement V/C Ratio               | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | 0.01 | 0.01 | 0.01 |
| d_M, Delay for Movement [s/veh]       | 7.28 | 0.00 | 0.00 | 7.28 | 0.00 | 0.00 | 9.30 | 9.71 | 8.57 | 9.31 | 9.69 | 8.54 |
| Movement LOS                          | A    | A    | A    | A    | A    | A    | A    | A    | A    | A    | A    | A    |
| 95th-Percentile Queue Length [veh/ln] | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 | 0.07 |
| 95th-Percentile Queue Length [ft/ln]  | 0.24 | 0.24 | 0.24 | 0.43 | 0.43 | 0.43 | 1.60 | 1.60 | 1.60 | 1.76 | 1.76 | 1.76 |
| d_A, Approach Delay [s/veh]           | 0.85 |      |      | 1.31 |      |      | 9.53 |      |      | 9.22 |      |      |
| Approach LOS                          | A    |      |      | A    |      |      | A    |      |      | A    |      |      |
| d_I, Intersection Delay [s/veh]       | 3.45 |      |      |      |      |      |      |      |      |      |      |      |
| Intersection LOS                      | A    |      |      |      |      |      |      |      |      |      |      |      |

**Intersection Level Of Service Report**  
**Intersection 3: US-Route 395 (NS) at Palmdale Road (EW)**

|                  |            |                           |       |
|------------------|------------|---------------------------|-------|
| Control Type:    | Signalized | Delay (sec / veh):        | 28.8  |
| Analysis Method: | HCM 2010   | Level Of Service:         | C     |
| Analysis Period: | 15 minutes | Volume to Capacity (v/c): | 0.523 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Approach               | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| Lane Configuration     | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| 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      | 1      | 1         | 0      | 0      | 1         | 0      | 2      |
| Pocket Length [ft]     | 120.00     | 100.00 | 100.00 | 350.00     | 100.00 | 370.00 | 140.00    | 100.00 | 100.00 | 250.00    | 100.00 | 450.00 |
| Speed [mph]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | Yes        |        |        | No         |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 217        | 674    | 77     | 85         | 488    | 34     | 55        | 461    | 289    | 85        | 335    | 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 [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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]             | 217        | 674    | 77     | 85         | 488    | 34     | 55        | 461    | 289    | 85        | 335    | 57     |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| 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]          | 57         | 177    | 20     | 22         | 128    | 9      | 14        | 121    | 76     | 22        | 88     | 15     |
| Total Analysis Volume [veh/h]           | 228        | 709    | 81     | 89         | 514    | 36     | 58        | 485    | 304    | 89        | 353    | 60     |
| 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            | Fixed time                   |
| Offset [s]                | 0.0                          |
| Offset Reference          | LeadGreen                    |
| Permissive Mode           | SingleBand                   |
| Lost time [s]             | 2.00                         |

**Phasing & Timing**

| Control Type                 | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss |
|------------------------------|----------|---------|---------|----------|---------|---------|----------|---------|---------|----------|---------|---------|
| Signal group                 | 5        | 2       | 0       | 1        | 6       | 0       | 3        | 8       | 0       | 7        | 4       | 0       |
| Auxiliary Signal Groups      |          |         |         |          |         |         |          |         |         |          |         |         |
| Lead / Lag                   | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       |
| Minimum Green [s]            | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       |
| Maximum Green [s]            | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       |
| Amber [s]                    | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| All red [s]                  | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     |
| Split [s]                    | 17       | 25      | 0       | 13       | 21      | 0       | 11       | 21      | 0       | 11       | 21      | 0       |
| Vehicle Extension [s]        | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| Walk [s]                     | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 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     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| I2, Clearance Lost Time [s]  | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| Minimum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Maximum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Pedestrian Recall            | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Detector Location [ft]       | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| Detector Length [ft]         | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| I, Upstream Filtering Factor | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    |

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

| Lane Group                              | L     | C     | R     | L     | C     | R     | L     | C     | R     | L     | C     | R     |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| C, Cycle Length [s]                     | 70    | 70    | 70    | 70    | 70    | 70    | 70    | 70    | 70    | 70    | 70    | 70    |
| L, Total Lost Time per Cycle [s]        | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  |
| l1_p, Permitted Start-Up Lost Time [s]  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| l2, Clearance Lost Time [s]             | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  |
| g_i, Effective Green Time [s]           | 13    | 21    | 21    | 9     | 17    | 17    | 7     | 17    | 17    | 7     | 17    | 17    |
| g / C, Green / Cycle                    | 0.19  | 0.30  | 0.30  | 0.13  | 0.24  | 0.24  | 0.10  | 0.24  | 0.24  | 0.10  | 0.24  | 0.24  |
| (v / s)_i Volume / Saturation Flow Rate | 0.13  | 0.21  | 0.05  | 0.05  | 0.15  | 0.02  | 0.03  | 0.14  | 0.20  | 0.03  | 0.10  | 0.04  |
| s, saturation flow rate [veh/h]         | 1714  | 3427  | 1530  | 1714  | 3427  | 1530  | 1714  | 3427  | 1530  | 3329  | 3427  | 1530  |
| c, Capacity [veh/h]                     | 318   | 1028  | 459   | 220   | 832   | 372   | 171   | 832   | 372   | 333   | 832   | 372   |
| d1, Uniform Delay [s]                   | 26.77 | 21.62 | 18.11 | 28.03 | 23.60 | 20.55 | 29.34 | 23.37 | 25.04 | 29.13 | 22.37 | 20.88 |
| k, delay calibration                    | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  |
| 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]               | 12.95 | 3.79  | 0.84  | 5.42  | 3.42  | 0.52  | 5.28  | 2.97  | 17.89 | 1.96  | 1.58  | 0.93  |
| d3, Initial Queue Delay [s]             | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 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**

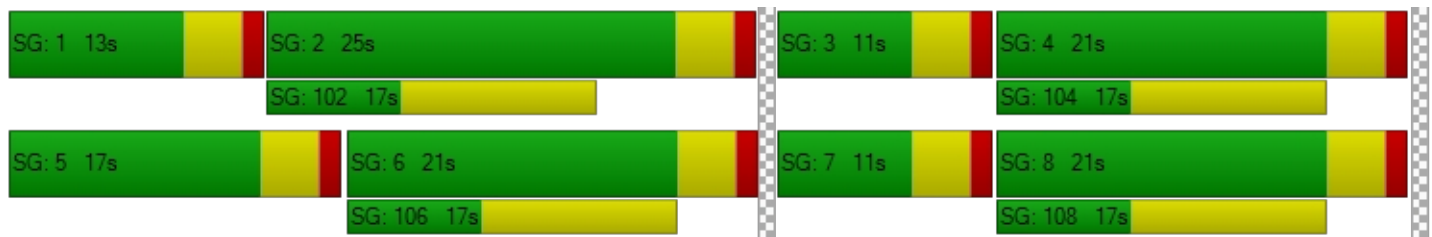
|                                       |        |        |       |       |        |       |       |        |        |       |        |       |
|---------------------------------------|--------|--------|-------|-------|--------|-------|-------|--------|--------|-------|--------|-------|
| X, volume / capacity                  | 0.72   | 0.69   | 0.18  | 0.40  | 0.62   | 0.10  | 0.34  | 0.58   | 0.82   | 0.27  | 0.42   | 0.16  |
| d, Delay for Lane Group [s/veh]       | 39.72  | 25.41  | 18.95 | 33.46 | 27.03  | 21.07 | 34.62 | 26.34  | 42.92  | 31.09 | 23.95  | 21.81 |
| Lane Group LOS                        | D      | C      | B     | C     | C      | C     | C     | C      | D      | C     | C      | C     |
| Critical Lane Group                   | Yes    | No     | No    | No    | Yes    | No    | No    | No     | Yes    | Yes   | No     | No    |
| 50th-Percentile Queue Length [veh/ln] | 4.55   | 5.34   | 1.02  | 1.65  | 3.97   | 0.49  | 1.13  | 3.69   | 6.34   | 0.76  | 2.51   | 0.84  |
| 50th-Percentile Queue Length [ft/ln]  | 113.77 | 133.38 | 25.61 | 41.30 | 99.37  | 12.25 | 28.22 | 92.19  | 158.43 | 18.97 | 62.81  | 20.88 |
| 95th-Percentile Queue Length [veh/ln] | 8.05   | 9.12   | 1.84  | 2.97  | 7.15   | 0.88  | 2.03  | 6.64   | 10.47  | 1.37  | 4.52   | 1.50  |
| 95th-Percentile Queue Length [ft/ln]  | 201.23 | 228.08 | 46.10 | 74.33 | 178.87 | 22.05 | 50.79 | 165.94 | 261.64 | 34.15 | 113.05 | 37.59 |

**Movement, Approach, & Intersection Results**

|                                 |       |       |       |       |       |       |       |       |       |       |       |       |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| d_M, Delay for Movement [s/veh] | 39.72 | 25.41 | 18.95 | 33.46 | 27.03 | 21.07 | 34.62 | 26.34 | 42.92 | 31.09 | 23.95 | 21.81 |
| Movement LOS                    | D     | C     | B     | C     | C     | C     | C     | C     | D     | C     | C     | C     |
| d_A, Approach Delay [s/veh]     | 28.10 |       |       | 27.59 |       |       | 32.86 |       |       | 24.96 |       |       |
| Approach LOS                    | C     |       |       | C     |       |       | C     |       |       | C     |       |       |
| d_I, Intersection Delay [s/veh] | 28.81 |       |       |       |       |       |       |       |       |       |       |       |
| Intersection LOS                | C     |       |       |       |       |       |       |       |       |       |       |       |
| Intersection V/C                | 0.523 |       |       |       |       |       |       |       |       |       |       |       |

**Sequence**

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









**Intersection Level Of Service Report**  
**Intersection 4: US-Route 395 (NS) at Dos Palmas Road (EW)**

|                  |            |                           |       |
|------------------|------------|---------------------------|-------|
| Control Type:    | Signalized | Delay (sec / veh):        | 14.0  |
| Analysis Method: | HCM 2010   | Level Of Service:         | B     |
| Analysis Period: | 15 minutes | Volume to Capacity (v/c): | 0.410 |

**Intersection Setup**

| Name                   | Northbound  |        |        | Southbound  |        |        | Eastbound   |        |        | Westbound   |        |        |
|------------------------|---|--------|--------|---|--------|--------|---|--------|--------|---|--------|--------|
| Approach               |   |        |        |   |        |        |   |        |        |   |        |        |
| 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      | 1      | 1   | 0      | 0      | 1   | 0      | 1      | 1   | 0      | 0      |
| Pocket Length [ft]     | 480.00  | 100.00 | 250.00 | 300.00  | 100.00 | 100.00 | 160.00  | 100.00 | 470.00 | 100.00  | 100.00 | 100.00 |
| Speed [mph]            | 30.00   |        |        | 30.00   |        |        | 30.00   |        |        | 30.00   |        |        |
| Grade [%]              | 0.00  |        |        | 0.00  |        |        | 0.00  |        |        | 0.00  |        |        |
| Crosswalk              | No  |        |        | Yes   |        |        | Yes   |        |        | Yes   |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 7          | 832    | 7      | 47         | 812    | 51     | 99        | 23     | 43     | 24        | 7      | 72     |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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]             | 7          | 832    | 7      | 47         | 812    | 51     | 99        | 23     | 43     | 24        | 7      | 72     |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| Other Adjustment Factor                 | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h]          | 2          | 219    | 2      | 12         | 214    | 13     | 26        | 6      | 11     | 6         | 2      | 19     |
| Total Analysis Volume [veh/h]           | 7          | 876    | 7      | 49         | 855    | 54     | 104       | 24     | 45     | 25        | 7      | 76     |
| 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]             | 2.00                         |

**Phasing & Timing**

| Control Type                 | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss |
|------------------------------|----------|---------|---------|----------|---------|---------|----------|---------|---------|----------|---------|---------|
| Signal group                 | 5        | 2       | 0       | 1        | 6       | 0       | 3        | 8       | 0       | 7        | 4       | 0       |
| Auxiliary Signal Groups      |          |         |         |          |         |         |          |         |         |          |         |         |
| Lead / Lag                   | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       |
| Minimum Green [s]            | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       |
| Maximum Green [s]            | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       |
| Amber [s]                    | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| All red [s]                  | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     |
| Split [s]                    | 12       | 27      | 0       | 11       | 26      | 0       | 11       | 20      | 0       | 12       | 21      | 0       |
| Vehicle Extension [s]        | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| Walk [s]                     | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 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     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| I2, Clearance Lost Time [s]  | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| Minimum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Maximum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Pedestrian Recall            | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Detector Location [ft]       | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| Detector Length [ft]         | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| I, Upstream Filtering Factor | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    |

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

| Lane Group                              | L     | C     | R    | L     | C    | C    | L     | C     | R     | L     | C     |
|---|-------|-------|------|-------|------|------|-------|-------|-------|-------|-------|
| C, Cycle Length [s]                     | 70    | 70    | 70   | 70    | 70   | 70   | 70    | 70    | 70    | 70    | 70    |
| L, Total Lost Time per Cycle [s]        | 4.00  | 4.00  | 4.00 | 4.00  | 4.00 | 4.00 | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  |
| l1_p, Permitted Start-Up Lost Time [s]  | 0.00  | 0.00  | 0.00 | 0.00  | 0.00 | 0.00 | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| l2, Clearance Lost Time [s]             | 2.00  | 2.00  | 2.00 | 2.00  | 2.00 | 2.00 | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  |
| g_i, Effective Green Time [s]           | 1     | 38    | 38   | 4     | 41   | 41   | 6     | 9     | 9     | 3     | 6     |
| g / C, Green / Cycle                    | 0.01  | 0.54  | 0.54 | 0.06  | 0.59 | 0.59 | 0.09  | 0.13  | 0.13  | 0.04  | 0.08  |
| (v / s)_i Volume / Saturation Flow Rate | 0.00  | 0.26  | 0.00 | 0.03  | 0.26 | 0.26 | 0.06  | 0.01  | 0.03  | 0.01  | 0.05  |
| s, saturation flow rate [veh/h]         | 1714  | 3427  | 1530 | 1714  | 1800 | 1763 | 1714  | 1800  | 1530  | 1714  | 1550  |
| c, Capacity [veh/h]                     | 25    | 1846  | 824  | 109   | 1058 | 1036 | 152   | 233   | 198   | 70    | 126   |
| d1, Uniform Delay [s]                   | 34.25 | 10.04 | 7.51 | 31.71 | 8.02 | 8.02 | 31.08 | 26.99 | 27.44 | 32.81 | 31.31 |
| 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  |
| 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  |
| d2, Incremental Delay [s]               | 5.93  | 0.88  | 0.02 | 2.89  | 1.30 | 1.33 | 5.40  | 0.19  | 0.58  | 3.10  | 5.68  |
| d3, Initial Queue Delay [s]             | 0.00  | 0.00  | 0.00 | 0.00  | 0.00 | 0.00 | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| Rp, platoon ratio                       | 1.00  | 1.00  | 1.00 | 1.00  | 1.00 | 1.00 | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| PF, progression factor                  | 1.00  | 1.00  | 1.00 | 1.00  | 1.00 | 1.00 | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |

**Lane Group Results**

|                                       |       |        |      |       |        |        |       |       |       |       |       |
|---------------------------------------|-------|--------|------|-------|--------|--------|-------|-------|-------|-------|-------|
| X, volume / capacity                  | 0.28  | 0.47   | 0.01 | 0.45  | 0.43   | 0.43   | 0.69  | 0.10  | 0.23  | 0.36  | 0.66  |
| d, Delay for Lane Group [s/veh]       | 40.18 | 10.92  | 7.53 | 34.60 | 9.32   | 9.34   | 36.48 | 27.18 | 28.01 | 35.91 | 36.99 |
| Lane Group LOS                        | D     | B      | A    | C     | A      | A      | D     | C     | C     | D     | D     |
| Critical Lane Group                   | No    | Yes    | No   | Yes   | No     | No     | Yes   | No    | No    | No    | Yes   |
| 50th-Percentile Queue Length [veh/ln] | 0.16  | 3.79   | 0.05 | 0.86  | 3.53   | 3.47   | 1.88  | 0.36  | 0.68  | 0.46  | 1.52  |
| 50th-Percentile Queue Length [ft/ln]  | 3.90  | 94.79  | 1.17 | 21.58 | 88.31  | 86.67  | 46.90 | 8.88  | 17.12 | 11.53 | 37.92 |
| 95th-Percentile Queue Length [veh/ln] | 0.28  | 6.82   | 0.08 | 1.55  | 6.36   | 6.24   | 3.38  | 0.64  | 1.23  | 0.83  | 2.73  |
| 95th-Percentile Queue Length [ft/ln]  | 7.02  | 170.62 | 2.11 | 38.84 | 158.95 | 156.01 | 84.41 | 15.98 | 30.81 | 20.76 | 68.25 |

**Movement, Approach, & Intersection Results**

|                                 |       |       |      |       |      |      |       |       |       |       |       |       |
|---------------------------------|-------|-------|------|-------|------|------|-------|-------|-------|-------|-------|-------|
| d_M, Delay for Movement [s/veh] | 40.18 | 10.92 | 7.53 | 34.60 | 9.33 | 9.34 | 36.48 | 27.18 | 28.01 | 35.91 | 36.99 | 36.99 |
| Movement LOS                    | D     | B     | A    | C     | A    | A    | D     | C     | C     | D     | D     | D     |
| d_A, Approach Delay [s/veh]     | 11.12 |       |      | 10.62 |      |      | 32.99 |       |       | 36.74 |       |       |
| Approach LOS                    | B     |       |      | B     |      |      | C     |       |       | D     |       |       |
| d_I, Intersection Delay [s/veh] | 13.97 |       |      |       |      |      |       |       |       |       |       |       |
| Intersection LOS                | B     |       |      |       |      |      |       |       |       |       |       |       |
| Intersection V/C                | 0.410 |       |      |       |      |      |       |       |       |       |       |       |

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 5: US-Route 395 (NS) at Luna Road (EW)**

|                  |            |                           |       |
|------------------|------------|---------------------------|-------|
| Control Type:    | Signalized | Delay (sec / veh):        | 31.3  |
| Analysis Method: | HCM 2010   | Level Of Service:         | C     |
| Analysis Period: | 15 minutes | Volume to Capacity (v/c): | 0.403 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Approach               | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
| Lane Configuration     | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| 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      | 1      | 1          | 0      | 1      | 1         | 0      | 0      | 1         | 0      | 0      |
| Pocket Length [ft]     | 360.00     | 100.00 | 450.00 | 400.00     | 100.00 | 400.00 | 125.00    | 100.00 | 100.00 | 425.00    | 100.00 | 100.00 |
| Speed [mph]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | No         |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 22         | 651    | 36     | 120        | 710    | 16     | 44        | 52     | 45     | 50        | 30     | 146    |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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]             | 22         | 651    | 36     | 120        | 710    | 16     | 44        | 52     | 45     | 50        | 30     | 146    |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| 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          | 171    | 9      | 32         | 187    | 4      | 12        | 14     | 12     | 13        | 8      | 38     |
| Total Analysis Volume [veh/h]           | 23         | 685    | 38     | 126        | 747    | 17     | 46        | 55     | 47     | 53        | 32     | 154    |
| 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            | Fixed time                   |
| Offset [s]                | 0.0                          |
| Offset Reference          | LeadGreen                    |
| Permissive Mode           | SingleBand                   |
| Lost time [s]             | 2.00                         |

**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]            | 7        | 7       | 0       | 7        | 7       | 0       | 0       | 7       | 0       | 0       | 7       | 0       |
| Maximum Green [s]            | 30       | 30      | 0       | 30       | 30      | 0       | 0       | 30      | 0       | 0       | 30      | 0       |
| Amber [s]                    | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 0.0     | 3.0     | 0.0     | 0.0     | 3.0     | 0.0     |
| All red [s]                  | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 0.0     | 1.0     | 0.0     | 0.0     | 1.0     | 0.0     |
| Split [s]                    | 17       | 25      | 0       | 13       | 21      | 0       | 0       | 21      | 0       | 0       | 21      | 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        | 7       | 0       | 0        | 7       | 0       | 0       | 7       | 0       | 0       | 7       | 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]  | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 0.0     | 2.0     | 0.0     | 0.0     | 2.0     | 0.0     |
| Minimum Recall               | No       | No      |         | No       | No      |         |         | No      |         |         | No      |         |
| Maximum Recall               | No       | No      |         | No       | No      |         |         | No      |         |         | No      |         |
| Pedestrian Recall            | No       | No      |         | No       | No      |         |         | No      |         |         | No      |         |
| Detector Location [ft]       | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| Detector Length [ft]         | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| I, Upstream Filtering Factor | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    |

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

| Lane Group                              | L     | C     | R     | L     | C     | R     | L     | C     | R     | L     | C     |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| C, Cycle Length [s]                     | 70    | 70    | 70    | 70    | 70    | 70    | 70    | 70    | 70    | 70    | 70    |
| L, Total Lost Time per Cycle [s]        | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  |
| l1_p, Permitted Start-Up Lost Time [s]  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 2.00  | 0.00  | 0.00  | 2.00  | 0.00  |
| l2, Clearance Lost Time [s]             | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  |
| g_i, Effective Green Time [s]           | 13    | 21    | 21    | 9     | 17    | 17    | 17    | 17    | 17    | 17    | 17    |
| g / C, Green / Cycle                    | 0.19  | 0.30  | 0.30  | 0.13  | 0.24  | 0.24  | 0.24  | 0.24  | 0.24  | 0.24  | 0.24  |
| (v / s)_i Volume / Saturation Flow Rate | 0.01  | 0.20  | 0.02  | 0.07  | 0.22  | 0.01  | 0.04  | 0.03  | 0.03  | 0.04  | 0.12  |
| s, saturation flow rate [veh/h]         | 1714  | 3427  | 1530  | 1714  | 3427  | 1530  | 1217  | 1800  | 1530  | 1370  | 1571  |
| c, Capacity [veh/h]                     | 318   | 1028  | 459   | 220   | 832   | 372   | 240   | 437   | 372   | 364   | 381   |
| d1, Uniform Delay [s]                   | 23.52 | 21.43 | 17.59 | 28.69 | 25.66 | 20.29 | 28.65 | 20.70 | 20.70 | 23.86 | 22.76 |
| k, delay calibration                    | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  |
| 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  |
| d2, Incremental Delay [s]               | 0.44  | 3.42  | 0.35  | 10.34 | 14.42 | 0.23  | 1.77  | 0.59  | 0.70  | 0.84  | 4.41  |
| d3, Initial Queue Delay [s]             | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| Rp, platoon ratio                       | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| PF, progression factor                  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |

**Lane Group Results**

|                                       |       |        |       |        |        |       |       |       |       |       |        |
|---------------------------------------|-------|--------|-------|--------|--------|-------|-------|-------|-------|-------|--------|
| X, volume / capacity                  | 0.07  | 0.67   | 0.08  | 0.57   | 0.90   | 0.05  | 0.19  | 0.13  | 0.13  | 0.15  | 0.49   |
| d, Delay for Lane Group [s/veh]       | 23.96 | 24.85  | 17.94 | 39.03  | 40.08  | 20.52 | 30.42 | 21.29 | 21.40 | 24.70 | 27.17  |
| Lane Group LOS                        | C     | C      | B     | D      | D      | C     | C     | C     | C     | C     | C      |
| Critical Lane Group                   | No    | Yes    | No    | Yes    | No     | No    | No    | No    | No    | No    | Yes    |
| 50th-Percentile Queue Length [veh/ln] | 0.34  | 5.08   | 0.46  | 2.55   | 7.32   | 0.23  | 0.81  | 0.74  | 0.65  | 0.79  | 2.96   |
| 50th-Percentile Queue Length [ft/ln]  | 8.52  | 126.99 | 11.58 | 63.64  | 183.03 | 5.69  | 20.13 | 18.59 | 16.16 | 19.85 | 74.12  |
| 95th-Percentile Queue Length [veh/ln] | 0.61  | 8.78   | 0.83  | 4.58   | 11.76  | 0.41  | 1.45  | 1.34  | 1.16  | 1.43  | 5.34   |
| 95th-Percentile Queue Length [ft/ln]  | 15.33 | 219.40 | 20.84 | 114.55 | 293.97 | 10.24 | 36.23 | 33.46 | 29.08 | 35.73 | 133.41 |

**Movement, Approach, & Intersection Results**

|                                 |       |       |       |       |       |       |       |       |       |       |       |       |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| d_M, Delay for Movement [s/veh] | 23.96 | 24.85 | 17.94 | 39.03 | 40.08 | 20.52 | 30.42 | 21.29 | 21.40 | 24.70 | 27.17 | 27.17 |
| Movement LOS                    | C     | C     | B     | D     | D     | C     | C     | C     | C     | C     | C     | C     |
| d_A, Approach Delay [s/veh]     | 24.47 |       |       | 39.56 |       |       | 24.16 |       |       | 26.62 |       |       |
| Approach LOS                    | C     |       |       | D     |       |       | C     |       |       | C     |       |       |
| d_I, Intersection Delay [s/veh] | 31.34 |       |       |       |       |       |       |       |       |       |       |       |
| Intersection LOS                | C     |       |       |       |       |       |       |       |       |       |       |       |
| Intersection V/C                | 0.403 |       |       |       |       |       |       |       |       |       |       |       |

**Sequence**

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





## TTM 16397

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Scenario 1 Existing

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11/1/2019

**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  | Mesa View Drive (NS) at Dos Palmas Road (EW) | Final Base          | 0          | 3        | 34        | 9          | 8        | 0        | 0         | 5        | 2        | 9         | 3        | 2        | 75           |
|    |  | Growth Rate         | 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>3</b> | <b>34</b> | <b>9</b>   | <b>8</b> | <b>0</b> | <b>0</b>  | <b>5</b> | <b>2</b> | <b>9</b>  | <b>3</b> | <b>2</b> | <b>75</b>    |

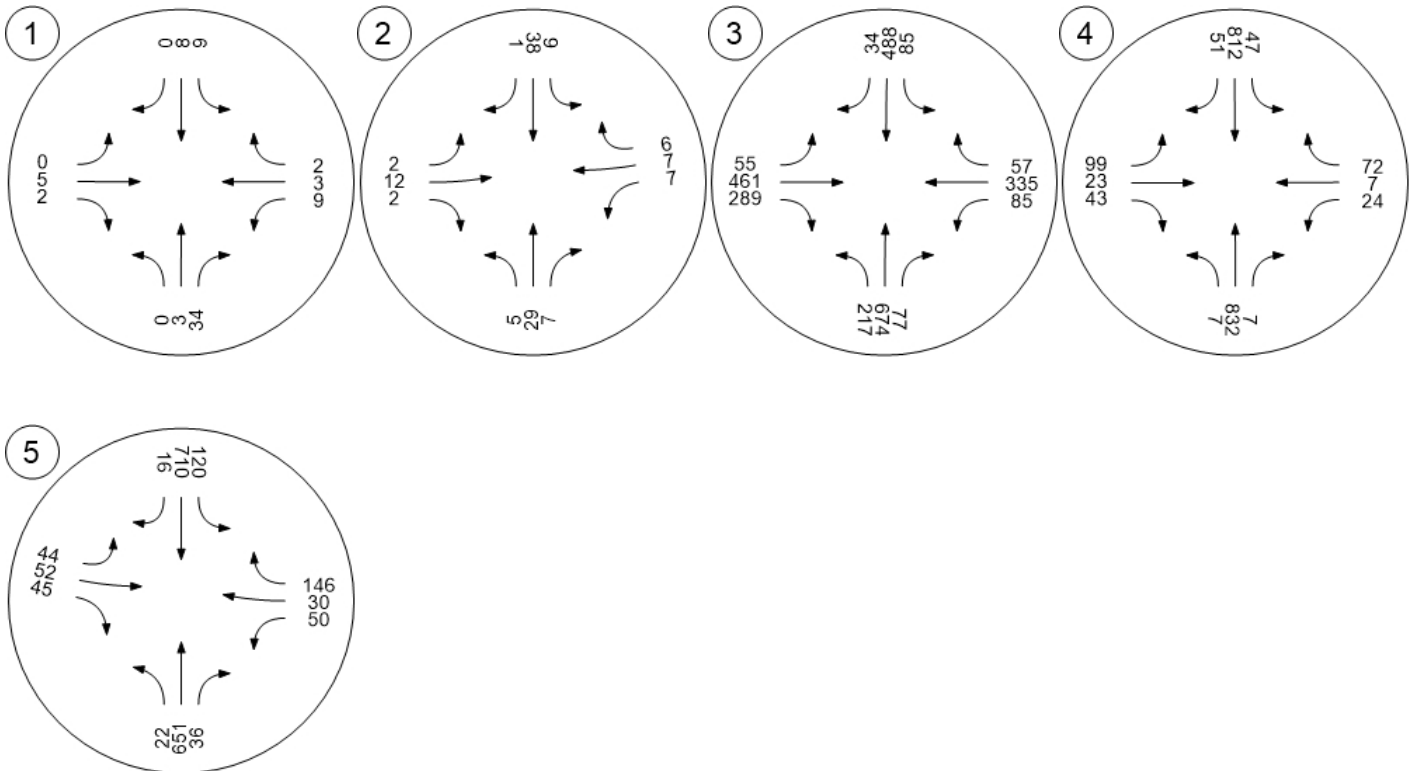
| ID | Intersection Name                      | Volume Type         | Northbound |           |          | Southbound |           |          | Eastbound |           |          | Westbound |          |          | Total Volume |
|----|--|---------------------|------------|-----------|----------|------------|-----------|----------|-----------|-----------|----------|-----------|----------|----------|--------------|
|    |  |                     | Left       | Thru      | Right    | Left       | Thru      | Right    | Left      | Thru      | Right    | Left      | Thru     | Right    |              |
| 2  | Mesa View Drive (NS) at Luna Road (EW) | Final Base          | 5          | 29        | 7        | 9          | 38        | 1        | 2         | 12        | 2        | 7         | 7        | 6        | 125          |
|    |  | Growth Rate         | 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>5</b>   | <b>29</b> | <b>7</b> | <b>9</b>   | <b>38</b> | <b>1</b> | <b>2</b>  | <b>12</b> | <b>2</b> | <b>7</b>  | <b>7</b> | <b>6</b> | <b>125</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  | US-Route 395 (NS) at Palmdale Road (EW) | Final Base          | 217        | 674        | 77        | 85         | 488        | 34        | 55        | 461        | 289        | 85        | 335        | 57        | 2857         |
|    |   | Growth Rate         | 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>217</b> | <b>674</b> | <b>77</b> | <b>85</b>  | <b>488</b> | <b>34</b> | <b>55</b> | <b>461</b> | <b>289</b> | <b>85</b> | <b>335</b> | <b>57</b> | <b>2857</b>  |

| ID | Intersection Name                         | Volume Type         | Northbound |            |          | Southbound |            |           | Eastbound |           |           | Westbound |          |           | Total Volume |
|----|---|---------------------|------------|------------|----------|------------|------------|-----------|-----------|-----------|-----------|-----------|----------|-----------|--------------|
|    |   |                     | Left       | Thru       | Right    | Left       | Thru       | Right     | Left      | Thru      | Right     | Left      | Thru     | Right     |              |
| 4  | US-Route 395 (NS) at Dos Palmas Road (EW) | Final Base          | 7          | 832        | 7        | 47         | 812        | 51        | 99        | 23        | 43        | 24        | 7        | 72        | 2024         |
|    |   | Growth Rate         | 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>7</b>   | <b>832</b> | <b>7</b> | <b>47</b>  | <b>812</b> | <b>51</b> | <b>99</b> | <b>23</b> | <b>43</b> | <b>24</b> | <b>7</b> | <b>72</b> | <b>2024</b>  |

| ID | Intersection Name                   | Volume Type         | Northbound |            |           | Southbound |            |           | Eastbound |           |           | Westbound |           |            | Total Volume |   |
|----|-------------------------------------|---------------------|------------|------------|-----------|------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|------------|--------------|---|
|    |                                     |                     | Left       | Thru       | Right     | Left       | Thru       | Right     | Left      | Thru      | Right     | Left      | Thru      | Right      |              |   |
| 5  | US-Route 395 (NS) at Luna Road (EW) | Final Base          | 22         | 651        | 36        | 120        | 710        | 16        | 44        | 52        | 45        | 50        | 30        | 146        | 1922         |   |
|    |                                     | Growth Rate         | 1.00       | 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            | 0 |
|    |                                     | Net New Trips       | 0          | 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            | 0 |
|    |                                     | <b>Future Total</b> | <b>22</b>  | <b>651</b> | <b>36</b> | <b>120</b> | <b>710</b> | <b>16</b> | <b>44</b> | <b>52</b> | <b>45</b> | <b>50</b> | <b>30</b> | <b>146</b> | <b>1922</b>  |   |

Traffic Volume - Future Total Volume



## TTM 16397

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Scenario 1 Existing

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11/1/2019

**Intersection Analysis Summary**

| ID | Intersection Name                            | Control Type | Method   | Worst Mvmt | V/C        | Delay (s/veh) | LOS |
|----|--|--------------|----------|------------|------------|---------------|-----|
| 1  | Mesa View Drive (NS) at Dos Palmas Road (EW) | Two-way stop | HCM 2010 | NB Thru    | 0.025      | 10.0          | B   |
| 2  | Mesa View Drive (NS) at Luna Road (EW)       | Two-way stop | HCM 2010 | WB Thru    | 0.026      | 10.2          | B   |
| 3  | US-Route 395 (NS) at Palmdale Road (EW)      | Signalized   | HCM 2010 | EB Left    | 0.697      | 40.2          | D   |
| 4  | US-Route 395 (NS) at Dos Palmas Road (EW)    | Signalized   | HCM 2010 | WB Right   | 0.532      | 18.0          | B   |
| 5  | US-Route 395 (NS) at Luna Road (EW)          | Signalized   | HCM 2010 | SB Left    | 10,256.796 | 37.7          | D   |

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: Mesa View Drive (NS) at Dos Palmas Road (EW)**

|                  |              |                           |       |
|------------------|--------------|---------------------------|-------|
| Control Type:    | Two-way stop | Delay (sec / veh):        | 10.0  |
| Analysis Method: | HCM 2010     | Level Of Service:         | B     |
| Analysis Period: | 15 minutes   | Volume to Capacity (v/c): | 0.025 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| 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      | 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]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | Yes        |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 5          | 18     | 45     | 12         | 16     | 0      | 0         | 8      | 0      | 35        | 6      | 24     |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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]             | 5          | 18     | 45     | 12         | 16     | 0      | 0         | 8      | 0      | 35        | 6      | 24     |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| Other Adjustment Factor                 | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h]          | 1          | 5      | 12     | 3          | 4      | 0      | 0         | 2      | 0      | 9         | 2      | 6      |
| Total Analysis Volume [veh/h]           | 5          | 19     | 47     | 13         | 17     | 0      | 0         | 8      | 0      | 37        | 6      | 25     |
| Pedestrian Volume [ped/h]               | 0          |        |        | 0          |        |        | 0         |        |        | 0         |        |        |

**Intersection Settings**

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

**Movement, Approach, & Intersection Results**

|                                       |      |       |      |      |      |      |      |      |      |      |      |      |
|---------------------------------------|------|-------|------|------|------|------|------|------|------|------|------|------|
| V/C, Movement V/C Ratio               | 0.01 | 0.02  | 0.04 | 0.02 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 |
| d_M, Delay for Movement [s/veh]       | 9.57 | 10.02 | 8.64 | 9.82 | 9.83 | 8.56 | 7.26 | 0.00 | 0.00 | 7.27 | 0.00 | 0.00 |
| Movement LOS                          | A    | B     | A    | A    | A    | A    | A    | A    | A    | A    | A    | A    |
| 95th-Percentile Queue Length [veh/ln] | 0.24 | 0.24  | 0.24 | 0.12 | 0.12 | 0.12 | 0.00 | 0.00 | 0.00 | 0.07 | 0.07 | 0.07 |
| 95th-Percentile Queue Length [ft/ln]  | 6.01 | 6.01  | 6.01 | 3.01 | 3.01 | 3.01 | 0.00 | 0.00 | 0.00 | 1.65 | 1.65 | 1.65 |
| d_A, Approach Delay [s/veh]           | 9.07 |       |      | 9.83 |      |      | 0.00 |      |      | 3.95 |      |      |
| Approach LOS                          | A    |       |      | A    |      |      | A    |      |      | A    |      |      |
| d_I, Intersection Delay [s/veh]       | 6.82 |       |      |      |      |      |      |      |      |      |      |      |
| Intersection LOS                      | B    |       |      |      |      |      |      |      |      |      |      |      |

**Intersection Level Of Service Report**  
**Intersection 2: Mesa View Drive (NS) at Luna Road (EW)**

|                  |              |                           |       |
|------------------|--------------|---------------------------|-------|
| Control Type:    | Two-way stop | Delay (sec / veh):        | 10.2  |
| Analysis Method: | HCM 2010     | Level Of Service:         | B     |
| Analysis Period: | 15 minutes   | Volume to Capacity (v/c): | 0.026 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| 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      | 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]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | Yes        |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 8          | 65     | 13     | 13         | 34     | 5      | 6         | 10     | 6      | 6         | 18     | 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 [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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]             | 8          | 65     | 13     | 13         | 34     | 5      | 6         | 10     | 6      | 6         | 18     | 22     |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| Other Adjustment Factor                 | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h]          | 2          | 17     | 3      | 3          | 9      | 1      | 2         | 3      | 2      | 2         | 5      | 6      |
| Total Analysis Volume [veh/h]           | 8          | 68     | 14     | 14         | 36     | 5      | 6         | 11     | 6      | 6         | 19     | 23     |
| Pedestrian Volume [ped/h]               | 0          |        |        | 0          |        |        | 0         |        |        | 0         |        |        |

**Intersection Settings**

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

**Movement, Approach, & Intersection Results**

|                                       |      |      |      |      |      |      |      |       |      |      |       |      |
|---------------------------------------|------|------|------|------|------|------|------|-------|------|------|-------|------|
| V/C, Movement V/C Ratio               | 0.01 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 0.02  | 0.01 | 0.01 | 0.03  | 0.02 |
| d_M, Delay for Movement [s/veh]       | 7.29 | 0.00 | 0.00 | 7.38 | 0.00 | 0.00 | 9.96 | 10.13 | 8.60 | 9.87 | 10.22 | 8.89 |
| Movement LOS                          | A    | A    | A    | A    | A    | A    | A    | B     | A    | A    | B     | A    |
| 95th-Percentile Queue Length [veh/ln] | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | 0.09 | 0.09  | 0.09 | 0.18 | 0.18  | 0.18 |
| 95th-Percentile Queue Length [ft/ln]  | 0.38 | 0.38 | 0.38 | 0.64 | 0.64 | 0.64 | 2.24 | 2.24  | 2.24 | 4.53 | 4.53  | 4.53 |
| d_A, Approach Delay [s/veh]           | 0.65 |      |      | 1.88 |      |      | 9.69 |       |      | 9.54 |       |      |
| Approach LOS                          | A    |      |      | A    |      |      | A    |       |      | A    |       |      |
| d_I, Intersection Delay [s/veh]       | 3.90 |      |      |      |      |      |      |       |      |      |       |      |
| Intersection LOS                      | B    |      |      |      |      |      |      |       |      |      |       |      |



**Intersection Level Of Service Report**  
**Intersection 3: US-Route 395 (NS) at Palmdale Road (EW)**

|                  |            |                           |       |
|------------------|------------|---------------------------|-------|
| Control Type:    | Signalized | Delay (sec / veh):        | 40.2  |
| Analysis Method: | HCM 2010   | Level Of Service:         | D     |
| Analysis Period: | 15 minutes | Volume to Capacity (v/c): | 0.697 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Approach               | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
| Lane Configuration     | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| 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      | 1      | 1         | 0      | 0      | 1         | 0      | 2      |
| Pocket Length [ft]     | 120.00     | 100.00 | 100.00 | 350.00     | 100.00 | 370.00 | 140.00    | 100.00 | 100.00 | 250.00    | 100.00 | 450.00 |
| Speed [mph]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | Yes        |        |        | No         |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 300        | 795    | 89     | 136        | 690    | 42     | 92        | 573    | 273    | 229       | 740    | 124    |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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]             | 300        | 795    | 89     | 136        | 690    | 42     | 92        | 573    | 273    | 229       | 740    | 124    |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| 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]          | 79         | 209    | 23     | 36         | 182    | 11     | 24        | 151    | 72     | 60        | 195    | 33     |
| Total Analysis Volume [veh/h]           | 316        | 837    | 94     | 143        | 726    | 44     | 97        | 603    | 287    | 241       | 779    | 131    |
| 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            | Fixed time                   |
| Offset [s]                | 0.0                          |
| Offset Reference          | LeadGreen                    |
| Permissive Mode           | SingleBand                   |
| Lost time [s]             | 2.00                         |

**Phasing & Timing**

| Control Type                 | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss |
|------------------------------|----------|---------|---------|----------|---------|---------|----------|---------|---------|----------|---------|---------|
| Signal group                 | 5        | 2       | 0       | 1        | 6       | 0       | 3        | 8       | 0       | 7        | 4       | 0       |
| Auxiliary Signal Groups      |          |         |         |          |         |         |          |         |         |          |         |         |
| Lead / Lag                   | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       |
| Minimum Green [s]            | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       |
| Maximum Green [s]            | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       |
| Amber [s]                    | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| All red [s]                  | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     |
| Split [s]                    | 21       | 31      | 0       | 15       | 25      | 0       | 11       | 22      | 0       | 12       | 23      | 0       |
| Vehicle Extension [s]        | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| Walk [s]                     | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 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     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| I2, Clearance Lost Time [s]  | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| Minimum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Maximum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Pedestrian Recall            | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Detector Location [ft]       | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| Detector Length [ft]         | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| I, Upstream Filtering Factor | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    |

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

| Lane Group                              | L     | C     | R     | L     | C     | R     | L     | C     | R     | L     | C     | R     |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| C, Cycle Length [s]                     | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    |
| L, Total Lost Time per Cycle [s]        | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  |
| l1_p, Permitted Start-Up Lost Time [s]  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| l2, Clearance Lost Time [s]             | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  |
| g_i, Effective Green Time [s]           | 17    | 27    | 27    | 11    | 21    | 21    | 7     | 18    | 18    | 8     | 19    | 19    |
| g / C, Green / Cycle                    | 0.21  | 0.34  | 0.34  | 0.14  | 0.26  | 0.26  | 0.09  | 0.23  | 0.23  | 0.10  | 0.24  | 0.24  |
| (v / s)_i Volume / Saturation Flow Rate | 0.18  | 0.24  | 0.06  | 0.08  | 0.21  | 0.03  | 0.06  | 0.18  | 0.19  | 0.07  | 0.23  | 0.09  |
| s, saturation flow rate [veh/h]         | 1714  | 3427  | 1530  | 1714  | 3427  | 1530  | 1714  | 3427  | 1530  | 3329  | 3427  | 1530  |
| c, Capacity [veh/h]                     | 364   | 1157  | 516   | 236   | 900   | 402   | 150   | 771   | 344   | 333   | 814   | 363   |
| d1, Uniform Delay [s]                   | 30.41 | 23.23 | 18.71 | 32.46 | 27.60 | 22.40 | 35.30 | 29.15 | 29.57 | 34.93 | 30.10 | 25.43 |
| k, delay calibration                    | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  |
| 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]               | 23.26 | 3.95  | 0.77  | 11.08 | 7.69  | 0.55  | 19.56 | 7.76  | 20.56 | 12.85 | 22.67 | 2.77  |
| 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                  | 0.87   | 0.72   | 0.18  | 0.61   | 0.81   | 0.11  | 0.65   | 0.78   | 0.83   | 0.72   | 0.96   | 0.36   |
| d, Delay for Lane Group [s/veh]       | 53.68  | 27.18  | 19.48 | 43.55  | 35.29  | 22.95 | 54.86  | 36.91  | 50.13  | 47.78  | 52.77  | 28.20  |
| Lane Group LOS                        | D      | C      | B     | D      | D      | C     | D      | D      | D      | D      | D      | C      |
| Critical Lane Group                   | Yes    | No     | No    | No     | Yes    | No    | Yes    | No     | No     | No     | Yes    | No     |
| 50th-Percentile Queue Length [veh/ln] | 8.02   | 7.19   | 1.30  | 3.27   | 7.18   | 0.67  | 2.60   | 6.08   | 7.03   | 2.82   | 9.65   | 2.29   |
| 50th-Percentile Queue Length [ft/ln]  | 200.41 | 179.74 | 32.42 | 81.65  | 179.50 | 16.83 | 65.08  | 151.92 | 175.79 | 70.44  | 241.27 | 57.34  |
| 95th-Percentile Queue Length [veh/ln] | 12.66  | 11.59  | 2.33  | 5.88   | 11.57  | 1.21  | 4.69   | 10.12  | 11.38  | 5.07   | 14.75  | 4.13   |
| 95th-Percentile Queue Length [ft/ln]  | 316.49 | 289.67 | 58.35 | 146.97 | 289.36 | 30.30 | 117.15 | 252.99 | 284.50 | 126.79 | 368.64 | 103.21 |

**Movement, Approach, & Intersection Results**

|                                 |       |       |       |       |       |       |       |       |       |       |       |       |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| d_M, Delay for Movement [s/veh] | 53.68 | 27.18 | 19.48 | 43.55 | 35.29 | 22.95 | 54.86 | 36.91 | 50.13 | 47.78 | 52.77 | 28.20 |
| Movement LOS                    | D     | C     | B     | D     | D     | C     | D     | D     | D     | D     | D     | C     |
| d_A, Approach Delay [s/veh]     | 33.31 |       |       | 35.99 |       |       | 42.52 |       |       | 48.93 |       |       |
| Approach LOS                    | C     |       |       | D     |       |       | D     |       |       | D     |       |       |
| d_I, Intersection Delay [s/veh] | 40.18 |       |       |       |       |       |       |       |       |       |       |       |
| Intersection LOS                | D     |       |       |       |       |       |       |       |       |       |       |       |
| Intersection V/C                | 0.697 |       |       |       |       |       |       |       |       |       |       |       |

**Sequence**


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



**Intersection Level Of Service Report**  
**Intersection 4: US-Route 395 (NS) at Dos Palmas Road (EW)**

|                  |            |                           |       |
|------------------|------------|---------------------------|-------|
| Control Type:    | Signalized | Delay (sec / veh):        | 18.0  |
| Analysis Method: | HCM 2010   | Level Of Service:         | B     |
| Analysis Period: | 15 minutes | Volume to Capacity (v/c): | 0.532 |

**Intersection Setup**

| Name                   | Northbound  |        |        | Southbound  |        |        | Eastbound   |        |        | Westbound   |        |        |
|------------------------|---|--------|--------|---|--------|--------|---|--------|--------|---|--------|--------|
| 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      | 1      | 1   | 0      | 0      | 1   | 0      | 1      | 1   | 0      | 0      |
| Pocket Length [ft]     | 480.00  | 100.00 | 250.00 | 300.00  | 100.00 | 100.00 | 160.00  | 100.00 | 470.00 | 100.00  | 100.00 | 100.00 |
| Speed [mph]            | 30.00   |        |        | 30.00   |        |        | 30.00   |        |        | 30.00   |        |        |
| Grade [%]              | 0.00  |        |        | 0.00  |        |        | 0.00  |        |        | 0.00  |        |        |
| Crosswalk              | No  |        |        | Yes   |        |        | Yes   |        |        | Yes   |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 37         | 1014   | 19     | 77         | 1025   | 164    | 120       | 32     | 34     | 13        | 24     | 75     |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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]             | 37         | 1014   | 19     | 77         | 1025   | 164    | 120       | 32     | 34     | 13        | 24     | 75     |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| 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]          | 10         | 267    | 5      | 20         | 270    | 43     | 32        | 8      | 9      | 3         | 6      | 20     |
| Total Analysis Volume [veh/h]           | 39         | 1067   | 20     | 81         | 1079   | 173    | 126       | 34     | 36     | 14        | 25     | 79     |
| 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]             | 2.00                         |

**Phasing & Timing**

| Control Type                 | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss |
|------------------------------|----------|---------|---------|----------|---------|---------|----------|---------|---------|----------|---------|---------|
| Signal group                 | 5        | 2       | 0       | 1        | 6       | 0       | 3        | 8       | 0       | 7        | 4       | 0       |
| Auxiliary Signal Groups      |          |         |         |          |         |         |          |         |         |          |         |         |
| Lead / Lag                   | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       |
| Minimum Green [s]            | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       |
| Maximum Green [s]            | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       |
| Amber [s]                    | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| All red [s]                  | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     |
| Split [s]                    | 11       | 21      | 0       | 11       | 21      | 0       | 12       | 34      | 0       | 14       | 36      | 0       |
| Vehicle Extension [s]        | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| Walk [s]                     | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 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     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| I2, Clearance Lost Time [s]  | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| Minimum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Maximum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Pedestrian Recall            | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Detector Location [ft]       | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| Detector Length [ft]         | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| I, Upstream Filtering Factor | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    |

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

| Lane Group                              | L     | C     | R    | L     | C     | C     | L     | C     | R     | L     | C     |
|---|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|
| C, Cycle Length [s]                     | 80    | 80    | 80   | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    |
| L, Total Lost Time per Cycle [s]        | 4.00  | 4.00  | 4.00 | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  |
| l1_p, Permitted Start-Up Lost Time [s]  | 0.00  | 0.00  | 0.00 | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| l2, Clearance Lost Time [s]             | 2.00  | 2.00  | 2.00 | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  |
| g_i, Effective Green Time [s]           | 4     | 44    | 44   | 6     | 46    | 46    | 7     | 12    | 12    | 2     | 7     |
| g / C, Green / Cycle                    | 0.05  | 0.55  | 0.55 | 0.07  | 0.57  | 0.57  | 0.09  | 0.15  | 0.15  | 0.02  | 0.08  |
| (v / s)_i Volume / Saturation Flow Rate | 0.02  | 0.31  | 0.01 | 0.05  | 0.36  | 0.36  | 0.07  | 0.02  | 0.02  | 0.01  | 0.07  |
| s, saturation flow rate [veh/h]         | 1714  | 3427  | 1530 | 1714  | 1800  | 1715  | 1714  | 1800  | 1530  | 1714  | 1587  |
| c, Capacity [veh/h]                     | 88    | 1886  | 842  | 126   | 1031  | 982   | 158   | 273   | 232   | 42    | 133   |
| d1, Uniform Delay [s]                   | 36.86 | 11.76 | 8.20 | 36.07 | 11.35 | 11.39 | 35.63 | 29.37 | 29.51 | 38.45 | 35.97 |
| 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  |
| 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  |
| d2, Incremental Delay [s]               | 3.42  | 1.23  | 0.05 | 5.30  | 2.81  | 2.99  | 8.84  | 0.20  | 0.31  | 4.67  | 9.50  |
| d3, Initial Queue Delay [s]             | 0.00  | 0.00  | 0.00 | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| Rp, platoon ratio                       | 1.00  | 1.00  | 1.00 | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| PF, progression factor                  | 1.00  | 1.00  | 1.00 | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |

**Lane Group Results**

|                                       |       |        |      |       |        |        |        |       |       |       |        |
|---------------------------------------|-------|--------|------|-------|--------|--------|--------|-------|-------|-------|--------|
| X, volume / capacity                  | 0.44  | 0.57   | 0.02 | 0.64  | 0.62   | 0.62   | 0.80   | 0.12  | 0.16  | 0.34  | 0.78   |
| d, Delay for Lane Group [s/veh]       | 40.28 | 12.99  | 8.25 | 41.37 | 14.15  | 14.38  | 44.47  | 29.57 | 29.82 | 43.12 | 45.47  |
| Lane Group LOS                        | D     | B      | A    | D     | B      | B      | D      | C     | C     | D     | D      |
| Critical Lane Group                   | Yes   | No     | No   | No    | No     | Yes    | Yes    | No    | No    | No    | Yes    |
| 50th-Percentile Queue Length [veh/ln] | 0.81  | 5.82   | 0.16 | 1.69  | 7.34   | 7.10   | 2.74   | 0.57  | 0.61  | 0.32  | 2.30   |
| 50th-Percentile Queue Length [ft/ln]  | 20.27 | 145.38 | 3.90 | 42.32 | 183.47 | 177.62 | 68.57  | 14.23 | 15.23 | 7.99  | 57.47  |
| 95th-Percentile Queue Length [veh/ln] | 1.46  | 9.77   | 0.28 | 3.05  | 11.78  | 11.48  | 4.94   | 1.02  | 1.10  | 0.58  | 4.14   |
| 95th-Percentile Queue Length [ft/ln]  | 36.49 | 244.24 | 7.01 | 76.17 | 294.54 | 286.91 | 123.42 | 25.62 | 27.42 | 14.38 | 103.44 |

**Movement, Approach, & Intersection Results**

|                                 |       |       |      |       |       |       |       |       |       |       |       |       |
|---------------------------------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| d_M, Delay for Movement [s/veh] | 40.28 | 12.99 | 8.25 | 41.37 | 14.24 | 14.38 | 44.47 | 29.57 | 29.82 | 43.12 | 45.47 | 45.47 |
| Movement LOS                    | D     | B     | A    | D     | B     | B     | D     | C     | C     | D     | D     | D     |
| d_A, Approach Delay [s/veh]     | 13.85 |       |      | 15.91 |       |       | 39.20 |       |       | 45.19 |       |       |
| Approach LOS                    | B     |       |      | B     |       |       | D     |       |       | D     |       |       |
| d_I, Intersection Delay [s/veh] | 17.97 |       |      |       |       |       |       |       |       |       |       |       |
| Intersection LOS                | B     |       |      |       |       |       |       |       |       |       |       |       |
| Intersection V/C                | 0.532 |       |      |       |       |       |       |       |       |       |       |       |

**Sequence**

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





**Intersection Level Of Service Report**  
**Intersection 5: US-Route 395 (NS) at Luna Road (EW)**

|                  |            |                           |            |
|------------------|------------|---------------------------|------------|
| Control Type:    | Signalized | Delay (sec / veh):        | 37.7       |
| Analysis Method: | HCM 2010   | Level Of Service:         | D          |
| Analysis Period: | 15 minutes | Volume to Capacity (v/c): | 10,256.796 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| 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      | 1      | 1          | 0      | 1      | 1         | 0      | 0      | 1         | 0      | 0      |
| Pocket Length [ft]     | 360.00     | 100.00 | 450.00 | 400.00     | 100.00 | 400.00 | 125.00    | 100.00 | 100.00 | 425.00    | 100.00 | 100.00 |
| Speed [mph]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | No         |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 60         | 887    | 72     | 169        | 808    | 58     | 55        | 75     | 40     | 33        | 81     | 159    |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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]             | 60         | 887    | 72     | 169        | 808    | 58     | 55        | 75     | 40     | 33        | 81     | 159    |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| Other Adjustment Factor                 | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h]          | 16         | 233    | 19     | 44         | 213    | 15     | 14        | 20     | 11     | 9         | 21     | 42     |
| Total Analysis Volume [veh/h]           | 63         | 934    | 76     | 178        | 851    | 61     | 58        | 79     | 42     | 35        | 85     | 167    |
| 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            | Fixed time                   |
| Offset [s]                | 0.0                          |
| Offset Reference          | LeadGreen                    |
| Permissive Mode           | SingleBand                   |
| Lost time [s]             | 2.00                         |

**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]            | 7        | 7       | 0       | 7        | 7       | 0       | 0       | 7       | 0       | 0       | 7       | 0       |
| Maximum Green [s]            | 30       | 30      | 0       | 30       | 30      | 0       | 0       | 30      | 0       | 0       | 30      | 0       |
| Amber [s]                    | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 0.0     | 3.0     | 0.0     | 0.0     | 3.0     | 0.0     |
| All red [s]                  | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 0.0     | 1.0     | 0.0     | 0.0     | 1.0     | 0.0     |
| Split [s]                    | 21       | 31      | 0       | 15       | 25      | 0       | 0       | 22      | 0       | 0       | 23      | 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        | 7       | 0       | 0        | 7       | 0       | 0       | 7       | 0       | 0       | 7       | 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]  | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 0.0     | 2.0     | 0.0     | 0.0     | 2.0     | 0.0     |
| Minimum Recall               | No       | No      |         | No       | No      |         |         | No      |         |         | No      |         |
| Maximum Recall               | No       | No      |         | No       | No      |         |         | No      |         |         | No      |         |
| Pedestrian Recall            | No       | No      |         | No       | No      |         |         | No      |         |         | No      |         |
| Detector Location [ft]       | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| Detector Length [ft]         | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| I, Upstream Filtering Factor | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    |

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

| Lane Group                              | L     | C     | R     | L     | C     | R     | L     | C     | R     | L     | C     |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| C, Cycle Length [s]                     | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    |
| L, Total Lost Time per Cycle [s]        | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  |
| l1_p, Permitted Start-Up Lost Time [s]  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 2.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| l2, Clearance Lost Time [s]             | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 0.00  | 2.00  |
| g_i, Effective Green Time [s]           | 17    | 27    | 27    | 11    | 21    | 21    | 18    | 18    | 18    | 20    | 19    |
| g / C, Green / Cycle                    | 0.21  | 0.34  | 0.34  | 0.14  | 0.26  | 0.26  | 0.23  | 0.23  | 0.23  | 0.25  | 0.24  |
| (v / s)_i Volume / Saturation Flow Rate | 0.04  | 0.27  | 0.05  | 0.10  | 0.25  | 0.04  | 0.05  | 0.04  | 0.03  | 0.03  | 0.16  |
| s, saturation flow rate [veh/h]         | 1714  | 3427  | 1530  | 1714  | 3427  | 1530  | 1146  | 1800  | 1530  | 1341  | 1612  |
| c, Capacity [veh/h]                     | 364   | 1157  | 516   | 236   | 900   | 402   | 157   | 405   | 344   | 377   | 383   |
| d1, Uniform Delay [s]                   | 25.75 | 24.13 | 18.47 | 33.20 | 28.94 | 22.66 | 37.33 | 25.13 | 24.70 | 26.16 | 27.57 |
| k, delay calibration                    | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  |
| 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  |
| d2, Incremental Delay [s]               | 1.03  | 6.10  | 0.60  | 19.94 | 19.45 | 0.80  | 6.54  | 1.07  | 0.73  | 0.49  | 8.59  |
| d3, Initial Queue Delay [s]             | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| Rp, platoon ratio                       | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| PF, progression factor                  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |

**Lane Group Results**

|                                       |       |        |       |        |        |       |       |       |       |       |        |
|---------------------------------------|-------|--------|-------|--------|--------|-------|-------|-------|-------|-------|--------|
| X, volume / capacity                  | 0.17  | 0.81   | 0.15  | 0.76   | 0.95   | 0.15  | 0.37  | 0.20  | 0.12  | 0.09  | 0.66   |
| d, Delay for Lane Group [s/veh]       | 26.78 | 30.23  | 19.07 | 53.15  | 48.40  | 23.46 | 43.88 | 26.20 | 25.43 | 26.65 | 36.15  |
| Lane Group LOS                        | C     | C      | B     | D      | D      | C     | D     | C     | C     | C     | D      |
| Critical Lane Group                   | No    | Yes    | No    | Yes    | No     | No    | No    | No    | No    | Yes   | No     |
| 50th-Percentile Queue Length [veh/ln] | 1.06  | 8.58   | 1.03  | 4.54   | 10.08  | 0.95  | 1.39  | 1.31  | 0.69  | 0.55  | 5.11   |
| 50th-Percentile Queue Length [ft/ln]  | 26.50 | 214.48 | 25.82 | 113.50 | 251.88 | 23.68 | 34.69 | 32.64 | 17.21 | 13.84 | 127.82 |
| 95th-Percentile Queue Length [veh/ln] | 1.91  | 13.38  | 1.86  | 8.03   | 15.28  | 1.71  | 2.50  | 2.35  | 1.24  | 1.00  | 8.82   |
| 95th-Percentile Queue Length [ft/ln]  | 47.71 | 334.56 | 46.48 | 200.85 | 382.01 | 42.63 | 62.44 | 58.75 | 30.98 | 24.90 | 220.52 |

**Movement, Approach, & Intersection Results**

|                                 |           |       |       |       |       |       |       |       |       |       |       |       |
|---------------------------------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| d_M, Delay for Movement [s/veh] | 26.78     | 30.23 | 19.07 | 53.15 | 48.40 | 23.46 | 43.88 | 26.20 | 25.43 | 26.65 | 36.15 | 36.15 |
| Movement LOS                    | C         | C     | B     | D     | D     | C     | D     | C     | C     | C     | D     | D     |
| d_A, Approach Delay [s/veh]     | 29.24     |       |       | 47.78 |       |       | 31.75 |       |       | 34.99 |       |       |
| Approach LOS                    | C         |       |       | D     |       |       | C     |       |       | C     |       |       |
| d_I, Intersection Delay [s/veh] | 37.72     |       |       |       |       |       |       |       |       |       |       |       |
| Intersection LOS                | D         |       |       |       |       |       |       |       |       |       |       |       |
| Intersection V/C                | 10256.796 |       |       |       |       |       |       |       |       |       |       |       |

**Sequence**

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



## TTM 16397

Vistro File: C:\...\IPM.vistro

Scenario 1 Existing

Report File: C:\...\IPM E.pdf

11/1/2019

**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  | Mesa View Drive (NS) at Dos Palmas Road (EW) | Final Base          | 5          | 18        | 45        | 12         | 16        | 0        | 0         | 8        | 0        | 35        | 6        | 24        | 169          |
|    |  | Growth Rate         | 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>5</b>   | <b>18</b> | <b>45</b> | <b>12</b>  | <b>16</b> | <b>0</b> | <b>0</b>  | <b>8</b> | <b>0</b> | <b>35</b> | <b>6</b> | <b>24</b> | <b>169</b>   |

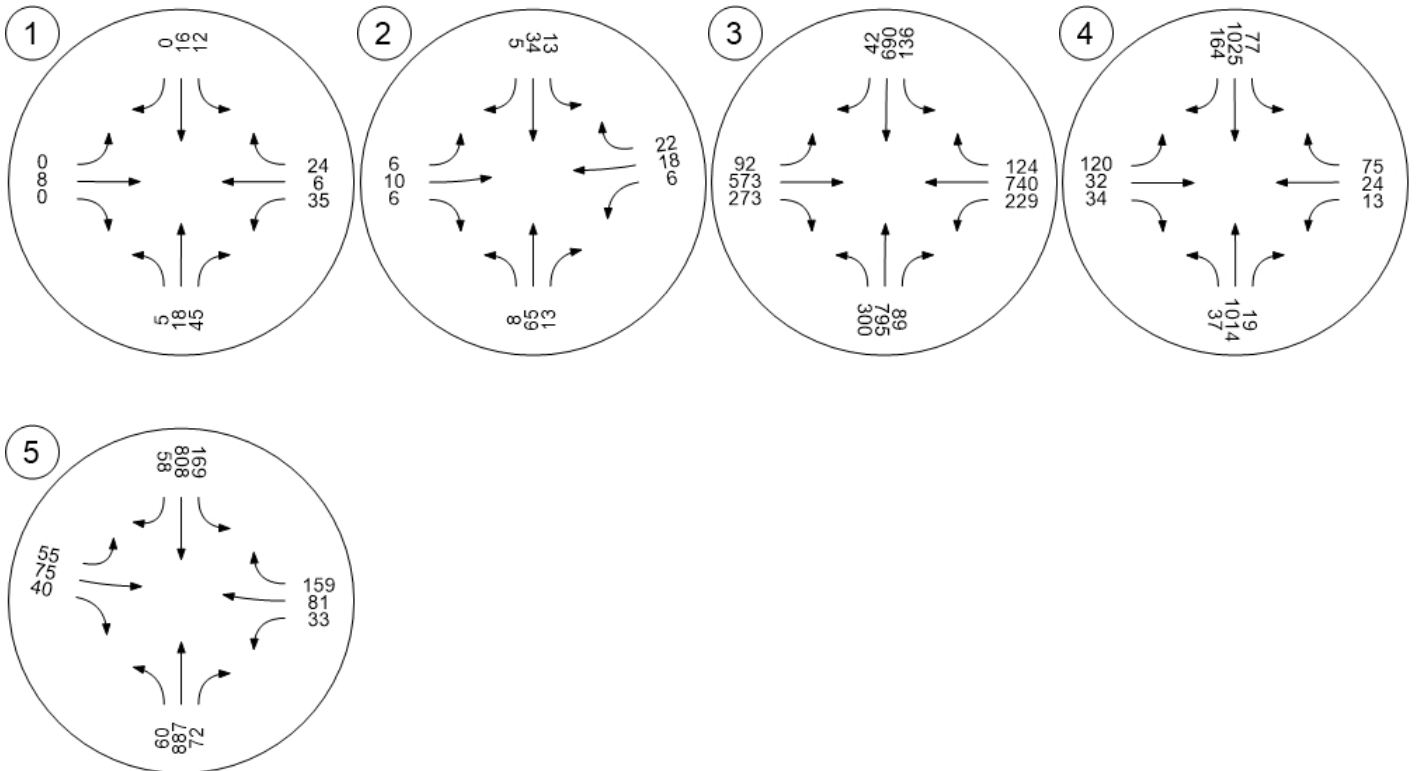
| ID | Intersection Name                      | Volume Type         | Northbound |           |           | Southbound |           |          | Eastbound |           |          | Westbound |           |           | Total Volume |
|----|--|---------------------|------------|-----------|-----------|------------|-----------|----------|-----------|-----------|----------|-----------|-----------|-----------|--------------|
|    |  |                     | Left       | Thru      | Right     | Left       | Thru      | Right    | Left      | Thru      | Right    | Left      | Thru      | Right     |              |
| 2  | Mesa View Drive (NS) at Luna Road (EW) | Final Base          | 8          | 65        | 13        | 13         | 34        | 5        | 6         | 10        | 6        | 6         | 18        | 22        | 206          |
|    |  | Growth Rate         | 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>8</b>   | <b>65</b> | <b>13</b> | <b>13</b>  | <b>34</b> | <b>5</b> | <b>6</b>  | <b>10</b> | <b>6</b> | <b>6</b>  | <b>18</b> | <b>22</b> | <b>206</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  | US-Route 395 (NS) at Palmdale Road (EW) | Final Base          | 300        | 795        | 89        | 136        | 690        | 42        | 92        | 573        | 273        | 229        | 740        | 124        | 4083         |
|    |   | Growth Rate         | 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>300</b> | <b>795</b> | <b>89</b> | <b>136</b> | <b>690</b> | <b>42</b> | <b>92</b> | <b>573</b> | <b>273</b> | <b>229</b> | <b>740</b> | <b>124</b> | <b>4083</b>  |

| ID | Intersection Name                         | Volume Type         | Northbound |             |           | Southbound |             |            | Eastbound  |           |           | Westbound |           |           | Total Volume |
|----|---|---------------------|------------|-------------|-----------|------------|-------------|------------|------------|-----------|-----------|-----------|-----------|-----------|--------------|
|    |   |                     | Left       | Thru        | Right     | Left       | Thru        | Right      | Left       | Thru      | Right     | Left      | Thru      | Right     |              |
| 4  | US-Route 395 (NS) at Dos Palmas Road (EW) | Final Base          | 37         | 1014        | 19        | 77         | 1025        | 164        | 120        | 32        | 34        | 13        | 24        | 75        | 2634         |
|    |   | Growth Rate         | 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>37</b>  | <b>1014</b> | <b>19</b> | <b>77</b>  | <b>1025</b> | <b>164</b> | <b>120</b> | <b>32</b> | <b>34</b> | <b>13</b> | <b>24</b> | <b>75</b> | <b>2634</b>  |

| ID | Intersection Name                   | Volume Type         | Northbound |            |           | Southbound |            |           | Eastbound |           |           | Westbound |           |            | Total Volume |   |
|----|-------------------------------------|---------------------|------------|------------|-----------|------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|------------|--------------|---|
|    |                                     |                     | Left       | Thru       | Right     | Left       | Thru       | Right     | Left      | Thru      | Right     | Left      | Thru      | Right      |              |   |
| 5  | US-Route 395 (NS) at Luna Road (EW) | Final Base          | 60         | 887        | 72        | 169        | 808        | 58        | 55        | 75        | 40        | 33        | 81        | 159        | 2497         |   |
|    |                                     | Growth Rate         | 1.00       | 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            | 0 |
|    |                                     | Net New Trips       | 0          | 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            | 0 |
|    |                                     | <b>Future Total</b> | <b>60</b>  | <b>887</b> | <b>72</b> | <b>169</b> | <b>808</b> | <b>58</b> | <b>55</b> | <b>75</b> | <b>40</b> | <b>33</b> | <b>81</b> | <b>159</b> | <b>2497</b>  |   |

Traffic Volume - Future Total Volume



**Existing Plus Project**



## TTM 16397

Vistro File: C:\...\IPM.vistro

Scenario 2 Existing Plus Project

Report File: C:\...\IPM Ep.pdf

11/1/2019

**Intersection Analysis Summary**

| ID | Intersection Name                            | Control Type | Method   | Worst Mvmt | V/C        | Delay (s/veh) | LOS |
|----|--|--------------|----------|------------|------------|---------------|-----|
| 1  | Mesa View Drive (NS) at Dos Palmas Road (EW) | Two-way stop | HCM 2010 | NB Thru    | 0.034      | 12.5          | B   |
| 2  | Mesa View Drive (NS) at Luna Road (EW)       | Two-way stop | HCM 2010 | WB Thru    | 0.029      | 11.0          | B   |
| 3  | US-Route 395 (NS) at Palmdale Road (EW)      | Signalized   | HCM 2010 | NB Left    | 0.714      | 41.0          | D   |
| 4  | US-Route 395 (NS) at Dos Palmas Road (EW)    | Signalized   | HCM 2010 | WB Right   | 0.630      | 23.3          | C   |
| 5  | US-Route 395 (NS) at Luna Road (EW)          | Signalized   | HCM 2010 | SB Thru    | 10,256.803 | 43.3          | D   |

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: Mesa View Drive (NS) at Dos Palmas Road (EW)**

|                  |              |                           |       |
|------------------|--------------|---------------------------|-------|
| Control Type:    | Two-way stop | Delay (sec / veh):        | 12.5  |
| Analysis Method: | HCM 2010     | Level Of Service:         | B     |
| Analysis Period: | 15 minutes   | Volume to Capacity (v/c): | 0.034 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| 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      | 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]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | Yes        |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 5          | 18     | 45     | 12         | 16     | 0      | 0         | 8      | 0      | 35        | 6      | 24     |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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]            | 30         | 0      | 6      | 0          | 0      | 0      | 0         | 74     | 18     | 10        | 131    | 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]             | 35         | 18     | 51     | 12         | 16     | 0      | 0         | 82     | 18     | 45        | 137    | 24     |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| Other Adjustment Factor                 | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h]          | 9          | 5      | 13     | 3          | 4      | 0      | 0         | 22     | 5      | 12        | 36     | 6      |
| Total Analysis Volume [veh/h]           | 37         | 19     | 54     | 13         | 17     | 0      | 0         | 86     | 19     | 47        | 144    | 25     |
| Pedestrian Volume [ped/h]               | 0          |        |        | 0          |        |        | 0         |        |        | 0         |        |        |

**Intersection Settings**

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

**Movement, Approach, & Intersection Results**

|                                       |       |       |       |       |       |      |      |      |      |      |      |      |
|---------------------------------------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|
| V/C, Movement V/C Ratio               | 0.06  | 0.03  | 0.06  | 0.03  | 0.03  | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.00 | 0.00 |
| d_M, Delay for Movement [s/veh]       | 12.19 | 12.45 | 9.65  | 12.34 | 11.90 | 9.42 | 7.53 | 0.00 | 0.00 | 7.48 | 0.00 | 0.00 |
| Movement LOS                          | B     | B     | A     | B     | B     | A    | A    | A    | A    | A    | A    | A    |
| 95th-Percentile Queue Length [veh/ln] | 0.55  | 0.55  | 0.55  | 0.18  | 0.18  | 0.18 | 0.00 | 0.00 | 0.00 | 0.09 | 0.09 | 0.09 |
| 95th-Percentile Queue Length [ft/ln]  | 13.63 | 13.63 | 13.63 | 4.42  | 4.42  | 4.42 | 0.00 | 0.00 | 0.00 | 2.32 | 2.32 | 2.32 |
| d_A, Approach Delay [s/veh]           | 10.99 |       |       | 12.09 |       |      | 0.00 |      |      | 1.63 |      |      |
| Approach LOS                          | B     |       |       | B     |       |      | A    |      |      | A    |      |      |
| d_I, Intersection Delay [s/veh]       | 4.17  |       |       |       |       |      |      |      |      |      |      |      |
| Intersection LOS                      | B     |       |       |       |       |      |      |      |      |      |      |      |

**Intersection Level Of Service Report**  
**Intersection 2: Mesa View Drive (NS) at Luna Road (EW)**

|                  |              |                           |       |
|------------------|--------------|---------------------------|-------|
| Control Type:    | Two-way stop | Delay (sec / veh):        | 11.0  |
| Analysis Method: | HCM 2010     | Level Of Service:         | B     |
| Analysis Period: | 15 minutes   | Volume to Capacity (v/c): | 0.029 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| 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      | 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]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | Yes        |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 8          | 65     | 13     | 13         | 34     | 5      | 6         | 10     | 6      | 6         | 18     | 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 [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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          | 20     | 0      | 18         | 12     | 0      | 0         | 0      | 0      | 0         | 0      | 30     |
| 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]             | 8          | 85     | 13     | 31         | 46     | 5      | 6         | 10     | 6      | 6         | 18     | 52     |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| Other Adjustment Factor                 | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h]          | 2          | 22     | 3      | 8          | 12     | 1      | 2         | 3      | 2      | 2         | 5      | 14     |
| Total Analysis Volume [veh/h]           | 8          | 89     | 14     | 33         | 48     | 5      | 6         | 11     | 6      | 6         | 19     | 55     |
| Pedestrian Volume [ped/h]               | 0          |        |        | 0          |        |        | 0         |        |        | 0         |        |        |

**Intersection Settings**

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

**Movement, Approach, & Intersection Results**

|                                       |      |      |      |      |      |      |       |       |      |       |       |      |
|---------------------------------------|------|------|------|------|------|------|-------|-------|------|-------|-------|------|
| V/C, Movement V/C Ratio               | 0.01 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.01  | 0.02  | 0.01 | 0.01  | 0.03  | 0.06 |
| d_M, Delay for Movement [s/veh]       | 7.31 | 0.00 | 0.00 | 7.45 | 0.00 | 0.00 | 10.94 | 10.71 | 8.69 | 10.64 | 10.95 | 9.17 |
| Movement LOS                          | A    | A    | A    | A    | A    | A    | B     | B     | A    | B     | B     | A    |
| 95th-Percentile Queue Length [veh/ln] | 0.02 | 0.02 | 0.02 | 0.06 | 0.06 | 0.06 | 0.10  | 0.10  | 0.10 | 0.31  | 0.31  | 0.31 |
| 95th-Percentile Queue Length [ft/ln]  | 0.39 | 0.39 | 0.39 | 1.58 | 1.58 | 1.58 | 2.51  | 2.51  | 2.51 | 7.82  | 7.82  | 7.82 |
| d_A, Approach Delay [s/veh]           | 0.53 |      |      | 2.86 |      |      | 10.24 |       |      | 9.70  |       |      |
| Approach LOS                          | A    |      |      | A    |      |      | B     |       |      | A     |       |      |
| d_I, Intersection Delay [s/veh]       | 4.39 |      |      |      |      |      |       |       |      |       |       |      |
| Intersection LOS                      | B    |      |      |      |      |      |       |       |      |       |       |      |

**Intersection Level Of Service Report**  
**Intersection 3: US-Route 395 (NS) at Palmdale Road (EW)**

|                  |            |                           |       |
|------------------|------------|---------------------------|-------|
| Control Type:    | Signalized | Delay (sec / veh):        | 41.0  |
| Analysis Method: | HCM 2010   | Level Of Service:         | D     |
| Analysis Period: | 15 minutes | Volume to Capacity (v/c): | 0.714 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Approach               | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| Lane Configuration     | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| 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      | 1      | 1         | 0      | 0      | 1         | 0      | 2      |
| Pocket Length [ft]     | 120.00     | 100.00 | 100.00 | 350.00     | 100.00 | 370.00 | 140.00    | 100.00 | 100.00 | 250.00    | 100.00 | 450.00 |
| Speed [mph]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | Yes        |        |        | No         |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 300        | 795    | 89     | 136        | 690    | 42     | 92        | 573    | 273    | 229       | 740    | 124    |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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          | 23     | 27     | 0          | 40     | 0      | 0         | 0      | 10     | 51        | 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]             | 306        | 818    | 116    | 136        | 730    | 42     | 92        | 573    | 283    | 280       | 740    | 124    |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| 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]          | 81         | 215    | 31     | 36         | 192    | 11     | 24        | 151    | 74     | 74        | 195    | 33     |
| Total Analysis Volume [veh/h]           | 322        | 861    | 122    | 143        | 768    | 44     | 97        | 603    | 298    | 295       | 779    | 131    |
| 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            | Fixed time                   |
| Offset [s]                | 0.0                          |
| Offset Reference          | LeadGreen                    |
| Permissive Mode           | SingleBand                   |
| Lost time [s]             | 2.00                         |

**Phasing & Timing**

| Control Type                 | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss |
|------------------------------|----------|---------|---------|----------|---------|---------|----------|---------|---------|----------|---------|---------|
| Signal group                 | 5        | 2       | 0       | 1        | 6       | 0       | 3        | 8       | 0       | 7        | 4       | 0       |
| Auxiliary Signal Groups      |          |         |         |          |         |         |          |         |         |          |         |         |
| Lead / Lag                   | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       |
| Minimum Green [s]            | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       |
| Maximum Green [s]            | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       |
| Amber [s]                    | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| All red [s]                  | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     |
| Split [s]                    | 21       | 30      | 0       | 15       | 24      | 0       | 11       | 22      | 0       | 13       | 24      | 0       |
| Vehicle Extension [s]        | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| Walk [s]                     | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 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     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| I2, Clearance Lost Time [s]  | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| Minimum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Maximum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Pedestrian Recall            | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Detector Location [ft]       | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| Detector Length [ft]         | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| I, Upstream Filtering Factor | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    |

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

| Lane Group                              | L     | C     | R     | L     | C     | R     | L     | C     | R     | L     | C     | R     |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| C, Cycle Length [s]                     | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    |
| L, Total Lost Time per Cycle [s]        | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  |
| l1_p, Permitted Start-Up Lost Time [s]  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| l2, Clearance Lost Time [s]             | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  |
| g_i, Effective Green Time [s]           | 17    | 26    | 26    | 11    | 20    | 20    | 7     | 18    | 18    | 9     | 20    | 20    |
| g / C, Green / Cycle                    | 0.21  | 0.33  | 0.33  | 0.14  | 0.25  | 0.25  | 0.09  | 0.23  | 0.23  | 0.11  | 0.25  | 0.25  |
| (v / s)_i Volume / Saturation Flow Rate | 0.19  | 0.25  | 0.08  | 0.08  | 0.22  | 0.03  | 0.06  | 0.18  | 0.19  | 0.09  | 0.23  | 0.09  |
| s, saturation flow rate [veh/h]         | 1714  | 3427  | 1530  | 1714  | 3427  | 1530  | 1714  | 3427  | 1530  | 3329  | 3427  | 1530  |
| c, Capacity [veh/h]                     | 364   | 1114  | 497   | 236   | 857   | 383   | 150   | 771   | 344   | 375   | 857   | 383   |
| d1, Uniform Delay [s]                   | 30.54 | 24.34 | 19.80 | 32.46 | 29.00 | 23.17 | 35.30 | 29.15 | 29.84 | 34.57 | 29.12 | 24.61 |
| k, delay calibration                    | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  |
| 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]               | 25.34 | 5.23  | 1.17  | 11.08 | 13.98 | 0.61  | 19.56 | 7.76  | 24.09 | 15.36 | 15.30 | 2.43  |
| 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   | 0.77   | 0.25  | 0.61   | 0.90   | 0.12  | 0.65   | 0.78   | 0.87   | 0.79   | 0.91   | 0.34   |
| d, Delay for Lane Group [s/veh]       | 55.88  | 29.57  | 20.98 | 43.55  | 42.98  | 23.78 | 54.86  | 36.91  | 53.93  | 49.93  | 44.42  | 27.04  |
| Lane Group LOS                        | E      | C      | C     | D      | D      | C     | D      | D      | D      | D      | D      | C      |
| Critical Lane Group                   | Yes    | No     | No    | No     | Yes    | No    | Yes    | No     | No     | No     | Yes    | No     |
| 50th-Percentile Queue Length [veh/ln] | 8.36   | 7.78   | 1.77  | 3.27   | 8.48   | 0.69  | 2.60   | 6.08   | 7.61   | 3.52   | 8.77   | 2.23   |
| 50th-Percentile Queue Length [ft/ln]  | 208.96 | 194.39 | 44.21 | 81.65  | 212.11 | 17.23 | 65.08  | 151.92 | 190.25 | 88.10  | 219.21 | 55.82  |
| 95th-Percentile Queue Length [veh/ln] | 13.10  | 12.35  | 3.18  | 5.88   | 13.26  | 1.24  | 4.69   | 10.12  | 12.13  | 6.34   | 13.62  | 4.02   |
| 95th-Percentile Queue Length [ft/ln]  | 327.50 | 308.72 | 79.57 | 146.97 | 331.54 | 31.02 | 117.15 | 252.99 | 303.35 | 158.58 | 340.62 | 100.48 |



**Movement, Approach, & Intersection Results**

|                                 |       |       |       |       |       |       |       |       |       |       |       |       |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| d_M, Delay for Movement [s/veh] | 55.88 | 29.57 | 20.98 | 43.55 | 42.98 | 23.78 | 54.86 | 36.91 | 53.93 | 49.93 | 44.42 | 27.04 |
| Movement LOS                    | E     | C     | C     | D     | D     | C     | D     | D     | D     | D     | D     | C     |
| d_A, Approach Delay [s/veh]     | 35.26 |       |       | 42.18 |       |       | 43.74 |       |       | 43.88 |       |       |
| Approach LOS                    | D     |       |       | D     |       |       | D     |       |       | D     |       |       |
| d_I, Intersection Delay [s/veh] | 40.96 |       |       |       |       |       |       |       |       |       |       |       |
| Intersection LOS                | D     |       |       |       |       |       |       |       |       |       |       |       |
| Intersection V/C                | 0.714 |       |       |       |       |       |       |       |       |       |       |       |

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 4: US-Route 395 (NS) at Dos Palmas Road (EW)**

|                  |            |                           |       |
|------------------|------------|---------------------------|-------|
| Control Type:    | Signalized | Delay (sec / veh):        | 23.3  |
| Analysis Method: | HCM 2010   | Level Of Service:         | C     |
| Analysis Period: | 15 minutes | Volume to Capacity (v/c): | 0.630 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Approach               | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| Lane Configuration     | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| 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      | 1      | 1          | 0      | 0      | 1         | 0      | 1      | 1         | 0      | 0      |
| Pocket Length [ft]     | 480.00     | 100.00 | 250.00 | 300.00     | 100.00 | 100.00 | 160.00    | 100.00 | 470.00 | 100.00    | 100.00 | 100.00 |
| Speed [mph]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | No         |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 37         | 1014   | 19     | 77         | 1025   | 164    | 120       | 32     | 34     | 13        | 24     | 75     |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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]            | 20         | 0      | 0      | 0          | 0      | 101    | 56        | 12     | 12     | 0         | 20     | 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]             | 57         | 1014   | 19     | 77         | 1025   | 265    | 176       | 44     | 46     | 13        | 44     | 75     |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| 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]          | 15         | 267    | 5      | 20         | 270    | 70     | 46        | 12     | 12     | 3         | 12     | 20     |
| Total Analysis Volume [veh/h]           | 60         | 1067   | 20     | 81         | 1079   | 279    | 185       | 46     | 48     | 14        | 46     | 79     |
| 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]             | 2.00                         |

**Phasing & Timing**

| Control Type                 | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss |
|------------------------------|----------|---------|---------|----------|---------|---------|----------|---------|---------|----------|---------|---------|
| Signal group                 | 5        | 2       | 0       | 1        | 6       | 0       | 3        | 8       | 0       | 7        | 4       | 0       |
| Auxiliary Signal Groups      |          |         |         |          |         |         |          |         |         |          |         |         |
| Lead / Lag                   | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       |
| Minimum Green [s]            | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       |
| Maximum Green [s]            | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       |
| Amber [s]                    | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| All red [s]                  | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     |
| Split [s]                    | 11       | 21      | 0       | 11       | 21      | 0       | 15       | 36      | 0       | 12       | 33      | 0       |
| Vehicle Extension [s]        | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| Walk [s]                     | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 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     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| I2, Clearance Lost Time [s]  | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| Minimum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Maximum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Pedestrian Recall            | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Detector Location [ft]       | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| Detector Length [ft]         | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| I, Upstream Filtering Factor | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    |

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

| Lane Group                              | L     | C     | R     | L     | C     | C     | L     | C     | R     | L     | C     |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| C, Cycle Length [s]                     | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    |
| L, Total Lost Time per Cycle [s]        | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  |
| l1_p, Permitted Start-Up Lost Time [s]  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| l2, Clearance Lost Time [s]             | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  |
| g_i, Effective Green Time [s]           | 5     | 40    | 40    | 6     | 41    | 41    | 10    | 16    | 16    | 2     | 8     |
| g / C, Green / Cycle                    | 0.06  | 0.50  | 0.50  | 0.07  | 0.51  | 0.51  | 0.13  | 0.20  | 0.20  | 0.02  | 0.10  |
| (v / s)_i Volume / Saturation Flow Rate | 0.04  | 0.31  | 0.01  | 0.05  | 0.39  | 0.39  | 0.11  | 0.03  | 0.03  | 0.01  | 0.08  |
| s, saturation flow rate [veh/h]         | 1714  | 3427  | 1530  | 1714  | 1800  | 1675  | 1714  | 1800  | 1530  | 1714  | 1619  |
| c, Capacity [veh/h]                     | 112   | 1710  | 763   | 126   | 913   | 850   | 222   | 366   | 311   | 42    | 159   |
| d1, Uniform Delay [s]                   | 36.27 | 14.61 | 10.19 | 36.07 | 15.88 | 16.04 | 34.03 | 26.09 | 26.24 | 38.45 | 35.30 |
| 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  |
| 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  |
| d2, Incremental Delay [s]               | 3.94  | 1.73  | 0.06  | 5.30  | 6.04  | 6.89  | 7.94  | 0.15  | 0.23  | 4.67  | 8.28  |
| d3, Initial Queue Delay [s]             | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| Rp, platoon ratio                       | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| PF, progression factor                  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |

**Lane Group Results**

|                                       |       |        |       |       |        |        |        |       |       |       |        |
|---------------------------------------|-------|--------|-------|-------|--------|--------|--------|-------|-------|-------|--------|
| X, volume / capacity                  | 0.54  | 0.62   | 0.03  | 0.64  | 0.76   | 0.78   | 0.83   | 0.13  | 0.15  | 0.34  | 0.79   |
| d, Delay for Lane Group [s/veh]       | 40.21 | 16.34  | 10.26 | 41.37 | 21.92  | 22.93  | 41.97  | 26.24 | 26.47 | 43.12 | 43.58  |
| Lane Group LOS                        | D     | B      | B     | D     | C      | C      | D      | C     | C     | D     | D      |
| Critical Lane Group                   | Yes   | No     | No    | No    | No     | Yes    | Yes    | No    | No    | No    | Yes    |
| 50th-Percentile Queue Length [veh/ln] | 1.24  | 6.79   | 0.18  | 1.69  | 10.71  | 10.39  | 3.91   | 0.72  | 0.76  | 0.32  | 2.69   |
| 50th-Percentile Queue Length [ft/ln]  | 30.91 | 169.79 | 4.51  | 42.32 | 267.66 | 259.77 | 97.70  | 17.90 | 18.88 | 7.99  | 67.32  |
| 95th-Percentile Queue Length [veh/ln] | 2.23  | 11.07  | 0.32  | 3.05  | 16.07  | 15.68  | 7.03   | 1.29  | 1.36  | 0.58  | 4.85   |
| 95th-Percentile Queue Length [ft/ln]  | 55.63 | 276.63 | 8.12  | 76.17 | 401.81 | 391.93 | 175.86 | 32.22 | 33.98 | 14.38 | 121.17 |

**Movement, Approach, & Intersection Results**

|                                 |       |       |       |       |       |       |       |       |       |       |       |       |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| d_M, Delay for Movement [s/veh] | 40.21 | 16.34 | 10.26 | 41.37 | 22.28 | 22.93 | 41.97 | 26.24 | 26.47 | 43.12 | 43.58 | 43.58 |
| Movement LOS                    | D     | B     | B     | D     | C     | C     | D     | C     | C     | D     | D     | D     |
| d_A, Approach Delay [s/veh]     | 17.48 |       |       | 23.48 |       |       | 36.71 |       |       | 43.53 |       |       |
| Approach LOS                    | B     |       |       | C     |       |       | D     |       |       | D     |       |       |
| d_I, Intersection Delay [s/veh] | 23.35 |       |       |       |       |       |       |       |       |       |       |       |
| Intersection LOS                | C     |       |       |       |       |       |       |       |       |       |       |       |
| Intersection V/C                | 0.630 |       |       |       |       |       |       |       |       |       |       |       |

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 5: US-Route 395 (NS) at Luna Road (EW)**

|                  |            |                           |            |
|------------------|------------|---------------------------|------------|
| Control Type:    | Signalized | Delay (sec / veh):        | 43.3       |
| Analysis Method: | HCM 2010   | Level Of Service:         | D          |
| Analysis Period: | 15 minutes | Volume to Capacity (v/c): | 10,256.803 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Approach               | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| Lane Configuration     | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| 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      | 1      | 1          | 0      | 1      | 1         | 0      | 0      | 1         | 0      | 0      |
| Pocket Length [ft]     | 360.00     | 100.00 | 450.00 | 400.00     | 100.00 | 400.00 | 125.00    | 100.00 | 100.00 | 425.00    | 100.00 | 100.00 |
| Speed [mph]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | No         |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 60         | 887    | 72     | 169        | 808    | 58     | 55        | 75     | 40     | 33        | 81     | 159    |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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]            | 20         | 20     | 0      | 0          | 12     | 0      | 0         | 12     | 12     | 0         | 20     | 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]             | 80         | 907    | 72     | 169        | 820    | 58     | 55        | 87     | 52     | 33        | 101    | 159    |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| 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]          | 21         | 239    | 19     | 44         | 216    | 15     | 14        | 23     | 14     | 9         | 27     | 42     |
| Total Analysis Volume [veh/h]           | 84         | 955    | 76     | 178        | 863    | 61     | 58        | 92     | 55     | 35        | 106    | 167    |
| 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            | Fixed time                   |
| Offset [s]                | 0.0                          |
| Offset Reference          | LeadGreen                    |
| Permissive Mode           | SingleBand                   |
| Lost time [s]             | 2.00                         |

**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]            | 7        | 7       | 0       | 7        | 7       | 0       | 0       | 7       | 0       | 0       | 7       | 0       |
| Maximum Green [s]            | 30       | 30      | 0       | 30       | 30      | 0       | 0       | 30      | 0       | 0       | 30      | 0       |
| Amber [s]                    | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 0.0     | 3.0     | 0.0     | 0.0     | 3.0     | 0.0     |
| All red [s]                  | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 0.0     | 1.0     | 0.0     | 0.0     | 1.0     | 0.0     |
| Split [s]                    | 21       | 30      | 0       | 15       | 24      | 0       | 0       | 22      | 0       | 0       | 24      | 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        | 7       | 0       | 0        | 7       | 0       | 0       | 7       | 0       | 0       | 7       | 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]  | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 0.0     | 2.0     | 0.0     | 0.0     | 2.0     | 0.0     |
| Minimum Recall               | No       | No      |         | No       | No      |         |         | No      |         |         | No      |         |
| Maximum Recall               | No       | No      |         | No       | No      |         |         | No      |         |         | No      |         |
| Pedestrian Recall            | No       | No      |         | No       | No      |         |         | No      |         |         | No      |         |
| Detector Location [ft]       | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| Detector Length [ft]         | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| I, Upstream Filtering Factor | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    |

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

| Lane Group                              | L     | C     | R     | L     | C     | R     | L     | C     | R     | L     | C     |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| C, Cycle Length [s]                     | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    |
| L, Total Lost Time per Cycle [s]        | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  |
| l1_p, Permitted Start-Up Lost Time [s]  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 2.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| l2, Clearance Lost Time [s]             | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 0.00  | 2.00  |
| g_i, Effective Green Time [s]           | 17    | 26    | 26    | 11    | 20    | 20    | 18    | 18    | 18    | 20    | 20    |
| g / C, Green / Cycle                    | 0.21  | 0.33  | 0.33  | 0.14  | 0.25  | 0.25  | 0.23  | 0.23  | 0.23  | 0.25  | 0.25  |
| (v / s)_i Volume / Saturation Flow Rate | 0.05  | 0.28  | 0.05  | 0.10  | 0.25  | 0.04  | 0.05  | 0.05  | 0.04  | 0.03  | 0.17  |
| s, saturation flow rate [veh/h]         | 1714  | 3427  | 1530  | 1714  | 3427  | 1530  | 1124  | 1800  | 1530  | 1325  | 1625  |
| c, Capacity [veh/h]                     | 364   | 1114  | 497   | 236   | 857   | 383   | 145   | 405   | 344   | 366   | 406   |
| d1, Uniform Delay [s]                   | 26.08 | 25.27 | 19.18 | 33.20 | 30.00 | 23.43 | 38.18 | 25.32 | 24.92 | 25.75 | 27.04 |
| k, delay calibration                    | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  |
| 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  |
| d2, Incremental Delay [s]               | 1.47  | 8.57  | 0.65  | 19.94 | 32.53 | 0.89  | 8.11  | 1.30  | 0.99  | 0.52  | 8.59  |
| d3, Initial Queue Delay [s]             | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| Rp, platoon ratio                       | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| PF, progression factor                  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |

**Lane Group Results**

|                                       |       |        |       |        |        |       |       |       |       |       |        |
|---------------------------------------|-------|--------|-------|--------|--------|-------|-------|-------|-------|-------|--------|
| X, volume / capacity                  | 0.23  | 0.86   | 0.15  | 0.76   | 1.01   | 0.16  | 0.40  | 0.23  | 0.16  | 0.10  | 0.67   |
| d, Delay for Lane Group [s/veh]       | 27.56 | 33.84  | 19.83 | 53.15  | 62.53  | 24.33 | 46.28 | 26.62 | 25.91 | 26.27 | 35.63  |
| Lane Group LOS                        | C     | C      | B     | D      | F      | C     | D     | C     | C     | C     | D      |
| Critical Lane Group                   | No    | Yes    | No    | Yes    | No     | No    | No    | No    | No    | Yes   | No     |
| 50th-Percentile Queue Length [veh/ln] | 1.44  | 9.35   | 1.06  | 4.54   | 11.74  | 0.97  | 1.44  | 1.54  | 0.91  | 0.55  | 5.49   |
| 50th-Percentile Queue Length [ft/ln]  | 36.00 | 233.65 | 26.47 | 113.50 | 293.59 | 24.26 | 36.05 | 38.41 | 22.82 | 13.63 | 137.28 |
| 95th-Percentile Queue Length [veh/ln] | 2.59  | 14.36  | 1.91  | 8.03   | 17.44  | 1.75  | 2.60  | 2.77  | 1.64  | 0.98  | 9.33   |
| 95th-Percentile Queue Length [ft/ln]  | 64.81 | 359.00 | 47.65 | 200.85 | 435.89 | 43.66 | 64.89 | 69.15 | 41.08 | 24.54 | 233.36 |



**Movement, Approach, & Intersection Results**

|                                 |           |       |       |       |       |       |       |       |       |       |       |       |
|---------------------------------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| d_M, Delay for Movement [s/veh] | 27.56     | 33.84 | 19.83 | 53.15 | 62.53 | 24.33 | 46.28 | 26.62 | 25.91 | 26.27 | 35.63 | 35.63 |
| Movement LOS                    | C         | C     | B     | D     | F     | C     | D     | C     | C     | C     | D     | D     |
| d_A, Approach Delay [s/veh]     | 32.41     |       |       | 58.90 |       |       | 31.99 |       |       | 34.57 |       |       |
| Approach LOS                    | C         |       |       | E     |       |       | C     |       |       | C     |       |       |
| d_I, Intersection Delay [s/veh] | 43.31     |       |       |       |       |       |       |       |       |       |       |       |
| Intersection LOS                | D         |       |       |       |       |       |       |       |       |       |       |       |
| Intersection V/C                | 10256.803 |       |       |       |       |       |       |       |       |       |       |       |

**Sequence**

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



## TTM 16397

Vistro File: C:\...\IPM.vistro

Scenario 2 Existing Plus Project

Report File: C:\...\IPM Ep.pdf

11/1/2019

**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  | Mesa View Drive (NS) at Dos Palmas Road (EW) | Final Base          | 5          | 18        | 45        | 12         | 16        | 0        | 0         | 8         | 0         | 35        | 6          | 24        | 169          |     |
|    |  | Growth Rate         | 1.00       | 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            | 0   |
|    |  | Net New Trips       | 30         | 0         | 6         | 0          | 0         | 0        | 0         | 0         | 74        | 18        | 10         | 131       | 0            | 269 |
|    |  | Other               | 0          | 0         | 0         | 0          | 0         | 0        | 0         | 0         | 0         | 0         | 0          | 0         | 0            | 0   |
|    |  | <b>Future Total</b> | <b>35</b>  | <b>18</b> | <b>51</b> | <b>12</b>  | <b>16</b> | <b>0</b> | <b>0</b>  | <b>82</b> | <b>18</b> | <b>45</b> | <b>137</b> | <b>24</b> | <b>438</b>   |     |

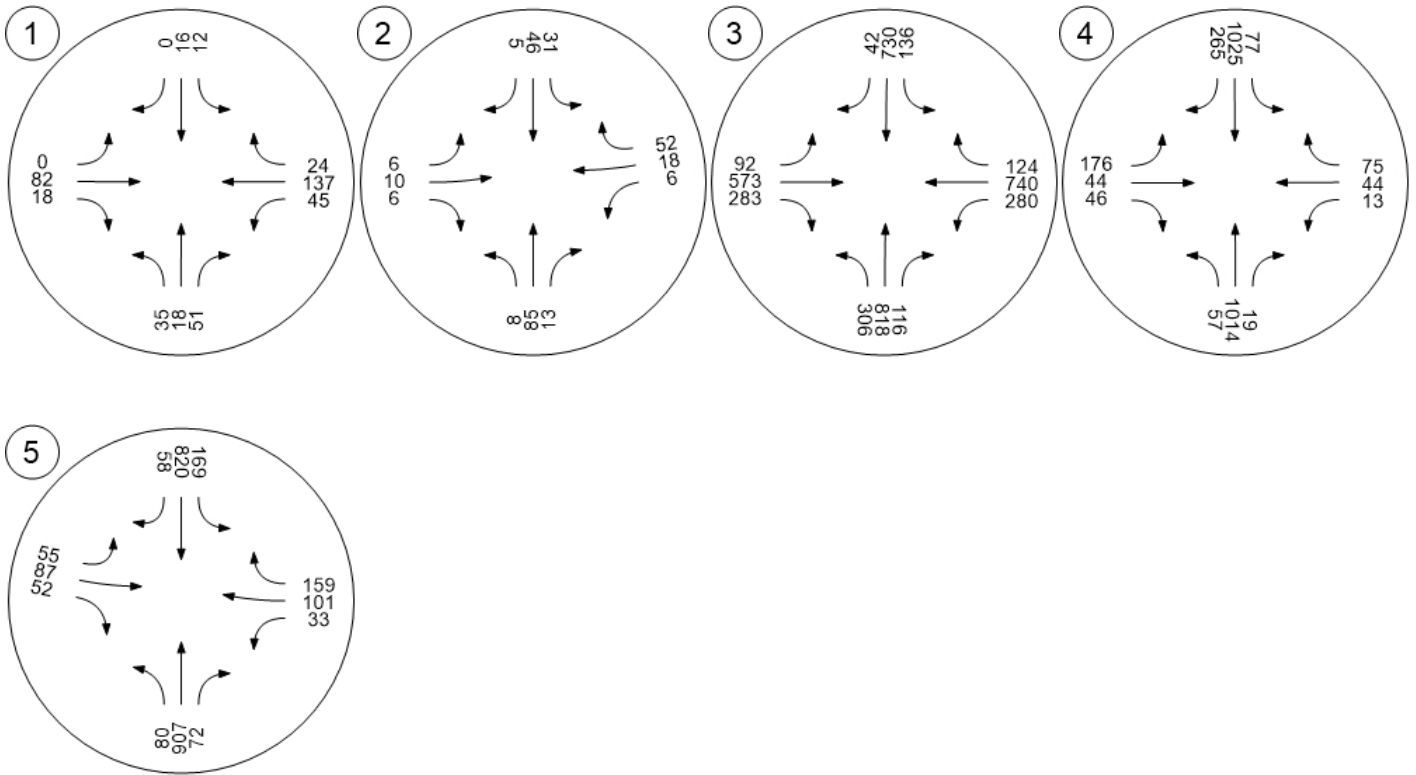
| ID | Intersection Name                      | Volume Type         | Northbound |           |           | Southbound |           |          | Eastbound |           |          | Westbound |           |           | Total Volume |    |
|----|--|---------------------|------------|-----------|-----------|------------|-----------|----------|-----------|-----------|----------|-----------|-----------|-----------|--------------|----|
|    |  |                     | Left       | Thru      | Right     | Left       | Thru      | Right    | Left      | Thru      | Right    | Left      | Thru      | Right     |              |    |
| 2  | Mesa View Drive (NS) at Luna Road (EW) | Final Base          | 8          | 65        | 13        | 13         | 34        | 5        | 6         | 10        | 6        | 6         | 18        | 22        | 206          |    |
|    |  | Growth Rate         | 1.00       | 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            | 0  |
|    |  | Net New Trips       | 0          | 20        | 0         | 18         | 12        | 0        | 0         | 0         | 0        | 0         | 0         | 0         | 30           | 80 |
|    |  | Other               | 0          | 0         | 0         | 0          | 0         | 0        | 0         | 0         | 0        | 0         | 0         | 0         | 0            | 0  |
|    |  | <b>Future Total</b> | <b>8</b>   | <b>85</b> | <b>13</b> | <b>31</b>  | <b>46</b> | <b>5</b> | <b>6</b>  | <b>10</b> | <b>6</b> | <b>6</b>  | <b>18</b> | <b>52</b> | <b>286</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  | US-Route 395 (NS) at Palmdale Road (EW) | Final Base          | 300        | 795        | 89         | 136        | 690        | 42        | 92        | 573        | 273        | 229        | 740        | 124        | 4083         |     |
|    |   | Growth Rate         | 1.00       | 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            | 0   |
|    |   | Net New Trips       | 6          | 23         | 27         | 0          | 40         | 0         | 0         | 0          | 10         | 51         | 0          | 0          | 0            | 157 |
|    |   | Other               | 0          | 0          | 0          | 0          | 0          | 0         | 0         | 0          | 0          | 0          | 0          | 0          | 0            | 0   |
|    |   | <b>Future Total</b> | <b>306</b> | <b>818</b> | <b>116</b> | <b>136</b> | <b>730</b> | <b>42</b> | <b>92</b> | <b>573</b> | <b>283</b> | <b>280</b> | <b>740</b> | <b>124</b> | <b>4240</b>  |     |

| ID | Intersection Name                         | Volume Type         | Northbound |             |           | Southbound |             |            | Eastbound  |           |           | Westbound |           |           | Total Volume |     |
|----|---|---------------------|------------|-------------|-----------|------------|-------------|------------|------------|-----------|-----------|-----------|-----------|-----------|--------------|-----|
|    |   |                     | Left       | Thru        | Right     | Left       | Thru        | Right      | Left       | Thru      | Right     | Left      | Thru      | Right     |              |     |
| 4  | US-Route 395 (NS) at Dos Palmas Road (EW) | Final Base          | 37         | 1014        | 19        | 77         | 1025        | 164        | 120        | 32        | 34        | 13        | 24        | 75        | 2634         |     |
|    |   | Growth Rate         | 1.00       | 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            | 0   |
|    |   | Net New Trips       | 20         | 0           | 0         | 0          | 0           | 101        | 56         | 12        | 12        | 0         | 20        | 0         | 0            | 221 |
|    |   | Other               | 0          | 0           | 0         | 0          | 0           | 0          | 0          | 0         | 0         | 0         | 0         | 0         | 0            | 0   |
|    |   | <b>Future Total</b> | <b>57</b>  | <b>1014</b> | <b>19</b> | <b>77</b>  | <b>1025</b> | <b>265</b> | <b>176</b> | <b>44</b> | <b>46</b> | <b>13</b> | <b>44</b> | <b>75</b> | <b>2855</b>  |     |

| ID | Intersection Name                   | Volume Type         | Northbound |            |           | Southbound |            |           | Eastbound |           |           | Westbound |            |            | Total Volume |    |
|----|-------------------------------------|---------------------|------------|------------|-----------|------------|------------|-----------|-----------|-----------|-----------|-----------|------------|------------|--------------|----|
|    |                                     |                     | Left       | Thru       | Right     | Left       | Thru       | Right     | Left      | Thru      | Right     | Left      | Thru       | Right      |              |    |
| 5  | US-Route 395 (NS) at Luna Road (EW) | Final Base          | 60         | 887        | 72        | 169        | 808        | 58        | 55        | 75        | 40        | 33        | 81         | 159        | 2497         |    |
|    |                                     | Growth Rate         | 1.00       | 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            | 0  |
|    |                                     | Net New Trips       | 20         | 20         | 0         | 0          | 12         | 0         | 0         | 0         | 12        | 12        | 0          | 20         | 0            | 96 |
|    |                                     | Other               | 0          | 0          | 0         | 0          | 0          | 0         | 0         | 0         | 0         | 0         | 0          | 0          | 0            | 0  |
|    |                                     | <b>Future Total</b> | <b>80</b>  | <b>907</b> | <b>72</b> | <b>169</b> | <b>820</b> | <b>58</b> | <b>55</b> | <b>87</b> | <b>52</b> | <b>33</b> | <b>101</b> | <b>159</b> | <b>2593</b>  |    |

Traffic Volume - Future Total Volume



## TTM 16397

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

Scenario 2 Existing Plus Project

Report File: C:\...\IAM Ep.pdf

11/1/2019

**Intersection Analysis Summary**

| ID | Intersection Name                            | Control Type | Method   | Worst Mvmt | V/C   | Delay (s/veh) | LOS |
|----|--|--------------|----------|------------|-------|---------------|-----|
| 1  | Mesa View Drive (NS) at Dos Palmas Road (EW) | Two-way stop | HCM 2010 | NB Thru    | 0.004 | 10.6          | B   |
| 2  | Mesa View Drive (NS) at Luna Road (EW)       | Two-way stop | HCM 2010 | WB Thru    | 0.010 | 10.4          | B   |
| 3  | US-Route 395 (NS) at Palmdale Road (EW)      | Signalized   | HCM 2010 | EB Right   | 0.540 | 29.3          | C   |
| 4  | US-Route 395 (NS) at Dos Palmas Road (EW)    | Signalized   | HCM 2010 | NB Left    | 0.471 | 17.6          | B   |
| 5  | US-Route 395 (NS) at Luna Road (EW)          | Signalized   | HCM 2010 | SB Thru    | 0.409 | 32.3          | 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: Mesa View Drive (NS) at Dos Palmas Road (EW)**

|                  |              |                           |       |
|------------------|--------------|---------------------------|-------|
| Control Type:    | Two-way stop | Delay (sec / veh):        | 10.6  |
| Analysis Method: | HCM 2010     | Level Of Service:         | B     |
| Analysis Period: | 15 minutes   | Volume to Capacity (v/c): | 0.004 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| 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      | 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]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | Yes        |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 0          | 3      | 34     | 9          | 8      | 0      | 0         | 5      | 2      | 9         | 3      | 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 [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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]            | 9          | 0      | 9      | 0          | 0      | 0      | 0         | 116    | 27     | 3         | 39     | 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]             | 9          | 3      | 43     | 9          | 8      | 0      | 0         | 121    | 29     | 12        | 42     | 2      |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| Other Adjustment Factor                 | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h]          | 2          | 1      | 11     | 2          | 2      | 0      | 0         | 32     | 8      | 3         | 11     | 1      |
| Total Analysis Volume [veh/h]           | 9          | 3      | 45     | 9          | 8      | 0      | 0         | 127    | 31     | 13        | 44     | 2      |
| Pedestrian Volume [ped/h]               | 0          |        |        | 0          |        |        | 0         |        |        | 0         |        |        |

**Intersection Settings**

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

**Movement, Approach, & Intersection Results**

|                                       |       |       |      |       |       |      |      |      |      |      |      |      |
|---------------------------------------|-------|-------|------|-------|-------|------|------|------|------|------|------|------|
| V/C, Movement V/C Ratio               | 0.01  | 0.00  | 0.05 | 0.01  | 0.01  | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 |
| d_M, Delay for Movement [s/veh]       | 10.22 | 10.59 | 9.25 | 10.45 | 10.53 | 8.63 | 7.29 | 0.00 | 0.00 | 7.53 | 0.00 | 0.00 |
| Movement LOS                          | B     | B     | A    | B     | B     | A    | A    | A    | A    | A    | A    | A    |
| 95th-Percentile Queue Length [veh/ln] | 0.21  | 0.21  | 0.21 | 0.08  | 0.08  | 0.08 | 0.00 | 0.00 | 0.00 | 0.03 | 0.03 | 0.03 |
| 95th-Percentile Queue Length [ft/ln]  | 5.30  | 5.30  | 5.30 | 1.94  | 1.94  | 1.94 | 0.00 | 0.00 | 0.00 | 0.63 | 0.63 | 0.63 |
| d_A, Approach Delay [s/veh]           | 9.47  |       |      | 10.48 |       |      | 0.00 |      |      | 1.66 |      |      |
| Approach LOS                          | A     |       |      | B     |       |      | A    |      |      | A    |      |      |
| d_I, Intersection Delay [s/veh]       | 2.80  |       |      |       |       |      |      |      |      |      |      |      |
| Intersection LOS                      | B     |       |      |       |       |      |      |      |      |      |      |      |

**Intersection Level Of Service Report**  
**Intersection 2: Mesa View Drive (NS) at Luna Road (EW)**

|                  |              |                           |       |
|------------------|--------------|---------------------------|-------|
| Control Type:    | Two-way stop | Delay (sec / veh):        | 10.4  |
| Analysis Method: | HCM 2010     | Level Of Service:         | B     |
| Analysis Period: | 15 minutes   | Volume to Capacity (v/c): | 0.010 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Approach               |            |        |        |            |        |        |           |        |        |           |        |        |
| 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      | 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]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | Yes        |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 5          | 29     | 7      | 9          | 38     | 1      | 2         | 12     | 2      | 7         | 7      | 6      |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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          | 6      | 0      | 27         | 18     | 0      | 0         | 0      | 0      | 0         | 0      | 9      |
| 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]             | 5          | 35     | 7      | 36         | 56     | 1      | 2         | 12     | 2      | 7         | 7      | 15     |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| Other Adjustment Factor                 | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h]          | 1          | 9      | 2      | 9          | 15     | 0      | 1         | 3      | 1      | 2         | 2      | 4      |
| Total Analysis Volume [veh/h]           | 5          | 37     | 7      | 38         | 59     | 1      | 2         | 13     | 2      | 7         | 7      | 16     |
| Pedestrian Volume [ped/h]               | 0          |        |        | 0          |        |        | 0         |        |        | 0         |        |        |



**Intersection Settings**

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

**Movement, Approach, & Intersection Results**

|                                       |      |      |      |      |      |      |       |       |      |       |       |      |
|---------------------------------------|------|------|------|------|------|------|-------|-------|------|-------|-------|------|
| V/C, Movement V/C Ratio               | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00  | 0.02  | 0.00 | 0.01  | 0.01  | 0.02 |
| d_M, Delay for Movement [s/veh]       | 7.32 | 0.00 | 0.00 | 7.34 | 0.00 | 0.00 | 10.04 | 10.35 | 8.68 | 10.01 | 10.36 | 8.63 |
| Movement LOS                          | A    | A    | A    | A    | A    | A    | B     | B     | A    | B     | B     | A    |
| 95th-Percentile Queue Length [veh/ln] | 0.01 | 0.01 | 0.01 | 0.07 | 0.07 | 0.07 | 0.07  | 0.07  | 0.07 | 0.11  | 0.11  | 0.11 |
| 95th-Percentile Queue Length [ft/ln]  | 0.24 | 0.24 | 0.24 | 1.75 | 1.75 | 1.75 | 1.81  | 1.81  | 1.81 | 2.72  | 2.72  | 2.72 |
| d_A, Approach Delay [s/veh]           | 0.75 |      |      | 2.85 |      |      | 10.11 |       |      | 9.35  |       |      |
| Approach LOS                          | A    |      |      | A    |      |      | B     |       |      | A     |       |      |
| d_I, Intersection Delay [s/veh]       | 3.96 |      |      |      |      |      |       |       |      |       |       |      |
| Intersection LOS                      | B    |      |      |      |      |      |       |       |      |       |       |      |

**Intersection Level Of Service Report**  
**Intersection 3: US-Route 395 (NS) at Palmdale Road (EW)**

|                  |            |                           |       |
|------------------|------------|---------------------------|-------|
| Control Type:    | Signalized | Delay (sec / veh):        | 29.3  |
| Analysis Method: | HCM 2010   | Level Of Service:         | C     |
| Analysis Period: | 15 minutes | Volume to Capacity (v/c): | 0.540 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Approach               | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
| Lane Configuration     | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| 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      | 1      | 1         | 0      | 0      | 1         | 0      | 2      |
| Pocket Length [ft]     | 120.00     | 100.00 | 100.00 | 350.00     | 100.00 | 370.00 | 140.00    | 100.00 | 100.00 | 250.00    | 100.00 | 450.00 |
| Speed [mph]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | Yes        |        |        | No         |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 217        | 674    | 77     | 85         | 488    | 34     | 55        | 461    | 289    | 85        | 335    | 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 [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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]            | 9          | 36     | 44     | 0          | 12     | 0      | 0         | 0      | 3      | 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      |
| Right-Turn on Red Volume [veh/h]        | 0          | 0      | 0      | 0          | 0      | 0      | 0         | 0      | 0      | 0         | 0      | 0      |
| Total Hourly Volume [veh/h]             | 226        | 710    | 121    | 85         | 500    | 34     | 55        | 461    | 292    | 100       | 335    | 57     |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| 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]          | 59         | 187    | 32     | 22         | 132    | 9      | 14        | 121    | 77     | 26        | 88     | 15     |
| Total Analysis Volume [veh/h]           | 238        | 747    | 127    | 89         | 526    | 36     | 58        | 485    | 307    | 105       | 353    | 60     |
| 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            | Fixed time                   |
| Offset [s]                | 0.0                          |
| Offset Reference          | LeadGreen                    |
| Permissive Mode           | SingleBand                   |
| Lost time [s]             | 2.00                         |

**Phasing & Timing**

| Control Type                 | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss |
|------------------------------|----------|---------|---------|----------|---------|---------|----------|---------|---------|----------|---------|---------|
| Signal group                 | 5        | 2       | 0       | 1        | 6       | 0       | 3        | 8       | 0       | 7        | 4       | 0       |
| Auxiliary Signal Groups      |          |         |         |          |         |         |          |         |         |          |         |         |
| Lead / Lag                   | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       |
| Minimum Green [s]            | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       |
| Maximum Green [s]            | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       |
| Amber [s]                    | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| All red [s]                  | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     |
| Split [s]                    | 17       | 25      | 0       | 13       | 21      | 0       | 11       | 21      | 0       | 11       | 21      | 0       |
| Vehicle Extension [s]        | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| Walk [s]                     | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 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     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| I2, Clearance Lost Time [s]  | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| Minimum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Maximum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Pedestrian Recall            | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Detector Location [ft]       | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| Detector Length [ft]         | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| I, Upstream Filtering Factor | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    |

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

| Lane Group                              | L     | C     | R     | L     | C     | R     | L     | C     | R     | L     | C     | R     |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| C, Cycle Length [s]                     | 70    | 70    | 70    | 70    | 70    | 70    | 70    | 70    | 70    | 70    | 70    | 70    |
| L, Total Lost Time per Cycle [s]        | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  |
| l1_p, Permitted Start-Up Lost Time [s]  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| l2, Clearance Lost Time [s]             | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  |
| g_i, Effective Green Time [s]           | 13    | 21    | 21    | 9     | 17    | 17    | 7     | 17    | 17    | 7     | 17    | 17    |
| g / C, Green / Cycle                    | 0.19  | 0.30  | 0.30  | 0.13  | 0.24  | 0.24  | 0.10  | 0.24  | 0.24  | 0.10  | 0.24  | 0.24  |
| (v / s)_i Volume / Saturation Flow Rate | 0.14  | 0.22  | 0.08  | 0.05  | 0.15  | 0.02  | 0.03  | 0.14  | 0.20  | 0.03  | 0.10  | 0.04  |
| s, saturation flow rate [veh/h]         | 1714  | 3427  | 1530  | 1714  | 3427  | 1530  | 1714  | 3427  | 1530  | 3329  | 3427  | 1530  |
| c, Capacity [veh/h]                     | 318   | 1028  | 459   | 220   | 832   | 372   | 171   | 832   | 372   | 333   | 832   | 372   |
| d1, Uniform Delay [s]                   | 26.95 | 21.93 | 18.70 | 28.03 | 23.70 | 20.55 | 29.34 | 23.37 | 25.10 | 29.27 | 22.37 | 20.88 |
| k, delay calibration                    | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  |
| 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]               | 14.81 | 4.49  | 1.49  | 5.42  | 3.63  | 0.52  | 5.28  | 2.97  | 18.61 | 2.47  | 1.58  | 0.93  |
| d3, Initial Queue Delay [s]             | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 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                  | 0.75   | 0.73   | 0.28  | 0.40  | 0.63   | 0.10  | 0.34  | 0.58   | 0.83   | 0.32  | 0.42   | 0.16  |
| d, Delay for Lane Group [s/veh]       | 41.76  | 26.42  | 20.20 | 33.46 | 27.34  | 21.07 | 34.62 | 26.34  | 43.71  | 31.74 | 23.95  | 21.81 |
| Lane Group LOS                        | D      | C      | C     | C     | C      | C     | C     | C      | D      | C     | C      | C     |
| Critical Lane Group                   | Yes    | No     | No    | No    | Yes    | No    | No    | No     | Yes    | Yes   | No     | No    |
| 50th-Percentile Queue Length [veh/ln] | 4.89   | 5.76   | 1.68  | 1.65  | 4.10   | 0.49  | 1.13  | 3.69   | 6.47   | 0.91  | 2.51   | 0.84  |
| 50th-Percentile Queue Length [ft/ln]  | 122.22 | 144.10 | 41.90 | 41.30 | 102.45 | 12.25 | 28.22 | 92.19  | 161.67 | 22.66 | 62.81  | 20.88 |
| 95th-Percentile Queue Length [veh/ln] | 8.51   | 9.70   | 3.02  | 2.97  | 7.38   | 0.88  | 2.03  | 6.64   | 10.64  | 1.63  | 4.52   | 1.50  |
| 95th-Percentile Queue Length [ft/ln]  | 212.87 | 242.53 | 75.42 | 74.33 | 184.41 | 22.05 | 50.79 | 165.94 | 265.94 | 40.80 | 113.05 | 37.59 |

**Movement, Approach, & Intersection Results**

|                                 |       |       |       |       |       |       |       |       |       |       |       |       |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| d_M, Delay for Movement [s/veh] | 41.76 | 26.42 | 20.20 | 33.46 | 27.34 | 21.07 | 34.62 | 26.34 | 43.71 | 31.74 | 23.95 | 21.81 |
| Movement LOS                    | D     | C     | C     | C     | C     | C     | C     | C     | D     | C     | C     | C     |
| d_A, Approach Delay [s/veh]     | 28.99 |       |       | 27.83 |       |       | 33.18 |       |       | 25.28 |       |       |
| Approach LOS                    | C     |       |       | C     |       |       | C     |       |       | C     |       |       |
| d_I, Intersection Delay [s/veh] | 29.27 |       |       |       |       |       |       |       |       |       |       |       |
| Intersection LOS                | C     |       |       |       |       |       |       |       |       |       |       |       |
| Intersection V/C                | 0.540 |       |       |       |       |       |       |       |       |       |       |       |

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 4: US-Route 395 (NS) at Dos Palmas Road (EW)**

|                  |            |                           |       |
|------------------|------------|---------------------------|-------|
| Control Type:    | Signalized | Delay (sec / veh):        | 17.6  |
| Analysis Method: | HCM 2010   | Level Of Service:         | B     |
| Analysis Period: | 15 minutes | Volume to Capacity (v/c): | 0.471 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Approach               | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
| Lane Configuration     | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| 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      | 1      | 1          | 0      | 0      | 1         | 0      | 1      | 1         | 0      | 0      |
| Pocket Length [ft]     | 480.00     | 100.00 | 250.00 | 300.00     | 100.00 | 100.00 | 160.00    | 100.00 | 470.00 | 100.00    | 100.00 | 100.00 |
| Speed [mph]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | No         |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 7          | 832    | 7      | 47         | 812    | 51     | 99        | 23     | 43     | 24        | 7      | 72     |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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      | 30     | 89        | 18     | 18     | 0         | 6      | 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]             | 13         | 832    | 7      | 47         | 812    | 81     | 188       | 41     | 61     | 24        | 13     | 72     |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| 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]          | 3          | 219    | 2      | 12         | 214    | 21     | 49        | 11     | 16     | 6         | 3      | 19     |
| Total Analysis Volume [veh/h]           | 14         | 876    | 7      | 49         | 855    | 85     | 198       | 43     | 64     | 25        | 14     | 76     |
| 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]             | 2.00                         |

**Phasing & Timing**

| Control Type                 | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss |
|------------------------------|----------|---------|---------|----------|---------|---------|----------|---------|---------|----------|---------|---------|
| Signal group                 | 5        | 2       | 0       | 1        | 6       | 0       | 3        | 8       | 0       | 7        | 4       | 0       |
| Auxiliary Signal Groups      |          |         |         |          |         |         |          |         |         |          |         |         |
| Lead / Lag                   | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       |
| Minimum Green [s]            | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       |
| Maximum Green [s]            | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       |
| Amber [s]                    | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| All red [s]                  | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     |
| Split [s]                    | 11       | 23      | 0       | 12       | 24      | 0       | 14       | 24      | 0       | 11       | 21      | 0       |
| Vehicle Extension [s]        | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| Walk [s]                     | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 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     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| I2, Clearance Lost Time [s]  | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| Minimum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Maximum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Pedestrian Recall            | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Detector Location [ft]       | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| Detector Length [ft]         | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| I, Upstream Filtering Factor | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    |

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

| Lane Group                              | L     | C     | R    | L     | C     | C     | L     | C     | R     | L     | C     |
|---|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|
| C, Cycle Length [s]                     | 70    | 70    | 70   | 70    | 70    | 70    | 70    | 70    | 70    | 70    | 70    |
| L, Total Lost Time per Cycle [s]        | 4.00  | 4.00  | 4.00 | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  |
| l1_p, Permitted Start-Up Lost Time [s]  | 0.00  | 0.00  | 0.00 | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| l2, Clearance Lost Time [s]             | 2.00  | 2.00  | 2.00 | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  |
| g_i, Effective Green Time [s]           | 2     | 34    | 34   | 4     | 37    | 37    | 10    | 13    | 13    | 3     | 6     |
| g / C, Green / Cycle                    | 0.02  | 0.49  | 0.49 | 0.06  | 0.52  | 0.52  | 0.14  | 0.18  | 0.18  | 0.04  | 0.08  |
| (v / s)_i Volume / Saturation Flow Rate | 0.01  | 0.26  | 0.00 | 0.03  | 0.27  | 0.27  | 0.12  | 0.02  | 0.04  | 0.01  | 0.06  |
| s, saturation flow rate [veh/h]         | 1714  | 3427  | 1530 | 1714  | 1800  | 1743  | 1714  | 1800  | 1530  | 1714  | 1567  |
| c, Capacity [veh/h]                     | 44    | 1661  | 741  | 109   | 940   | 910   | 240   | 330   | 281   | 70    | 132   |
| d1, Uniform Delay [s]                   | 33.61 | 12.54 | 9.38 | 31.71 | 10.91 | 10.91 | 29.37 | 23.99 | 24.44 | 32.81 | 31.27 |
| 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  |
| 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  |
| d2, Incremental Delay [s]               | 4.00  | 1.20  | 0.02 | 2.89  | 1.96  | 2.02  | 6.98  | 0.18  | 0.41  | 3.10  | 6.11  |
| 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  |
| Rp, platoon ratio                       | 1.00  | 1.00  | 1.00 | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| PF, progression factor                  | 1.00  | 1.00  | 1.00 | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |

**Lane Group Results**

|                                       |       |        |      |       |        |        |        |       |       |       |       |
|---------------------------------------|-------|--------|------|-------|--------|--------|--------|-------|-------|-------|-------|
| X, volume / capacity                  | 0.32  | 0.53   | 0.01 | 0.45  | 0.51   | 0.51   | 0.82   | 0.13  | 0.23  | 0.36  | 0.68  |
| d, Delay for Lane Group [s/veh]       | 37.62 | 13.74  | 9.40 | 34.60 | 12.87  | 12.94  | 36.35  | 24.16 | 24.85 | 35.91 | 37.37 |
| Lane Group LOS                        | D     | B      | A    | C     | B      | B      | D      | C     | C     | D     | D     |
| Critical Lane Group                   | No    | Yes    | No   | Yes   | No     | No     | Yes    | No    | No    | No    | Yes   |
| 50th-Percentile Queue Length [veh/ln] | 0.28  | 4.46   | 0.05 | 0.86  | 4.66   | 4.53   | 3.57   | 0.59  | 0.90  | 0.46  | 1.65  |
| 50th-Percentile Queue Length [ft/ln]  | 6.92  | 111.62 | 1.37 | 21.58 | 116.49 | 113.23 | 89.34  | 14.75 | 22.55 | 11.53 | 41.32 |
| 95th-Percentile Queue Length [veh/ln] | 0.50  | 7.93   | 0.10 | 1.55  | 8.20   | 8.02   | 6.43   | 1.06  | 1.62  | 0.83  | 2.98  |
| 95th-Percentile Queue Length [ft/ln]  | 12.45 | 198.25 | 2.47 | 38.84 | 204.99 | 200.48 | 160.82 | 26.56 | 40.60 | 20.76 | 74.38 |



**Movement, Approach, & Intersection Results**

|                                 |       |       |      |       |       |       |       |       |       |       |       |       |
|---------------------------------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| d_M, Delay for Movement [s/veh] | 37.62 | 13.74 | 9.40 | 34.60 | 12.90 | 12.94 | 36.35 | 24.16 | 24.85 | 35.91 | 37.37 | 37.37 |
| Movement LOS                    | D     | B     | A    | C     | B     | B     | D     | C     | C     | D     | D     | D     |
| d_A, Approach Delay [s/veh]     | 14.08 |       |      | 13.98 |       |       | 32.22 |       |       | 37.05 |       |       |
| Approach LOS                    | B     |       |      | B     |       |       | C     |       |       | D     |       |       |
| d_I, Intersection Delay [s/veh] | 17.58 |       |      |       |       |       |       |       |       |       |       |       |
| Intersection LOS                | B     |       |      |       |       |       |       |       |       |       |       |       |
| Intersection V/C                | 0.471 |       |      |       |       |       |       |       |       |       |       |       |

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 5: US-Route 395 (NS) at Luna Road (EW)**

|                  |            |                           |       |
|------------------|------------|---------------------------|-------|
| Control Type:    | Signalized | Delay (sec / veh):        | 32.3  |
| Analysis Method: | HCM 2010   | Level Of Service:         | C     |
| Analysis Period: | 15 minutes | Volume to Capacity (v/c): | 0.409 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Approach               | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| Lane Configuration     | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| 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      | 1      | 1          | 0      | 1      | 1         | 0      | 0      | 1         | 0      | 0      |
| Pocket Length [ft]     | 360.00     | 100.00 | 450.00 | 400.00     | 100.00 | 400.00 | 125.00    | 100.00 | 100.00 | 425.00    | 100.00 | 100.00 |
| Speed [mph]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | No         |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 22         | 651    | 36     | 120        | 710    | 16     | 44        | 52     | 45     | 50        | 30     | 146    |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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          | 6      | 0      | 0          | 18     | 0      | 0         | 18     | 18     | 0         | 6      | 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]             | 28         | 657    | 36     | 120        | 728    | 16     | 44        | 70     | 63     | 50        | 36     | 146    |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| Other Adjustment Factor                 | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h]          | 7          | 173    | 9      | 32         | 192    | 4      | 12        | 18     | 17     | 13        | 9      | 38     |
| Total Analysis Volume [veh/h]           | 29         | 692    | 38     | 126        | 766    | 17     | 46        | 74     | 66     | 53        | 38     | 154    |
| 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            | Fixed time                   |
| Offset [s]                | 0.0                          |
| Offset Reference          | LeadGreen                    |
| Permissive Mode           | SingleBand                   |
| Lost time [s]             | 2.00                         |

**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]            | 7        | 7       | 0       | 7        | 7       | 0       | 0       | 7       | 0       | 0       | 7       | 0       |
| Maximum Green [s]            | 30       | 30      | 0       | 30       | 30      | 0       | 0       | 30      | 0       | 0       | 30      | 0       |
| Amber [s]                    | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 0.0     | 3.0     | 0.0     | 0.0     | 3.0     | 0.0     |
| All red [s]                  | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 0.0     | 1.0     | 0.0     | 0.0     | 1.0     | 0.0     |
| Split [s]                    | 17       | 25      | 0       | 13       | 21      | 0       | 0       | 21      | 0       | 0       | 21      | 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        | 7       | 0       | 0        | 7       | 0       | 0       | 7       | 0       | 0       | 7       | 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]  | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 0.0     | 2.0     | 0.0     | 0.0     | 2.0     | 0.0     |
| Minimum Recall               | No       | No      |         | No       | No      |         |         | No      |         |         | No      |         |
| Maximum Recall               | No       | No      |         | No       | No      |         |         | No      |         |         | No      |         |
| Pedestrian Recall            | No       | No      |         | No       | No      |         |         | No      |         |         | No      |         |
| Detector Location [ft]       | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| Detector Length [ft]         | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| I, Upstream Filtering Factor | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    |

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

| Lane Group                              | L     | C     | R     | L     | C     | R     | L     | C     | R     | L     | C     |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| C, Cycle Length [s]                     | 70    | 70    | 70    | 70    | 70    | 70    | 70    | 70    | 70    | 70    | 70    |
| L, Total Lost Time per Cycle [s]        | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  |
| l1_p, Permitted Start-Up Lost Time [s]  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 2.00  | 0.00  | 0.00  | 2.00  | 0.00  |
| l2, Clearance Lost Time [s]             | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  |
| g_i, Effective Green Time [s]           | 13    | 21    | 21    | 9     | 17    | 17    | 17    | 17    | 17    | 17    | 17    |
| g / C, Green / Cycle                    | 0.19  | 0.30  | 0.30  | 0.13  | 0.24  | 0.24  | 0.24  | 0.24  | 0.24  | 0.24  | 0.24  |
| (v / s)_i Volume / Saturation Flow Rate | 0.02  | 0.20  | 0.02  | 0.07  | 0.22  | 0.01  | 0.04  | 0.04  | 0.04  | 0.04  | 0.12  |
| s, saturation flow rate [veh/h]         | 1714  | 3427  | 1530  | 1714  | 3427  | 1530  | 1210  | 1800  | 1530  | 1347  | 1577  |
| c, Capacity [veh/h]                     | 318   | 1028  | 459   | 220   | 832   | 372   | 235   | 437   | 372   | 348   | 383   |
| d1, Uniform Delay [s]                   | 23.61 | 21.49 | 17.59 | 28.69 | 25.84 | 20.29 | 28.86 | 20.92 | 20.97 | 24.39 | 22.85 |
| k, delay calibration                    | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  |
| 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  |
| d2, Incremental Delay [s]               | 0.57  | 3.52  | 0.35  | 10.34 | 16.96 | 0.23  | 1.85  | 0.84  | 1.04  | 0.93  | 4.63  |
| d3, Initial Queue Delay [s]             | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| Rp, platoon ratio                       | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| PF, progression factor                  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |

**Lane Group Results**

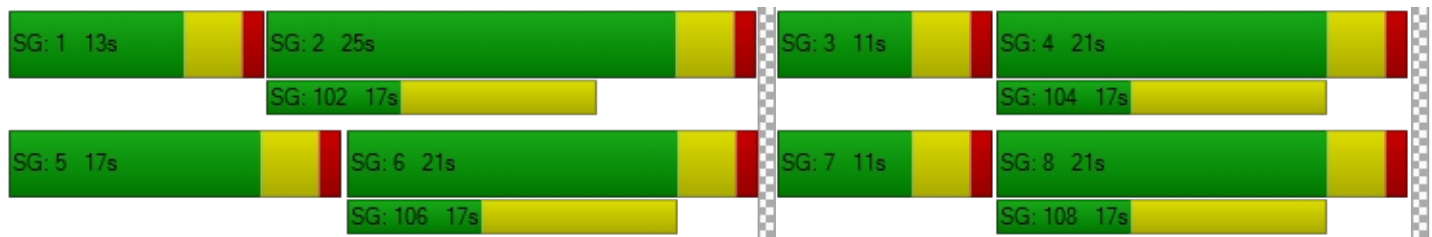
|                                       |       |        |       |        |        |       |       |       |       |       |        |
|---------------------------------------|-------|--------|-------|--------|--------|-------|-------|-------|-------|-------|--------|
| X, volume / capacity                  | 0.09  | 0.67   | 0.08  | 0.57   | 0.92   | 0.05  | 0.20  | 0.17  | 0.18  | 0.15  | 0.50   |
| d, Delay for Lane Group [s/veh]       | 24.17 | 25.01  | 17.94 | 39.03  | 42.80  | 20.52 | 30.72 | 21.76 | 22.01 | 25.32 | 27.48  |
| Lane Group LOS                        | C     | C      | B     | D      | D      | C     | C     | C     | C     | C     | C      |
| Critical Lane Group                   | No    | Yes    | No    | Yes    | No     | No    | No    | No    | No    | No    | Yes    |
| 50th-Percentile Queue Length [veh/ln] | 0.43  | 5.15   | 0.46  | 2.55   | 7.80   | 0.23  | 0.81  | 1.02  | 0.92  | 0.81  | 3.08   |
| 50th-Percentile Queue Length [ft/ln]  | 10.80 | 128.83 | 11.58 | 63.64  | 194.98 | 5.69  | 20.28 | 25.38 | 23.11 | 20.21 | 77.02  |
| 95th-Percentile Queue Length [veh/ln] | 0.78  | 8.88   | 0.83  | 4.58   | 12.38  | 0.41  | 1.46  | 1.83  | 1.66  | 1.45  | 5.55   |
| 95th-Percentile Queue Length [ft/ln]  | 19.44 | 221.90 | 20.84 | 114.55 | 309.49 | 10.24 | 36.51 | 45.69 | 41.59 | 36.37 | 138.63 |

**Movement, Approach, & Intersection Results**

|                                 |       |       |       |       |       |       |       |       |       |       |       |       |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| d_M, Delay for Movement [s/veh] | 24.17 | 25.01 | 17.94 | 39.03 | 42.80 | 20.52 | 30.72 | 21.76 | 22.01 | 25.32 | 27.48 | 27.48 |
| Movement LOS                    | C     | C     | B     | D     | D     | C     | C     | C     | C     | C     | C     | C     |
| d_A, Approach Delay [s/veh]     | 24.62 |       |       | 41.86 |       |       | 24.07 |       |       | 27.01 |       |       |
| Approach LOS                    | C     |       |       | D     |       |       | C     |       |       | C     |       |       |
| d_I, Intersection Delay [s/veh] | 32.32 |       |       |       |       |       |       |       |       |       |       |       |
| Intersection LOS                | C     |       |       |       |       |       |       |       |       |       |       |       |
| Intersection V/C                | 0.409 |       |       |       |       |       |       |       |       |       |       |       |

**Sequence**

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



## TTM 16397

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

Scenario 2 Existing Plus Project

Report File: C:\...IAM Ep.pdf

11/1/2019

**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  | Mesa View Drive (NS) at Dos Palmas Road (EW) | Final Base          | 0          | 3        | 34        | 9          | 8        | 0        | 0         | 5        | 2          | 9         | 3         | 2         | 75           |            |
|    |  | Growth Rate         | 1.00       | 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            | 0          |
|    |  | Net New Trips       | 9          | 0        | 9         | 0          | 0        | 0        | 0         | 0        | 116        | 27        | 3         | 39        | 0            | 203        |
|    |  | Other               | 0          | 0        | 0         | 0          | 0        | 0        | 0         | 0        | 0          | 0         | 0         | 0         | 0            | 0          |
|    |  | <b>Future Total</b> | <b>9</b>   | <b>3</b> | <b>43</b> | <b>9</b>   | <b>8</b> | <b>0</b> | <b>0</b>  | <b>0</b> | <b>121</b> | <b>29</b> | <b>12</b> | <b>42</b> | <b>2</b>     | <b>278</b> |

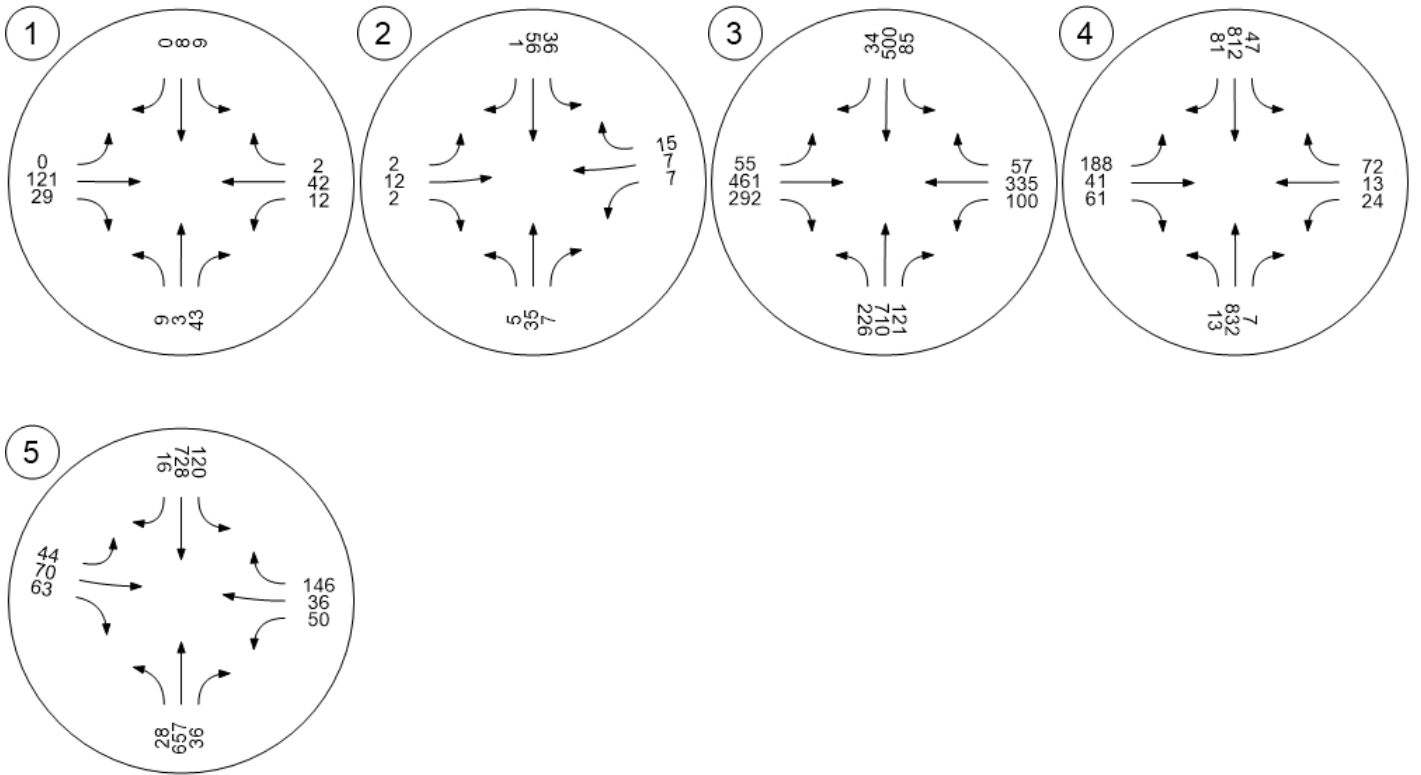
| ID | Intersection Name                      | Volume Type         | Northbound |           |          | Southbound |           |          | Eastbound |           |          | Westbound |          |           | Total Volume |    |
|----|--|---------------------|------------|-----------|----------|------------|-----------|----------|-----------|-----------|----------|-----------|----------|-----------|--------------|----|
|    |  |                     | Left       | Thru      | Right    | Left       | Thru      | Right    | Left      | Thru      | Right    | Left      | Thru     | Right     |              |    |
| 2  | Mesa View Drive (NS) at Luna Road (EW) | Final Base          | 5          | 29        | 7        | 9          | 38        | 1        | 2         | 12        | 2        | 7         | 7        | 6         | 125          |    |
|    |  | Growth Rate         | 1.00       | 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            | 0  |
|    |  | Net New Trips       | 0          | 6         | 0        | 27         | 18        | 0        | 0         | 0         | 0        | 0         | 0        | 0         | 9            | 60 |
|    |  | Other               | 0          | 0         | 0        | 0          | 0         | 0        | 0         | 0         | 0        | 0         | 0        | 0         | 0            | 0  |
|    |  | <b>Future Total</b> | <b>5</b>   | <b>35</b> | <b>7</b> | <b>36</b>  | <b>56</b> | <b>1</b> | <b>2</b>  | <b>12</b> | <b>2</b> | <b>7</b>  | <b>7</b> | <b>15</b> | <b>185</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  | US-Route 395 (NS) at Palmdale Road (EW) | Final Base          | 217        | 674        | 77         | 85         | 488        | 34        | 55        | 461        | 289        | 85         | 335        | 57        | 2857         |     |
|    |   | Growth Rate         | 1.00       | 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            | 0   |
|    |   | Net New Trips       | 9          | 36         | 44         | 0          | 12         | 0         | 0         | 0          | 3          | 15         | 0          | 0         | 0            | 119 |
|    |   | Other               | 0          | 0          | 0          | 0          | 0          | 0         | 0         | 0          | 0          | 0          | 0          | 0         | 0            | 0   |
|    |   | <b>Future Total</b> | <b>226</b> | <b>710</b> | <b>121</b> | <b>85</b>  | <b>500</b> | <b>34</b> | <b>55</b> | <b>461</b> | <b>292</b> | <b>100</b> | <b>335</b> | <b>57</b> | <b>2976</b>  |     |

| ID | Intersection Name                         | Volume Type         | Northbound |            |          | Southbound |            |           | Eastbound  |           |           | Westbound |           |           | Total Volume |     |
|----|---|---------------------|------------|------------|----------|------------|------------|-----------|------------|-----------|-----------|-----------|-----------|-----------|--------------|-----|
|    |   |                     | Left       | Thru       | Right    | Left       | Thru       | Right     | Left       | Thru      | Right     | Left      | Thru      | Right     |              |     |
| 4  | US-Route 395 (NS) at Dos Palmas Road (EW) | Final Base          | 7          | 832        | 7        | 47         | 812        | 51        | 99         | 23        | 43        | 24        | 7         | 72        | 2024         |     |
|    |   | Growth Rate         | 1.00       | 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            | 0   |
|    |   | Net New Trips       | 6          | 0          | 0        | 0          | 0          | 30        | 89         | 18        | 18        | 0         | 6         | 0         | 0            | 167 |
|    |   | Other               | 0          | 0          | 0        | 0          | 0          | 0         | 0          | 0         | 0         | 0         | 0         | 0         | 0            | 0   |
|    |   | <b>Future Total</b> | <b>13</b>  | <b>832</b> | <b>7</b> | <b>47</b>  | <b>812</b> | <b>81</b> | <b>188</b> | <b>41</b> | <b>61</b> | <b>24</b> | <b>13</b> | <b>72</b> | <b>2191</b>  |     |

| ID | Intersection Name                   | Volume Type         | Northbound |            |           | Southbound |            |           | Eastbound |           |           | Westbound |           |            | Total Volume |
|----|-------------------------------------|---------------------|------------|------------|-----------|------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|------------|--------------|
|    |                                     |                     | Left       | Thru       | Right     | Left       | Thru       | Right     | Left      | Thru      | Right     | Left      | Thru      | Right      |              |
| 5  | US-Route 395 (NS) at Luna Road (EW) | Final Base          | 22         | 651        | 36        | 120        | 710        | 16        | 44        | 52        | 45        | 50        | 30        | 146        | 1922         |
|    |                                     | Growth Rate         | 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          | 6          | 0         | 0          | 18         | 0         | 0         | 18        | 18        | 0         | 6         | 0          | 72           |
|    |                                     | Other               | 0          | 0          | 0         | 0          | 0          | 0         | 0         | 0         | 0         | 0         | 0         | 0          | 0            |
|    |                                     | <b>Future Total</b> | <b>28</b>  | <b>657</b> | <b>36</b> | <b>120</b> | <b>728</b> | <b>16</b> | <b>44</b> | <b>70</b> | <b>63</b> | <b>50</b> | <b>36</b> | <b>146</b> | <b>1994</b>  |

Traffic Volume - Future Total Volume





**Opening Year (2022) Without Project**

## TTM 16397

Vistro File: C:\...\IPM.vistro

Scenario 3 Opening Year (2022) Without Project

Report File: C:\...\IPM OY.pdf

11/1/2019

**Intersection Analysis Summary**

| ID | Intersection Name                            | Control Type | Method   | Worst Mvmt | V/C        | Delay (s/veh) | LOS |
|----|--|--------------|----------|------------|------------|---------------|-----|
| 1  | Mesa View Drive (NS) at Dos Palmas Road (EW) | Two-way stop | HCM 2010 | NB Thru    | 0.027      | 10.2          | B   |
| 2  | Mesa View Drive (NS) at Luna Road (EW)       | Two-way stop | HCM 2010 | WB Thru    | 0.029      | 10.5          | B   |
| 3  | US-Route 395 (NS) at Palmdale Road (EW)      | Signalized   | HCM 2010 | WB Thru    | 0.743      | 45.3          | D   |
| 4  | US-Route 395 (NS) at Dos Palmas Road (EW)    | Signalized   | HCM 2010 | WB Right   | 0.573      | 19.7          | B   |
| 5  | US-Route 395 (NS) at Luna Road (EW)          | Signalized   | HCM 2010 | SB Thru    | 10,256.819 | 43.1          | D   |

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: Mesa View Drive (NS) at Dos Palmas Road (EW)**

|                  |              |                           |       |
|------------------|--------------|---------------------------|-------|
| Control Type:    | Two-way stop | Delay (sec / veh):        | 10.2  |
| Analysis Method: | HCM 2010     | Level Of Service:         | B     |
| Analysis Period: | 15 minutes   | Volume to Capacity (v/c): | 0.027 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| 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      | 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]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | Yes        |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 5          | 19     | 48     | 13         | 17     | 0      | 0         | 8      | 0      | 37        | 6      | 25     |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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      | 5      | 0          | 0      | 0      | 0         | 0      | 0      | 9         | 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]             | 5          | 19     | 53     | 13         | 17     | 0      | 0         | 8      | 0      | 46        | 6      | 25     |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| Other Adjustment Factor                 | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h]          | 1          | 5      | 14     | 3          | 4      | 0      | 0         | 2      | 0      | 12        | 2      | 7      |
| Total Analysis Volume [veh/h]           | 5          | 20     | 56     | 14         | 18     | 0      | 0         | 8      | 0      | 48        | 6      | 26     |
| Pedestrian Volume [ped/h]               | 0          |        |        | 0          |        |        | 0         |        |        | 0         |        |        |

**Intersection Settings**

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

**Movement, Approach, & Intersection Results**

|                                       |      |       |      |       |       |      |      |      |      |      |      |      |
|---------------------------------------|------|-------|------|-------|-------|------|------|------|------|------|------|------|
| V/C, Movement V/C Ratio               | 0.01 | 0.03  | 0.05 | 0.02  | 0.02  | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.00 | 0.00 |
| d_M, Delay for Movement [s/veh]       | 9.80 | 10.25 | 8.69 | 10.12 | 10.03 | 8.60 | 7.26 | 0.00 | 0.00 | 7.28 | 0.00 | 0.00 |
| Movement LOS                          | A    | B     | A    | B     | B     | A    | A    | A    | A    | A    | A    | A    |
| 95th-Percentile Queue Length [veh/ln] | 0.28 | 0.28  | 0.28 | 0.14  | 0.14  | 0.14 | 0.00 | 0.00 | 0.00 | 0.09 | 0.09 | 0.09 |
| 95th-Percentile Queue Length [ft/ln]  | 6.97 | 6.97  | 6.97 | 3.38  | 3.38  | 3.38 | 0.00 | 0.00 | 0.00 | 2.18 | 2.18 | 2.18 |
| d_A, Approach Delay [s/veh]           | 9.14 |       |      | 10.07 |       |      | 0.00 |      |      | 4.37 |      |      |
| Approach LOS                          | A    |       |      | B     |       |      | A    |      |      | A    |      |      |
| d_I, Intersection Delay [s/veh]       | 7.03 |       |      |       |       |      |      |      |      |      |      |      |
| Intersection LOS                      | B    |       |      |       |       |      |      |      |      |      |      |      |

**Intersection Level Of Service Report**  
**Intersection 2: Mesa View Drive (NS) at Luna Road (EW)**

|                  |              |                           |       |
|------------------|--------------|---------------------------|-------|
| Control Type:    | Two-way stop | Delay (sec / veh):        | 10.5  |
| Analysis Method: | HCM 2010     | Level Of Service:         | B     |
| Analysis Period: | 15 minutes   | Volume to Capacity (v/c): | 0.029 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| 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      | 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]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | Yes        |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 8          | 69     | 14     | 14         | 36     | 5      | 6         | 11     | 6      | 6         | 19     | 23     |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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          | 5      | 5      | 0          | 9      | 0      | 0         | 0      | 0      | 9         | 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]             | 8          | 74     | 19     | 14         | 45     | 5      | 6         | 11     | 6      | 15        | 19     | 23     |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| Other Adjustment Factor                 | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h]          | 2          | 19     | 5      | 4          | 12     | 1      | 2         | 3      | 2      | 4         | 5      | 6      |
| Total Analysis Volume [veh/h]           | 8          | 78     | 20     | 15         | 47     | 5      | 6         | 12     | 6      | 16        | 20     | 24     |
| Pedestrian Volume [ped/h]               | 0          |        |        | 0          |        |        | 0         |        |        | 0         |        |        |

**Intersection Settings**

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

**Movement, Approach, & Intersection Results**

|                                       |      |      |      |      |      |      |       |       |      |       |       |      |
|---------------------------------------|------|------|------|------|------|------|-------|-------|------|-------|-------|------|
| V/C, Movement V/C Ratio               | 0.01 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01  | 0.02  | 0.01 | 0.02  | 0.03  | 0.02 |
| d_M, Delay for Movement [s/veh]       | 7.31 | 0.00 | 0.00 | 7.41 | 0.00 | 0.00 | 10.20 | 10.34 | 8.67 | 10.17 | 10.50 | 9.05 |
| Movement LOS                          | A    | A    | A    | A    | A    | A    | B     | B     | A    | B     | B     | A    |
| 95th-Percentile Queue Length [veh/ln] | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | 0.10  | 0.10  | 0.10 | 0.24  | 0.24  | 0.24 |
| 95th-Percentile Queue Length [ft/ln]  | 0.38 | 0.38 | 0.38 | 0.70 | 0.70 | 0.70 | 2.44  | 2.44  | 2.44 | 6.02  | 6.02  | 6.02 |
| d_A, Approach Delay [s/veh]           | 0.55 |      |      | 1.66 |      |      | 9.89  |       |      | 9.83  |       |      |
| Approach LOS                          | A    |      |      | A    |      |      | A     |       |      | A     |       |      |
| d_I, Intersection Delay [s/veh]       | 3.88 |      |      |      |      |      |       |       |      |       |       |      |
| Intersection LOS                      | B    |      |      |      |      |      |       |       |      |       |       |      |

**Intersection Level Of Service Report**  
**Intersection 3: US-Route 395 (NS) at Palmdale Road (EW)**

|                  |            |                           |       |
|------------------|------------|---------------------------|-------|
| Control Type:    | Signalized | Delay (sec / veh):        | 45.3  |
| Analysis Method: | HCM 2010   | Level Of Service:         | D     |
| Analysis Period: | 15 minutes | Volume to Capacity (v/c): | 0.743 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Approach               | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| Lane Configuration     | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| 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      | 1      | 1         | 0      | 0      | 1         | 0      | 2      |
| Pocket Length [ft]     | 120.00     | 100.00 | 100.00 | 350.00     | 100.00 | 370.00 | 140.00    | 100.00 | 100.00 | 250.00    | 100.00 | 450.00 |
| Speed [mph]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | Yes        |        |        | No         |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 318        | 844    | 94     | 144        | 732    | 45     | 98        | 608    | 290    | 243       | 785    | 132    |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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          | 4      | 2      | 0          | 7      | 0      | 0         | 0      | 2      | 3         | 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]             | 319        | 848    | 96     | 144        | 739    | 45     | 98        | 608    | 292    | 246       | 785    | 132    |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| 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         | 223    | 25     | 38         | 194    | 12     | 26        | 160    | 77     | 65        | 207    | 35     |
| Total Analysis Volume [veh/h]           | 336        | 893    | 101    | 152        | 778    | 47     | 103       | 640    | 307    | 259       | 826    | 139    |
| 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            | Fixed time                   |
| Offset [s]                | 0.0                          |
| Offset Reference          | LeadGreen                    |
| Permissive Mode           | SingleBand                   |
| Lost time [s]             | 2.00                         |

**Phasing & Timing**

| Control Type                 | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss |
|------------------------------|----------|---------|---------|----------|---------|---------|----------|---------|---------|----------|---------|---------|
| Signal group                 | 5        | 2       | 0       | 1        | 6       | 0       | 3        | 8       | 0       | 7        | 4       | 0       |
| Auxiliary Signal Groups      |          |         |         |          |         |         |          |         |         |          |         |         |
| Lead / Lag                   | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       |
| Minimum Green [s]            | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       |
| Maximum Green [s]            | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       |
| Amber [s]                    | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| All red [s]                  | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     |
| Split [s]                    | 21       | 31      | 0       | 15       | 25      | 0       | 11       | 22      | 0       | 12       | 23      | 0       |
| Vehicle Extension [s]        | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| Walk [s]                     | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 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     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| I2, Clearance Lost Time [s]  | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| Minimum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Maximum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Pedestrian Recall            | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Detector Location [ft]       | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| Detector Length [ft]         | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| I, Upstream Filtering Factor | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    |

**Exclusive Pedestrian Phase**

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



**Lane Group Calculations**

| Lane Group                              | L     | C     | R     | L     | C     | R     | L     | C     | R     | L     | C     | R     |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| C, Cycle Length [s]                     | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    |
| L, Total Lost Time per Cycle [s]        | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  |
| l1_p, Permitted Start-Up Lost Time [s]  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| l2, Clearance Lost Time [s]             | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  |
| g_i, Effective Green Time [s]           | 17    | 27    | 27    | 11    | 21    | 21    | 7     | 18    | 18    | 8     | 19    | 19    |
| g / C, Green / Cycle                    | 0.21  | 0.34  | 0.34  | 0.14  | 0.26  | 0.26  | 0.09  | 0.23  | 0.23  | 0.10  | 0.24  | 0.24  |
| (v / s)_i Volume / Saturation Flow Rate | 0.20  | 0.26  | 0.07  | 0.09  | 0.23  | 0.03  | 0.06  | 0.19  | 0.20  | 0.08  | 0.24  | 0.09  |
| s, saturation flow rate [veh/h]         | 1714  | 3427  | 1530  | 1714  | 3427  | 1530  | 1714  | 3427  | 1530  | 3329  | 3427  | 1530  |
| c, Capacity [veh/h]                     | 364   | 1157  | 516   | 236   | 900   | 402   | 150   | 771   | 344   | 333   | 814   | 363   |
| d1, Uniform Delay [s]                   | 30.85 | 23.74 | 18.80 | 32.65 | 28.15 | 22.45 | 35.44 | 29.54 | 30.06 | 35.13 | 30.50 | 25.58 |
| k, delay calibration                    | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  |
| 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]               | 31.07 | 5.02  | 0.85  | 12.83 | 10.86 | 0.59  | 22.66 | 10.07 | 27.53 | 16.29 | 35.28 | 3.04  |
| d3, Initial Queue Delay [s]             | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 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                  | 0.92   | 0.77   | 0.20  | 0.64   | 0.86   | 0.12  | 0.69   | 0.83   | 0.89   | 0.78   | 1.01   | 0.38   |
| d, Delay for Lane Group [s/veh]       | 61.92  | 28.77  | 19.64 | 45.49  | 39.00  | 23.04 | 58.09  | 39.61  | 57.59  | 51.42  | 65.78  | 28.62  |
| Lane Group LOS                        | E      | C      | B     | D      | D      | C     | E      | D      | E      | D      | F      | C      |
| Critical Lane Group                   | Yes    | No     | No    | No     | Yes    | No    | Yes    | No     | No     | No     | Yes    | No     |
| 50th-Percentile Queue Length [veh/ln] | 9.25   | 7.96   | 1.40  | 3.56   | 8.15   | 0.72  | 2.85   | 6.72   | 8.14   | 3.16   | 11.49  | 2.46   |
| 50th-Percentile Queue Length [ft/ln]  | 231.30 | 198.88 | 35.04 | 88.90  | 203.82 | 18.03 | 71.25  | 168.00 | 203.48 | 78.92  | 287.33 | 61.40  |
| 95th-Percentile Queue Length [veh/ln] | 14.24  | 12.58  | 2.52  | 6.40   | 12.84  | 1.30  | 5.13   | 10.97  | 12.82  | 5.68   | 17.19  | 4.42   |
| 95th-Percentile Queue Length [ft/ln]  | 356.01 | 314.53 | 63.06 | 160.02 | 320.89 | 32.45 | 128.25 | 274.29 | 320.45 | 142.05 | 429.84 | 110.52 |

**Movement, Approach, & Intersection Results**

|                                 |       |       |       |       |       |       |       |       |       |       |       |       |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| d_M, Delay for Movement [s/veh] | 61.92 | 28.77 | 19.64 | 45.49 | 39.00 | 23.04 | 58.09 | 39.61 | 57.59 | 51.42 | 65.78 | 28.62 |
| Movement LOS                    | E     | C     | B     | D     | D     | C     | E     | D     | E     | D     | F     | C     |
| d_A, Approach Delay [s/veh]     | 36.45 |       |       | 39.24 |       |       | 46.68 |       |       | 58.52 |       |       |
| Approach LOS                    | D     |       |       | D     |       |       | D     |       |       | E     |       |       |
| d_I, Intersection Delay [s/veh] | 45.29 |       |       |       |       |       |       |       |       |       |       |       |
| Intersection LOS                | D     |       |       |       |       |       |       |       |       |       |       |       |
| Intersection V/C                | 0.743 |       |       |       |       |       |       |       |       |       |       |       |

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 4: US-Route 395 (NS) at Dos Palmas Road (EW)**

|                  |            |                           |       |
|------------------|------------|---------------------------|-------|
| Control Type:    | Signalized | Delay (sec / veh):        | 19.7  |
| Analysis Method: | HCM 2010   | Level Of Service:         | B     |
| Analysis Period: | 15 minutes | Volume to Capacity (v/c): | 0.573 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Approach               | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
| Lane Configuration     | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| 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      | 1      | 1          | 0      | 0      | 1         | 0      | 1      | 1         | 0      | 0      |
| Pocket Length [ft]     | 480.00     | 100.00 | 250.00 | 300.00     | 100.00 | 100.00 | 160.00    | 100.00 | 470.00 | 100.00    | 100.00 | 100.00 |
| Speed [mph]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | No         |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 39         | 1076   | 20     | 82         | 1088   | 174    | 127       | 34     | 36     | 14        | 25     | 80     |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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          | 3      | 0      | 0          | 5      | 7      | 4         | 1      | 0      | 0         | 2      | 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]             | 39         | 1079   | 20     | 82         | 1093   | 181    | 131       | 35     | 36     | 14        | 27     | 80     |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| 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]          | 10         | 284    | 5      | 22         | 288    | 48     | 34        | 9      | 9      | 4         | 7      | 21     |
| Total Analysis Volume [veh/h]           | 41         | 1136   | 21     | 86         | 1151   | 191    | 138       | 37     | 38     | 15        | 28     | 84     |
| 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]             | 2.00                         |

**Phasing & Timing**

| Control Type                 | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss |
|------------------------------|----------|---------|---------|----------|---------|---------|----------|---------|---------|----------|---------|---------|
| Signal group                 | 5        | 2       | 0       | 1        | 6       | 0       | 3        | 8       | 0       | 7        | 4       | 0       |
| Auxiliary Signal Groups      |          |         |         |          |         |         |          |         |         |          |         |         |
| Lead / Lag                   | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       |
| Minimum Green [s]            | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       |
| Maximum Green [s]            | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       |
| Amber [s]                    | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| All red [s]                  | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     |
| Split [s]                    | 11       | 21      | 0       | 11       | 21      | 0       | 12       | 34      | 0       | 14       | 36      | 0       |
| Vehicle Extension [s]        | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| Walk [s]                     | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 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     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| I2, Clearance Lost Time [s]  | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| Minimum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Maximum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Pedestrian Recall            | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Detector Location [ft]       | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| Detector Length [ft]         | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| I, Upstream Filtering Factor | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    |

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

| Lane Group                              | L     | C     | R    | L     | C     | C     | L     | C     | R     | L     | C     |
|---|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|
| C, Cycle Length [s]                     | 80    | 80    | 80   | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    |
| L, Total Lost Time per Cycle [s]        | 4.00  | 4.00  | 4.00 | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  |
| l1_p, Permitted Start-Up Lost Time [s]  | 0.00  | 0.00  | 0.00 | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| l2, Clearance Lost Time [s]             | 2.00  | 2.00  | 2.00 | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  |
| g_i, Effective Green Time [s]           | 4     | 43    | 43   | 6     | 45    | 45    | 8     | 13    | 13    | 2     | 7     |
| g / C, Green / Cycle                    | 0.05  | 0.54  | 0.54 | 0.08  | 0.56  | 0.56  | 0.10  | 0.16  | 0.16  | 0.03  | 0.09  |
| (v / s)_i Volume / Saturation Flow Rate | 0.02  | 0.33  | 0.01 | 0.05  | 0.38  | 0.38  | 0.08  | 0.02  | 0.02  | 0.01  | 0.07  |
| s, saturation flow rate [veh/h]         | 1714  | 3427  | 1530 | 1714  | 1800  | 1712  | 1714  | 1800  | 1530  | 1714  | 1590  |
| c, Capacity [veh/h]                     | 93    | 1828  | 816  | 130   | 1000  | 951   | 172   | 296   | 252   | 45    | 144   |
| d1, Uniform Delay [s]                   | 36.77 | 13.06 | 8.85 | 36.06 | 12.79 | 12.88 | 35.30 | 28.58 | 28.70 | 38.35 | 35.67 |
| 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  |
| 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  |
| d2, Incremental Delay [s]               | 3.29  | 1.60  | 0.06 | 5.60  | 3.80  | 4.13  | 8.37  | 0.19  | 0.27  | 4.17  | 8.61  |
| d3, Initial Queue Delay [s]             | 0.00  | 0.00  | 0.00 | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| Rp, platoon ratio                       | 1.00  | 1.00  | 1.00 | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| PF, progression factor                  | 1.00  | 1.00  | 1.00 | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |

**Lane Group Results**

|                                       |       |        |      |       |        |        |        |       |       |       |        |
|---------------------------------------|-------|--------|------|-------|--------|--------|--------|-------|-------|-------|--------|
| X, volume / capacity                  | 0.44  | 0.62   | 0.03 | 0.66  | 0.68   | 0.69   | 0.80   | 0.12  | 0.15  | 0.33  | 0.78   |
| d, Delay for Lane Group [s/veh]       | 40.07 | 14.66  | 8.91 | 41.66 | 16.59  | 17.00  | 43.67  | 28.76 | 28.98 | 42.51 | 44.29  |
| Lane Group LOS                        | D     | B      | A    | D     | B      | B      | D      | C     | C     | D     | D      |
| Critical Lane Group                   | Yes   | No     | No   | No    | No     | Yes    | Yes    | No    | No    | No    | Yes    |
| 50th-Percentile Queue Length [veh/ln] | 0.85  | 6.74   | 0.17 | 1.80  | 8.74   | 8.53   | 2.97   | 0.61  | 0.63  | 0.34  | 2.44   |
| 50th-Percentile Queue Length [ft/ln]  | 21.21 | 168.56 | 4.30 | 45.12 | 218.60 | 213.28 | 74.34  | 15.23 | 15.79 | 8.42  | 60.95  |
| 95th-Percentile Queue Length [veh/ln] | 1.53  | 11.00  | 0.31 | 3.25  | 13.59  | 13.32  | 5.35   | 1.10  | 1.14  | 0.61  | 4.39   |
| 95th-Percentile Queue Length [ft/ln]  | 38.18 | 275.02 | 7.74 | 81.21 | 339.84 | 333.03 | 133.81 | 27.41 | 28.43 | 15.16 | 109.70 |

**Movement, Approach, & Intersection Results**

|                                 |       |       |      |       |       |       |       |       |       |       |       |       |
|---------------------------------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| d_M, Delay for Movement [s/veh] | 40.07 | 14.66 | 8.91 | 41.66 | 16.76 | 17.00 | 43.67 | 28.76 | 28.98 | 42.51 | 44.29 | 44.29 |
| Movement LOS                    | D     | B     | A    | D     | B     | B     | D     | C     | C     | D     | D     | D     |
| d_A, Approach Delay [s/veh]     | 15.43 |       |      | 18.29 |       |       | 38.46 |       |       | 44.08 |       |       |
| Approach LOS                    | B     |       |      | B     |       |       | D     |       |       | D     |       |       |
| d_I, Intersection Delay [s/veh] | 19.69 |       |      |       |       |       |       |       |       |       |       |       |
| Intersection LOS                | B     |       |      |       |       |       |       |       |       |       |       |       |
| Intersection V/C                | 0.573 |       |      |       |       |       |       |       |       |       |       |       |

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 5: US-Route 395 (NS) at Luna Road (EW)**

|                  |            |                           |            |
|------------------|------------|---------------------------|------------|
| Control Type:    | Signalized | Delay (sec / veh):        | 43.1       |
| Analysis Method: | HCM 2010   | Level Of Service:         | D          |
| Analysis Period: | 15 minutes | Volume to Capacity (v/c): | 10,256.819 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Approach               | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| Lane Configuration     | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| 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      | 1      | 1          | 0      | 1      | 1         | 0      | 0      | 1         | 0      | 0      |
| Pocket Length [ft]     | 360.00     | 100.00 | 450.00 | 400.00     | 100.00 | 400.00 | 125.00    | 100.00 | 100.00 | 425.00    | 100.00 | 100.00 |
| Speed [mph]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | No         |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 64         | 941    | 76     | 179        | 857    | 62     | 58        | 80     | 42     | 35        | 86     | 169    |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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      | 5      | 3         | 1      | 0      | 0         | 2      | 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]             | 64         | 941    | 76     | 179        | 857    | 67     | 61        | 81     | 42     | 35        | 88     | 169    |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| 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]          | 17         | 248    | 20     | 47         | 226    | 18     | 16        | 21     | 11     | 9         | 23     | 44     |
| Total Analysis Volume [veh/h]           | 67         | 991    | 80     | 188        | 902    | 71     | 64        | 85     | 44     | 37        | 93     | 178    |
| 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            | Fixed time                   |
| Offset [s]                | 0.0                          |
| Offset Reference          | LeadGreen                    |
| Permissive Mode           | SingleBand                   |
| Lost time [s]             | 2.00                         |

**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]            | 7        | 7       | 0       | 7        | 7       | 0       | 0       | 7       | 0       | 0       | 7       | 0       |
| Maximum Green [s]            | 30       | 30      | 0       | 30       | 30      | 0       | 0       | 30      | 0       | 0       | 30      | 0       |
| Amber [s]                    | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 0.0     | 3.0     | 0.0     | 0.0     | 3.0     | 0.0     |
| All red [s]                  | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 0.0     | 1.0     | 0.0     | 0.0     | 1.0     | 0.0     |
| Split [s]                    | 21       | 31      | 0       | 15       | 25      | 0       | 0       | 22      | 0       | 0       | 23      | 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        | 7       | 0       | 0        | 7       | 0       | 0       | 7       | 0       | 0       | 7       | 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]  | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 0.0     | 2.0     | 0.0     | 0.0     | 2.0     | 0.0     |
| Minimum Recall               | No       | No      |         | No       | No      |         |         | No      |         |         | No      |         |
| Maximum Recall               | No       | No      |         | No       | No      |         |         | No      |         |         | No      |         |
| Pedestrian Recall            | No       | No      |         | No       | No      |         |         | No      |         |         | No      |         |
| Detector Location [ft]       | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| Detector Length [ft]         | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| I, Upstream Filtering Factor | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    |

**Exclusive Pedestrian Phase**

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



**Lane Group Calculations**

| Lane Group                              | L     | C     | R     | L     | C     | R     | L     | C     | R     | L     | C     |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| C, Cycle Length [s]                     | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    |
| L, Total Lost Time per Cycle [s]        | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  |
| l1_p, Permitted Start-Up Lost Time [s]  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 2.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| l2, Clearance Lost Time [s]             | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 0.00  | 2.00  |
| g_i, Effective Green Time [s]           | 17    | 27    | 27    | 11    | 21    | 21    | 18    | 18    | 18    | 20    | 19    |
| g / C, Green / Cycle                    | 0.21  | 0.34  | 0.34  | 0.14  | 0.26  | 0.26  | 0.23  | 0.23  | 0.23  | 0.25  | 0.24  |
| (v / s)_i Volume / Saturation Flow Rate | 0.04  | 0.29  | 0.05  | 0.11  | 0.26  | 0.05  | 0.06  | 0.05  | 0.03  | 0.03  | 0.17  |
| s, saturation flow rate [veh/h]         | 1714  | 3427  | 1530  | 1714  | 3427  | 1530  | 1126  | 1800  | 1530  | 1333  | 1613  |
| c, Capacity [veh/h]                     | 364   | 1157  | 516   | 236   | 900   | 402   | 142   | 405   | 344   | 372   | 383   |
| d1, Uniform Delay [s]                   | 25.82 | 24.70 | 18.52 | 33.42 | 29.50 | 22.81 | 38.51 | 25.22 | 24.74 | 26.39 | 27.95 |
| k, delay calibration                    | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  |
| 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  |
| d2, Incremental Delay [s]               | 1.11  | 8.25  | 0.64  | 23.85 | 30.64 | 0.96  | 10.03 | 1.18  | 0.76  | 0.53  | 10.52 |
| d3, Initial Queue Delay [s]             | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| Rp, platoon ratio                       | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| PF, progression factor                  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |

**Lane Group Results**

|                                       |       |        |       |        |        |       |       |       |       |       |        |
|---------------------------------------|-------|--------|-------|--------|--------|-------|-------|-------|-------|-------|--------|
| X, volume / capacity                  | 0.18  | 0.86   | 0.15  | 0.80   | 1.00   | 0.18  | 0.45  | 0.21  | 0.13  | 0.10  | 0.71   |
| d, Delay for Lane Group [s/veh]       | 26.93 | 32.95  | 19.16 | 57.27  | 60.14  | 23.77 | 48.54 | 26.39 | 25.50 | 26.92 | 38.47  |
| Lane Group LOS                        | C     | C      | B     | E      | F      | C     | D     | C     | C     | C     | D      |
| Critical Lane Group                   | No    | Yes    | No    | Yes    | No     | No    | No    | No    | No    | Yes   | No     |
| 50th-Percentile Queue Length [veh/ln] | 1.13  | 9.58   | 1.09  | 5.00   | 12.07  | 1.11  | 1.63  | 1.41  | 0.72  | 0.59  | 5.70   |
| 50th-Percentile Queue Length [ft/ln]  | 28.29 | 239.44 | 27.27 | 124.99 | 301.64 | 27.81 | 40.82 | 35.29 | 18.07 | 14.67 | 142.48 |
| 95th-Percentile Queue Length [veh/ln] | 2.04  | 14.65  | 1.96  | 8.67   | 17.79  | 2.00  | 2.94  | 2.54  | 1.30  | 1.06  | 9.61   |
| 95th-Percentile Queue Length [ft/ln]  | 50.91 | 366.32 | 49.09 | 216.66 | 444.74 | 50.07 | 73.48 | 63.52 | 32.52 | 26.41 | 240.36 |

**Movement, Approach, & Intersection Results**

|                                 |           |       |       |       |       |       |       |       |       |       |       |       |
|---------------------------------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| d_M, Delay for Movement [s/veh] | 26.93     | 32.95 | 19.16 | 57.27 | 60.14 | 23.77 | 48.54 | 26.39 | 25.50 | 26.92 | 38.47 | 38.47 |
| Movement LOS                    | C         | C     | B     | E     | F     | C     | D     | C     | C     | C     | D     | D     |
| d_A, Approach Delay [s/veh]     | 31.63     |       |       | 57.45 |       |       | 33.53 |       |       | 37.08 |       |       |
| Approach LOS                    | C         |       |       | E     |       |       | C     |       |       | D     |       |       |
| d_I, Intersection Delay [s/veh] | 43.07     |       |       |       |       |       |       |       |       |       |       |       |
| Intersection LOS                | D         |       |       |       |       |       |       |       |       |       |       |       |
| Intersection V/C                | 10256.819 |       |       |       |       |       |       |       |       |       |       |       |

**Sequence**

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



## TTM 16397

Vistro File: C:\...IPM.vistro

Scenario 3 Opening Year (2022) Without Project

Report File: C:\...IPM OY.pdf

11/1/2019

**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  | Mesa View Drive (NS) at Dos Palmas Road (EW) | Final Base          | 5          | 19        | 48        | 13         | 17        | 0        | 0         | 8        | 0        | 37        | 6        | 25        | 178          |    |
|    |  | Growth Rate         | 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         | 5         | 0          | 0         | 0        | 0         | 0        | 0        | 0         | 9        | 0         | 0            | 14 |
|    |  | Other               | 0          | 0         | 0         | 0          | 0         | 0        | 0         | 0        | 0        | 0         | 0        | 0         | 0            | 0  |
|    |  | <b>Future Total</b> | <b>5</b>   | <b>19</b> | <b>53</b> | <b>13</b>  | <b>17</b> | <b>0</b> | <b>0</b>  | <b>8</b> | <b>0</b> | <b>46</b> | <b>6</b> | <b>25</b> | <b>192</b>   |    |

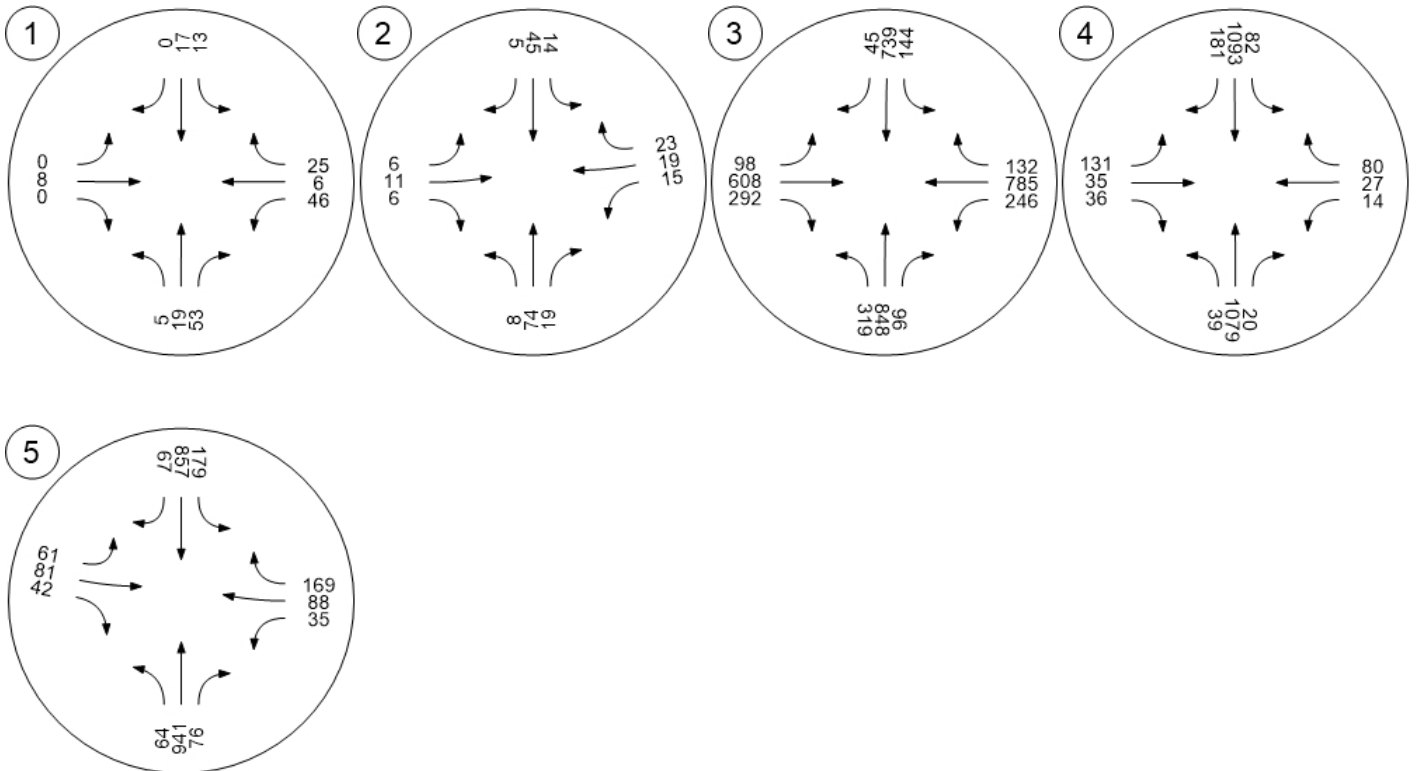
| ID | Intersection Name                      | Volume Type         | Northbound |           |           | Southbound |           |          | Eastbound |           |          | Westbound |           |           | Total Volume |
|----|--|---------------------|------------|-----------|-----------|------------|-----------|----------|-----------|-----------|----------|-----------|-----------|-----------|--------------|
|    |  |                     | Left       | Thru      | Right     | Left       | Thru      | Right    | Left      | Thru      | Right    | Left      | Thru      | Right     |              |
| 2  | Mesa View Drive (NS) at Luna Road (EW) | Final Base          | 8          | 69        | 14        | 14         | 36        | 5        | 6         | 11        | 6        | 6         | 19        | 23        | 217          |
|    |  | Growth Rate         | 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          | 5         | 5         | 0          | 9         | 0        | 0         | 0         | 0        | 9         | 0         | 0         | 28           |
|    |  | Other               | 0          | 0         | 0         | 0          | 0         | 0        | 0         | 0         | 0        | 0         | 0         | 0         | 0            |
|    |  | <b>Future Total</b> | <b>8</b>   | <b>74</b> | <b>19</b> | <b>14</b>  | <b>45</b> | <b>5</b> | <b>6</b>  | <b>11</b> | <b>6</b> | <b>15</b> | <b>19</b> | <b>23</b> | <b>245</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  | US-Route 395 (NS) at Palmdale Road (EW) | Final Base          | 318        | 844        | 94        | 144        | 732        | 45        | 98        | 608        | 290        | 243        | 785        | 132        | 4333         |    |
|    |   | Growth Rate         | 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          | 4          | 2         | 0          | 7          | 0         | 0         | 0          | 0          | 2          | 3          | 0          | 0            | 19 |
|    |   | Other               | 0          | 0          | 0         | 0          | 0          | 0         | 0         | 0          | 0          | 0          | 0          | 0          | 0            | 0  |
|    |   | <b>Future Total</b> | <b>319</b> | <b>848</b> | <b>96</b> | <b>144</b> | <b>739</b> | <b>45</b> | <b>98</b> | <b>608</b> | <b>292</b> | <b>246</b> | <b>785</b> | <b>132</b> | <b>4352</b>  |    |

| ID | Intersection Name                         | Volume Type         | Northbound |             |           | Southbound |             |            | Eastbound  |           |           | Westbound |           |           | Total Volume |
|----|---|---------------------|------------|-------------|-----------|------------|-------------|------------|------------|-----------|-----------|-----------|-----------|-----------|--------------|
|    |   |                     | Left       | Thru        | Right     | Left       | Thru        | Right      | Left       | Thru      | Right     | Left      | Thru      | Right     |              |
| 4  | US-Route 395 (NS) at Dos Palmas Road (EW) | Final Base          | 39         | 1076        | 20        | 82         | 1088        | 174        | 127        | 34        | 36        | 14        | 25        | 80        | 2795         |
|    |   | Growth Rate         | 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          | 3           | 0         | 0          | 5           | 7          | 4          | 1         | 0         | 0         | 2         | 0         | 22           |
|    |   | Other               | 0          | 0           | 0         | 0          | 0           | 0          | 0          | 0         | 0         | 0         | 0         | 0         | 0            |
|    |   | <b>Future Total</b> | <b>39</b>  | <b>1079</b> | <b>20</b> | <b>82</b>  | <b>1093</b> | <b>181</b> | <b>131</b> | <b>35</b> | <b>36</b> | <b>14</b> | <b>27</b> | <b>80</b> | <b>2817</b>  |

| ID | Intersection Name                   | Volume Type         | Northbound |            |           | Southbound |            |           | Eastbound |           |           | Westbound |           |            | Total Volume |    |
|----|-------------------------------------|---------------------|------------|------------|-----------|------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|------------|--------------|----|
|    |                                     |                     | Left       | Thru       | Right     | Left       | Thru       | Right     | Left      | Thru      | Right     | Left      | Thru      | Right      |              |    |
| 5  | US-Route 395 (NS) at Luna Road (EW) | Final Base          | 64         | 941        | 76        | 179        | 857        | 62        | 58        | 80        | 42        | 35        | 86        | 169        | 2649         |    |
|    |                                     | Growth Rate         | 1.00       | 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            | 0  |
|    |                                     | Net New Trips       | 0          | 0          | 0         | 0          | 0          | 5         | 3         | 1         | 0         | 0         | 2         | 0          | 0            | 11 |
|    |                                     | Other               | 0          | 0          | 0         | 0          | 0          | 0         | 0         | 0         | 0         | 0         | 0         | 0          | 0            | 0  |
|    |                                     | <b>Future Total</b> | <b>64</b>  | <b>941</b> | <b>76</b> | <b>179</b> | <b>857</b> | <b>67</b> | <b>61</b> | <b>81</b> | <b>42</b> | <b>35</b> | <b>88</b> | <b>169</b> | <b>2660</b>  |    |

Traffic Volume - Future Total Volume



## TTM 16397

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

Scenario 3 Opening Year (2022) Without Project

Report File: C:\...\IAM OY.pdf

11/1/2019

**Intersection Analysis Summary**

| ID | Intersection Name                            | Control Type | Method   | Worst Mvmt | V/C   | Delay (s/veh) | LOS |
|----|--|--------------|----------|------------|-------|---------------|-----|
| 1  | Mesa View Drive (NS) at Dos Palmas Road (EW) | Two-way stop | HCM 2010 | NB Thru    | 0.004 | 9.4           | A   |
| 2  | Mesa View Drive (NS) at Luna Road (EW)       | Two-way stop | HCM 2010 | EB Thru    | 0.018 | 9.9           | A   |
| 3  | US-Route 395 (NS) at Palmdale Road (EW)      | Signalized   | HCM 2010 | EB Right   | 0.557 | 29.9          | C   |
| 4  | US-Route 395 (NS) at Dos Palmas Road (EW)    | Signalized   | HCM 2010 | NB Left    | 0.440 | 14.6          | B   |
| 5  | US-Route 395 (NS) at Luna Road (EW)          | Signalized   | HCM 2010 | SB Thru    | 0.428 | 34.6          | 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: Mesa View Drive (NS) at Dos Palmas Road (EW)**

|                  |              |                           |       |
|------------------|--------------|---------------------------|-------|
| Control Type:    | Two-way stop | Delay (sec / veh):        | 9.4   |
| Analysis Method: | HCM 2010     | Level Of Service:         | A     |
| Analysis Period: | 15 minutes   | Volume to Capacity (v/c): | 0.004 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| 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      | 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]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | Yes        |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 0          | 3      | 36     | 10         | 8      | 0      | 0         | 5      | 2      | 10        | 3      | 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 [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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      | 6      | 0          | 0      | 0      | 0         | 0      | 0      | 1         | 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          | 3      | 42     | 10         | 8      | 0      | 0         | 5      | 2      | 11        | 3      | 2      |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| 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          | 1      | 11     | 3          | 2      | 0      | 0         | 1      | 1      | 3         | 1      | 1      |
| Total Analysis Volume [veh/h]           | 0          | 3      | 44     | 11         | 8      | 0      | 0         | 5      | 2      | 12        | 3      | 2      |
| Pedestrian Volume [ped/h]               | 0          |        |        | 0          |        |        | 0         |        |        | 0         |        |        |

**Intersection Settings**

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

**Movement, Approach, & Intersection Results**

|                                       |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| V/C, Movement V/C Ratio               | 0.00 | 0.00 | 0.04 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 |
| d_M, Delay for Movement [s/veh]       | 8.91 | 9.37 | 8.48 | 9.10 | 9.30 | 8.41 | 7.21 | 0.00 | 0.00 | 7.23 | 0.00 | 0.00 |
| Movement LOS                          | A    | A    | A    | A    | A    | A    | A    | A    | A    | A    | A    | A    |
| 95th-Percentile Queue Length [veh/ln] | 0.14 | 0.14 | 0.14 | 0.07 | 0.07 | 0.07 | 0.00 | 0.00 | 0.00 | 0.02 | 0.02 | 0.02 |
| 95th-Percentile Queue Length [ft/ln]  | 3.46 | 3.46 | 3.46 | 1.65 | 1.65 | 1.65 | 0.00 | 0.00 | 0.00 | 0.51 | 0.51 | 0.51 |
| d_A, Approach Delay [s/veh]           | 8.54 |      |      | 9.18 |      |      | 0.00 |      |      | 5.10 |      |      |
| Approach LOS                          | A    |      |      | A    |      |      | A    |      |      | A    |      |      |
| d_I, Intersection Delay [s/veh]       | 7.36 |      |      |      |      |      |      |      |      |      |      |      |
| Intersection LOS                      | A    |      |      |      |      |      |      |      |      |      |      |      |



**Intersection Level Of Service Report**  
**Intersection 2: Mesa View Drive (NS) at Luna Road (EW)**

|                  |              |                           |       |
|------------------|--------------|---------------------------|-------|
| Control Type:    | Two-way stop | Delay (sec / veh):        | 9.9   |
| Analysis Method: | HCM 2010     | Level Of Service:         | A     |
| Analysis Period: | 15 minutes   | Volume to Capacity (v/c): | 0.018 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| 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      | 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]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | Yes        |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 5          | 31     | 7      | 10         | 40     | 1      | 2         | 13     | 2      | 7         | 7      | 6      |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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          | 6      | 6      | 0          | 1      | 0      | 0         | 0      | 0      | 1         | 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]             | 5          | 37     | 13     | 10         | 41     | 1      | 2         | 13     | 2      | 8         | 7      | 6      |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| Other Adjustment Factor                 | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h]          | 1          | 10     | 3      | 3          | 11     | 0      | 1         | 3      | 1      | 2         | 2      | 2      |
| Total Analysis Volume [veh/h]           | 5          | 39     | 14     | 11         | 43     | 1      | 2         | 14     | 2      | 8         | 7      | 6      |
| Pedestrian Volume [ped/h]               | 0          |        |        | 0          |        |        | 0         |        |        | 0         |        |        |

**Intersection Settings**

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

**Movement, Approach, & Intersection Results**

|                                       |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| V/C, Movement V/C Ratio               | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | 0.01 | 0.01 | 0.01 |
| d_M, Delay for Movement [s/veh]       | 7.29 | 0.00 | 0.00 | 7.32 | 0.00 | 0.00 | 9.43 | 9.86 | 8.59 | 9.46 | 9.82 | 8.60 |
| Movement LOS                          | A    | A    | A    | A    | A    | A    | A    | A    | A    | A    | A    | A    |
| 95th-Percentile Queue Length [veh/ln] | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.07 | 0.07 | 0.07 | 0.08 | 0.08 | 0.08 |
| 95th-Percentile Queue Length [ft/ln]  | 0.24 | 0.24 | 0.24 | 0.48 | 0.48 | 0.48 | 1.75 | 1.75 | 1.75 | 1.89 | 1.89 | 1.89 |
| d_A, Approach Delay [s/veh]           | 0.63 |      |      | 1.46 |      |      | 9.67 |      |      | 9.33 |      |      |
| Approach LOS                          | A    |      |      | A    |      |      | A    |      |      | A    |      |      |
| d_I, Intersection Delay [s/veh]       | 3.20 |      |      |      |      |      |      |      |      |      |      |      |
| Intersection LOS                      | A    |      |      |      |      |      |      |      |      |      |      |      |

**Intersection Level Of Service Report**  
**Intersection 3: US-Route 395 (NS) at Palmdale Road (EW)**

|                  |            |                           |       |
|------------------|------------|---------------------------|-------|
| Control Type:    | Signalized | Delay (sec / veh):        | 29.9  |
| Analysis Method: | HCM 2010   | Level Of Service:         | C     |
| Analysis Period: | 15 minutes | Volume to Capacity (v/c): | 0.557 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Approach               | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| Lane Configuration     | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| 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      | 1      | 1         | 0      | 0      | 1         | 0      | 2      |
| Pocket Length [ft]     | 120.00     | 100.00 | 100.00 | 350.00     | 100.00 | 370.00 | 140.00    | 100.00 | 100.00 | 250.00    | 100.00 | 450.00 |
| Speed [mph]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | Yes        |        |        | No         |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 230        | 715    | 82     | 90         | 518    | 36     | 58        | 489    | 307    | 90        | 356    | 60     |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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          | 5      | 3      | 0          | 1      | 0      | 0         | 0      | 0      | 1         | 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]             | 231        | 720    | 85     | 90         | 519    | 36     | 58        | 489    | 307    | 91        | 356    | 60     |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| 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]          | 61         | 189    | 22     | 24         | 137    | 9      | 15        | 129    | 81     | 24        | 94     | 16     |
| Total Analysis Volume [veh/h]           | 243        | 758    | 89     | 95         | 546    | 38     | 61        | 515    | 323    | 96        | 375    | 63     |
| 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            | Fixed time                   |
| Offset [s]                | 0.0                          |
| Offset Reference          | LeadGreen                    |
| Permissive Mode           | SingleBand                   |
| Lost time [s]             | 2.00                         |

**Phasing & Timing**

| Control Type                 | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss |
|------------------------------|----------|---------|---------|----------|---------|---------|----------|---------|---------|----------|---------|---------|
| Signal group                 | 5        | 2       | 0       | 1        | 6       | 0       | 3        | 8       | 0       | 7        | 4       | 0       |
| Auxiliary Signal Groups      |          |         |         |          |         |         |          |         |         |          |         |         |
| Lead / Lag                   | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       |
| Minimum Green [s]            | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       |
| Maximum Green [s]            | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       |
| Amber [s]                    | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| All red [s]                  | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     |
| Split [s]                    | 17       | 26      | 0       | 12       | 21      | 0       | 11       | 21      | 0       | 11       | 21      | 0       |
| Vehicle Extension [s]        | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| Walk [s]                     | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 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     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| I2, Clearance Lost Time [s]  | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| Minimum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Maximum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Pedestrian Recall            | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Detector Location [ft]       | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| Detector Length [ft]         | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| I, Upstream Filtering Factor | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    |

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

| Lane Group                              | L     | C     | R     | L     | C     | R     | L     | C     | R     | L     | C     | R     |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| C, Cycle Length [s]                     | 70    | 70    | 70    | 70    | 70    | 70    | 70    | 70    | 70    | 70    | 70    | 70    |
| L, Total Lost Time per Cycle [s]        | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  |
| l1_p, Permitted Start-Up Lost Time [s]  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| l2, Clearance Lost Time [s]             | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  |
| g_i, Effective Green Time [s]           | 13    | 22    | 22    | 8     | 17    | 17    | 7     | 17    | 17    | 7     | 17    | 17    |
| g / C, Green / Cycle                    | 0.19  | 0.31  | 0.31  | 0.11  | 0.24  | 0.24  | 0.10  | 0.24  | 0.24  | 0.10  | 0.24  | 0.24  |
| (v / s)_i Volume / Saturation Flow Rate | 0.14  | 0.22  | 0.06  | 0.06  | 0.16  | 0.02  | 0.04  | 0.15  | 0.21  | 0.03  | 0.11  | 0.04  |
| s, saturation flow rate [veh/h]         | 1714  | 3427  | 1530  | 1714  | 3427  | 1530  | 1714  | 3427  | 1530  | 3329  | 3427  | 1530  |
| c, Capacity [veh/h]                     | 318   | 1077  | 481   | 196   | 832   | 372   | 171   | 832   | 372   | 333   | 832   | 372   |
| d1, Uniform Delay [s]                   | 27.04 | 21.13 | 17.47 | 29.07 | 23.87 | 20.58 | 29.40 | 23.61 | 25.43 | 29.19 | 22.53 | 20.93 |
| k, delay calibration                    | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  |
| 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]               | 15.87 | 3.86  | 0.85  | 8.35  | 4.02  | 0.55  | 5.69  | 3.44  | 23.12 | 2.18  | 1.76  | 0.99  |
| d3, Initial Queue Delay [s]             | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 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**

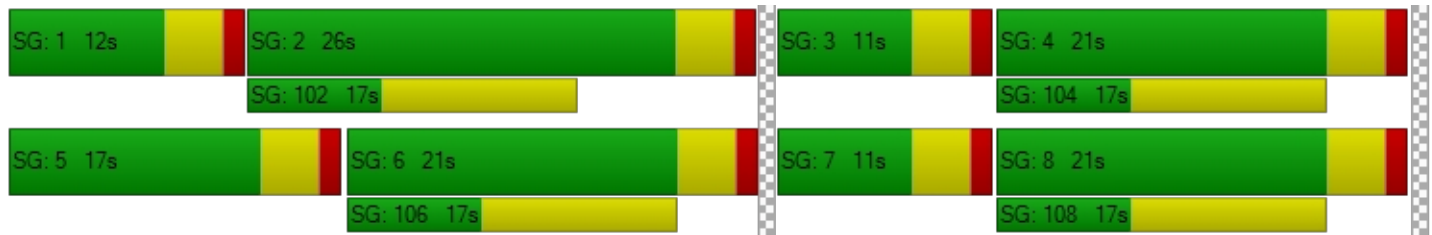
|                                       |        |        |       |       |        |       |       |        |        |       |        |       |
|---------------------------------------|--------|--------|-------|-------|--------|-------|-------|--------|--------|-------|--------|-------|
| X, volume / capacity                  | 0.76   | 0.70   | 0.19  | 0.48  | 0.66   | 0.10  | 0.36  | 0.62   | 0.87   | 0.29  | 0.45   | 0.17  |
| d, Delay for Lane Group [s/veh]       | 42.91  | 24.99  | 18.32 | 37.42 | 27.89  | 21.13 | 35.08 | 27.05  | 48.56  | 31.37 | 24.29  | 21.91 |
| Lane Group LOS                        | D      | C      | B     | D     | C      | C     | D     | C      | D      | C     | C      | C     |
| Critical Lane Group                   | Yes    | No     | No    | No    | Yes    | No    | No    | No     | Yes    | Yes   | No     | No    |
| 50th-Percentile Queue Length [veh/ln] | 5.07   | 5.66   | 1.10  | 1.90  | 4.31   | 0.52  | 1.20  | 3.99   | 7.23   | 0.82  | 2.70   | 0.88  |
| 50th-Percentile Queue Length [ft/ln]  | 126.74 | 141.55 | 27.52 | 47.41 | 107.72 | 12.95 | 29.88 | 99.63  | 180.84 | 20.58 | 67.40  | 21.99 |
| 95th-Percentile Queue Length [veh/ln] | 8.76   | 9.56   | 1.98  | 3.41  | 7.71   | 0.93  | 2.15  | 7.17   | 11.64  | 1.48  | 4.85   | 1.58  |
| 95th-Percentile Queue Length [ft/ln]  | 219.05 | 239.11 | 49.53 | 85.34 | 192.83 | 23.32 | 53.79 | 179.33 | 291.11 | 37.04 | 121.31 | 39.58 |

**Movement, Approach, & Intersection Results**

|                                 |       |       |       |       |       |       |       |       |       |       |       |       |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| d_M, Delay for Movement [s/veh] | 42.91 | 24.99 | 18.32 | 37.42 | 27.89 | 21.13 | 35.08 | 27.05 | 48.56 | 31.37 | 24.29 | 21.91 |
| Movement LOS                    | D     | C     | B     | D     | C     | C     | D     | C     | D     | C     | C     | C     |
| d_A, Approach Delay [s/veh]     | 28.44 |       |       | 28.84 |       |       | 35.32 |       |       | 25.28 |       |       |
| Approach LOS                    | C     |       |       | C     |       |       | D     |       |       | C     |       |       |
| d_I, Intersection Delay [s/veh] | 29.93 |       |       |       |       |       |       |       |       |       |       |       |
| Intersection LOS                | C     |       |       |       |       |       |       |       |       |       |       |       |
| Intersection V/C                | 0.557 |       |       |       |       |       |       |       |       |       |       |       |

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 4: US-Route 395 (NS) at Dos Palmas Road (EW)**

|                  |            |                           |       |
|------------------|------------|---------------------------|-------|
| Control Type:    | Signalized | Delay (sec / veh):        | 14.6  |
| Analysis Method: | HCM 2010   | Level Of Service:         | B     |
| Analysis Period: | 15 minutes | Volume to Capacity (v/c): | 0.440 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Approach               | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| Lane Configuration     | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| 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      | 1      | 1          | 0      | 0      | 1         | 0      | 1      | 1         | 0      | 0      |
| Pocket Length [ft]     | 480.00     | 100.00 | 250.00 | 300.00     | 100.00 | 100.00 | 160.00    | 100.00 | 470.00 | 100.00    | 100.00 | 100.00 |
| Speed [mph]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | No         |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 7          | 883    | 7      | 50         | 862    | 54     | 105       | 24     | 46     | 25        | 7      | 76     |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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          | 4      | 0      | 0          | 1      | 1      | 5         | 1      | 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]             | 7          | 887    | 7      | 50         | 863    | 55     | 110       | 25     | 46     | 25        | 7      | 76     |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| Other Adjustment Factor                 | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h]          | 2          | 233    | 2      | 13         | 227    | 14     | 29        | 7      | 12     | 7         | 2      | 20     |
| Total Analysis Volume [veh/h]           | 7          | 934    | 7      | 53         | 908    | 58     | 116       | 26     | 48     | 26        | 7      | 80     |
| 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]             | 2.00                         |

**Phasing & Timing**

| Control Type                 | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss |
|------------------------------|----------|---------|---------|----------|---------|---------|----------|---------|---------|----------|---------|---------|
| Signal group                 | 5        | 2       | 0       | 1        | 6       | 0       | 3        | 8       | 0       | 7        | 4       | 0       |
| Auxiliary Signal Groups      |          |         |         |          |         |         |          |         |         |          |         |         |
| Lead / Lag                   | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       |
| Minimum Green [s]            | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       |
| Maximum Green [s]            | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       |
| Amber [s]                    | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| All red [s]                  | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     |
| Split [s]                    | 12       | 27      | 0       | 11       | 26      | 0       | 11       | 20      | 0       | 12       | 21      | 0       |
| Vehicle Extension [s]        | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| Walk [s]                     | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 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     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| I2, Clearance Lost Time [s]  | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| Minimum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Maximum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Pedestrian Recall            | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Detector Location [ft]       | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| Detector Length [ft]         | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| I, Upstream Filtering Factor | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    |

**Exclusive Pedestrian Phase**

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



**Lane Group Calculations**

| Lane Group                              | L     | C     | R    | L     | C    | C    | L     | C     | R     | L     | C     |
|---|-------|-------|------|-------|------|------|-------|-------|-------|-------|-------|
| C, Cycle Length [s]                     | 70    | 70    | 70   | 70    | 70   | 70   | 70    | 70    | 70    | 70    | 70    |
| L, Total Lost Time per Cycle [s]        | 4.00  | 4.00  | 4.00 | 4.00  | 4.00 | 4.00 | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  |
| l1_p, Permitted Start-Up Lost Time [s]  | 0.00  | 0.00  | 0.00 | 0.00  | 0.00 | 0.00 | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| l2, Clearance Lost Time [s]             | 2.00  | 2.00  | 2.00 | 2.00  | 2.00 | 2.00 | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  |
| g_i, Effective Green Time [s]           | 1     | 37    | 37   | 5     | 41   | 41   | 6     | 9     | 9     | 3     | 6     |
| g / C, Green / Cycle                    | 0.01  | 0.53  | 0.53 | 0.07  | 0.59 | 0.59 | 0.09  | 0.13  | 0.13  | 0.04  | 0.08  |
| (v / s)_i Volume / Saturation Flow Rate | 0.00  | 0.27  | 0.00 | 0.03  | 0.27 | 0.27 | 0.07  | 0.01  | 0.03  | 0.02  | 0.06  |
| s, saturation flow rate [veh/h]         | 1714  | 3427  | 1530 | 1714  | 1800 | 1762 | 1714  | 1800  | 1530  | 1714  | 1549  |
| c, Capacity [veh/h]                     | 25    | 1822  | 814  | 114   | 1050 | 1028 | 156   | 238   | 202   | 72    | 129   |
| d1, Uniform Delay [s]                   | 34.25 | 10.59 | 7.74 | 31.60 | 8.36 | 8.36 | 31.12 | 26.84 | 27.30 | 32.75 | 31.30 |
| 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  |
| 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  |
| d2, Incremental Delay [s]               | 5.93  | 1.03  | 0.02 | 2.94  | 1.48 | 1.51 | 6.78  | 0.20  | 0.60  | 3.06  | 6.09  |
| d3, Initial Queue Delay [s]             | 0.00  | 0.00  | 0.00 | 0.00  | 0.00 | 0.00 | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| Rp, platoon ratio                       | 1.00  | 1.00  | 1.00 | 1.00  | 1.00 | 1.00 | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| PF, progression factor                  | 1.00  | 1.00  | 1.00 | 1.00  | 1.00 | 1.00 | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |

**Lane Group Results**

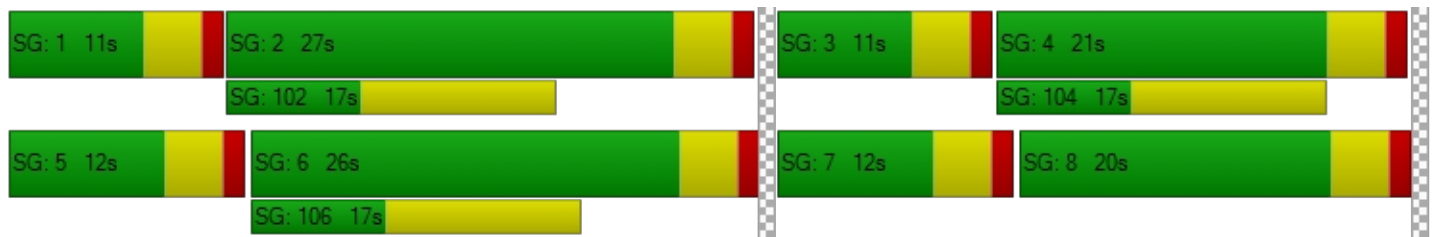
|                                       |       |        |      |       |        |        |       |       |       |       |       |
|---------------------------------------|-------|--------|------|-------|--------|--------|-------|-------|-------|-------|-------|
| X, volume / capacity                  | 0.28  | 0.51   | 0.01 | 0.47  | 0.46   | 0.46   | 0.74  | 0.11  | 0.24  | 0.36  | 0.68  |
| d, Delay for Lane Group [s/veh]       | 40.18 | 11.62  | 7.76 | 34.54 | 9.84   | 9.87   | 37.90 | 27.04 | 27.90 | 35.81 | 37.39 |
| Lane Group LOS                        | D     | B      | A    | C     | A      | A      | D     | C     | C     | D     | D     |
| Critical Lane Group                   | No    | Yes    | No   | Yes   | No     | No     | Yes   | No    | No    | No    | Yes   |
| 50th-Percentile Queue Length [veh/ln] | 0.16  | 4.24   | 0.05 | 0.93  | 3.91   | 3.84   | 2.14  | 0.38  | 0.73  | 0.48  | 1.60  |
| 50th-Percentile Queue Length [ft/ln]  | 3.90  | 106.03 | 1.20 | 23.27 | 97.70  | 95.89  | 53.50 | 9.58  | 18.21 | 11.95 | 39.98 |
| 95th-Percentile Queue Length [veh/ln] | 0.28  | 7.62   | 0.09 | 1.68  | 7.03   | 6.90   | 3.85  | 0.69  | 1.31  | 0.86  | 2.88  |
| 95th-Percentile Queue Length [ft/ln]  | 7.02  | 190.46 | 2.16 | 41.89 | 175.86 | 172.59 | 96.30 | 17.25 | 32.79 | 21.51 | 71.97 |

**Movement, Approach, & Intersection Results**

|                                 |       |       |      |       |      |      |       |       |       |       |       |       |
|---------------------------------|-------|-------|------|-------|------|------|-------|-------|-------|-------|-------|-------|
| d_M, Delay for Movement [s/veh] | 40.18 | 11.62 | 7.76 | 34.54 | 9.85 | 9.87 | 37.90 | 27.04 | 27.90 | 35.81 | 37.39 | 37.39 |
| Movement LOS                    | D     | B     | A    | C     | A    | A    | D     | C     | C     | D     | D     | D     |
| d_A, Approach Delay [s/veh]     | 11.80 |       |      | 11.14 |      |      | 33.89 |       |       | 37.02 |       |       |
| Approach LOS                    | B     |       |      | B     |      |      | C     |       |       | D     |       |       |
| d_I, Intersection Delay [s/veh] | 14.61 |       |      |       |      |      |       |       |       |       |       |       |
| Intersection LOS                | B     |       |      |       |      |      |       |       |       |       |       |       |
| Intersection V/C                | 0.440 |       |      |       |      |      |       |       |       |       |       |       |

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 5: US-Route 395 (NS) at Luna Road (EW)**

|                  |            |                           |       |
|------------------|------------|---------------------------|-------|
| Control Type:    | Signalized | Delay (sec / veh):        | 34.6  |
| Analysis Method: | HCM 2010   | Level Of Service:         | C     |
| Analysis Period: | 15 minutes | Volume to Capacity (v/c): | 0.428 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Approach               | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| Lane Configuration     | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| 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      | 1      | 1          | 0      | 1      | 1         | 0      | 0      | 1         | 0      | 0      |
| Pocket Length [ft]     | 360.00     | 100.00 | 450.00 | 400.00     | 100.00 | 400.00 | 125.00    | 100.00 | 100.00 | 425.00    | 100.00 | 100.00 |
| Speed [mph]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | No         |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 23         | 691    | 38     | 127        | 753    | 17     | 47        | 55     | 48     | 53        | 32     | 155    |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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      | 1      | 4         | 1      | 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]             | 23         | 691    | 38     | 127        | 753    | 18     | 51        | 56     | 48     | 53        | 32     | 155    |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| 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          | 182    | 10     | 33         | 198    | 5      | 13        | 15     | 13     | 14        | 8      | 41     |
| Total Analysis Volume [veh/h]           | 24         | 727    | 40     | 134        | 793    | 19     | 54        | 59     | 51     | 56        | 34     | 163    |
| 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            | Fixed time                   |
| Offset [s]                | 0.0                          |
| Offset Reference          | LeadGreen                    |
| Permissive Mode           | SingleBand                   |
| Lost time [s]             | 2.00                         |

**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]            | 7        | 7       | 0       | 7        | 7       | 0       | 0       | 7       | 0       | 0       | 7       | 0       |
| Maximum Green [s]            | 30       | 30      | 0       | 30       | 30      | 0       | 0       | 30      | 0       | 0       | 30      | 0       |
| Amber [s]                    | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 0.0     | 3.0     | 0.0     | 0.0     | 3.0     | 0.0     |
| All red [s]                  | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 0.0     | 1.0     | 0.0     | 0.0     | 1.0     | 0.0     |
| Split [s]                    | 17       | 26      | 0       | 12       | 21      | 0       | 0       | 21      | 0       | 0       | 21      | 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        | 7       | 0       | 0        | 7       | 0       | 0       | 7       | 0       | 0       | 7       | 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]  | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 0.0     | 2.0     | 0.0     | 0.0     | 2.0     | 0.0     |
| Minimum Recall               | No       | No      |         | No       | No      |         |         | No      |         |         | No      |         |
| Maximum Recall               | No       | No      |         | No       | No      |         |         | No      |         |         | No      |         |
| Pedestrian Recall            | No       | No      |         | No       | No      |         |         | No      |         |         | No      |         |
| Detector Location [ft]       | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| Detector Length [ft]         | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| I, Upstream Filtering Factor | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    |

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

| Lane Group                              | L     | C     | R     | L     | C     | R     | L     | C     | R     | L     | C     |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| C, Cycle Length [s]                     | 70    | 70    | 70    | 70    | 70    | 70    | 70    | 70    | 70    | 70    | 70    |
| L, Total Lost Time per Cycle [s]        | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  |
| l1_p, Permitted Start-Up Lost Time [s]  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 2.00  | 0.00  | 0.00  | 2.00  | 0.00  |
| l2, Clearance Lost Time [s]             | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  |
| g_i, Effective Green Time [s]           | 13    | 22    | 22    | 8     | 17    | 17    | 17    | 17    | 17    | 17    | 17    |
| g / C, Green / Cycle                    | 0.19  | 0.31  | 0.31  | 0.11  | 0.24  | 0.24  | 0.24  | 0.24  | 0.24  | 0.24  | 0.24  |
| (v / s)_i Volume / Saturation Flow Rate | 0.01  | 0.21  | 0.03  | 0.08  | 0.23  | 0.01  | 0.04  | 0.03  | 0.03  | 0.04  | 0.13  |
| s, saturation flow rate [veh/h]         | 1714  | 3427  | 1530  | 1714  | 3427  | 1530  | 1204  | 1800  | 1530  | 1365  | 1571  |
| c, Capacity [veh/h]                     | 318   | 1077  | 481   | 196   | 832   | 372   | 230   | 437   | 372   | 360   | 381   |
| d1, Uniform Delay [s]                   | 23.54 | 20.89 | 16.90 | 29.79 | 26.10 | 20.32 | 29.31 | 20.74 | 20.76 | 24.03 | 22.94 |
| k, delay calibration                    | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  |
| 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  |
| d2, Incremental Delay [s]               | 0.46  | 3.39  | 0.34  | 17.68 | 21.62 | 0.26  | 2.38  | 0.64  | 0.77  | 0.92  | 4.93  |
| d3, Initial Queue Delay [s]             | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| Rp, platoon ratio                       | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| PF, progression factor                  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |

**Lane Group Results**

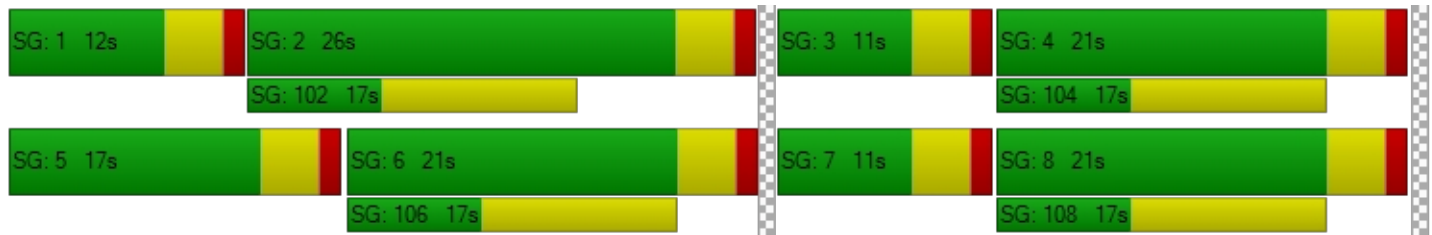
|                                       |       |        |       |        |        |       |       |       |       |       |        |
|---------------------------------------|-------|--------|-------|--------|--------|-------|-------|-------|-------|-------|--------|
| X, volume / capacity                  | 0.08  | 0.67   | 0.08  | 0.68   | 0.95   | 0.05  | 0.23  | 0.13  | 0.14  | 0.16  | 0.52   |
| d, Delay for Lane Group [s/veh]       | 24.00 | 24.28  | 17.24 | 47.47  | 47.73  | 20.58 | 31.69 | 21.39 | 21.53 | 24.94 | 27.87  |
| Lane Group LOS                        | C     | C      | B     | D      | D      | C     | C     | C     | C     | C     | C      |
| Critical Lane Group                   | No    | Yes    | No    | Yes    | No     | No    | No    | No    | No    | No    | Yes    |
| 50th-Percentile Queue Length [veh/ln] | 0.36  | 5.33   | 0.47  | 3.05   | 8.61   | 0.25  | 0.97  | 0.80  | 0.70  | 0.84  | 3.19   |
| 50th-Percentile Queue Length [ft/ln]  | 8.90  | 133.21 | 11.86 | 76.17  | 215.16 | 6.37  | 24.31 | 20.00 | 17.60 | 21.12 | 79.72  |
| 95th-Percentile Queue Length [veh/ln] | 0.64  | 9.11   | 0.85  | 5.48   | 13.42  | 0.46  | 1.75  | 1.44  | 1.27  | 1.52  | 5.74   |
| 95th-Percentile Queue Length [ft/ln]  | 16.02 | 227.85 | 21.35 | 137.10 | 335.44 | 11.46 | 43.75 | 36.00 | 31.68 | 38.01 | 143.49 |

**Movement, Approach, & Intersection Results**

|                                 |       |       |       |       |       |       |       |       |       |       |       |       |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| d_M, Delay for Movement [s/veh] | 24.00 | 24.28 | 17.24 | 47.47 | 47.73 | 20.58 | 31.69 | 21.39 | 21.53 | 24.94 | 27.87 | 27.87 |
| Movement LOS                    | C     | C     | B     | D     | D     | C     | C     | C     | C     | C     | C     | C     |
| d_A, Approach Delay [s/veh]     | 23.91 |       |       | 47.15 |       |       | 24.82 |       |       | 27.22 |       |       |
| Approach LOS                    | C     |       |       | D     |       |       | C     |       |       | C     |       |       |
| d_I, Intersection Delay [s/veh] | 34.57 |       |       |       |       |       |       |       |       |       |       |       |
| Intersection LOS                | C     |       |       |       |       |       |       |       |       |       |       |       |
| Intersection V/C                | 0.428 |       |       |       |       |       |       |       |       |       |       |       |

**Sequence**

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



## TTM 16397

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

Scenario 3 Opening Year (2022) Without Project

Report File: C:\...IAM OY.pdf

11/1/2019

**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  | Mesa View Drive (NS) at Dos Palmas Road (EW) | Final Base          | 0          | 3        | 36        | 10         | 8        | 0        | 0         | 5        | 2        | 10        | 3        | 2        | 79           |   |
|    |  | Growth Rate         | 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        | 6         | 0          | 0        | 0        | 0         | 0        | 0        | 0         | 1        | 0        | 0            | 7 |
|    |  | Other               | 0          | 0        | 0         | 0          | 0        | 0        | 0         | 0        | 0        | 0         | 0        | 0        | 0            | 0 |
|    |  | <b>Future Total</b> | <b>0</b>   | <b>3</b> | <b>42</b> | <b>10</b>  | <b>8</b> | <b>0</b> | <b>0</b>  | <b>5</b> | <b>2</b> | <b>11</b> | <b>3</b> | <b>2</b> | <b>86</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  | Mesa View Drive (NS) at Luna Road (EW) | Final Base          | 5          | 31        | 7         | 10         | 40        | 1        | 2         | 13        | 2        | 7         | 7        | 6        | 131          |
|    |  | Growth Rate         | 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          | 6         | 6         | 0          | 1         | 0        | 0         | 0         | 0        | 1         | 0        | 0        | 14           |
|    |  | Other               | 0          | 0         | 0         | 0          | 0         | 0        | 0         | 0         | 0        | 0         | 0        | 0        | 0            |
|    |  | <b>Future Total</b> | <b>5</b>   | <b>37</b> | <b>13</b> | <b>10</b>  | <b>41</b> | <b>1</b> | <b>2</b>  | <b>13</b> | <b>2</b> | <b>8</b>  | <b>7</b> | <b>6</b> | <b>145</b>   |

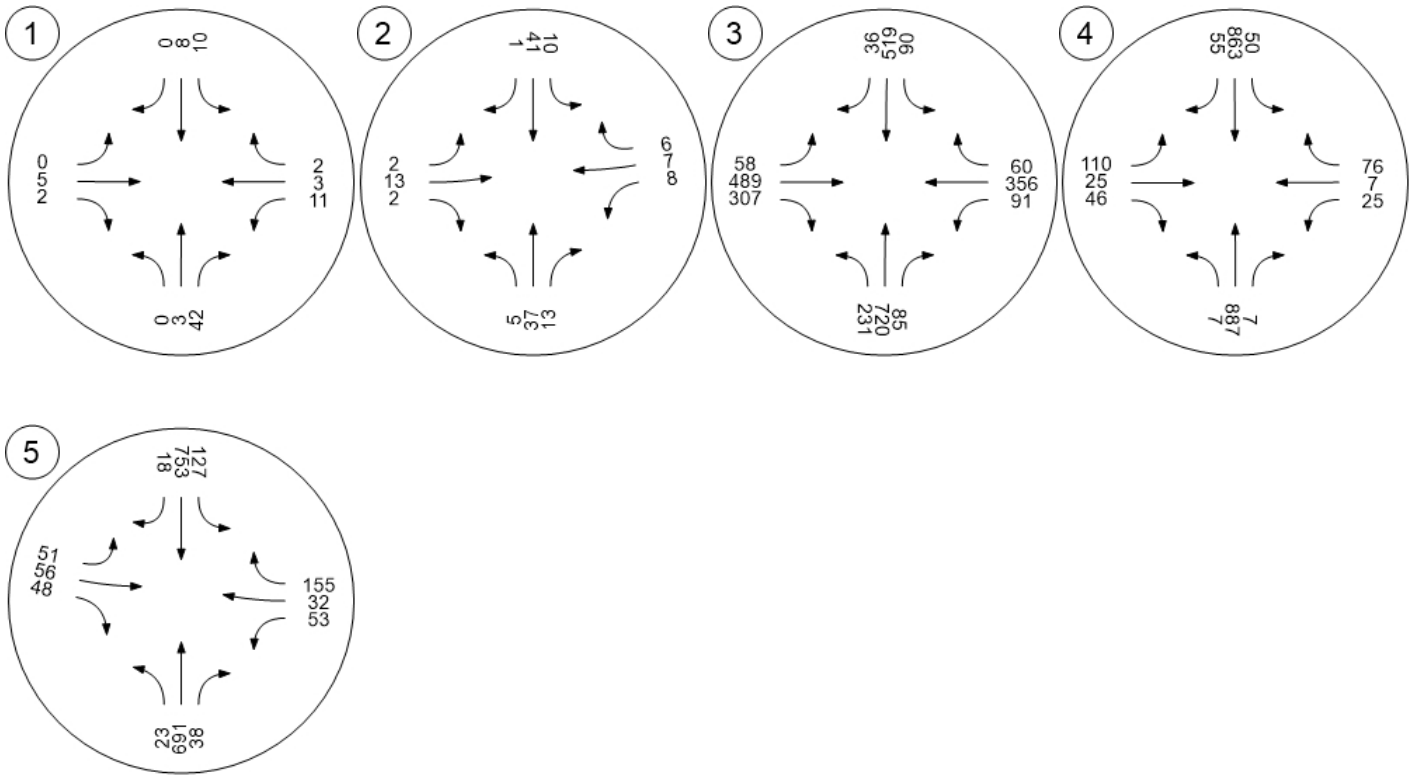
| ID | Intersection Name                       | Volume Type         | Northbound |            |           | Southbound |            |           | Eastbound |            |            | Westbound |            |           | Total Volume |
|----|---|---------------------|------------|------------|-----------|------------|------------|-----------|-----------|------------|------------|-----------|------------|-----------|--------------|
|    |   |                     | Left       | Thru       | Right     | Left       | Thru       | Right     | Left      | Thru       | Right      | Left      | Thru       | Right     |              |
| 3  | US-Route 395 (NS) at Palmdale Road (EW) | Final Base          | 230        | 715        | 82        | 90         | 518        | 36        | 58        | 489        | 307        | 90        | 356        | 60        | 3031         |
|    |   | Growth Rate         | 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          | 5          | 3         | 0          | 1          | 0         | 0         | 0          | 0          | 1         | 0          | 0         | 11           |
|    |   | Other               | 0          | 0          | 0         | 0          | 0          | 0         | 0         | 0          | 0          | 0         | 0          | 0         | 0            |
|    |   | <b>Future Total</b> | <b>231</b> | <b>720</b> | <b>85</b> | <b>90</b>  | <b>519</b> | <b>36</b> | <b>58</b> | <b>489</b> | <b>307</b> | <b>91</b> | <b>356</b> | <b>60</b> | <b>3042</b>  |

| ID | Intersection Name                         | Volume Type         | Northbound |            |          | Southbound |            |           | Eastbound  |           |           | Westbound |          |           | Total Volume |
|----|---|---------------------|------------|------------|----------|------------|------------|-----------|------------|-----------|-----------|-----------|----------|-----------|--------------|
|    |   |                     | Left       | Thru       | Right    | Left       | Thru       | Right     | Left       | Thru      | Right     | Left      | Thru     | Right     |              |
| 4  | US-Route 395 (NS) at Dos Palmas Road (EW) | Final Base          | 7          | 883        | 7        | 50         | 862        | 54        | 105        | 24        | 46        | 25        | 7        | 76        | 2146         |
|    |   | Growth Rate         | 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          | 4          | 0        | 0          | 1          | 1         | 5          | 1         | 0         | 0         | 0        | 0         | 12           |
|    |   | Other               | 0          | 0          | 0        | 0          | 0          | 0         | 0          | 0         | 0         | 0         | 0        | 0         | 0            |
|    |   | <b>Future Total</b> | <b>7</b>   | <b>887</b> | <b>7</b> | <b>50</b>  | <b>863</b> | <b>55</b> | <b>110</b> | <b>25</b> | <b>46</b> | <b>25</b> | <b>7</b> | <b>76</b> | <b>2158</b>  |

| ID | Intersection Name                   | Volume Type         | Northbound |            |           | Southbound |            |           | Eastbound |           |           | Westbound |           |            | Total Volume |   |
|----|-------------------------------------|---------------------|------------|------------|-----------|------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|------------|--------------|---|
|    |                                     |                     | Left       | Thru       | Right     | Left       | Thru       | Right     | Left      | Thru      | Right     | Left      | Thru      | Right      |              |   |
| 5  | US-Route 395 (NS) at Luna Road (EW) | Final Base          | 23         | 691        | 38        | 127        | 753        | 17        | 47        | 55        | 48        | 53        | 32        | 155        | 2039         |   |
|    |                                     | Growth Rate         | 1.00       | 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            | 0 |
|    |                                     | Net New Trips       | 0          | 0          | 0         | 0          | 0          | 1         | 4         | 1         | 0         | 0         | 0         | 0          | 0            | 6 |
|    |                                     | Other               | 0          | 0          | 0         | 0          | 0          | 0         | 0         | 0         | 0         | 0         | 0         | 0          | 0            | 0 |
|    |                                     | <b>Future Total</b> | <b>23</b>  | <b>691</b> | <b>38</b> | <b>127</b> | <b>753</b> | <b>18</b> | <b>51</b> | <b>56</b> | <b>48</b> | <b>53</b> | <b>32</b> | <b>155</b> | <b>2045</b>  |   |



Traffic Volume - Future Total Volume



**Opening Year (2022) With Project**

## TTM 16397

Vistro File: C:\...\IPM.vistro

Scenario 4 Opening Year (2022) With Project

Report File: C:\...\IPM OYp.pdf

11/1/2019

**Intersection Analysis Summary**

| ID | Intersection Name                            | Control Type | Method   | Worst Mvmt | V/C        | Delay (s/veh) | LOS |
|----|--|--------------|----------|------------|------------|---------------|-----|
| 1  | Mesa View Drive (NS) at Dos Palmas Road (EW) | Two-way stop | HCM 2010 | SB Left    | 0.029      | 12.9          | B   |
| 2  | Mesa View Drive (NS) at Luna Road (EW)       | Two-way stop | HCM 2010 | WB Thru    | 0.032      | 11.3          | B   |
| 3  | US-Route 395 (NS) at Palmdale Road (EW)      | Signalized   | HCM 2010 | WB Left    | 0.760      | 47.8          | D   |
| 4  | US-Route 395 (NS) at Dos Palmas Road (EW)    | Signalized   | HCM 2010 | SB Left    | 0.670      | 25.7          | C   |
| 5  | US-Route 395 (NS) at Luna Road (EW)          | Signalized   | HCM 2010 | SB Left    | 10,256.826 | 44.6          | D   |

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: Mesa View Drive (NS) at Dos Palmas Road (EW)**

|                  |              |                           |       |
|------------------|--------------|---------------------------|-------|
| Control Type:    | Two-way stop | Delay (sec / veh):        | 12.9  |
| Analysis Method: | HCM 2010     | Level Of Service:         | B     |
| Analysis Period: | 15 minutes   | Volume to Capacity (v/c): | 0.029 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Approach               | +          |        |        | +          |        |        | +         |        |        | +         |        |        |
| 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      | 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]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | Yes        |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 5          | 19     | 48     | 13         | 17     | 0      | 0         | 8      | 0      | 37        | 6      | 25     |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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]            | 30         | 0      | 11     | 0          | 0      | 0      | 0         | 74     | 18     | 19        | 131    | 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]             | 35         | 19     | 59     | 13         | 17     | 0      | 0         | 82     | 18     | 56        | 137    | 25     |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| Other Adjustment Factor                 | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h]          | 9          | 5      | 16     | 3          | 4      | 0      | 0         | 22     | 5      | 15        | 36     | 7      |
| Total Analysis Volume [veh/h]           | 37         | 20     | 62     | 14         | 18     | 0      | 0         | 86     | 19     | 59        | 144    | 26     |
| Pedestrian Volume [ped/h]               | 0          |        |        | 0          |        |        | 0         |        |        | 0         |        |        |

**Intersection Settings**

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

**Movement, Approach, & Intersection Results**

|                                       |       |       |       |       |       |      |      |      |      |      |      |      |
|---------------------------------------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|
| V/C, Movement V/C Ratio               | 0.07  | 0.04  | 0.06  | 0.03  | 0.03  | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 | 0.00 | 0.00 |
| d_M, Delay for Movement [s/veh]       | 12.61 | 12.85 | 9.77  | 12.86 | 12.25 | 9.50 | 7.54 | 0.00 | 0.00 | 7.50 | 0.00 | 0.00 |
| Movement LOS                          | B     | B     | A     | B     | B     | A    | A    | A    | A    | A    | A    | A    |
| 95th-Percentile Queue Length [veh/ln] | 0.61  | 0.61  | 0.61  | 0.20  | 0.20  | 0.20 | 0.00 | 0.00 | 0.00 | 0.12 | 0.12 | 0.12 |
| 95th-Percentile Queue Length [ft/ln]  | 15.18 | 15.18 | 15.18 | 4.99  | 4.99  | 4.99 | 0.00 | 0.00 | 0.00 | 2.91 | 2.91 | 2.91 |
| d_A, Approach Delay [s/veh]           | 11.17 |       |       | 12.51 |       |      | 0.00 |      |      | 1.93 |      |      |
| Approach LOS                          | B     |       |       | B     |       |      | A    |      |      | A    |      |      |
| d_I, Intersection Delay [s/veh]       | 4.48  |       |       |       |       |      |      |      |      |      |      |      |
| Intersection LOS                      | B     |       |       |       |       |      |      |      |      |      |      |      |

**Intersection Level Of Service Report**  
**Intersection 2: Mesa View Drive (NS) at Luna Road (EW)**

|                  |              |                           |       |
|------------------|--------------|---------------------------|-------|
| Control Type:    | Two-way stop | Delay (sec / veh):        | 11.3  |
| Analysis Method: | HCM 2010     | Level Of Service:         | B     |
| Analysis Period: | 15 minutes   | Volume to Capacity (v/c): | 0.032 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| 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      | 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]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | Yes        |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 8          | 69     | 14     | 14         | 36     | 5      | 6         | 11     | 6      | 6         | 19     | 23     |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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          | 25     | 5      | 18         | 21     | 0      | 0         | 0      | 0      | 9         | 0      | 30     |
| 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]             | 8          | 94     | 19     | 32         | 57     | 5      | 6         | 11     | 6      | 15        | 19     | 53     |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| Other Adjustment Factor                 | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h]          | 2          | 25     | 5      | 8          | 15     | 1      | 2         | 3      | 2      | 4         | 5      | 14     |
| Total Analysis Volume [veh/h]           | 8          | 99     | 20     | 34         | 60     | 5      | 6         | 12     | 6      | 16        | 20     | 56     |
| Pedestrian Volume [ped/h]               | 0          |        |        | 0          |        |        | 0         |        |        | 0         |        |        |

**Intersection Settings**

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

**Movement, Approach, & Intersection Results**

|                                       |      |      |      |      |      |      |       |       |      |       |       |      |
|---------------------------------------|------|------|------|------|------|------|-------|-------|------|-------|-------|------|
| V/C, Movement V/C Ratio               | 0.01 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.01  | 0.02  | 0.01 | 0.02  | 0.03  | 0.06 |
| d_M, Delay for Movement [s/veh]       | 7.33 | 0.00 | 0.00 | 7.49 | 0.00 | 0.00 | 11.24 | 10.96 | 8.76 | 11.01 | 11.29 | 9.37 |
| Movement LOS                          | A    | A    | A    | A    | A    | A    | B     | B     | A    | B     | B     | A    |
| 95th-Percentile Queue Length [veh/ln] | 0.02 | 0.02 | 0.02 | 0.07 | 0.07 | 0.07 | 0.11  | 0.11  | 0.11 | 0.39  | 0.39  | 0.39 |
| 95th-Percentile Queue Length [ft/ln]  | 0.39 | 0.39 | 0.39 | 1.66 | 1.66 | 1.66 | 2.74  | 2.74  | 2.74 | 9.68  | 9.68  | 9.68 |
| d_A, Approach Delay [s/veh]           | 0.46 |      |      | 2.57 |      |      | 10.48 |       |      | 10.07 |       |      |
| Approach LOS                          | A    |      |      | A    |      |      | B     |       |      | B     |       |      |
| d_I, Intersection Delay [s/veh]       | 4.36 |      |      |      |      |      |       |       |      |       |       |      |
| Intersection LOS                      | B    |      |      |      |      |      |       |       |      |       |       |      |

**Intersection Level Of Service Report**  
**Intersection 3: US-Route 395 (NS) at Palmdale Road (EW)**

|                  |            |                           |       |
|------------------|------------|---------------------------|-------|
| Control Type:    | Signalized | Delay (sec / veh):        | 47.8  |
| Analysis Method: | HCM 2010   | Level Of Service:         | D     |
| Analysis Period: | 15 minutes | Volume to Capacity (v/c): | 0.760 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Approach               | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| Lane Configuration     | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| 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      | 1      | 1         | 0      | 0      | 1         | 0      | 2      |
| Pocket Length [ft]     | 120.00     | 100.00 | 100.00 | 350.00     | 100.00 | 370.00 | 140.00    | 100.00 | 100.00 | 250.00    | 100.00 | 450.00 |
| Speed [mph]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | Yes        |        |        | No         |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 318        | 844    | 94     | 144        | 732    | 45     | 98        | 608    | 290    | 243       | 785    | 132    |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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]            | 7          | 27     | 29     | 0          | 47     | 0      | 0         | 0      | 12     | 54        | 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]             | 325        | 871    | 123    | 144        | 779    | 45     | 98        | 608    | 302    | 297       | 785    | 132    |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| 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]          | 86         | 229    | 32     | 38         | 205    | 12     | 26        | 160    | 79     | 78        | 207    | 35     |
| Total Analysis Volume [veh/h]           | 342        | 917    | 129    | 152        | 820    | 47     | 103       | 640    | 318    | 313       | 826    | 139    |
| 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            | Fixed time                   |
| Offset [s]                | 0.0                          |
| Offset Reference          | LeadGreen                    |
| Permissive Mode           | SingleBand                   |
| Lost time [s]             | 2.00                         |

**Phasing & Timing**

| Control Type                 | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss |
|------------------------------|----------|---------|---------|----------|---------|---------|----------|---------|---------|----------|---------|---------|
| Signal group                 | 5        | 2       | 0       | 1        | 6       | 0       | 3        | 8       | 0       | 7        | 4       | 0       |
| Auxiliary Signal Groups      |          |         |         |          |         |         |          |         |         |          |         |         |
| Lead / Lag                   | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       |
| Minimum Green [s]            | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       |
| Maximum Green [s]            | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       |
| Amber [s]                    | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| All red [s]                  | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     |
| Split [s]                    | 21       | 32      | 0       | 14       | 25      | 0       | 11       | 22      | 0       | 12       | 23      | 0       |
| Vehicle Extension [s]        | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| Walk [s]                     | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 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     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| I2, Clearance Lost Time [s]  | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| Minimum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Maximum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Pedestrian Recall            | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Detector Location [ft]       | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| Detector Length [ft]         | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| I, Upstream Filtering Factor | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    |

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

| Lane Group                              | L     | C     | R     | L     | C     | R     | L     | C     | R     | L     | C     | R     |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| C, Cycle Length [s]                     | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    |
| L, Total Lost Time per Cycle [s]        | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  |
| l1_p, Permitted Start-Up Lost Time [s]  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| l2, Clearance Lost Time [s]             | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  |
| g_i, Effective Green Time [s]           | 17    | 28    | 28    | 10    | 21    | 21    | 7     | 18    | 18    | 8     | 19    | 19    |
| g / C, Green / Cycle                    | 0.21  | 0.35  | 0.35  | 0.13  | 0.26  | 0.26  | 0.09  | 0.23  | 0.23  | 0.10  | 0.24  | 0.24  |
| (v / s)_i Volume / Saturation Flow Rate | 0.20  | 0.27  | 0.08  | 0.09  | 0.24  | 0.03  | 0.06  | 0.19  | 0.21  | 0.09  | 0.24  | 0.09  |
| s, saturation flow rate [veh/h]         | 1714  | 3427  | 1530  | 1714  | 3427  | 1530  | 1714  | 3427  | 1530  | 3329  | 3427  | 1530  |
| c, Capacity [veh/h]                     | 364   | 1200  | 536   | 214   | 900   | 402   | 150   | 771   | 344   | 333   | 814   | 363   |
| d1, Uniform Delay [s]                   | 30.99 | 23.07 | 18.46 | 33.60 | 28.60 | 22.45 | 35.44 | 29.54 | 30.33 | 35.76 | 30.50 | 25.58 |
| k, delay calibration                    | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  |
| 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]               | 33.95 | 4.67  | 1.06  | 18.02 | 14.97 | 0.59  | 22.66 | 10.07 | 32.52 | 36.23 | 35.28 | 3.04  |
| d3, Initial Queue Delay [s]             | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 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**

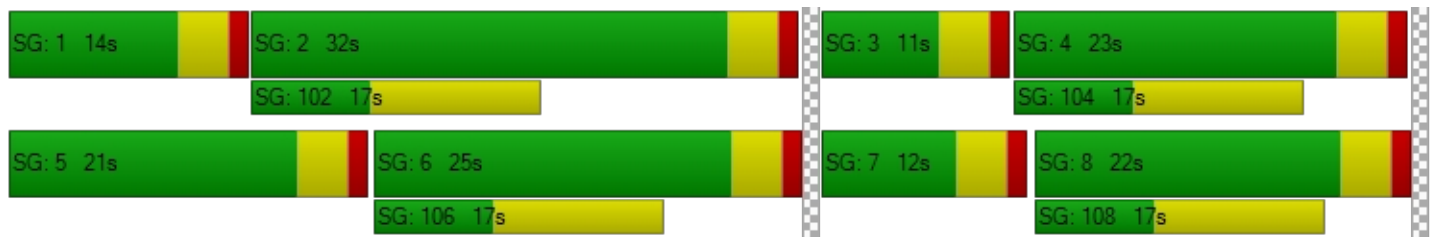
|                                       |        |        |       |        |        |       |        |        |        |        |        |        |
|---------------------------------------|--------|--------|-------|--------|--------|-------|--------|--------|--------|--------|--------|--------|
| X, volume / capacity                  | 0.94   | 0.76   | 0.24  | 0.71   | 0.91   | 0.12  | 0.69   | 0.83   | 0.92   | 0.94   | 1.01   | 0.38   |
| d, Delay for Lane Group [s/veh]       | 64.94  | 27.74  | 19.52 | 51.62  | 43.57  | 23.04 | 58.09  | 39.61  | 62.85  | 71.99  | 65.78  | 28.62  |
| Lane Group LOS                        | E      | C      | B     | D      | D      | C     | E      | D      | E      | E      | F      | C      |
| Critical Lane Group                   | Yes    | No     | No    | No     | Yes    | No    | No     | No     | Yes    | Yes    | No     | No     |
| 50th-Percentile Queue Length [veh/ln] | 9.68   | 8.01   | 1.79  | 3.83   | 9.15   | 0.72  | 2.85   | 6.72   | 8.87   | 4.63   | 11.49  | 2.46   |
| 50th-Percentile Queue Length [ft/ln]  | 242.00 | 200.35 | 44.67 | 95.86  | 228.73 | 18.03 | 71.25  | 168.00 | 221.64 | 115.79 | 287.33 | 61.40  |
| 95th-Percentile Queue Length [veh/ln] | 14.78  | 12.66  | 3.22  | 6.90   | 14.11  | 1.30  | 5.13   | 10.97  | 13.75  | 8.16   | 17.19  | 4.42   |
| 95th-Percentile Queue Length [ft/ln]  | 369.56 | 316.41 | 80.40 | 172.55 | 352.75 | 32.45 | 128.25 | 274.29 | 343.72 | 204.03 | 429.84 | 110.52 |

**Movement, Approach, & Intersection Results**

|                                 |       |       |       |       |       |       |       |       |       |       |       |       |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| d_M, Delay for Movement [s/veh] | 64.94 | 27.74 | 19.52 | 51.62 | 43.57 | 23.04 | 58.09 | 39.61 | 62.85 | 71.99 | 65.78 | 28.62 |
| Movement LOS                    | E     | C     | B     | D     | D     | C     | E     | D     | E     | E     | F     | C     |
| d_A, Approach Delay [s/veh]     | 36.14 |       |       | 43.83 |       |       | 48.37 |       |       | 63.26 |       |       |
| Approach LOS                    | D     |       |       | D     |       |       | D     |       |       | E     |       |       |
| d_I, Intersection Delay [s/veh] | 47.83 |       |       |       |       |       |       |       |       |       |       |       |
| Intersection LOS                | D     |       |       |       |       |       |       |       |       |       |       |       |
| Intersection V/C                | 0.760 |       |       |       |       |       |       |       |       |       |       |       |

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 4: US-Route 395 (NS) at Dos Palmas Road (EW)**

|                  |            |                           |       |
|------------------|------------|---------------------------|-------|
| Control Type:    | Signalized | Delay (sec / veh):        | 25.7  |
| Analysis Method: | HCM 2010   | Level Of Service:         | C     |
| Analysis Period: | 15 minutes | Volume to Capacity (v/c): | 0.670 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Approach               | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| Lane Configuration     | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| 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      | 1      | 1          | 0      | 0      | 1         | 0      | 1      | 1         | 0      | 0      |
| Pocket Length [ft]     | 480.00     | 100.00 | 250.00 | 300.00     | 100.00 | 100.00 | 160.00    | 100.00 | 470.00 | 100.00    | 100.00 | 100.00 |
| Speed [mph]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | No         |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 39         | 1076   | 20     | 82         | 1088   | 174    | 127       | 34     | 36     | 14        | 25     | 80     |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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]            | 20         | 3      | 0      | 0          | 5      | 108    | 60        | 13     | 12     | 0         | 22     | 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]             | 59         | 1079   | 20     | 82         | 1093   | 282    | 187       | 47     | 48     | 14        | 47     | 80     |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| Other Adjustment Factor                 | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h]          | 16         | 284    | 5      | 22         | 288    | 74     | 49        | 12     | 13     | 4         | 12     | 21     |
| Total Analysis Volume [veh/h]           | 62         | 1136   | 21     | 86         | 1151   | 297    | 197       | 49     | 51     | 15        | 49     | 84     |
| 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]          | 90                           |
| Coordination Type         | Time of Day Pattern Isolated |
| Actuation Type            | Fully actuated               |
| Offset [s]                | 0.0                          |
| Offset Reference          | LeadGreen                    |
| Permissive Mode           | SingleBand                   |
| Lost time [s]             | 2.00                         |

**Phasing & Timing**

| Control Type                 | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss |
|------------------------------|----------|---------|---------|----------|---------|---------|----------|---------|---------|----------|---------|---------|
| Signal group                 | 5        | 2       | 0       | 1        | 6       | 0       | 3        | 8       | 0       | 7        | 4       | 0       |
| Auxiliary Signal Groups      |          |         |         |          |         |         |          |         |         |          |         |         |
| Lead / Lag                   | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       |
| Minimum Green [s]            | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       |
| Maximum Green [s]            | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       |
| Amber [s]                    | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| All red [s]                  | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     |
| Split [s]                    | 11       | 21      | 0       | 32       | 42      | 0       | 16       | 26      | 0       | 11       | 21      | 0       |
| Vehicle Extension [s]        | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| Walk [s]                     | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 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     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| I2, Clearance Lost Time [s]  | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| Minimum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Maximum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Pedestrian Recall            | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Detector Location [ft]       | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| Detector Length [ft]         | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| I, Upstream Filtering Factor | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    |

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

| Lane Group                              | L     | C     | R     | L     | C     | C     | L     | C     | R     | L     | C     |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| C, Cycle Length [s]                     | 90    | 90    | 90    | 90    | 90    | 90    | 90    | 90    | 90    | 90    | 90    |
| L, Total Lost Time per Cycle [s]        | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  |
| l1_p, Permitted Start-Up Lost Time [s]  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| l2, Clearance Lost Time [s]             | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  |
| g_i, Effective Green Time [s]           | 6     | 47    | 47    | 6     | 47    | 47    | 12    | 19    | 19    | 2     | 9     |
| g / C, Green / Cycle                    | 0.06  | 0.52  | 0.52  | 0.07  | 0.53  | 0.53  | 0.13  | 0.21  | 0.21  | 0.03  | 0.10  |
| (v / s)_i Volume / Saturation Flow Rate | 0.04  | 0.33  | 0.01  | 0.05  | 0.41  | 0.42  | 0.11  | 0.03  | 0.03  | 0.01  | 0.08  |
| s, saturation flow rate [veh/h]         | 1714  | 3427  | 1530  | 1714  | 1800  | 1676  | 1714  | 1800  | 1530  | 1714  | 1619  |
| c, Capacity [veh/h]                     | 107   | 1773  | 791   | 120   | 944   | 879   | 229   | 377   | 321   | 44    | 165   |
| d1, Uniform Delay [s]                   | 41.11 | 15.72 | 10.66 | 41.07 | 17.33 | 17.62 | 38.22 | 28.95 | 29.13 | 43.18 | 39.65 |
| 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  |
| 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  |
| d2, Incremental Delay [s]               | 4.85  | 1.79  | 0.06  | 7.79  | 6.53  | 7.71  | 9.01  | 0.15  | 0.23  | 4.47  | 9.01  |
| d3, Initial Queue Delay [s]             | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| Rp, platoon ratio                       | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| PF, progression factor                  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |

**Lane Group Results**

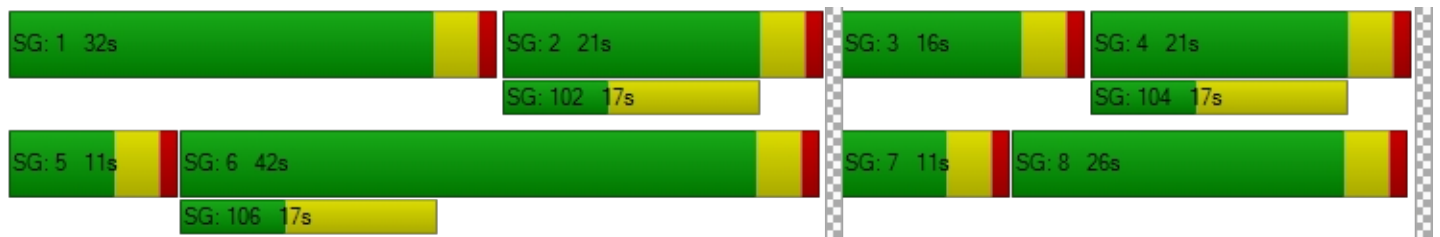
|                                       |       |        |       |       |        |        |        |       |       |       |        |
|---------------------------------------|-------|--------|-------|-------|--------|--------|--------|-------|-------|-------|--------|
| X, volume / capacity                  | 0.58  | 0.64   | 0.03  | 0.72  | 0.79   | 0.80   | 0.86   | 0.13  | 0.16  | 0.34  | 0.81   |
| d, Delay for Lane Group [s/veh]       | 45.96 | 17.51  | 10.72 | 48.85 | 23.86  | 25.34  | 47.23  | 29.10 | 29.36 | 47.64 | 48.66  |
| Lane Group LOS                        | D     | B      | B     | D     | C      | C      | D      | C     | C     | D     | D      |
| Critical Lane Group                   | Yes   | No     | No    | No    | No     | Yes    | Yes    | No    | No    | No    | Yes    |
| 50th-Percentile Queue Length [veh/ln] | 1.47  | 8.23   | 0.21  | 2.11  | 13.04  | 12.86  | 4.76   | 0.87  | 0.91  | 0.38  | 3.25   |
| 50th-Percentile Queue Length [ft/ln]  | 36.72 | 205.82 | 5.22  | 52.67 | 326.08 | 321.49 | 118.96 | 21.67 | 22.79 | 9.51  | 81.33  |
| 95th-Percentile Queue Length [veh/ln] | 2.64  | 12.94  | 0.38  | 3.79  | 18.97  | 18.74  | 8.34   | 1.56  | 1.64  | 0.68  | 5.86   |
| 95th-Percentile Queue Length [ft/ln]  | 66.10 | 323.46 | 9.40  | 94.80 | 474.16 | 468.52 | 208.40 | 39.01 | 41.02 | 17.11 | 146.40 |

**Movement, Approach, & Intersection Results**

|                                 |       |       |       |       |       |       |       |       |       |       |       |       |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| d_M, Delay for Movement [s/veh] | 45.96 | 17.51 | 10.72 | 48.85 | 24.39 | 25.34 | 47.23 | 29.10 | 29.36 | 47.64 | 48.66 | 48.66 |
| Movement LOS                    | D     | B     | B     | D     | C     | C     | D     | C     | C     | D     | D     | D     |
| d_A, Approach Delay [s/veh]     | 18.84 |       |       | 25.94 |       |       | 41.17 |       |       | 48.56 |       |       |
| Approach LOS                    | B     |       |       | C     |       |       | D     |       |       | D     |       |       |
| d_I, Intersection Delay [s/veh] | 25.70 |       |       |       |       |       |       |       |       |       |       |       |
| Intersection LOS                | C     |       |       |       |       |       |       |       |       |       |       |       |
| Intersection V/C                | 0.670 |       |       |       |       |       |       |       |       |       |       |       |

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 5: US-Route 395 (NS) at Luna Road (EW)**

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

Delay (sec / veh): 44.6  
 Level Of Service: D  
 Volume to Capacity (v/c): 10,256.826

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Approach               | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| Lane Configuration     | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| 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      | 1      | 1          | 0      | 1      | 1         | 0      | 0      | 1         | 0      | 0      |
| Pocket Length [ft]     | 360.00     | 100.00 | 450.00 | 400.00     | 100.00 | 400.00 | 125.00    | 100.00 | 100.00 | 425.00    | 100.00 | 100.00 |
| Speed [mph]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | No         |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 64         | 941    | 76     | 179        | 857    | 62     | 58        | 80     | 42     | 35        | 86     | 169    |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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]            | 20         | 20     | 0      | 0          | 12     | 5      | 3         | 13     | 12     | 0         | 22     | 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]             | 84         | 961    | 76     | 179        | 869    | 67     | 61        | 93     | 54     | 35        | 108    | 169    |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| 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         | 253    | 20     | 47         | 229    | 18     | 16        | 24     | 14     | 9         | 28     | 44     |
| Total Analysis Volume [veh/h]           | 88         | 1012   | 80     | 188        | 915    | 71     | 64        | 98     | 57     | 37        | 114    | 178    |
| 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            | Fixed time                   |
| Offset [s]                | 0.0                          |
| Offset Reference          | LeadGreen                    |
| Permissive Mode           | SingleBand                   |
| Lost time [s]             | 2.00                         |

**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]            | 7        | 7       | 0       | 7        | 7       | 0       | 0       | 7       | 0       | 0       | 7       | 0       |
| Maximum Green [s]            | 30       | 30      | 0       | 30       | 30      | 0       | 0       | 30      | 0       | 0       | 30      | 0       |
| Amber [s]                    | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 0.0     | 3.0     | 0.0     | 0.0     | 3.0     | 0.0     |
| All red [s]                  | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 0.0     | 1.0     | 0.0     | 0.0     | 1.0     | 0.0     |
| Split [s]                    | 21       | 32      | 0       | 14       | 25      | 0       | 0       | 22      | 0       | 0       | 23      | 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        | 7       | 0       | 0        | 7       | 0       | 0       | 7       | 0       | 0       | 7       | 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]  | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 0.0     | 2.0     | 0.0     | 0.0     | 2.0     | 0.0     |
| Minimum Recall               | No       | No      |         | No       | No      |         |         | No      |         |         | No      |         |
| Maximum Recall               | No       | No      |         | No       | No      |         |         | No      |         |         | No      |         |
| Pedestrian Recall            | No       | No      |         | No       | No      |         |         | No      |         |         | No      |         |
| Detector Location [ft]       | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| Detector Length [ft]         | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| I, Upstream Filtering Factor | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    |

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

| Lane Group                              | L     | C     | R     | L     | C     | R     | L     | C     | R     | L     | C     |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| C, Cycle Length [s]                     | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    |
| L, Total Lost Time per Cycle [s]        | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  |
| l1_p, Permitted Start-Up Lost Time [s]  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 2.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| l2, Clearance Lost Time [s]             | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 0.00  | 2.00  |
| g_i, Effective Green Time [s]           | 17    | 28    | 28    | 10    | 21    | 21    | 18    | 18    | 18    | 20    | 19    |
| g / C, Green / Cycle                    | 0.21  | 0.35  | 0.35  | 0.13  | 0.26  | 0.26  | 0.23  | 0.23  | 0.23  | 0.25  | 0.24  |
| (v / s)_i Volume / Saturation Flow Rate | 0.05  | 0.30  | 0.05  | 0.11  | 0.27  | 0.05  | 0.06  | 0.05  | 0.04  | 0.03  | 0.18  |
| s, saturation flow rate [veh/h]         | 1714  | 3427  | 1530  | 1714  | 3427  | 1530  | 1104  | 1800  | 1530  | 1318  | 1625  |
| c, Capacity [veh/h]                     | 364   | 1200  | 536   | 214   | 900   | 402   | 126   | 405   | 344   | 361   | 386   |
| d1, Uniform Delay [s]                   | 26.15 | 23.98 | 17.83 | 34.40 | 29.50 | 22.81 | 39.25 | 25.41 | 24.95 | 26.81 | 28.35 |
| k, delay calibration                    | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  |
| 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  |
| d2, Incremental Delay [s]               | 1.57  | 7.33  | 0.59  | 36.26 | 34.35 | 0.96  | 13.74 | 1.41  | 1.03  | 0.57  | 12.96 |
| d3, Initial Queue Delay [s]             | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| Rp, platoon ratio                       | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| PF, progression factor                  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |

**Lane Group Results**

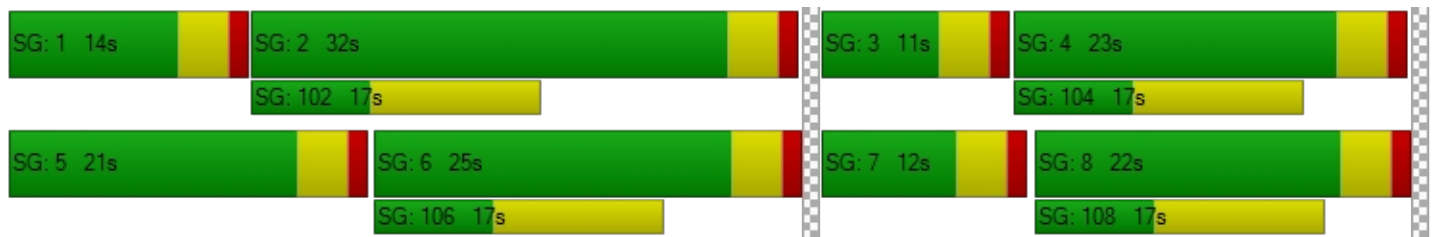
|                                       |       |        |       |        |        |       |       |       |       |       |        |
|---------------------------------------|-------|--------|-------|--------|--------|-------|-------|-------|-------|-------|--------|
| X, volume / capacity                  | 0.24  | 0.84   | 0.15  | 0.88   | 1.02   | 0.18  | 0.51  | 0.24  | 0.17  | 0.10  | 0.76   |
| d, Delay for Lane Group [s/veh]       | 27.72 | 31.32  | 18.42 | 70.66  | 63.85  | 23.77 | 52.99 | 26.82 | 25.99 | 27.38 | 41.31  |
| Lane Group LOS                        | C     | C      | B     | E      | F      | C     | D     | C     | C     | C     | D      |
| Critical Lane Group                   | No    | Yes    | No    | Yes    | No     | No    | No    | No    | No    | Yes   | No     |
| 50th-Percentile Queue Length [veh/ln] | 1.51  | 9.52   | 1.06  | 5.66   | 12.53  | 1.11  | 1.72  | 1.64  | 0.95  | 0.59  | 6.39   |
| 50th-Percentile Queue Length [ft/ln]  | 37.86 | 238.06 | 26.59 | 141.38 | 313.21 | 27.81 | 43.01 | 41.12 | 23.70 | 14.72 | 159.85 |
| 95th-Percentile Queue Length [veh/ln] | 2.73  | 14.58  | 1.91  | 9.56   | 18.52  | 2.00  | 3.10  | 2.96  | 1.71  | 1.06  | 10.54  |
| 95th-Percentile Queue Length [ft/ln]  | 68.14 | 364.58 | 47.86 | 238.88 | 462.90 | 50.07 | 77.41 | 74.02 | 42.65 | 26.50 | 263.53 |

**Movement, Approach, & Intersection Results**

|                                 |           |       |       |       |       |       |       |       |       |       |       |       |
|---------------------------------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| d_M, Delay for Movement [s/veh] | 27.72     | 31.32 | 18.42 | 70.66 | 63.85 | 23.77 | 52.99 | 26.82 | 25.99 | 27.38 | 41.31 | 41.31 |
| Movement LOS                    | C         | C     | B     | E     | F     | C     | D     | C     | C     | C     | D     | D     |
| d_A, Approach Delay [s/veh]     | 30.17     |       |       | 62.51 |       |       | 34.25 |       |       | 39.74 |       |       |
| Approach LOS                    | C         |       |       | E     |       |       | C     |       |       | D     |       |       |
| d_I, Intersection Delay [s/veh] | 44.65     |       |       |       |       |       |       |       |       |       |       |       |
| Intersection LOS                | D         |       |       |       |       |       |       |       |       |       |       |       |
| Intersection V/C                | 10256.826 |       |       |       |       |       |       |       |       |       |       |       |

**Sequence**

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



## TTM 16397

Vistro File: C:\...\IPM.vistro

Scenario 4 Opening Year (2022) With Project

Report File: C:\...\IPM OYp.pdf

11/1/2019

**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  | Mesa View Drive (NS) at Dos Palmas Road (EW) | Final Base          | 5          | 19        | 48        | 13         | 17        | 0        | 0         | 8         | 0         | 37        | 6          | 25        | 178          |
|    |  | Growth Rate         | 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       | 30         | 0         | 11        | 0          | 0         | 0        | 0         | 74        | 18        | 19        | 131        | 0         | 283          |
|    |  | Other               | 0          | 0         | 0         | 0          | 0         | 0        | 0         | 0         | 0         | 0         | 0          | 0         | 0            |
|    |  | <b>Future Total</b> | <b>35</b>  | <b>19</b> | <b>59</b> | <b>13</b>  | <b>17</b> | <b>0</b> | <b>0</b>  | <b>82</b> | <b>18</b> | <b>56</b> | <b>137</b> | <b>25</b> | <b>461</b>   |

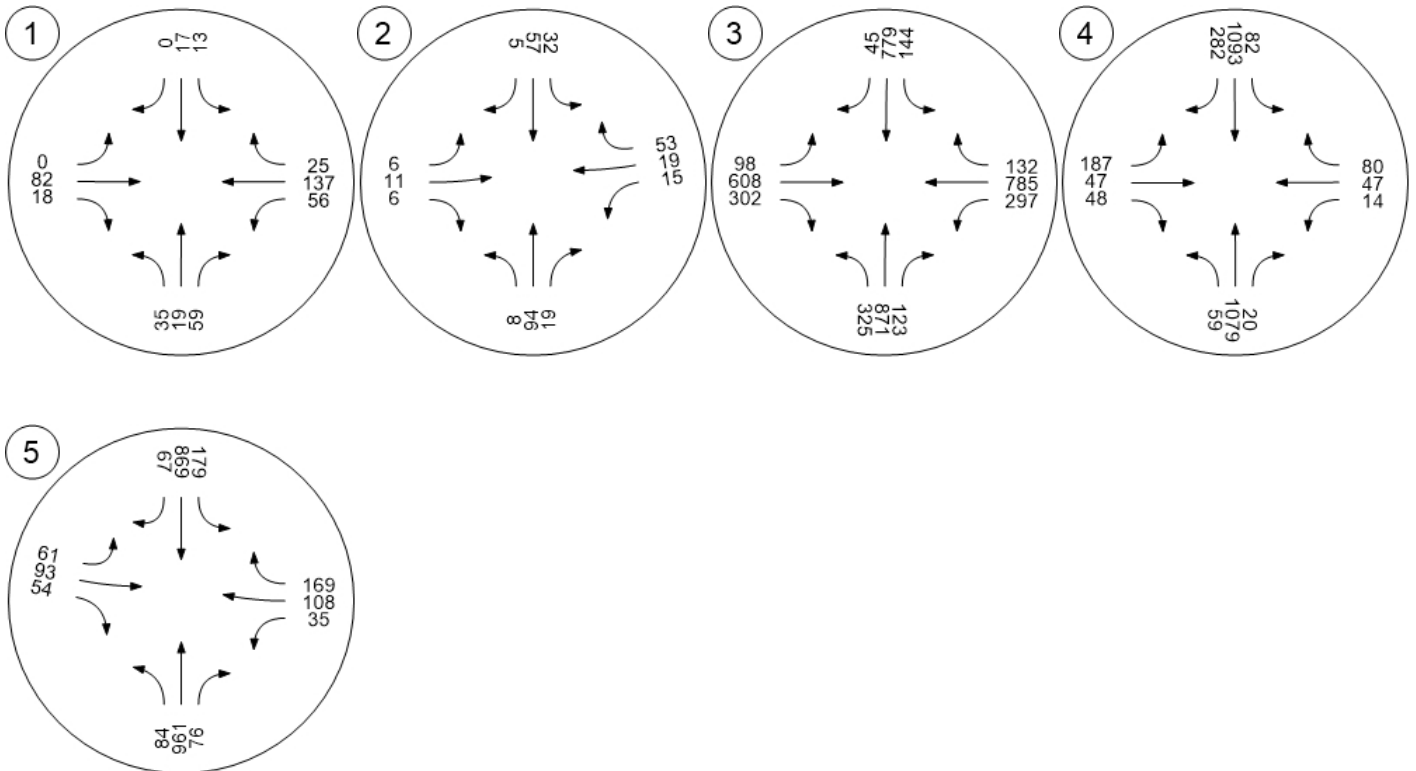
| ID | Intersection Name                      | Volume Type         | Northbound |           |           | Southbound |           |          | Eastbound |           |          | Westbound |           |           | Total Volume |
|----|--|---------------------|------------|-----------|-----------|------------|-----------|----------|-----------|-----------|----------|-----------|-----------|-----------|--------------|
|    |  |                     | Left       | Thru      | Right     | Left       | Thru      | Right    | Left      | Thru      | Right    | Left      | Thru      | Right     |              |
| 2  | Mesa View Drive (NS) at Luna Road (EW) | Final Base          | 8          | 69        | 14        | 14         | 36        | 5        | 6         | 11        | 6        | 6         | 19        | 23        | 217          |
|    |  | Growth Rate         | 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          | 25        | 5         | 18         | 21        | 0        | 0         | 0         | 0        | 9         | 0         | 30        | 108          |
|    |  | Other               | 0          | 0         | 0         | 0          | 0         | 0        | 0         | 0         | 0        | 0         | 0         | 0         | 0            |
|    |  | <b>Future Total</b> | <b>8</b>   | <b>94</b> | <b>19</b> | <b>32</b>  | <b>57</b> | <b>5</b> | <b>6</b>  | <b>11</b> | <b>6</b> | <b>15</b> | <b>19</b> | <b>53</b> | <b>325</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  | US-Route 395 (NS) at Palmdale Road (EW) | Final Base          | 318        | 844        | 94         | 144        | 732        | 45        | 98        | 608        | 290        | 243        | 785        | 132        | 4333         |
|    |   | Growth Rate         | 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       | 7          | 27         | 29         | 0          | 47         | 0         | 0         | 0          | 12         | 54         | 0          | 0          | 176          |
|    |   | Other               | 0          | 0          | 0          | 0          | 0          | 0         | 0         | 0          | 0          | 0          | 0          | 0          | 0            |
|    |   | <b>Future Total</b> | <b>325</b> | <b>871</b> | <b>123</b> | <b>144</b> | <b>779</b> | <b>45</b> | <b>98</b> | <b>608</b> | <b>302</b> | <b>297</b> | <b>785</b> | <b>132</b> | <b>4509</b>  |

| ID | Intersection Name                         | Volume Type         | Northbound |             |           | Southbound |             |            | Eastbound  |           |           | Westbound |           |           | Total Volume |
|----|---|---------------------|------------|-------------|-----------|------------|-------------|------------|------------|-----------|-----------|-----------|-----------|-----------|--------------|
|    |   |                     | Left       | Thru        | Right     | Left       | Thru        | Right      | Left       | Thru      | Right     | Left      | Thru      | Right     |              |
| 4  | US-Route 395 (NS) at Dos Palmas Road (EW) | Final Base          | 39         | 1076        | 20        | 82         | 1088        | 174        | 127        | 34        | 36        | 14        | 25        | 80        | 2795         |
|    |   | Growth Rate         | 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       | 20         | 3           | 0         | 0          | 5           | 108        | 60         | 13        | 12        | 0         | 22        | 0         | 243          |
|    |   | Other               | 0          | 0           | 0         | 0          | 0           | 0          | 0          | 0         | 0         | 0         | 0         | 0         | 0            |
|    |   | <b>Future Total</b> | <b>59</b>  | <b>1079</b> | <b>20</b> | <b>82</b>  | <b>1093</b> | <b>282</b> | <b>187</b> | <b>47</b> | <b>48</b> | <b>14</b> | <b>47</b> | <b>80</b> | <b>3038</b>  |

| ID | Intersection Name                   | Volume Type         | Northbound |            |           | Southbound |            |           | Eastbound |           |           | Westbound |            |            | Total Volume |     |
|----|-------------------------------------|---------------------|------------|------------|-----------|------------|------------|-----------|-----------|-----------|-----------|-----------|------------|------------|--------------|-----|
|    |                                     |                     | Left       | Thru       | Right     | Left       | Thru       | Right     | Left      | Thru      | Right     | Left      | Thru       | Right      |              |     |
| 5  | US-Route 395 (NS) at Luna Road (EW) | Final Base          | 64         | 941        | 76        | 179        | 857        | 62        | 58        | 80        | 42        | 35        | 86         | 169        | 2649         |     |
|    |                                     | Growth Rate         | 1.00       | 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            | 0   |
|    |                                     | Net New Trips       | 20         | 20         | 0         | 0          | 12         | 5         | 3         | 13        | 12        | 0         | 22         | 0          | 0            | 107 |
|    |                                     | Other               | 0          | 0          | 0         | 0          | 0          | 0         | 0         | 0         | 0         | 0         | 0          | 0          | 0            | 0   |
|    |                                     | <b>Future Total</b> | <b>84</b>  | <b>961</b> | <b>76</b> | <b>179</b> | <b>869</b> | <b>67</b> | <b>61</b> | <b>93</b> | <b>54</b> | <b>35</b> | <b>108</b> | <b>169</b> | <b>2756</b>  |     |

Traffic Volume - Future Total Volume



## TTM 16397

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

Scenario 4 Opening Year (2022) With Project

Report File: C:\...\IAM OYp.pdf

11/1/2019

**Intersection Analysis Summary**

| ID | Intersection Name                            | Control Type | Method   | Worst Mvmt | V/C   | Delay (s/veh) | LOS |
|----|--|--------------|----------|------------|-------|---------------|-----|
| 1  | Mesa View Drive (NS) at Dos Palmas Road (EW) | Two-way stop | HCM 2010 | NB Thru    | 0.004 | 10.7          | B   |
| 2  | Mesa View Drive (NS) at Luna Road (EW)       | Two-way stop | HCM 2010 | EB Thru    | 0.021 | 10.5          | B   |
| 3  | US-Route 395 (NS) at Palmdale Road (EW)      | Signalized   | HCM 2010 | NB Left    | 0.572 | 31.5          | C   |
| 4  | US-Route 395 (NS) at Dos Palmas Road (EW)    | Signalized   | HCM 2010 | WB Right   | 0.500 | 18.3          | B   |
| 5  | US-Route 395 (NS) at Luna Road (EW)          | Signalized   | HCM 2010 | SB Left    | 0.432 | 33.5          | 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: Mesa View Drive (NS) at Dos Palmas Road (EW)**

|                  |              |                           |       |
|------------------|--------------|---------------------------|-------|
| Control Type:    | Two-way stop | Delay (sec / veh):        | 10.7  |
| Analysis Method: | HCM 2010     | Level Of Service:         | B     |
| Analysis Period: | 15 minutes   | Volume to Capacity (v/c): | 0.004 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| 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      | 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]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | Yes        |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 0          | 3      | 36     | 10         | 8      | 0      | 0         | 5      | 2      | 10        | 3      | 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 [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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]            | 9          | 0      | 15     | 0          | 0      | 0      | 0         | 116    | 27     | 4         | 39     | 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]             | 9          | 3      | 51     | 10         | 8      | 0      | 0         | 121    | 29     | 14        | 42     | 2      |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| Other Adjustment Factor                 | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h]          | 2          | 1      | 13     | 3          | 2      | 0      | 0         | 32     | 8      | 4         | 11     | 1      |
| Total Analysis Volume [veh/h]           | 9          | 3      | 54     | 11         | 8      | 0      | 0         | 127    | 31     | 15        | 44     | 2      |
| Pedestrian Volume [ped/h]               | 0          |        |        | 0          |        |        | 0         |        |        | 0         |        |        |



**Intersection Settings**

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

**Movement, Approach, & Intersection Results**

|                                       |       |       |      |       |       |      |      |      |      |      |      |      |
|---------------------------------------|-------|-------|------|-------|-------|------|------|------|------|------|------|------|
| V/C, Movement V/C Ratio               | 0.01  | 0.00  | 0.06 | 0.02  | 0.01  | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 |
| d_M, Delay for Movement [s/veh]       | 10.30 | 10.67 | 9.30 | 10.60 | 10.59 | 8.65 | 7.29 | 0.00 | 0.00 | 7.54 | 0.00 | 0.00 |
| Movement LOS                          | B     | B     | A    | B     | B     | A    | A    | A    | A    | A    | A    | A    |
| 95th-Percentile Queue Length [veh/ln] | 0.25  | 0.25  | 0.25 | 0.09  | 0.09  | 0.09 | 0.00 | 0.00 | 0.00 | 0.03 | 0.03 | 0.03 |
| 95th-Percentile Queue Length [ft/ln]  | 6.17  | 6.17  | 6.17 | 2.21  | 2.21  | 2.21 | 0.00 | 0.00 | 0.00 | 0.74 | 0.74 | 0.74 |
| d_A, Approach Delay [s/veh]           | 9.50  |       |      | 10.59 |       |      | 0.00 |      |      | 1.85 |      |      |
| Approach LOS                          | A     |       |      | B     |       |      | A    |      |      | A    |      |      |
| d_I, Intersection Delay [s/veh]       | 3.10  |       |      |       |       |      |      |      |      |      |      |      |
| Intersection LOS                      | B     |       |      |       |       |      |      |      |      |      |      |      |

**Intersection Level Of Service Report**  
**Intersection 2: Mesa View Drive (NS) at Luna Road (EW)**

|                  |              |                           |       |
|------------------|--------------|---------------------------|-------|
| Control Type:    | Two-way stop | Delay (sec / veh):        | 10.5  |
| Analysis Method: | HCM 2010     | Level Of Service:         | B     |
| Analysis Period: | 15 minutes   | Volume to Capacity (v/c): | 0.021 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| 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      | 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]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | Yes        |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 5          | 31     | 7      | 10         | 40     | 1      | 2         | 13     | 2      | 7         | 7      | 6      |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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          | 12     | 6      | 27         | 19     | 0      | 0         | 0      | 0      | 1         | 0      | 9      |
| 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]             | 5          | 43     | 13     | 37         | 59     | 1      | 2         | 13     | 2      | 8         | 7      | 15     |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| Other Adjustment Factor                 | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h]          | 1          | 11     | 3      | 10         | 16     | 0      | 1         | 3      | 1      | 2         | 2      | 4      |
| Total Analysis Volume [veh/h]           | 5          | 45     | 14     | 39         | 62     | 1      | 2         | 14     | 2      | 8         | 7      | 16     |
| Pedestrian Volume [ped/h]               | 0          |        |        | 0          |        |        | 0         |        |        | 0         |        |        |

**Intersection Settings**

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

**Movement, Approach, & Intersection Results**

|                                       |      |      |      |      |      |      |       |       |      |       |       |      |
|---------------------------------------|------|------|------|------|------|------|-------|-------|------|-------|-------|------|
| V/C, Movement V/C Ratio               | 0.00 | 0.00 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00  | 0.02  | 0.00 | 0.01  | 0.01  | 0.02 |
| d_M, Delay for Movement [s/veh]       | 7.33 | 0.00 | 0.00 | 7.37 | 0.00 | 0.00 | 10.18 | 10.50 | 8.71 | 10.16 | 10.49 | 8.69 |
| Movement LOS                          | A    | A    | A    | A    | A    | A    | B     | B     | A    | B     | B     | A    |
| 95th-Percentile Queue Length [veh/ln] | 0.01 | 0.01 | 0.01 | 0.07 | 0.07 | 0.07 | 0.08  | 0.08  | 0.08 | 0.12  | 0.12  | 0.12 |
| 95th-Percentile Queue Length [ft/ln]  | 0.24 | 0.24 | 0.24 | 1.82 | 1.82 | 1.82 | 1.97  | 1.97  | 1.97 | 2.89  | 2.89  | 2.89 |
| d_A, Approach Delay [s/veh]           | 0.57 |      |      | 2.82 |      |      | 10.27 |       |      | 9.48  |       |      |
| Approach LOS                          | A    |      |      | A    |      |      | B     |       |      | A     |       |      |
| d_I, Intersection Delay [s/veh]       | 3.73 |      |      |      |      |      |       |       |      |       |       |      |
| Intersection LOS                      | B    |      |      |      |      |      |       |       |      |       |       |      |

**Intersection Level Of Service Report**  
**Intersection 3: US-Route 395 (NS) at Palmdale Road (EW)**

|                  |            |                           |       |
|------------------|------------|---------------------------|-------|
| Control Type:    | Signalized | Delay (sec / veh):        | 31.5  |
| Analysis Method: | HCM 2010   | Level Of Service:         | C     |
| Analysis Period: | 15 minutes | Volume to Capacity (v/c): | 0.572 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Approach               | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| Lane Configuration     | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| 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      | 1      | 1         | 0      | 0      | 1         | 0      | 2      |
| Pocket Length [ft]     | 120.00     | 100.00 | 100.00 | 350.00     | 100.00 | 370.00 | 140.00    | 100.00 | 100.00 | 250.00    | 100.00 | 450.00 |
| Speed [mph]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | Yes        |        |        | No         |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 230        | 715    | 82     | 90         | 518    | 36     | 58        | 489    | 307    | 90        | 356    | 60     |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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]            | 10         | 41     | 47     | 0          | 13     | 0      | 0         | 0      | 3      | 16        | 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]             | 240        | 756    | 129    | 90         | 531    | 36     | 58        | 489    | 310    | 106       | 356    | 60     |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| 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]          | 63         | 199    | 34     | 24         | 140    | 9      | 15        | 129    | 82     | 28        | 94     | 16     |
| Total Analysis Volume [veh/h]           | 253        | 796    | 136    | 95         | 559    | 38     | 61        | 515    | 326    | 112       | 375    | 63     |
| 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            | Fixed time                   |
| Offset [s]                | 0.0                          |
| Offset Reference          | LeadGreen                    |
| Permissive Mode           | SingleBand                   |
| Lost time [s]             | 2.00                         |

**Phasing & Timing**

| Control Type                 | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss |
|------------------------------|----------|---------|---------|----------|---------|---------|----------|---------|---------|----------|---------|---------|
| Signal group                 | 5        | 2       | 0       | 1        | 6       | 0       | 3        | 8       | 0       | 7        | 4       | 0       |
| Auxiliary Signal Groups      |          |         |         |          |         |         |          |         |         |          |         |         |
| Lead / Lag                   | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       |
| Minimum Green [s]            | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       |
| Maximum Green [s]            | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       |
| Amber [s]                    | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| All red [s]                  | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     |
| Split [s]                    | 19       | 30      | 0       | 14       | 25      | 0       | 11       | 25      | 0       | 11       | 25      | 0       |
| Vehicle Extension [s]        | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| Walk [s]                     | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 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     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| I2, Clearance Lost Time [s]  | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| Minimum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Maximum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Pedestrian Recall            | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Detector Location [ft]       | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| Detector Length [ft]         | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| I, Upstream Filtering Factor | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    |

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

| Lane Group                              | L     | C     | R     | L     | C     | R     | L     | C     | R     | L     | C     | R     |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| C, Cycle Length [s]                     | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    |
| L, Total Lost Time per Cycle [s]        | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  |
| l1_p, Permitted Start-Up Lost Time [s]  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| l2, Clearance Lost Time [s]             | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  |
| g_i, Effective Green Time [s]           | 15    | 26    | 26    | 10    | 21    | 21    | 7     | 21    | 21    | 7     | 21    | 21    |
| g / C, Green / Cycle                    | 0.19  | 0.33  | 0.33  | 0.13  | 0.26  | 0.26  | 0.09  | 0.26  | 0.26  | 0.09  | 0.26  | 0.26  |
| (v / s)_i Volume / Saturation Flow Rate | 0.15  | 0.23  | 0.09  | 0.06  | 0.16  | 0.02  | 0.04  | 0.15  | 0.21  | 0.03  | 0.11  | 0.04  |
| s, saturation flow rate [veh/h]         | 1714  | 3427  | 1530  | 1714  | 3427  | 1530  | 1714  | 3427  | 1530  | 3329  | 3427  | 1530  |
| c, Capacity [veh/h]                     | 321   | 1114  | 497   | 214   | 900   | 402   | 150   | 900   | 402   | 291   | 900   | 402   |
| d1, Uniform Delay [s]                   | 30.98 | 23.74 | 20.00 | 32.42 | 26.00 | 22.31 | 34.54 | 25.60 | 27.65 | 34.47 | 24.43 | 22.69 |
| k, delay calibration                    | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  |
| 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]               | 17.51 | 3.93  | 1.36  | 6.52  | 3.22  | 0.47  | 7.99  | 2.64  | 16.22 | 3.81  | 1.42  | 0.83  |
| 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                  | 0.79   | 0.71   | 0.27  | 0.44  | 0.62   | 0.09  | 0.41  | 0.57   | 0.81   | 0.38  | 0.42   | 0.16  |
| d, Delay for Lane Group [s/veh]       | 48.48  | 27.67  | 21.36 | 38.94 | 29.22  | 22.78 | 42.52 | 28.25  | 43.86  | 38.27 | 25.85  | 23.52 |
| Lane Group LOS                        | D      | C      | C     | D     | C      | C     | D     | C      | D      | D     | C      | C     |
| Critical Lane Group                   | Yes    | No     | No    | No    | Yes    | No    | No    | No     | Yes    | Yes   | No     | No    |
| 50th-Percentile Queue Length [veh/ln] | 6.07   | 6.89   | 2.00  | 2.05  | 4.91   | 0.58  | 1.43  | 4.42   | 7.40   | 1.16  | 3.02   | 0.98  |
| 50th-Percentile Queue Length [ft/ln]  | 151.65 | 172.21 | 49.90 | 51.34 | 122.82 | 14.46 | 35.82 | 110.57 | 185.09 | 29.05 | 75.52  | 24.50 |
| 95th-Percentile Queue Length [veh/ln] | 10.11  | 11.19  | 3.59  | 3.70  | 8.55   | 1.04  | 2.58  | 7.87   | 11.87  | 2.09  | 5.44   | 1.76  |
| 95th-Percentile Queue Length [ft/ln]  | 252.63 | 279.82 | 89.82 | 92.41 | 213.70 | 26.03 | 64.48 | 196.79 | 296.65 | 52.29 | 135.94 | 44.11 |

**Movement, Approach, & Intersection Results**

|                                 |       |       |       |       |       |       |       |       |       |       |       |       |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| d_M, Delay for Movement [s/veh] | 48.48 | 27.67 | 21.36 | 38.94 | 29.22 | 22.78 | 42.52 | 28.25 | 43.86 | 38.27 | 25.85 | 23.52 |
| Movement LOS                    | D     | C     | C     | D     | C     | C     | D     | C     | D     | D     | C     | C     |
| d_A, Approach Delay [s/veh]     | 31.39 |       |       | 30.20 |       |       | 34.86 |       |       | 28.11 |       |       |
| Approach LOS                    | C     |       |       | C     |       |       | C     |       |       | C     |       |       |
| d_I, Intersection Delay [s/veh] | 31.54 |       |       |       |       |       |       |       |       |       |       |       |
| Intersection LOS                | C     |       |       |       |       |       |       |       |       |       |       |       |
| Intersection V/C                | 0.572 |       |       |       |       |       |       |       |       |       |       |       |

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 4: US-Route 395 (NS) at Dos Palmas Road (EW)**

|                  |            |                           |       |
|------------------|------------|---------------------------|-------|
| Control Type:    | Signalized | Delay (sec / veh):        | 18.3  |
| Analysis Method: | HCM 2010   | Level Of Service:         | B     |
| Analysis Period: | 15 minutes | Volume to Capacity (v/c): | 0.500 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Approach               | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| Lane Configuration     | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| 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      | 1      | 1          | 0      | 0      | 1         | 0      | 1      | 1         | 0      | 0      |
| Pocket Length [ft]     | 480.00     | 100.00 | 250.00 | 300.00     | 100.00 | 100.00 | 160.00    | 100.00 | 470.00 | 100.00    | 100.00 | 100.00 |
| Speed [mph]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | No         |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 7          | 883    | 7      | 50         | 862    | 54     | 105       | 24     | 46     | 25        | 7      | 76     |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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          | 4      | 0      | 0          | 1      | 31     | 94        | 19     | 18     | 0         | 6      | 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]             | 13         | 887    | 7      | 50         | 863    | 85     | 199       | 43     | 64     | 25        | 13     | 76     |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| 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]          | 3          | 233    | 2      | 13         | 227    | 22     | 52        | 11     | 17     | 7         | 3      | 20     |
| Total Analysis Volume [veh/h]           | 14         | 934    | 7      | 53         | 908    | 89     | 209       | 45     | 67     | 26        | 14     | 80     |
| 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]             | 2.00                         |

**Phasing & Timing**

| Control Type                 | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss |
|------------------------------|----------|---------|---------|----------|---------|---------|----------|---------|---------|----------|---------|---------|
| Signal group                 | 5        | 2       | 0       | 1        | 6       | 0       | 3        | 8       | 0       | 7        | 4       | 0       |
| Auxiliary Signal Groups      |          |         |         |          |         |         |          |         |         |          |         |         |
| Lead / Lag                   | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       |
| Minimum Green [s]            | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       |
| Maximum Green [s]            | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       |
| Amber [s]                    | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| All red [s]                  | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     |
| Split [s]                    | 11       | 21      | 0       | 11       | 21      | 0       | 14       | 26      | 0       | 12       | 24      | 0       |
| Vehicle Extension [s]        | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| Walk [s]                     | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 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     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| I2, Clearance Lost Time [s]  | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| Minimum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Maximum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Pedestrian Recall            | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Detector Location [ft]       | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| Detector Length [ft]         | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| I, Upstream Filtering Factor | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    |

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

| Lane Group                              | L     | C     | R    | L     | C     | C     | L     | C     | R     | L     | C     |
|---|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|
| C, Cycle Length [s]                     | 70    | 70    | 70   | 70    | 70    | 70    | 70    | 70    | 70    | 70    | 70    |
| L, Total Lost Time per Cycle [s]        | 4.00  | 4.00  | 4.00 | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  |
| l1_p, Permitted Start-Up Lost Time [s]  | 0.00  | 0.00  | 0.00 | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| l2, Clearance Lost Time [s]             | 2.00  | 2.00  | 2.00 | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  |
| g_i, Effective Green Time [s]           | 2     | 34    | 34   | 5     | 36    | 36    | 10    | 13    | 13    | 3     | 6     |
| g / C, Green / Cycle                    | 0.02  | 0.48  | 0.48 | 0.07  | 0.52  | 0.52  | 0.14  | 0.19  | 0.19  | 0.04  | 0.08  |
| (v / s)_i Volume / Saturation Flow Rate | 0.01  | 0.27  | 0.00 | 0.03  | 0.28  | 0.28  | 0.12  | 0.03  | 0.04  | 0.02  | 0.06  |
| s, saturation flow rate [veh/h]         | 1714  | 3427  | 1530 | 1714  | 1800  | 1744  | 1714  | 1800  | 1530  | 1714  | 1565  |
| c, Capacity [veh/h]                     | 44    | 1635  | 730  | 114   | 932   | 903   | 246   | 337   | 286   | 72    | 134   |
| d1, Uniform Delay [s]                   | 33.61 | 13.21 | 9.65 | 31.60 | 11.37 | 11.37 | 29.35 | 23.81 | 24.28 | 32.75 | 31.26 |
| k, delay calibration                    | 0.11  | 0.50  | 0.50 | 0.11  | 0.50  | 0.50  | 0.11  | 0.11  | 0.11  | 0.11  | 0.11  |
| 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  |
| d2, Incremental Delay [s]               | 4.00  | 1.46  | 0.02 | 2.94  | 2.27  | 2.35  | 8.01  | 0.18  | 0.42  | 3.06  | 6.58  |
| d3, Initial Queue Delay [s]             | 0.00  | 0.00  | 0.00 | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| Rp, platoon ratio                       | 1.00  | 1.00  | 1.00 | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| PF, progression factor                  | 1.00  | 1.00  | 1.00 | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |

**Lane Group Results**

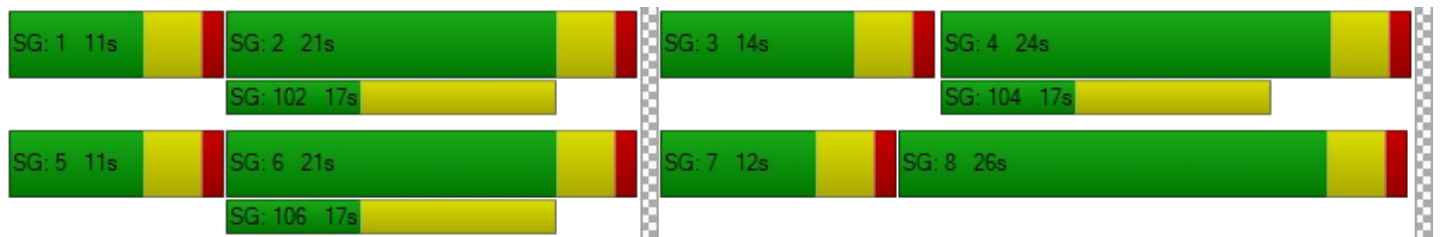
|                                       |       |        |      |       |        |        |        |       |       |       |       |
|---------------------------------------|-------|--------|------|-------|--------|--------|--------|-------|-------|-------|-------|
| X, volume / capacity                  | 0.32  | 0.57   | 0.01 | 0.47  | 0.54   | 0.54   | 0.85   | 0.13  | 0.23  | 0.36  | 0.70  |
| d, Delay for Lane Group [s/veh]       | 37.62 | 14.66  | 9.67 | 34.54 | 13.65  | 13.72  | 37.36  | 23.99 | 24.70 | 35.81 | 37.85 |
| Lane Group LOS                        | D     | B      | A    | C     | B      | B      | D      | C     | C     | D     | D     |
| Critical Lane Group                   | No    | Yes    | No   | Yes   | No     | No     | Yes    | No    | No    | No    | Yes   |
| 50th-Percentile Queue Length [veh/ln] | 0.28  | 5.00   | 0.06 | 0.93  | 5.16   | 5.02   | 3.83   | 0.61  | 0.94  | 0.48  | 1.74  |
| 50th-Percentile Queue Length [ft/ln]  | 6.92  | 124.99 | 1.40 | 23.27 | 128.90 | 125.39 | 95.83  | 15.36 | 23.51 | 11.95 | 43.48 |
| 95th-Percentile Queue Length [veh/ln] | 0.50  | 8.67   | 0.10 | 1.68  | 8.88   | 8.69   | 6.90   | 1.11  | 1.69  | 0.86  | 3.13  |
| 95th-Percentile Queue Length [ft/ln]  | 12.45 | 216.67 | 2.52 | 41.89 | 222.00 | 217.21 | 172.50 | 27.65 | 42.32 | 21.51 | 78.26 |

**Movement, Approach, & Intersection Results**

|                                 |       |       |      |       |       |       |       |       |       |       |       |       |
|---------------------------------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| d_M, Delay for Movement [s/veh] | 37.62 | 14.66 | 9.67 | 34.54 | 13.68 | 13.72 | 37.36 | 23.99 | 24.70 | 35.81 | 37.85 | 37.85 |
| Movement LOS                    | D     | B     | A    | C     | B     | B     | D     | C     | C     | D     | D     | D     |
| d_A, Approach Delay [s/veh]     | 14.96 |       |      | 14.74 |       |       | 32.84 |       |       | 37.41 |       |       |
| Approach LOS                    | B     |       |      | B     |       |       | C     |       |       | D     |       |       |
| d_I, Intersection Delay [s/veh] | 18.31 |       |      |       |       |       |       |       |       |       |       |       |
| Intersection LOS                | B     |       |      |       |       |       |       |       |       |       |       |       |
| Intersection V/C                | 0.500 |       |      |       |       |       |       |       |       |       |       |       |

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 5: US-Route 395 (NS) at Luna Road (EW)**

|                  |            |                           |       |
|------------------|------------|---------------------------|-------|
| Control Type:    | Signalized | Delay (sec / veh):        | 33.5  |
| Analysis Method: | HCM 2010   | Level Of Service:         | C     |
| Analysis Period: | 15 minutes | Volume to Capacity (v/c): | 0.432 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Approach               | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
| Lane Configuration     | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| 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      | 1      | 1          | 0      | 1      | 1         | 0      | 0      | 1         | 0      | 0      |
| Pocket Length [ft]     | 360.00     | 100.00 | 450.00 | 400.00     | 100.00 | 400.00 | 125.00    | 100.00 | 100.00 | 425.00    | 100.00 | 100.00 |
| Speed [mph]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | No         |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 23         | 691    | 38     | 127        | 753    | 17     | 47        | 55     | 48     | 53        | 32     | 155    |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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          | 6      | 0      | 0          | 18     | 1      | 4         | 19     | 18     | 0         | 6      | 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]             | 29         | 697    | 38     | 127        | 771    | 18     | 51        | 74     | 66     | 53        | 38     | 155    |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| Other Adjustment Factor                 | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h]          | 8          | 183    | 10     | 33         | 203    | 5      | 13        | 19     | 17     | 14        | 10     | 41     |
| Total Analysis Volume [veh/h]           | 31         | 734    | 40     | 134        | 812    | 19     | 54        | 78     | 69     | 56        | 40     | 163    |
| 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            | Fixed time                   |
| Offset [s]                | 0.0                          |
| Offset Reference          | LeadGreen                    |
| Permissive Mode           | SingleBand                   |
| Lost time [s]             | 2.00                         |

**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]            | 7        | 7       | 0       | 7        | 7       | 0       | 0       | 7       | 0       | 0       | 7       | 0       |
| Maximum Green [s]            | 30       | 30      | 0       | 30       | 30      | 0       | 0       | 30      | 0       | 0       | 30      | 0       |
| Amber [s]                    | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 0.0     | 3.0     | 0.0     | 0.0     | 3.0     | 0.0     |
| All red [s]                  | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 0.0     | 1.0     | 0.0     | 0.0     | 1.0     | 0.0     |
| Split [s]                    | 19       | 30      | 0       | 14       | 25      | 0       | 0       | 25      | 0       | 0       | 25      | 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        | 7       | 0       | 0        | 7       | 0       | 0       | 7       | 0       | 0       | 7       | 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]  | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 0.0     | 2.0     | 0.0     | 0.0     | 2.0     | 0.0     |
| Minimum Recall               | No       | No      |         | No       | No      |         |         | No      |         |         | No      |         |
| Maximum Recall               | No       | No      |         | No       | No      |         |         | No      |         |         | No      |         |
| Pedestrian Recall            | No       | No      |         | No       | No      |         |         | No      |         |         | No      |         |
| Detector Location [ft]       | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| Detector Length [ft]         | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| I, Upstream Filtering Factor | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    |

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

| Lane Group                              | L     | C     | R     | L     | C     | R     | L     | C     | R     | L     | C     |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| C, Cycle Length [s]                     | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    |
| L, Total Lost Time per Cycle [s]        | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  |
| l1_p, Permitted Start-Up Lost Time [s]  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 2.00  | 0.00  | 0.00  | 2.00  | 0.00  |
| l2, Clearance Lost Time [s]             | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  |
| g_i, Effective Green Time [s]           | 15    | 26    | 26    | 10    | 21    | 21    | 21    | 21    | 21    | 21    | 21    |
| g / C, Green / Cycle                    | 0.19  | 0.33  | 0.33  | 0.13  | 0.26  | 0.26  | 0.26  | 0.26  | 0.26  | 0.26  | 0.26  |
| (v / s)_i Volume / Saturation Flow Rate | 0.02  | 0.21  | 0.03  | 0.08  | 0.24  | 0.01  | 0.05  | 0.04  | 0.05  | 0.04  | 0.13  |
| s, saturation flow rate [veh/h]         | 1714  | 3427  | 1530  | 1714  | 3427  | 1530  | 1198  | 1800  | 1530  | 1342  | 1577  |
| c, Capacity [veh/h]                     | 321   | 1114  | 497   | 214   | 900   | 402   | 244   | 473   | 402   | 364   | 414   |
| d1, Uniform Delay [s]                   | 26.89 | 23.19 | 18.71 | 33.22 | 28.51 | 22.03 | 31.81 | 22.74 | 22.78 | 26.44 | 24.97 |
| k, delay calibration                    | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  |
| 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  |
| d2, Incremental Delay [s]               | 0.60  | 3.06  | 0.32  | 13.02 | 14.04 | 0.22  | 2.09  | 0.75  | 0.93  | 0.90  | 4.11  |
| 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  |
| Rp, platoon ratio                       | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| PF, progression factor                  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |

**Lane Group Results**

|                                       |       |        |       |        |        |       |       |       |       |       |        |
|---------------------------------------|-------|--------|-------|--------|--------|-------|-------|-------|-------|-------|--------|
| X, volume / capacity                  | 0.10  | 0.66   | 0.08  | 0.63   | 0.90   | 0.05  | 0.22  | 0.17  | 0.17  | 0.15  | 0.49   |
| d, Delay for Lane Group [s/veh]       | 27.49 | 26.25  | 19.03 | 46.24  | 42.55  | 22.25 | 33.90 | 23.49 | 23.71 | 27.34 | 29.08  |
| Lane Group LOS                        | C     | C      | B     | D      | D      | C     | C     | C     | C     | C     | C      |
| Critical Lane Group                   | No    | Yes    | No    | Yes    | No     | No    | No    | No    | No    | No    | Yes    |
| 50th-Percentile Queue Length [veh/ln] | 0.53  | 6.13   | 0.54  | 3.18   | 8.94   | 0.28  | 1.07  | 1.20  | 1.08  | 0.96  | 3.62   |
| 50th-Percentile Queue Length [ft/ln]  | 13.31 | 153.30 | 13.53 | 79.55  | 223.49 | 7.12  | 26.83 | 29.99 | 26.98 | 23.89 | 90.49  |
| 95th-Percentile Queue Length [veh/ln] | 0.96  | 10.19  | 0.97  | 5.73   | 13.84  | 0.51  | 1.93  | 2.16  | 1.94  | 1.72  | 6.52   |
| 95th-Percentile Queue Length [ft/ln]  | 23.95 | 254.83 | 24.36 | 143.19 | 346.08 | 12.81 | 48.30 | 53.99 | 48.57 | 43.01 | 162.88 |

**Movement, Approach, & Intersection Results**

|                                 |       |       |       |       |       |       |       |       |       |       |       |       |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| d_M, Delay for Movement [s/veh] | 27.49 | 26.25 | 19.03 | 46.24 | 42.55 | 22.25 | 33.90 | 23.49 | 23.71 | 27.34 | 29.08 | 29.08 |
| Movement LOS                    | C     | C     | B     | D     | D     | C     | C     | C     | C     | C     | C     | C     |
| d_A, Approach Delay [s/veh]     | 25.94 |       |       | 42.66 |       |       | 26.36 |       |       | 28.71 |       |       |
| Approach LOS                    | C     |       |       | D     |       |       | C     |       |       | C     |       |       |
| d_I, Intersection Delay [s/veh] | 33.54 |       |       |       |       |       |       |       |       |       |       |       |
| Intersection LOS                | C     |       |       |       |       |       |       |       |       |       |       |       |
| Intersection V/C                | 0.432 |       |       |       |       |       |       |       |       |       |       |       |

**Sequence**

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



## TTM 16397

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

Scenario 4 Opening Year (2022) With Project

Report File: C:\...IAM OYp.pdf

11/1/2019

**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  | Mesa View Drive (NS) at Dos Palmas Road (EW) | Final Base          | 0          | 3        | 36        | 10         | 8        | 0        | 0         | 5          | 2         | 10        | 3         | 2        | 79           |
|    |  | Growth Rate         | 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       | 9          | 0        | 15        | 0          | 0        | 0        | 0         | 116        | 27        | 4         | 39        | 0        | 210          |
|    |  | Other               | 0          | 0        | 0         | 0          | 0        | 0        | 0         | 0          | 0         | 0         | 0         | 0        | 0            |
|    |  | <b>Future Total</b> | <b>9</b>   | <b>3</b> | <b>51</b> | <b>10</b>  | <b>8</b> | <b>0</b> | <b>0</b>  | <b>121</b> | <b>29</b> | <b>14</b> | <b>42</b> | <b>2</b> | <b>289</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  | Mesa View Drive (NS) at Luna Road (EW) | Final Base          | 5          | 31        | 7         | 10         | 40        | 1        | 2         | 13        | 2        | 7         | 7        | 6         | 131          |
|    |  | Growth Rate         | 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          | 12        | 6         | 27         | 19        | 0        | 0         | 0         | 0        | 1         | 0        | 9         | 74           |
|    |  | Other               | 0          | 0         | 0         | 0          | 0         | 0        | 0         | 0         | 0        | 0         | 0        | 0         | 0            |
|    |  | <b>Future Total</b> | <b>5</b>   | <b>43</b> | <b>13</b> | <b>37</b>  | <b>59</b> | <b>1</b> | <b>2</b>  | <b>13</b> | <b>2</b> | <b>8</b>  | <b>7</b> | <b>15</b> | <b>205</b>   |

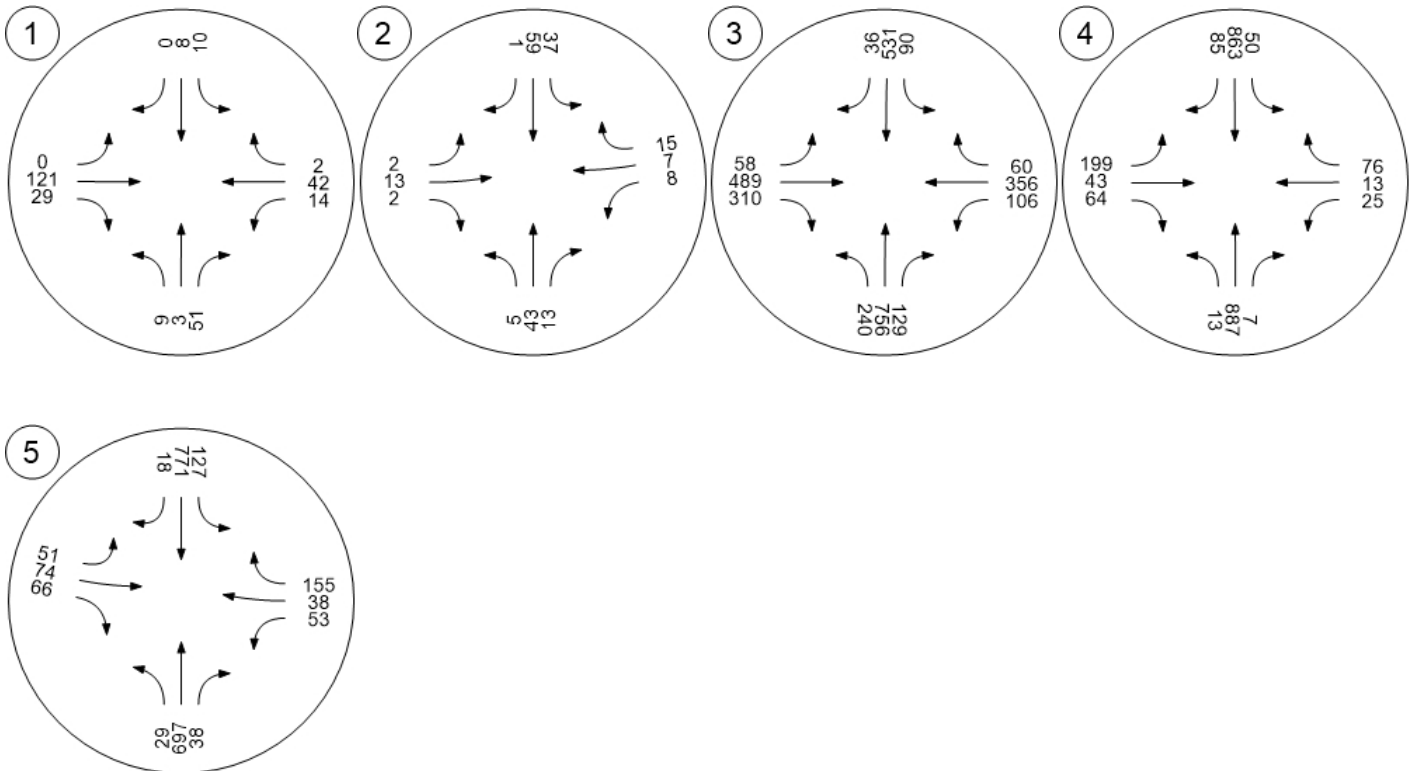
| ID | Intersection Name                       | Volume Type         | Northbound |            |            | Southbound |            |           | Eastbound |            |            | Westbound  |            |           | Total Volume |
|----|---|---------------------|------------|------------|------------|------------|------------|-----------|-----------|------------|------------|------------|------------|-----------|--------------|
|    |   |                     | Left       | Thru       | Right      | Left       | Thru       | Right     | Left      | Thru       | Right      | Left       | Thru       | Right     |              |
| 3  | US-Route 395 (NS) at Palmdale Road (EW) | Final Base          | 230        | 715        | 82         | 90         | 518        | 36        | 58        | 489        | 307        | 90         | 356        | 60        | 3031         |
|    |   | Growth Rate         | 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       | 10         | 41         | 47         | 0          | 13         | 0         | 0         | 0          | 3          | 16         | 0          | 0         | 130          |
|    |   | Other               | 0          | 0          | 0          | 0          | 0          | 0         | 0         | 0          | 0          | 0          | 0          | 0         | 0            |
|    |   | <b>Future Total</b> | <b>240</b> | <b>756</b> | <b>129</b> | <b>90</b>  | <b>531</b> | <b>36</b> | <b>58</b> | <b>489</b> | <b>310</b> | <b>106</b> | <b>356</b> | <b>60</b> | <b>3161</b>  |

| ID | Intersection Name                         | Volume Type         | Northbound |            |          | Southbound |            |           | Eastbound  |           |           | Westbound |           |           | Total Volume |
|----|---|---------------------|------------|------------|----------|------------|------------|-----------|------------|-----------|-----------|-----------|-----------|-----------|--------------|
|    |   |                     | Left       | Thru       | Right    | Left       | Thru       | Right     | Left       | Thru      | Right     | Left      | Thru      | Right     |              |
| 4  | US-Route 395 (NS) at Dos Palmas Road (EW) | Final Base          | 7          | 883        | 7        | 50         | 862        | 54        | 105        | 24        | 46        | 25        | 7         | 76        | 2146         |
|    |   | Growth Rate         | 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          | 4          | 0        | 0          | 1          | 31        | 94         | 19        | 18        | 0         | 6         | 0         | 179          |
|    |   | Other               | 0          | 0          | 0        | 0          | 0          | 0         | 0          | 0         | 0         | 0         | 0         | 0         | 0            |
|    |   | <b>Future Total</b> | <b>13</b>  | <b>887</b> | <b>7</b> | <b>50</b>  | <b>863</b> | <b>85</b> | <b>199</b> | <b>43</b> | <b>64</b> | <b>25</b> | <b>13</b> | <b>76</b> | <b>2325</b>  |



| ID | Intersection Name                   | Volume Type         | Northbound |            |           | Southbound |            |           | Eastbound |           |           | Westbound |           |            | Total Volume |    |
|----|-------------------------------------|---------------------|------------|------------|-----------|------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|------------|--------------|----|
|    |                                     |                     | Left       | Thru       | Right     | Left       | Thru       | Right     | Left      | Thru      | Right     | Left      | Thru      | Right      |              |    |
| 5  | US-Route 395 (NS) at Luna Road (EW) | Final Base          | 23         | 691        | 38        | 127        | 753        | 17        | 47        | 55        | 48        | 53        | 32        | 155        | 2039         |    |
|    |                                     | Growth Rate         | 1.00       | 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            | 0  |
|    |                                     | Net New Trips       | 6          | 6          | 0         | 0          | 18         | 1         | 4         | 19        | 18        | 0         | 6         | 0          | 0            | 78 |
|    |                                     | Other               | 0          | 0          | 0         | 0          | 0          | 0         | 0         | 0         | 0         | 0         | 0         | 0          | 0            | 0  |
|    |                                     | <b>Future Total</b> | <b>29</b>  | <b>697</b> | <b>38</b> | <b>127</b> | <b>771</b> | <b>18</b> | <b>51</b> | <b>74</b> | <b>66</b> | <b>53</b> | <b>38</b> | <b>155</b> | <b>2117</b>  |    |

Traffic Volume - Future Total Volume



**Year 2040 Without Project**

## TTM 16397

Vistro File: C:\...\IPM.vistro

Scenario 7 Year (2040) Without Project With Improvements

Report File: C:\...\IPM LRI.pdf

11/14/2019

**Intersection Analysis Summary**

| ID | Intersection Name                            | Control Type | Method   | Worst Mvmt | V/C        | Delay (s/veh) | LOS |
|----|--|--------------|----------|------------|------------|---------------|-----|
| 1  | Mesa View Drive (NS) at Dos Palmas Road (EW) | Two-way stop | HCM 2010 | SB Left    | 0.030      | 11.0          | B   |
| 2  | Mesa View Drive (NS) at Luna Road (EW)       | Two-way stop | HCM 2010 | WB Thru    | 0.044      | 11.3          | B   |
| 3  | US-Route 395 (NS) at Palmdale Road (EW)      | Signalized   | HCM 2010 | NB Left    | 0.684      | 38.9          | D   |
| 4  | US-Route 395 (NS) at Dos Palmas Road (EW)    | Signalized   | HCM 2010 | SB Left    | 0.643      | 24.5          | C   |
| 5  | US-Route 395 (NS) at Luna Road (EW)          | Signalized   | HCM 2010 | EB Left    | 10,256.789 | 46.0          | D   |

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: Mesa View Drive (NS) at Dos Palmas Road (EW)**

|                  |              |                           |       |
|------------------|--------------|---------------------------|-------|
| Control Type:    | Two-way stop | Delay (sec / veh):        | 11.0  |
| Analysis Method: | HCM 2010     | Level Of Service:         | B     |
| Analysis Period: | 15 minutes   | Volume to Capacity (v/c): | 0.030 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Approach               | +          |        |        | +          |        |        | +         |        |        | +         |        |        |
| 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      | 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]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | Yes        |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 8          | 27     | 68     | 18         | 24     | 0      | 0         | 12     | 0      | 53        | 9      | 36     |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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      | 5      | 0          | 0      | 0      | 0         | 0      | 0      | 9         | 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]             | 8          | 27     | 73     | 18         | 24     | 0      | 0         | 12     | 0      | 62        | 9      | 36     |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| Other Adjustment Factor                 | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h]          | 2          | 7      | 19     | 5          | 6      | 0      | 0         | 3      | 0      | 16        | 2      | 9      |
| Total Analysis Volume [veh/h]           | 8          | 28     | 77     | 19         | 25     | 0      | 0         | 13     | 0      | 65        | 9      | 38     |
| Pedestrian Volume [ped/h]               | 0          |        |        | 0          |        |        | 0         |        |        | 0         |        |        |

**Intersection Settings**

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

**Movement, Approach, & Intersection Results**

|                                       |       |       |       |       |       |      |      |      |      |      |      |      |
|---------------------------------------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|
| V/C, Movement V/C Ratio               | 0.01  | 0.04  | 0.07  | 0.03  | 0.04  | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 | 0.00 | 0.00 |
| d_M, Delay for Movement [s/veh]       | 10.44 | 10.86 | 8.91  | 10.99 | 10.55 | 8.80 | 7.29 | 0.00 | 0.00 | 7.32 | 0.00 | 0.00 |
| Movement LOS                          | B     | B     | A     | B     | B     | A    | A    | A    | A    | A    | A    | A    |
| 95th-Percentile Queue Length [veh/ln] | 0.42  | 0.42  | 0.42  | 0.21  | 0.21  | 0.21 | 0.00 | 0.00 | 0.00 | 0.12 | 0.12 | 0.12 |
| 95th-Percentile Queue Length [ft/ln]  | 10.56 | 10.56 | 10.56 | 5.25  | 5.25  | 5.25 | 0.00 | 0.00 | 0.00 | 2.99 | 2.99 | 2.99 |
| d_A, Approach Delay [s/veh]           | 9.50  |       |       | 10.74 |       |      | 0.00 |      |      | 4.25 |      |      |
| Approach LOS                          | A     |       |       | B     |       |      | A    |      |      | A    |      |      |
| d_I, Intersection Delay [s/veh]       | 7.17  |       |       |       |       |      |      |      |      |      |      |      |
| Intersection LOS                      | B     |       |       |       |       |      |      |      |      |      |      |      |

**Intersection Level Of Service Report**  
**Intersection 2: Mesa View Drive (NS) at Luna Road (EW)**

|                  |              |                           |       |
|------------------|--------------|---------------------------|-------|
| Control Type:    | Two-way stop | Delay (sec / veh):        | 11.3  |
| Analysis Method: | HCM 2010     | Level Of Service:         | B     |
| Analysis Period: | 15 minutes   | Volume to Capacity (v/c): | 0.044 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| 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      | 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]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | Yes        |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 12         | 99     | 20     | 20         | 52     | 8      | 9         | 15     | 9      | 9         | 27     | 33     |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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          | 5      | 5      | 0          | 9      | 0      | 0         | 0      | 0      | 9         | 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]             | 12         | 104    | 25     | 20         | 61     | 8      | 9         | 15     | 9      | 18        | 27     | 33     |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| 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]          | 3          | 27     | 7      | 5          | 16     | 2      | 2         | 4      | 2      | 5         | 7      | 9      |
| Total Analysis Volume [veh/h]           | 13         | 109    | 26     | 21         | 64     | 8      | 9         | 16     | 9      | 19        | 28     | 35     |
| Pedestrian Volume [ped/h]               | 0          |        |        | 0          |        |        | 0         |        |        | 0         |        |        |

**Intersection Settings**

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

**Movement, Approach, & Intersection Results**

|                                       |      |      |      |      |      |      |       |       |      |       |       |      |
|---------------------------------------|------|------|------|------|------|------|-------|-------|------|-------|-------|------|
| V/C, Movement V/C Ratio               | 0.01 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01  | 0.03  | 0.01 | 0.03  | 0.04  | 0.04 |
| d_M, Delay for Movement [s/veh]       | 7.36 | 0.00 | 0.00 | 7.50 | 0.00 | 0.00 | 11.19 | 11.04 | 8.87 | 11.11 | 11.31 | 9.46 |
| Movement LOS                          | A    | A    | A    | A    | A    | A    | B     | B     | A    | B     | B     | A    |
| 95th-Percentile Queue Length [veh/ln] | 0.02 | 0.02 | 0.02 | 0.04 | 0.04 | 0.04 | 0.16  | 0.16  | 0.16 | 0.37  | 0.37  | 0.37 |
| 95th-Percentile Queue Length [ft/ln]  | 0.59 | 0.59 | 0.59 | 1.04 | 1.04 | 1.04 | 3.89  | 3.89  | 3.89 | 9.31  | 9.31  | 9.31 |
| d_A, Approach Delay [s/veh]           | 0.65 |      |      | 1.69 |      |      | 10.51 |       |      | 10.47 |       |      |
| Approach LOS                          | A    |      |      | A    |      |      | B     |       |      | B     |       |      |
| d_I, Intersection Delay [s/veh]       | 4.12 |      |      |      |      |      |       |       |      |       |       |      |
| Intersection LOS                      | B    |      |      |      |      |      |       |       |      |       |       |      |



**Intersection Level Of Service Report**  
**Intersection 3: US-Route 395 (NS) at Palmdale Road (EW)**

|                  |            |                           |       |
|------------------|------------|---------------------------|-------|
| Control Type:    | Signalized | Delay (sec / veh):        | 38.9  |
| Analysis Method: | HCM 2010   | Level Of Service:         | D     |
| Analysis Period: | 15 minutes | Volume to Capacity (v/c): | 0.684 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| 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      | 1      | 1         | 0      | 0      | 1         | 0      | 2      |
| Pocket Length [ft]     | 120.00     | 100.00 | 100.00 | 350.00     | 100.00 | 370.00 | 140.00    | 100.00 | 100.00 | 250.00    | 100.00 | 450.00 |
| Speed [mph]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | Yes        |        |        | No         |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 455        | 1205   | 135    | 206        | 1046   | 64     | 139       | 868    | 414    | 347       | 1122   | 188    |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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          | 4      | 2      | 0          | 7      | 0      | 0         | 0      | 2      | 3         | 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]             | 456        | 1209   | 137    | 206        | 1053   | 64     | 139       | 868    | 416    | 350       | 1122   | 188    |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| 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]          | 120        | 318    | 36     | 54         | 277    | 17     | 37        | 228    | 109    | 92        | 295    | 49     |
| Total Analysis Volume [veh/h]           | 480        | 1273   | 144    | 217        | 1108   | 67     | 146       | 914    | 438    | 368       | 1181   | 198    |
| 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            | Fixed time                   |
| Offset [s]                | 0.0                          |
| Offset Reference          | LeadGreen                    |
| Permissive Mode           | SingleBand                   |
| Lost time [s]             | 2.00                         |

**Phasing & Timing**

| Control Type                 | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss |
|------------------------------|----------|---------|---------|----------|---------|---------|----------|---------|---------|----------|---------|---------|
| Signal group                 | 5        | 2       | 0       | 1        | 6       | 0       | 3        | 8       | 0       | 7        | 4       | 0       |
| Auxiliary Signal Groups      |          |         |         |          |         |         |          |         |         |          |         |         |
| Lead / Lag                   | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       |
| Minimum Green [s]            | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       |
| Maximum Green [s]            | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       |
| Amber [s]                    | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| All red [s]                  | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     |
| Split [s]                    | 16       | 29      | 0       | 12       | 25      | 0       | 15       | 25      | 0       | 14       | 24      | 0       |
| Vehicle Extension [s]        | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| Walk [s]                     | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 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     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| I2, Clearance Lost Time [s]  | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| Minimum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Maximum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Pedestrian Recall            | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Detector Location [ft]       | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| Detector Length [ft]         | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| I, Upstream Filtering Factor | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    |

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

| Lane Group                              | L     | C     | R     | L     | C     | R     | L     | C     | R     | L     | C     | R     |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| C, Cycle Length [s]                     | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    |
| L, Total Lost Time per Cycle [s]        | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  |
| l1_p, Permitted Start-Up Lost Time [s]  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| l2, Clearance Lost Time [s]             | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  |
| g_i, Effective Green Time [s]           | 12    | 25    | 25    | 8     | 21    | 21    | 11    | 21    | 21    | 10    | 20    | 20    |
| g / C, Green / Cycle                    | 0.15  | 0.31  | 0.31  | 0.10  | 0.26  | 0.26  | 0.14  | 0.26  | 0.26  | 0.13  | 0.25  | 0.25  |
| (v / s)_i Volume / Saturation Flow Rate | 0.14  | 0.26  | 0.09  | 0.07  | 0.23  | 0.04  | 0.04  | 0.19  | 0.16  | 0.11  | 0.24  | 0.13  |
| s, saturation flow rate [veh/h]         | 3329  | 4903  | 1530  | 3329  | 4903  | 1530  | 3329  | 4903  | 2708  | 3329  | 4903  | 1530  |
| c, Capacity [veh/h]                     | 499   | 1532  | 478   | 333   | 1287  | 402   | 458   | 1287  | 711   | 416   | 1226  | 383   |
| d1, Uniform Delay [s]                   | 33.77 | 25.54 | 20.87 | 34.66 | 28.11 | 22.75 | 31.12 | 26.74 | 25.95 | 34.43 | 29.64 | 25.84 |
| k, delay calibration                    | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  |
| 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]               | 31.71 | 5.39  | 1.61  | 9.54  | 7.70  | 0.90  | 1.83  | 3.34  | 3.97  | 22.95 | 18.31 | 4.94  |
| 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                  | 0.96   | 0.83   | 0.30  | 0.65   | 0.86   | 0.17  | 0.32  | 0.71   | 0.62   | 0.88   | 0.96   | 0.52   |
| d, Delay for Lane Group [s/veh]       | 65.48  | 30.92  | 22.48 | 44.20  | 35.81  | 23.65 | 32.95 | 30.08  | 29.93  | 57.38  | 47.95  | 30.78  |
| Lane Group LOS                        | E      | C      | C     | D      | D      | C     | C     | C      | C      | E      | D      | C      |
| Critical Lane Group                   | Yes    | No     | No    | No     | Yes    | No    | No    | Yes    | No     | Yes    | No     | No     |
| 50th-Percentile Queue Length [veh/ln] | 6.69   | 7.87   | 2.18  | 2.43   | 7.36   | 1.05  | 1.36  | 5.46   | 3.92   | 4.75   | 9.23   | 3.66   |
| 50th-Percentile Queue Length [ft/ln]  | 167.19 | 196.69 | 54.61 | 60.69  | 184.05 | 26.15 | 33.99 | 136.38 | 98.01  | 118.80 | 230.65 | 91.48  |
| 95th-Percentile Queue Length [veh/ln] | 10.93  | 12.47  | 3.93  | 4.37   | 11.81  | 1.88  | 2.45  | 9.29   | 7.06   | 8.33   | 14.21  | 6.59   |
| 95th-Percentile Queue Length [ft/ln]  | 273.22 | 311.69 | 98.30 | 109.25 | 295.30 | 47.08 | 61.18 | 232.14 | 176.42 | 208.18 | 355.18 | 164.67 |

**Movement, Approach, & Intersection Results**

|                                 |       |       |       |       |       |       |       |       |       |       |       |       |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| d_M, Delay for Movement [s/veh] | 65.48 | 30.92 | 22.48 | 44.20 | 35.81 | 23.65 | 32.95 | 30.08 | 29.93 | 57.38 | 47.95 | 30.78 |
| Movement LOS                    | E     | C     | C     | D     | D     | C     | C     | C     | C     | E     | D     | C     |
| d_A, Approach Delay [s/veh]     | 39.03 |       |       | 36.53 |       |       | 30.32 |       |       | 47.99 |       |       |
| Approach LOS                    | D     |       |       | D     |       |       | C     |       |       | D     |       |       |
| d_I, Intersection Delay [s/veh] | 38.90 |       |       |       |       |       |       |       |       |       |       |       |
| Intersection LOS                | D     |       |       |       |       |       |       |       |       |       |       |       |
| Intersection V/C                | 0.684 |       |       |       |       |       |       |       |       |       |       |       |

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 4: US-Route 395 (NS) at Dos Palmas 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): | 0.643 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Approach               |            |        |        |            |        |        |           |        |        |           |        |        |
| 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      | 1      | 1          | 0      | 0      | 1         | 0      | 1      | 1         | 0      | 0      |
| Pocket Length [ft]     | 480.00     | 100.00 | 250.00 | 300.00     | 100.00 | 100.00 | 160.00    | 100.00 | 470.00 | 100.00    | 100.00 | 100.00 |
| Speed [mph]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | No         |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 56         | 1537   | 29     | 117        | 1554   | 249    | 182       | 49     | 52     | 20        | 36     | 114    |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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          | 3      | 0      | 0          | 5      | 7      | 4         | 1      | 0      | 0         | 2      | 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]             | 56         | 1540   | 29     | 117        | 1559   | 256    | 186       | 50     | 52     | 20        | 38     | 114    |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| 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]          | 15         | 405    | 8      | 31         | 410    | 67     | 49        | 13     | 14     | 5         | 10     | 30     |
| Total Analysis Volume [veh/h]           | 59         | 1621   | 31     | 123        | 1641   | 269    | 196       | 53     | 55     | 21        | 40     | 120    |
| 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]             | 2.00                         |

**Phasing & Timing**

| Control Type                 | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss |
|------------------------------|----------|---------|---------|----------|---------|---------|----------|---------|---------|----------|---------|---------|
| Signal group                 | 5        | 2       | 0       | 1        | 6       | 0       | 3        | 8       | 0       | 7        | 4       | 0       |
| Auxiliary Signal Groups      |          |         |         |          |         |         |          |         |         |          |         |         |
| Lead / Lag                   | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       |
| Minimum Green [s]            | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       |
| Maximum Green [s]            | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       |
| Amber [s]                    | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| All red [s]                  | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     |
| Split [s]                    | 11       | 21      | 0       | 23       | 33      | 0       | 15       | 25      | 0       | 11       | 21      | 0       |
| Vehicle Extension [s]        | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| Walk [s]                     | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 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     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| I2, Clearance Lost Time [s]  | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| Minimum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Maximum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Pedestrian Recall            | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Detector Location [ft]       | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| Detector Length [ft]         | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| I, Upstream Filtering Factor | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    |

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

| Lane Group                              | L     | C     | R     | L     | C     | C     | L     | C     | R     | L     | C     |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| C, Cycle Length [s]                     | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    |
| L, Total Lost Time per Cycle [s]        | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  |
| l1_p, Permitted Start-Up Lost Time [s]  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| l2, Clearance Lost Time [s]             | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  |
| g_i, Effective Green Time [s]           | 5     | 36    | 36    | 7     | 38    | 38    | 11    | 18    | 18    | 3     | 10    |
| g / C, Green / Cycle                    | 0.06  | 0.45  | 0.45  | 0.09  | 0.48  | 0.48  | 0.14  | 0.23  | 0.23  | 0.03  | 0.12  |
| (v / s)_i Volume / Saturation Flow Rate | 0.03  | 0.33  | 0.02  | 0.07  | 0.37  | 0.38  | 0.11  | 0.03  | 0.04  | 0.01  | 0.10  |
| s, saturation flow rate [veh/h]         | 1714  | 4903  | 1530  | 1714  | 3427  | 1674  | 1714  | 1800  | 1530  | 1714  | 1590  |
| c, Capacity [veh/h]                     | 112   | 2197  | 685   | 159   | 1629  | 796   | 234   | 406   | 345   | 59    | 196   |
| d1, Uniform Delay [s]                   | 36.27 | 18.26 | 12.47 | 35.56 | 17.61 | 17.73 | 33.78 | 24.80 | 24.96 | 37.86 | 34.27 |
| 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  |
| 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  |
| d2, Incremental Delay [s]               | 3.77  | 2.26  | 0.12  | 7.75  | 3.88  | 8.00  | 7.80  | 0.14  | 0.21  | 3.62  | 8.01  |
| d3, Initial Queue Delay [s]             | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| Rp, platoon ratio                       | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| PF, progression factor                  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |

**Lane Group Results**

|                                       |       |        |       |        |        |        |        |       |       |       |        |
|---------------------------------------|-------|--------|-------|--------|--------|--------|--------|-------|-------|-------|--------|
| X, volume / capacity                  | 0.53  | 0.74   | 0.05  | 0.77   | 0.78   | 0.79   | 0.84   | 0.13  | 0.16  | 0.36  | 0.82   |
| d, Delay for Lane Group [s/veh]       | 40.04 | 20.52  | 12.60 | 43.31  | 21.49  | 25.73  | 41.58  | 24.94 | 25.18 | 41.48 | 42.28  |
| Lane Group LOS                        | D     | C      | B     | D      | C      | C      | D      | C     | C     | D     | D      |
| Critical Lane Group                   | Yes   | No     | No    | No     | No     | Yes    | Yes    | No    | No    | No    | Yes    |
| 50th-Percentile Queue Length [veh/ln] | 1.21  | 8.02   | 0.32  | 2.64   | 9.81   | 10.64  | 4.12   | 0.80  | 0.84  | 0.46  | 3.40   |
| 50th-Percentile Queue Length [ft/ln]  | 30.32 | 200.41 | 8.00  | 65.94  | 245.14 | 266.11 | 103.11 | 20.01 | 20.99 | 11.38 | 84.89  |
| 95th-Percentile Queue Length [veh/ln] | 2.18  | 12.66  | 0.58  | 4.75   | 14.94  | 16.00  | 7.42   | 1.44  | 1.51  | 0.82  | 6.11   |
| 95th-Percentile Queue Length [ft/ln]  | 54.58 | 316.50 | 14.39 | 118.70 | 373.53 | 399.88 | 185.60 | 36.02 | 37.79 | 20.48 | 152.80 |

**Movement, Approach, & Intersection Results**

|                                 |       |       |       |       |       |       |       |       |       |       |       |       |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| d_M, Delay for Movement [s/veh] | 40.04 | 20.52 | 12.60 | 43.31 | 22.43 | 25.73 | 41.58 | 24.94 | 25.18 | 41.48 | 42.28 | 42.28 |
| Movement LOS                    | D     | C     | B     | D     | C     | C     | D     | C     | C     | D     | D     | D     |
| d_A, Approach Delay [s/veh]     | 21.05 |       |       | 24.13 |       |       | 35.71 |       |       | 42.19 |       |       |
| Approach LOS                    | C     |       |       | C     |       |       | D     |       |       | D     |       |       |
| d_I, Intersection Delay [s/veh] | 24.49 |       |       |       |       |       |       |       |       |       |       |       |
| Intersection LOS                | C     |       |       |       |       |       |       |       |       |       |       |       |
| Intersection V/C                | 0.643 |       |       |       |       |       |       |       |       |       |       |       |

**Sequence**

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





**Intersection Level Of Service Report**  
**Intersection 5: US-Route 395 (NS) at Luna Road (EW)**

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

Delay (sec / veh): 46.0  
 Level Of Service: D  
 Volume to Capacity (v/c): 10,256.789

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Approach               | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| Lane Configuration     | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| 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      | 1      | 1          | 0      | 1      | 1         | 0      | 0      | 1         | 0      | 0      |
| Pocket Length [ft]     | 360.00     | 100.00 | 450.00 | 400.00     | 100.00 | 400.00 | 125.00    | 100.00 | 100.00 | 425.00    | 100.00 | 100.00 |
| Speed [mph]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | No         |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 91         | 1344   | 109    | 256        | 1225   | 88     | 83        | 114    | 61     | 50        | 123    | 241    |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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      | 5      | 3         | 1      | 0      | 0         | 2      | 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]             | 91         | 1344   | 109    | 256        | 1225   | 93     | 86        | 115    | 61     | 50        | 125    | 241    |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| 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         | 354    | 29     | 67         | 322    | 24     | 23        | 30     | 16     | 13        | 33     | 63     |
| Total Analysis Volume [veh/h]           | 96         | 1415   | 115    | 269        | 1289   | 98     | 91        | 121    | 64     | 53        | 132    | 254    |
| 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            | Fixed time                   |
| Offset [s]                | 0.0                          |
| Offset Reference          | LeadGreen                    |
| Permissive Mode           | SingleBand                   |
| Lost time [s]             | 2.00                         |

**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]            | 7        | 7       | 0       | 7        | 7       | 0       | 0       | 7       | 0       | 0       | 7       | 0       |
| Maximum Green [s]            | 30       | 30      | 0       | 30       | 30      | 0       | 0       | 30      | 0       | 0       | 30      | 0       |
| Amber [s]                    | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 0.0     | 3.0     | 0.0     | 0.0     | 3.0     | 0.0     |
| All red [s]                  | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 0.0     | 1.0     | 0.0     | 0.0     | 1.0     | 0.0     |
| Split [s]                    | 16       | 29      | 0       | 12       | 25      | 0       | 0       | 25      | 0       | 0       | 24      | 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        | 7       | 0       | 0        | 7       | 0       | 0       | 7       | 0       | 0       | 7       | 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]  | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 0.0     | 2.0     | 0.0     | 0.0     | 2.0     | 0.0     |
| Minimum Recall               | No       | No      |         | No       | No      |         |         | No      |         |         | No      |         |
| Maximum Recall               | No       | No      |         | No       | No      |         |         | No      |         |         | No      |         |
| Pedestrian Recall            | No       | No      |         | No       | No      |         |         | No      |         |         | No      |         |
| Detector Location [ft]       | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| Detector Length [ft]         | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| I, Upstream Filtering Factor | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    |

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

| Lane Group                              | L     | C     | R     | L     | C     | R     | L     | C     | R     | L     | C     |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| C, Cycle Length [s]                     | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    |
| L, Total Lost Time per Cycle [s]        | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  |
| l1_p, Permitted Start-Up Lost Time [s]  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 2.00  | 0.00  |
| l2, Clearance Lost Time [s]             | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 0.00  | 2.00  | 2.00  | 2.00  | 2.00  |
| g_i, Effective Green Time [s]           | 12    | 25    | 25    | 8     | 21    | 21    | 22    | 21    | 21    | 20    | 20    |
| g / C, Green / Cycle                    | 0.15  | 0.31  | 0.31  | 0.10  | 0.26  | 0.26  | 0.28  | 0.26  | 0.26  | 0.25  | 0.25  |
| (v / s)_i Volume / Saturation Flow Rate | 0.06  | 0.29  | 0.08  | 0.08  | 0.26  | 0.06  | 0.09  | 0.07  | 0.04  | 0.04  | 0.24  |
| s, saturation flow rate [veh/h]         | 1714  | 4903  | 1530  | 3329  | 4903  | 1530  | 1013  | 1800  | 1530  | 1291  | 1613  |
| c, Capacity [veh/h]                     | 257   | 1532  | 478   | 333   | 1287  | 402   | 130   | 473   | 402   | 312   | 403   |
| d1, Uniform Delay [s]                   | 30.61 | 26.58 | 20.44 | 35.25 | 29.50 | 23.25 | 40.33 | 23.32 | 22.71 | 28.61 | 29.58 |
| k, delay calibration                    | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  |
| 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  |
| d2, Incremental Delay [s]               | 4.11  | 10.79 | 1.19  | 18.71 | 25.44 | 1.44  | 27.27 | 1.31  | 0.85  | 1.18  | 35.30 |
| 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  |
| Rp, platoon ratio                       | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| PF, progression factor                  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |

**Lane Group Results**

|                                       |       |        |       |        |        |       |        |       |       |       |        |
|---------------------------------------|-------|--------|-------|--------|--------|-------|--------|-------|-------|-------|--------|
| X, volume / capacity                  | 0.37  | 0.92   | 0.24  | 0.81   | 1.00   | 0.24  | 0.70   | 0.26  | 0.16  | 0.17  | 0.96   |
| d, Delay for Lane Group [s/veh]       | 34.72 | 37.37  | 21.63 | 53.95  | 54.94  | 24.69 | 67.60  | 24.63 | 23.55 | 29.79 | 64.88  |
| Lane Group LOS                        | C     | D      | C     | D      | F      | C     | E      | C     | C     | C     | E      |
| Critical Lane Group                   | No    | Yes    | No    | Yes    | No     | No    | Yes    | No    | No    | No    | No     |
| 50th-Percentile Queue Length [veh/ln] | 1.92  | 9.75   | 1.70  | 3.37   | 10.89  | 1.57  | 2.28   | 1.92  | 1.00  | 0.96  | 10.95  |
| 50th-Percentile Queue Length [ft/ln]  | 48.03 | 243.71 | 42.47 | 84.23  | 272.20 | 39.37 | 56.97  | 48.08 | 24.92 | 24.00 | 273.70 |
| 95th-Percentile Queue Length [veh/ln] | 3.46  | 14.87  | 3.06  | 6.06   | 16.31  | 2.83  | 4.10   | 3.46  | 1.79  | 1.73  | 16.37  |
| 95th-Percentile Queue Length [ft/ln]  | 86.45 | 371.72 | 76.45 | 151.62 | 407.84 | 70.86 | 102.55 | 86.55 | 44.85 | 43.19 | 409.36 |

**Movement, Approach, & Intersection Results**

|                                 |           |       |       |       |       |       |       |       |       |       |       |       |
|---------------------------------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| d_M, Delay for Movement [s/veh] | 34.72     | 37.37 | 21.63 | 53.95 | 54.94 | 24.69 | 67.60 | 24.63 | 23.55 | 29.79 | 64.88 | 64.88 |
| Movement LOS                    | C         | D     | C     | D     | F     | C     | E     | C     | C     | C     | E     | E     |
| d_A, Approach Delay [s/veh]     | 36.10     |       |       | 52.99 |       |       | 38.55 |       |       | 60.65 |       |       |
| Approach LOS                    | D         |       |       | D     |       |       | D     |       |       | E     |       |       |
| d_I, Intersection Delay [s/veh] | 45.96     |       |       |       |       |       |       |       |       |       |       |       |
| Intersection LOS                | D         |       |       |       |       |       |       |       |       |       |       |       |
| Intersection V/C                | 10256.789 |       |       |       |       |       |       |       |       |       |       |       |

**Sequence**

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



## TTM 16397

Vistro File: C:\...IPM.vistro

Scenario 7 Year (2040) Without Project With Improvements

Report File: C:\...IPM LRI.pdf

11/14/2019

**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  | Mesa View Drive (NS) at Dos Palmas Road (EW) | Final Base          | 8          | 27        | 68        | 18         | 24        | 0        | 0         | 12        | 0        | 53        | 9        | 36        | 255          |    |
|    |  | Growth Rate         | 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         | 5         | 0          | 0         | 0        | 0         | 0         | 0        | 0         | 9        | 0         | 0            | 14 |
|    |  | Other               | 0          | 0         | 0         | 0          | 0         | 0        | 0         | 0         | 0        | 0         | 0        | 0         | 0            | 0  |
|    |  | <b>Future Total</b> | <b>8</b>   | <b>27</b> | <b>73</b> | <b>18</b>  | <b>24</b> | <b>0</b> | <b>0</b>  | <b>12</b> | <b>0</b> | <b>62</b> | <b>9</b> | <b>36</b> | <b>269</b>   |    |

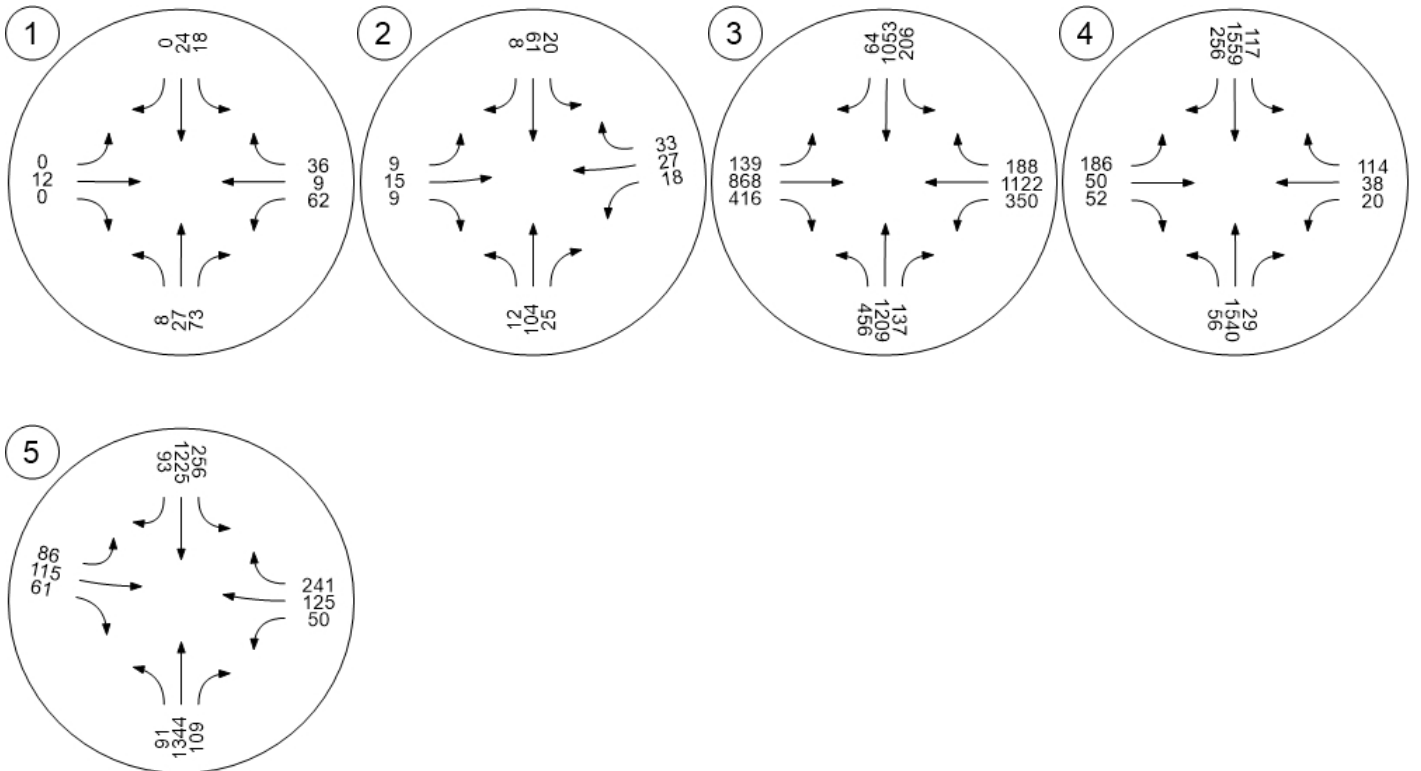
| ID | Intersection Name                      | Volume Type         | Northbound |            |           | Southbound |           |          | Eastbound |           |          | Westbound |           |           | Total Volume |    |
|----|--|---------------------|------------|------------|-----------|------------|-----------|----------|-----------|-----------|----------|-----------|-----------|-----------|--------------|----|
|    |  |                     | Left       | Thru       | Right     | Left       | Thru      | Right    | Left      | Thru      | Right    | Left      | Thru      | Right     |              |    |
| 2  | Mesa View Drive (NS) at Luna Road (EW) | Final Base          | 12         | 99         | 20        | 20         | 52        | 8        | 9         | 15        | 9        | 9         | 27        | 33        | 313          |    |
|    |  | Growth Rate         | 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          | 5          | 5         | 0          | 9         | 0        | 0         | 0         | 0        | 9         | 0         | 0         | 0            | 28 |
|    |  | Other               | 0          | 0          | 0         | 0          | 0         | 0        | 0         | 0         | 0        | 0         | 0         | 0         | 0            | 0  |
|    |  | <b>Future Total</b> | <b>12</b>  | <b>104</b> | <b>25</b> | <b>20</b>  | <b>61</b> | <b>8</b> | <b>9</b>  | <b>15</b> | <b>9</b> | <b>18</b> | <b>27</b> | <b>33</b> | <b>341</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  | US-Route 395 (NS) at Palmdale Road (EW) | Final Base          | 455        | 1205        | 135        | 206        | 1046        | 64        | 139        | 868        | 414        | 347        | 1122        | 188        | 6189         |    |
|    |   | Growth Rate         | 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          | 4           | 2          | 0          | 7           | 0         | 0          | 0          | 0          | 2          | 3           | 0          | 0            | 19 |
|    |   | Other               | 0          | 0           | 0          | 0          | 0           | 0         | 0          | 0          | 0          | 0          | 0           | 0          | 0            | 0  |
|    |   | <b>Future Total</b> | <b>456</b> | <b>1209</b> | <b>137</b> | <b>206</b> | <b>1053</b> | <b>64</b> | <b>139</b> | <b>868</b> | <b>416</b> | <b>350</b> | <b>1122</b> | <b>188</b> | <b>6208</b>  |    |

| ID | Intersection Name                         | Volume Type         | Northbound |             |           | Southbound |             |            | Eastbound  |           |           | Westbound |           |            | Total Volume |    |
|----|---|---------------------|------------|-------------|-----------|------------|-------------|------------|------------|-----------|-----------|-----------|-----------|------------|--------------|----|
|    |   |                     | Left       | Thru        | Right     | Left       | Thru        | Right      | Left       | Thru      | Right     | Left      | Thru      | Right      |              |    |
| 4  | US-Route 395 (NS) at Dos Palmas Road (EW) | Final Base          | 56         | 1537        | 29        | 117        | 1554        | 249        | 182        | 49        | 52        | 20        | 36        | 114        | 3995         |    |
|    |   | Growth Rate         | 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          | 3           | 0         | 0          | 5           | 7          | 4          | 1         | 0         | 0         | 2         | 0          | 0            | 22 |
|    |   | Other               | 0          | 0           | 0         | 0          | 0           | 0          | 0          | 0         | 0         | 0         | 0         | 0          | 0            | 0  |
|    |   | <b>Future Total</b> | <b>56</b>  | <b>1540</b> | <b>29</b> | <b>117</b> | <b>1559</b> | <b>256</b> | <b>186</b> | <b>50</b> | <b>52</b> | <b>20</b> | <b>38</b> | <b>114</b> | <b>4017</b>  |    |

| ID | Intersection Name                   | Volume Type         | Northbound |             |            | Southbound |             |           | Eastbound |            |           | Westbound |            |            | Total Volume |    |
|----|-------------------------------------|---------------------|------------|-------------|------------|------------|-------------|-----------|-----------|------------|-----------|-----------|------------|------------|--------------|----|
|    |                                     |                     | Left       | Thru        | Right      | Left       | Thru        | Right     | Left      | Thru       | Right     | Left      | Thru       | Right      |              |    |
| 5  | US-Route 395 (NS) at Luna Road (EW) | Final Base          | 91         | 1344        | 109        | 256        | 1225        | 88        | 83        | 114        | 61        | 50        | 123        | 241        | 3785         |    |
|    |                                     | Growth Rate         | 1.00       | 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            | 0  |
|    |                                     | Net New Trips       | 0          | 0           | 0          | 0          | 0           | 5         | 3         | 1          | 0         | 0         | 2          | 0          | 0            | 11 |
|    |                                     | Other               | 0          | 0           | 0          | 0          | 0           | 0         | 0         | 0          | 0         | 0         | 0          | 0          | 0            | 0  |
|    |                                     | <b>Future Total</b> | <b>91</b>  | <b>1344</b> | <b>109</b> | <b>256</b> | <b>1225</b> | <b>93</b> | <b>86</b> | <b>115</b> | <b>61</b> | <b>50</b> | <b>125</b> | <b>241</b> | <b>3796</b>  |    |

Traffic Volume - Future Total Volume



TTM 16397

Vistro File: C:\...\IPM.vistro

Scenario 5 Year (2040) Without Project

Report File: C:\...\IPM LR.pdf

11/1/2019

**Intersection Analysis Summary**

| ID | Intersection Name                            | Control Type | Method   | Worst Mvmt | V/C        | Delay (s/veh) | LOS |
|----|--|--------------|----------|------------|------------|---------------|-----|
| 1  | Mesa View Drive (NS) at Dos Palmas Road (EW) | Two-way stop | HCM 2010 | SB Left    | 0.030      | 11.0          | B   |
| 2  | Mesa View Drive (NS) at Luna Road (EW)       | Two-way stop | HCM 2010 | WB Thru    | 0.044      | 11.3          | B   |
| 3  | US-Route 395 (NS) at Palmdale Road (EW)      | Signalized   | HCM 2010 | NB Left    | 1.051      | 108.0         | F   |
| 4  | US-Route 395 (NS) at Dos Palmas Road (EW)    | Signalized   | HCM 2010 | NB Left    | 0.818      | 39.0          | D   |
| 5  | US-Route 395 (NS) at Luna Road (EW)          | Signalized   | HCM 2010 | SB Thru    | 10,170.071 | 117.4         | F   |

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: Mesa View Drive (NS) at Dos Palmas Road (EW)**

|                  |              |                           |       |
|------------------|--------------|---------------------------|-------|
| Control Type:    | Two-way stop | Delay (sec / veh):        | 11.0  |
| Analysis Method: | HCM 2010     | Level Of Service:         | B     |
| Analysis Period: | 15 minutes   | Volume to Capacity (v/c): | 0.030 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| 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      | 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]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | Yes        |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 8          | 27     | 68     | 18         | 24     | 0      | 0         | 12     | 0      | 53        | 9      | 36     |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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      | 5      | 0          | 0      | 0      | 0         | 0      | 0      | 9         | 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]             | 8          | 27     | 73     | 18         | 24     | 0      | 0         | 12     | 0      | 62        | 9      | 36     |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| Other Adjustment Factor                 | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h]          | 2          | 7      | 19     | 5          | 6      | 0      | 0         | 3      | 0      | 16        | 2      | 9      |
| Total Analysis Volume [veh/h]           | 8          | 28     | 77     | 19         | 25     | 0      | 0         | 13     | 0      | 65        | 9      | 38     |
| Pedestrian Volume [ped/h]               | 0          |        |        | 0          |        |        | 0         |        |        | 0         |        |        |

**Intersection Settings**

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

**Movement, Approach, & Intersection Results**

|                                       |       |       |       |       |       |      |      |      |      |      |      |      |
|---------------------------------------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|
| V/C, Movement V/C Ratio               | 0.01  | 0.04  | 0.07  | 0.03  | 0.04  | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 | 0.00 | 0.00 |
| d_M, Delay for Movement [s/veh]       | 10.44 | 10.86 | 8.91  | 10.99 | 10.55 | 8.80 | 7.29 | 0.00 | 0.00 | 7.32 | 0.00 | 0.00 |
| Movement LOS                          | B     | B     | A     | B     | B     | A    | A    | A    | A    | A    | A    | A    |
| 95th-Percentile Queue Length [veh/ln] | 0.42  | 0.42  | 0.42  | 0.21  | 0.21  | 0.21 | 0.00 | 0.00 | 0.00 | 0.12 | 0.12 | 0.12 |
| 95th-Percentile Queue Length [ft/ln]  | 10.56 | 10.56 | 10.56 | 5.25  | 5.25  | 5.25 | 0.00 | 0.00 | 0.00 | 2.99 | 2.99 | 2.99 |
| d_A, Approach Delay [s/veh]           | 9.50  |       |       | 10.74 |       |      | 0.00 |      |      | 4.25 |      |      |
| Approach LOS                          | A     |       |       | B     |       |      | A    |      |      | A    |      |      |
| d_I, Intersection Delay [s/veh]       | 7.17  |       |       |       |       |      |      |      |      |      |      |      |
| Intersection LOS                      | B     |       |       |       |       |      |      |      |      |      |      |      |

**Intersection Level Of Service Report  
Intersection 2: Mesa View Drive (NS) at Luna Road (EW)**

|                  |              |                           |       |
|------------------|--------------|---------------------------|-------|
| Control Type:    | Two-way stop | Delay (sec / veh):        | 11.3  |
| Analysis Method: | HCM 2010     | Level Of Service:         | B     |
| Analysis Period: | 15 minutes   | Volume to Capacity (v/c): | 0.044 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Approach               |            |        |        |            |        |        |           |        |        |           |        |        |
| 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      | 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]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | Yes        |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 12         | 99     | 20     | 20         | 52     | 8      | 9         | 15     | 9      | 9         | 27     | 33     |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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          | 5      | 5      | 0          | 9      | 0      | 0         | 0      | 0      | 9         | 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]             | 12         | 104    | 25     | 20         | 61     | 8      | 9         | 15     | 9      | 18        | 27     | 33     |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| 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]          | 3          | 27     | 7      | 5          | 16     | 2      | 2         | 4      | 2      | 5         | 7      | 9      |
| Total Analysis Volume [veh/h]           | 13         | 109    | 26     | 21         | 64     | 8      | 9         | 16     | 9      | 19        | 28     | 35     |
| Pedestrian Volume [ped/h]               | 0          |        |        | 0          |        |        | 0         |        |        | 0         |        |        |

**Intersection Settings**

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

**Movement, Approach, & Intersection Results**

|                                       |      |      |      |      |      |      |       |       |      |       |       |      |
|---------------------------------------|------|------|------|------|------|------|-------|-------|------|-------|-------|------|
| V/C, Movement V/C Ratio               | 0.01 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01  | 0.03  | 0.01 | 0.03  | 0.04  | 0.04 |
| d_M, Delay for Movement [s/veh]       | 7.36 | 0.00 | 0.00 | 7.50 | 0.00 | 0.00 | 11.19 | 11.04 | 8.87 | 11.11 | 11.31 | 9.46 |
| Movement LOS                          | A    | A    | A    | A    | A    | A    | B     | B     | A    | B     | B     | A    |
| 95th-Percentile Queue Length [veh/ln] | 0.02 | 0.02 | 0.02 | 0.04 | 0.04 | 0.04 | 0.16  | 0.16  | 0.16 | 0.37  | 0.37  | 0.37 |
| 95th-Percentile Queue Length [ft/ln]  | 0.59 | 0.59 | 0.59 | 1.04 | 1.04 | 1.04 | 3.89  | 3.89  | 3.89 | 9.31  | 9.31  | 9.31 |
| d_A, Approach Delay [s/veh]           | 0.65 |      |      | 1.69 |      |      | 10.51 |       |      | 10.47 |       |      |
| Approach LOS                          | A    |      |      | A    |      |      | B     |       |      | B     |       |      |
| d_I, Intersection Delay [s/veh]       | 4.12 |      |      |      |      |      |       |       |      |       |       |      |
| Intersection LOS                      | B    |      |      |      |      |      |       |       |      |       |       |      |

**Intersection Level Of Service Report**  
**Intersection 3: US-Route 395 (NS) at Palmdale Road (EW)**

|                  |            |                           |       |
|------------------|------------|---------------------------|-------|
| Control Type:    | Signalized | Delay (sec / veh):        | 108.0 |
| Analysis Method: | HCM 2010   | Level Of Service:         | F     |
| Analysis Period: | 15 minutes | Volume to Capacity (v/c): | 1.051 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Approach               | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| Lane Configuration     | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| 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      | 1      | 1         | 0      | 0      | 1         | 0      | 2      |
| Pocket Length [ft]     | 120.00     | 100.00 | 100.00 | 350.00     | 100.00 | 370.00 | 140.00    | 100.00 | 100.00 | 250.00    | 100.00 | 450.00 |
| Speed [mph]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | Yes        |        |        | No         |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 455        | 1205   | 135    | 206        | 1046   | 64     | 139       | 868    | 414    | 347       | 1122   | 188    |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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          | 4      | 2      | 0          | 7      | 0      | 0         | 0      | 2      | 3         | 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]             | 456        | 1209   | 137    | 206        | 1053   | 64     | 139       | 868    | 416    | 350       | 1122   | 188    |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| 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]          | 120        | 318    | 36     | 54         | 277    | 17     | 37        | 228    | 109    | 92        | 295    | 49     |
| Total Analysis Volume [veh/h]           | 480        | 1273   | 144    | 217        | 1108   | 67     | 146       | 914    | 438    | 368       | 1181   | 198    |
| 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]          | 120                          |
| Coordination Type         | Time of Day Pattern Isolated |
| Actuation Type            | Fixed time                   |
| Offset [s]                | 0.0                          |
| Offset Reference          | LeadGreen                    |
| Permissive Mode           | SingleBand                   |
| Lost time [s]             | 2.00                         |

**Phasing & Timing**

| Control Type                 | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss |
|------------------------------|----------|---------|---------|----------|---------|---------|----------|---------|---------|----------|---------|---------|
| Signal group                 | 5        | 2       | 0       | 1        | 6       | 0       | 3        | 8       | 0       | 7        | 4       | 0       |
| Auxiliary Signal Groups      |          |         |         |          |         |         |          |         |         |          |         |         |
| Lead / Lag                   | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       |
| Minimum Green [s]            | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       |
| Maximum Green [s]            | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       |
| Amber [s]                    | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| All red [s]                  | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     |
| Split [s]                    | 30       | 49      | 0       | 20       | 39      | 0       | 13       | 36      | 0       | 15       | 38      | 0       |
| Vehicle Extension [s]        | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| Walk [s]                     | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 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     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| I2, Clearance Lost Time [s]  | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| Minimum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Maximum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Pedestrian Recall            | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Detector Location [ft]       | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| Detector Length [ft]         | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| I, Upstream Filtering Factor | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    |

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

| Lane Group                              | L      | C     | R     | L     | C     | R     | L      | C     | R     | L      | C      | R     |
|---|--------|-------|-------|-------|-------|-------|--------|-------|-------|--------|--------|-------|
| C, Cycle Length [s]                     | 120    | 120   | 120   | 120   | 120   | 120   | 120    | 120   | 120   | 120    | 120    | 120   |
| L, Total Lost Time per Cycle [s]        | 4.00   | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00   | 4.00  | 4.00  | 4.00   | 4.00   | 4.00  |
| l1_p, Permitted Start-Up Lost Time [s]  | 0.00   | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00   | 0.00  | 0.00  | 0.00   | 0.00   | 0.00  |
| l2, Clearance Lost Time [s]             | 2.00   | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00   | 2.00  | 2.00  | 2.00   | 2.00   | 2.00  |
| g_i, Effective Green Time [s]           | 26     | 45    | 45    | 16    | 35    | 35    | 9      | 32    | 32    | 11     | 34     | 34    |
| g / C, Green / Cycle                    | 0.22   | 0.38  | 0.38  | 0.13  | 0.29  | 0.29  | 0.08   | 0.27  | 0.27  | 0.09   | 0.28   | 0.28  |
| (v / s)_i Volume / Saturation Flow Rate | 0.28   | 0.37  | 0.09  | 0.13  | 0.32  | 0.04  | 0.09   | 0.27  | 0.29  | 0.11   | 0.34   | 0.13  |
| s, saturation flow rate [veh/h]         | 1714   | 3427  | 1530  | 1714  | 3427  | 1530  | 1714   | 3427  | 1530  | 3329   | 3427   | 1530  |
| c, Capacity [veh/h]                     | 371    | 1285  | 574   | 229   | 1000  | 446   | 129    | 914   | 408   | 305    | 971    | 434   |
| d1, Uniform Delay [s]                   | 47.00  | 37.29 | 25.87 | 51.60 | 42.50 | 31.48 | 55.50  | 44.00 | 44.00 | 54.50  | 43.00  | 35.40 |
| k, delay calibration                    | 0.50   | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50   | 0.50  | 0.50  | 0.50   | 0.50   | 0.50  |
| 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]               | 150.29 | 22.94 | 1.05  | 47.72 | 63.05 | 0.71  | 120.41 | 29.79 | 65.58 | 119.44 | 106.80 | 3.44  |
| d3, Initial Queue Delay [s]             | 0.00   | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00   | 0.00  | 0.00  | 0.00   | 0.00   | 0.00  |
| Rp, platoon ratio                       | 1.00   | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00   | 1.00  | 1.00  | 1.00   | 1.00   | 1.00  |
| PF, progression factor                  | 1.00   | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00   | 1.00  | 1.00  | 1.00   | 1.00   | 1.00  |

**Lane Group Results**

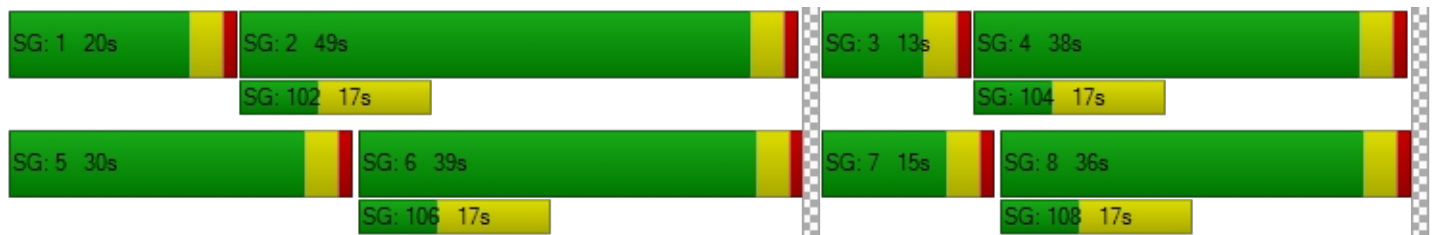
|                                       |        |        |        |        |        |       |        |        |        |        |         |        |
|---------------------------------------|--------|--------|--------|--------|--------|-------|--------|--------|--------|--------|---------|--------|
| X, volume / capacity                  | 1.29   | 0.99   | 0.25   | 0.95   | 1.11   | 0.15  | 1.14   | 1.00   | 1.07   | 1.21   | 1.22    | 0.46   |
| d, Delay for Lane Group [s/veh]       | 197.29 | 60.23  | 26.92  | 99.32  | 105.55 | 32.19 | 175.91 | 73.79  | 109.58 | 173.94 | 149.80  | 38.84  |
| Lane Group LOS                        | F      | E      | C      | F      | F      | C     | F      | F      | F      | F      | F       | D      |
| Critical Lane Group                   | Yes    | No     | No     | No     | Yes    | No    | Yes    | No     | No     | No     | Yes     | No     |
| 50th-Percentile Queue Length [veh/ln] | 26.52  | 22.27  | 3.02   | 9.49   | 23.38  | 1.54  | 8.19   | 17.22  | 19.43  | 9.66   | 28.63   | 5.19   |
| 50th-Percentile Queue Length [ft/ln]  | 662.99 | 556.77 | 75.51  | 237.27 | 584.45 | 38.51 | 204.63 | 430.41 | 485.71 | 241.61 | 715.84  | 129.79 |
| 95th-Percentile Queue Length [veh/ln] | 39.75  | 30.01  | 5.44   | 14.54  | 33.36  | 2.77  | 13.44  | 24.02  | 27.82  | 15.76  | 41.89   | 8.93   |
| 95th-Percentile Queue Length [ft/ln]  | 993.83 | 750.26 | 135.91 | 363.58 | 833.95 | 69.32 | 335.90 | 600.56 | 695.44 | 394.11 | 1047.23 | 223.21 |

**Movement, Approach, & Intersection Results**

|                                 |        |       |       |        |        |       |        |       |        |        |        |       |
|---------------------------------|--------|-------|-------|--------|--------|-------|--------|-------|--------|--------|--------|-------|
| d_M, Delay for Movement [s/veh] | 197.29 | 60.23 | 26.92 | 99.32  | 105.55 | 32.19 | 175.91 | 73.79 | 109.58 | 173.94 | 149.80 | 38.84 |
| Movement LOS                    | F      | E     | C     | F      | F      | C     | F      | F     | F      | F      | F      | D     |
| d_A, Approach Delay [s/veh]     | 92.38  |       |       | 101.04 |        |       | 94.21  |       |        | 142.31 |        |       |
| Approach LOS                    | F      |       |       | F      |        |       | F      |       |        | F      |        |       |
| d_I, Intersection Delay [s/veh] | 108.00 |       |       |        |        |       |        |       |        |        |        |       |
| Intersection LOS                | F      |       |       |        |        |       |        |       |        |        |        |       |
| Intersection V/C                | 1.051  |       |       |        |        |       |        |       |        |        |        |       |

**Sequence**

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





**Intersection Level Of Service Report**  
**Intersection 4: US-Route 395 (NS) at Dos Palmas Road (EW)**

|                  |            |                           |       |
|------------------|------------|---------------------------|-------|
| Control Type:    | Signalized | Delay (sec / veh):        | 39.0  |
| Analysis Method: | HCM 2010   | Level Of Service:         | D     |
| Analysis Period: | 15 minutes | Volume to Capacity (v/c): | 0.818 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Approach               | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
| Lane Configuration     | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| 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      | 1      | 1          | 0      | 0      | 1         | 0      | 1      | 1         | 0      | 0      |
| Pocket Length [ft]     | 480.00     | 100.00 | 250.00 | 300.00     | 100.00 | 100.00 | 160.00    | 100.00 | 470.00 | 100.00    | 100.00 | 100.00 |
| Speed [mph]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | No         |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 56         | 1537   | 29     | 117        | 1554   | 249    | 182       | 49     | 52     | 20        | 36     | 114    |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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          | 3      | 0      | 0          | 5      | 7      | 4         | 1      | 0      | 0         | 2      | 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]             | 56         | 1540   | 29     | 117        | 1559   | 256    | 186       | 50     | 52     | 20        | 38     | 114    |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| 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]          | 15         | 405    | 8      | 31         | 410    | 67     | 49        | 13     | 14     | 5         | 10     | 30     |
| Total Analysis Volume [veh/h]           | 59         | 1621   | 31     | 123        | 1641   | 269    | 196       | 53     | 55     | 21        | 40     | 120    |
| 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]          | 140                          |
| Coordination Type         | Time of Day Pattern Isolated |
| Actuation Type            | Fully actuated               |
| Offset [s]                | 0.0                          |
| Offset Reference          | LeadGreen                    |
| Permissive Mode           | SingleBand                   |
| Lost time [s]             | 2.00                         |

**Phasing & Timing**

| Control Type                 | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss |
|------------------------------|----------|---------|---------|----------|---------|---------|----------|---------|---------|----------|---------|---------|
| Signal group                 | 5        | 2       | 0       | 1        | 6       | 0       | 3        | 8       | 0       | 7        | 4       | 0       |
| Auxiliary Signal Groups      |          |         |         |          |         |         |          |         |         |          |         |         |
| Lead / Lag                   | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       |
| Minimum Green [s]            | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       |
| Maximum Green [s]            | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       |
| Amber [s]                    | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| All red [s]                  | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     |
| Split [s]                    | 11       | 82      | 0       | 16       | 87      | 0       | 21       | 29      | 0       | 13       | 21      | 0       |
| Vehicle Extension [s]        | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| Walk [s]                     | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 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     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| I2, Clearance Lost Time [s]  | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| Minimum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Maximum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Pedestrian Recall            | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Detector Location [ft]       | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| Detector Length [ft]         | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| I, Upstream Filtering Factor | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    |

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

| Lane Group                              | L     | C     | R     | L     | C     | C     | L     | C     | R     | L     | C     |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| C, Cycle Length [s]                     | 140   | 140   | 140   | 140   | 140   | 140   | 140   | 140   | 140   | 140   | 140   |
| L, Total Lost Time per Cycle [s]        | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  |
| l1_p, Permitted Start-Up Lost Time [s]  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| l2, Clearance Lost Time [s]             | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  |
| g_i, Effective Green Time [s]           | 6     | 79    | 79    | 12    | 85    | 85    | 17    | 29    | 29    | 4     | 16    |
| g / C, Green / Cycle                    | 0.05  | 0.57  | 0.57  | 0.08  | 0.61  | 0.61  | 0.12  | 0.21  | 0.21  | 0.03  | 0.11  |
| (v / s)_i Volume / Saturation Flow Rate | 0.03  | 0.47  | 0.02  | 0.07  | 0.53  | 0.56  | 0.11  | 0.03  | 0.04  | 0.01  | 0.10  |
| s, saturation flow rate [veh/h]         | 1714  | 3427  | 1530  | 1714  | 1800  | 1715  | 1714  | 1800  | 1530  | 1714  | 1590  |
| c, Capacity [veh/h]                     | 78    | 1940  | 866   | 145   | 1089  | 1038  | 209   | 371   | 316   | 49    | 180   |
| d1, Uniform Delay [s]                   | 66.02 | 25.00 | 13.45 | 63.18 | 23.24 | 24.63 | 60.95 | 45.43 | 45.74 | 66.86 | 61.21 |
| 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  |
| 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  |
| d2, Incremental Delay [s]               | 13.61 | 4.44  | 0.08  | 12.62 | 9.96  | 14.31 | 17.49 | 0.17  | 0.26  | 5.80  | 13.68 |
| d3, Initial Queue Delay [s]             | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| Rp, platoon ratio                       | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| PF, progression factor                  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |

**Lane Group Results**

|                                       |        |        |       |        |        |         |        |       |       |       |        |
|---------------------------------------|--------|--------|-------|--------|--------|---------|--------|-------|-------|-------|--------|
| X, volume / capacity                  | 0.75   | 0.84   | 0.04  | 0.85   | 0.88   | 0.92    | 0.94   | 0.14  | 0.17  | 0.43  | 0.89   |
| d, Delay for Lane Group [s/veh]       | 79.63  | 29.44  | 13.52 | 75.80  | 33.20  | 38.94   | 78.44  | 45.60 | 46.00 | 72.66 | 74.90  |
| Lane Group LOS                        | E      | C      | B     | E      | C      | D       | E      | D     | D     | E     | E      |
| Critical Lane Group                   | Yes    | No     | No    | No     | No     | Yes     | Yes    | No    | No    | No    | Yes    |
| 50th-Percentile Queue Length [veh/ln] | 2.39   | 22.70  | 0.46  | 4.84   | 28.36  | 30.98   | 7.94   | 1.55  | 1.62  | 0.82  | 6.30   |
| 50th-Percentile Queue Length [ft/ln]  | 59.70  | 567.51 | 11.52 | 121.10 | 708.96 | 774.47  | 198.38 | 38.63 | 40.45 | 20.53 | 157.61 |
| 95th-Percentile Queue Length [veh/ln] | 4.30   | 30.51  | 0.83  | 8.45   | 37.09  | 40.11   | 12.55  | 2.78  | 2.91  | 1.48  | 10.42  |
| 95th-Percentile Queue Length [ft/ln]  | 107.45 | 762.85 | 20.74 | 211.33 | 927.29 | 1002.67 | 313.87 | 69.53 | 72.82 | 36.95 | 260.55 |

**Movement, Approach, & Intersection Results**

|                                 |       |       |       |       |       |       |       |       |       |       |       |       |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| d_M, Delay for Movement [s/veh] | 79.63 | 29.44 | 13.52 | 75.80 | 35.60 | 38.94 | 78.44 | 45.60 | 46.00 | 72.66 | 74.90 | 74.90 |
| Movement LOS                    | E     | C     | B     | E     | D     | D     | E     | D     | D     | E     | E     | E     |
| d_A, Approach Delay [s/veh]     | 30.88 |       |       | 38.48 |       |       | 66.84 |       |       | 74.64 |       |       |
| Approach LOS                    | C     |       |       | D     |       |       | E     |       |       | E     |       |       |
| d_I, Intersection Delay [s/veh] | 38.99 |       |       |       |       |       |       |       |       |       |       |       |
| Intersection LOS                | D     |       |       |       |       |       |       |       |       |       |       |       |
| Intersection V/C                | 0.818 |       |       |       |       |       |       |       |       |       |       |       |

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 5: US-Route 395 (NS) at Luna Road (EW)**

|                  |            |                           |            |
|------------------|------------|---------------------------|------------|
| Control Type:    | Signalized | Delay (sec / veh):        | 117.4      |
| Analysis Method: | HCM 2010   | Level Of Service:         | F          |
| Analysis Period: | 15 minutes | Volume to Capacity (v/c): | 10,170.071 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Approach               | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| Lane Configuration     | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| 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      | 1      | 1          | 0      | 1      | 1         | 0      | 0      | 1         | 0      | 0      |
| Pocket Length [ft]     | 360.00     | 100.00 | 450.00 | 400.00     | 100.00 | 400.00 | 125.00    | 100.00 | 100.00 | 425.00    | 100.00 | 100.00 |
| Speed [mph]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | No         |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 91         | 1344   | 109    | 256        | 1225   | 88     | 83        | 114    | 61     | 50        | 123    | 241    |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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      | 5      | 3         | 1      | 0      | 0         | 2      | 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]             | 91         | 1344   | 109    | 256        | 1225   | 93     | 86        | 115    | 61     | 50        | 125    | 241    |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| 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         | 354    | 29     | 67         | 322    | 24     | 23        | 30     | 16     | 13        | 33     | 63     |
| Total Analysis Volume [veh/h]           | 96         | 1415   | 115    | 269        | 1289   | 98     | 91        | 121    | 64     | 53        | 132    | 254    |
| 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]          | 120                          |
| Coordination Type         | Time of Day Pattern Isolated |
| Actuation Type            | Fixed time                   |
| Offset [s]                | 0.0                          |
| Offset Reference          | LeadGreen                    |
| Permissive Mode           | SingleBand                   |
| Lost time [s]             | 2.00                         |

**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]            | 7        | 7       | 0       | 7        | 7       | 0       | 0       | 7       | 0       | 0       | 7       | 0       |
| Maximum Green [s]            | 30       | 30      | 0       | 30       | 30      | 0       | 0       | 30      | 0       | 0       | 30      | 0       |
| Amber [s]                    | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 0.0     | 3.0     | 0.0     | 0.0     | 3.0     | 0.0     |
| All red [s]                  | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 0.0     | 1.0     | 0.0     | 0.0     | 1.0     | 0.0     |
| Split [s]                    | 30       | 49      | 0       | 20       | 39      | 0       | 0       | 36      | 0       | 0       | 38      | 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        | 7       | 0       | 0        | 7       | 0       | 0       | 7       | 0       | 0       | 7       | 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]  | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 0.0     | 2.0     | 0.0     | 0.0     | 2.0     | 0.0     |
| Minimum Recall               | No       | No      |         | No       | No      |         |         | No      |         |         | No      |         |
| Maximum Recall               | No       | No      |         | No       | No      |         |         | No      |         |         | No      |         |
| Pedestrian Recall            | No       | No      |         | No       | No      |         |         | No      |         |         | No      |         |
| Detector Location [ft]       | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| Detector Length [ft]         | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| I, Upstream Filtering Factor | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    |

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

| Lane Group                              | L     | C     | R     | L      | C      | R     | L      | C     | R     | L     | C     |
|---|-------|-------|-------|--------|--------|-------|--------|-------|-------|-------|-------|
| C, Cycle Length [s]                     | 120   | 120   | 120   | 120    | 120    | 120   | 120    | 120   | 120   | 120   | 120   |
| L, Total Lost Time per Cycle [s]        | 4.00  | 4.00  | 4.00  | 4.00   | 4.00   | 4.00  | 4.00   | 4.00  | 4.00  | 4.00  | 4.00  |
| l1_p, Permitted Start-Up Lost Time [s]  | 0.00  | 0.00  | 0.00  | 0.00   | 0.00   | 0.00  | 2.00   | 0.00  | 0.00  | 0.00  | 0.00  |
| l2, Clearance Lost Time [s]             | 2.00  | 2.00  | 2.00  | 2.00   | 2.00   | 2.00  | 2.00   | 2.00  | 2.00  | 0.00  | 2.00  |
| g_i, Effective Green Time [s]           | 26    | 45    | 45    | 16     | 35     | 35    | 32     | 32    | 32    | 34    | 34    |
| g / C, Green / Cycle                    | 0.22  | 0.38  | 0.38  | 0.13   | 0.29   | 0.29  | 0.27   | 0.27  | 0.27  | 0.28  | 0.28  |
| (v / s)_i Volume / Saturation Flow Rate | 0.06  | 0.41  | 0.08  | 0.16   | 0.38   | 0.06  | 0.09   | 0.07  | 0.04  | 0.04  | 0.24  |
| s, saturation flow rate [veh/h]         | 1714  | 3427  | 1530  | 1714   | 3427   | 1530  | 1013   | 1800  | 1530  | 1291  | 1613  |
| c, Capacity [veh/h]                     | 371   | 1285  | 574   | 229    | 1000   | 446   | 85     | 480   | 408   | 357   | 457   |
| d1, Uniform Delay [s]                   | 39.00 | 37.50 | 25.34 | 52.00  | 42.50  | 32.16 | 59.57  | 34.59 | 33.68 | 37.05 | 40.51 |
| k, delay calibration                    | 0.50  | 0.50  | 0.50  | 0.50   | 0.50   | 0.50  | 0.50   | 0.50  | 0.50  | 0.50  | 0.50  |
| 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  |
| d2, Incremental Delay [s]               | 1.68  | 57.51 | 0.78  | 115.65 | 137.86 | 1.13  | 118.93 | 1.26  | 0.82  | 0.87  | 17.20 |
| d3, Initial Queue Delay [s]             | 0.00  | 0.00  | 0.00  | 0.00   | 0.00   | 0.00  | 0.00   | 0.00  | 0.00  | 0.00  | 0.00  |
| Rp, platoon ratio                       | 1.00  | 1.00  | 1.00  | 1.00   | 1.00   | 1.00  | 1.00   | 1.00  | 1.00  | 1.00  | 1.00  |
| PF, progression factor                  | 1.00  | 1.00  | 1.00  | 1.00   | 1.00   | 1.00  | 1.00   | 1.00  | 1.00  | 1.00  | 1.00  |

**Lane Group Results**

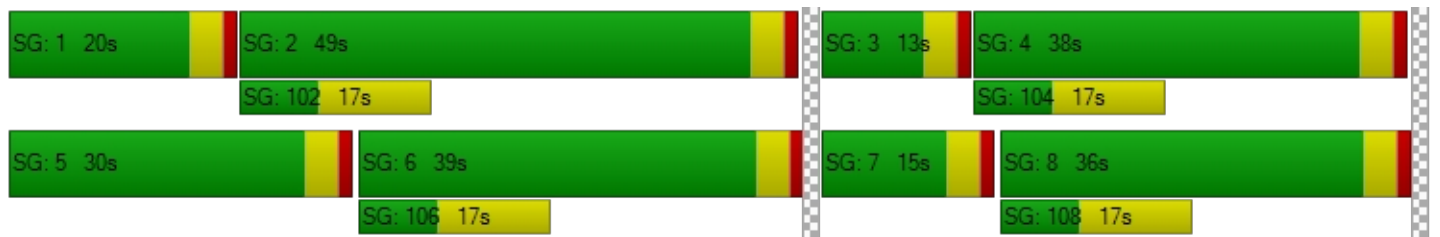
|                                       |        |         |        |        |         |        |        |        |       |       |        |
|---------------------------------------|--------|---------|--------|--------|---------|--------|--------|--------|-------|-------|--------|
| X, volume / capacity                  | 0.26   | 1.10    | 0.20   | 1.18   | 1.29    | 0.22   | 1.07   | 0.25   | 0.16  | 0.15  | 0.84   |
| d, Delay for Lane Group [s/veh]       | 40.68  | 95.01   | 26.13  | 167.65 | 180.36  | 33.30  | 178.50 | 35.85  | 34.49 | 37.93 | 57.71  |
| Lane Group LOS                        | D      | F       | C      | F      | F       | C      | F      | D      | C     | D     | E      |
| Critical Lane Group                   | No     | Yes     | No     | Yes    | No      | No     | No     | No     | No    | Yes   | No     |
| 50th-Percentile Queue Length [veh/ln] | 2.54   | 28.72   | 2.36   | 14.20  | 33.76   | 2.31   | 5.38   | 2.96   | 1.53  | 1.24  | 12.84  |
| 50th-Percentile Queue Length [ft/ln]  | 63.39  | 718.02  | 58.92  | 355.04 | 844.12  | 57.76  | 134.62 | 74.12  | 38.32 | 30.89 | 321.05 |
| 95th-Percentile Queue Length [veh/ln] | 4.56   | 40.08   | 4.24   | 21.85  | 49.97   | 4.16   | 9.51   | 5.34   | 2.76  | 2.22  | 18.72  |
| 95th-Percentile Queue Length [ft/ln]  | 114.10 | 1001.94 | 106.06 | 546.30 | 1249.29 | 103.97 | 237.74 | 133.41 | 68.98 | 55.60 | 467.98 |

**Movement, Approach, & Intersection Results**

|                                 |           |       |       |        |        |       |        |       |       |       |       |       |
|---------------------------------|-----------|-------|-------|--------|--------|-------|--------|-------|-------|-------|-------|-------|
| d_M, Delay for Movement [s/veh] | 40.68     | 95.01 | 26.13 | 167.65 | 180.36 | 33.30 | 178.50 | 35.85 | 34.49 | 37.93 | 57.71 | 57.71 |
| Movement LOS                    | D         | F     | C     | F      | F      | C     | F      | D     | C     | D     | E     | E     |
| d_A, Approach Delay [s/veh]     | 86.93     |       |       | 169.59 |        |       | 82.57  |       |       | 55.32 |       |       |
| Approach LOS                    | F         |       |       | F      |        |       | F      |       |       | E     |       |       |
| d_I, Intersection Delay [s/veh] | 117.41    |       |       |        |        |       |        |       |       |       |       |       |
| Intersection LOS                | F         |       |       |        |        |       |        |       |       |       |       |       |
| Intersection V/C                | 10170.071 |       |       |        |        |       |        |       |       |       |       |       |

**Sequence**

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





## TTM 16397

Vistro File: C:\...IPM.vistro

Scenario 5 Year (2040) Without Project

Report File: C:\...IPM LR.pdf

11/1/2019

**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  | Mesa View Drive (NS) at Dos Palmas Road (EW) | Final Base          | 8          | 27        | 68        | 18         | 24        | 0        | 0         | 12        | 0        | 53        | 9        | 36        | 255          |    |
|    |  | Growth Rate         | 1.00       | 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            | 0  |
|    |  | Net New Trips       | 0          | 0         | 5         | 0          | 0         | 0        | 0         | 0         | 0        | 0         | 9        | 0         | 0            | 14 |
|    |  | Other               | 0          | 0         | 0         | 0          | 0         | 0        | 0         | 0         | 0        | 0         | 0        | 0         | 0            | 0  |
|    |  | <b>Future Total</b> | <b>8</b>   | <b>27</b> | <b>73</b> | <b>18</b>  | <b>24</b> | <b>0</b> | <b>0</b>  | <b>12</b> | <b>0</b> | <b>62</b> | <b>9</b> | <b>36</b> | <b>269</b>   |    |

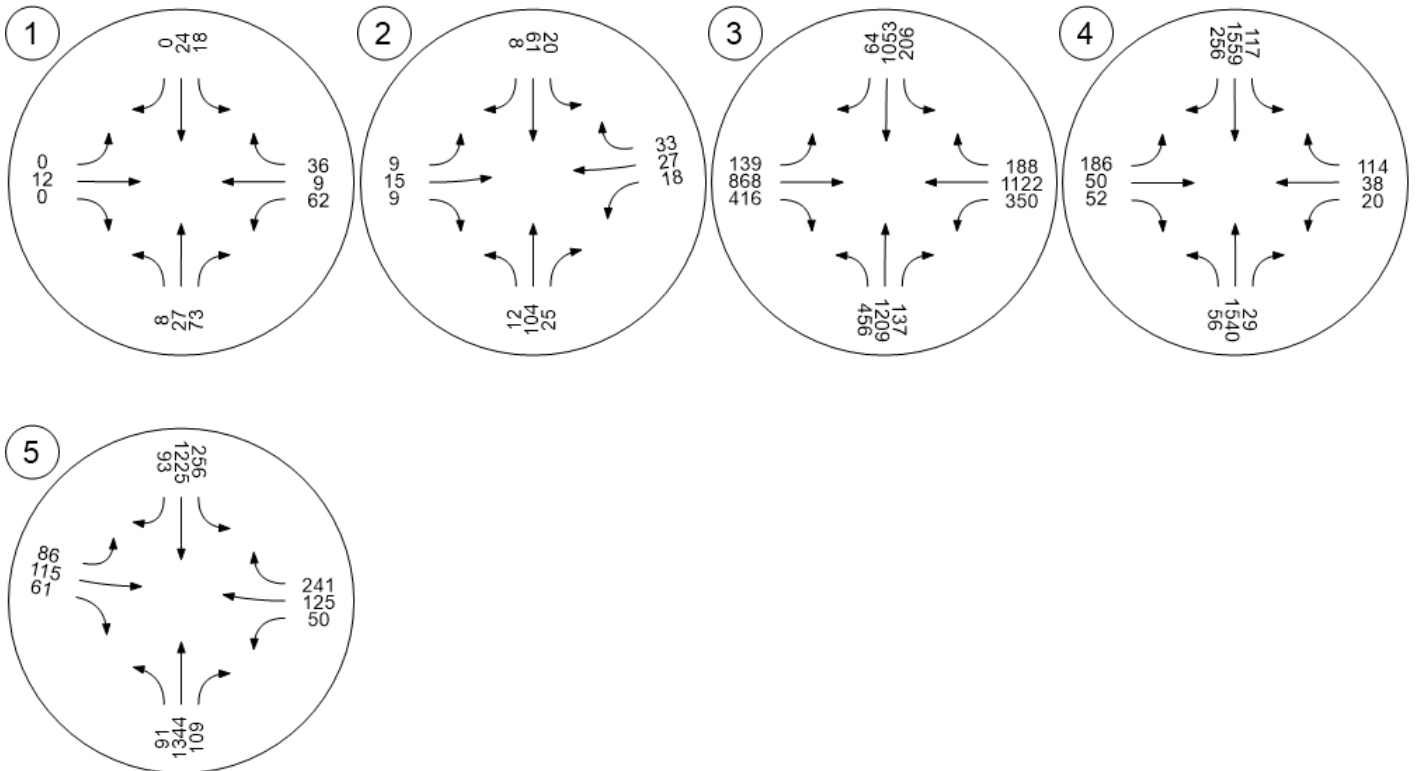
| ID | Intersection Name                      | Volume Type         | Northbound |            |           | Southbound |           |          | Eastbound |           |          | Westbound |           |           | Total Volume |    |
|----|--|---------------------|------------|------------|-----------|------------|-----------|----------|-----------|-----------|----------|-----------|-----------|-----------|--------------|----|
|    |  |                     | Left       | Thru       | Right     | Left       | Thru      | Right    | Left      | Thru      | Right    | Left      | Thru      | Right     |              |    |
| 2  | Mesa View Drive (NS) at Luna Road (EW) | Final Base          | 12         | 99         | 20        | 20         | 52        | 8        | 9         | 15        | 9        | 9         | 27        | 33        | 313          |    |
|    |  | Growth Rate         | 1.00       | 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            | 0  |
|    |  | Net New Trips       | 0          | 5          | 5         | 0          | 9         | 0        | 0         | 0         | 0        | 9         | 0         | 0         | 0            | 28 |
|    |  | Other               | 0          | 0          | 0         | 0          | 0         | 0        | 0         | 0         | 0        | 0         | 0         | 0         | 0            | 0  |
|    |  | <b>Future Total</b> | <b>12</b>  | <b>104</b> | <b>25</b> | <b>20</b>  | <b>61</b> | <b>8</b> | <b>9</b>  | <b>15</b> | <b>9</b> | <b>18</b> | <b>27</b> | <b>33</b> | <b>341</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  | US-Route 395 (NS) at Palmdale Road (EW) | Final Base          | 455        | 1205        | 135        | 206        | 1046        | 64        | 139        | 868        | 414        | 347        | 1122        | 188        | 6189         |    |
|    |   | Growth Rate         | 1.00       | 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            | 0  |
|    |   | Net New Trips       | 1          | 4           | 2          | 0          | 7           | 0         | 0          | 0          | 0          | 2          | 3           | 0          | 0            | 19 |
|    |   | Other               | 0          | 0           | 0          | 0          | 0           | 0         | 0          | 0          | 0          | 0          | 0           | 0          | 0            | 0  |
|    |   | <b>Future Total</b> | <b>456</b> | <b>1209</b> | <b>137</b> | <b>206</b> | <b>1053</b> | <b>64</b> | <b>139</b> | <b>868</b> | <b>416</b> | <b>350</b> | <b>1122</b> | <b>188</b> | <b>6208</b>  |    |

| ID | Intersection Name                         | Volume Type         | Northbound |             |           | Southbound |             |            | Eastbound  |           |           | Westbound |           |            | Total Volume |    |
|----|---|---------------------|------------|-------------|-----------|------------|-------------|------------|------------|-----------|-----------|-----------|-----------|------------|--------------|----|
|    |   |                     | Left       | Thru        | Right     | Left       | Thru        | Right      | Left       | Thru      | Right     | Left      | Thru      | Right      |              |    |
| 4  | US-Route 395 (NS) at Dos Palmas Road (EW) | Final Base          | 56         | 1537        | 29        | 117        | 1554        | 249        | 182        | 49        | 52        | 20        | 36        | 114        | 3995         |    |
|    |   | Growth Rate         | 1.00       | 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            | 0  |
|    |   | Net New Trips       | 0          | 3           | 0         | 0          | 5           | 7          | 4          | 1         | 0         | 0         | 2         | 0          | 0            | 22 |
|    |   | Other               | 0          | 0           | 0         | 0          | 0           | 0          | 0          | 0         | 0         | 0         | 0         | 0          | 0            | 0  |
|    |   | <b>Future Total</b> | <b>56</b>  | <b>1540</b> | <b>29</b> | <b>117</b> | <b>1559</b> | <b>256</b> | <b>186</b> | <b>50</b> | <b>52</b> | <b>20</b> | <b>38</b> | <b>114</b> | <b>4017</b>  |    |

| ID | Intersection Name                   | Volume Type         | Northbound |             |            | Southbound |             |           | Eastbound |            |           | Westbound |            |            | Total Volume |
|----|-------------------------------------|---------------------|------------|-------------|------------|------------|-------------|-----------|-----------|------------|-----------|-----------|------------|------------|--------------|
|    |                                     |                     | Left       | Thru        | Right      | Left       | Thru        | Right     | Left      | Thru       | Right     | Left      | Thru       | Right      |              |
| 5  | US-Route 395 (NS) at Luna Road (EW) | Final Base          | 91         | 1344        | 109        | 256        | 1225        | 88        | 83        | 114        | 61        | 50        | 123        | 241        | 3785         |
|    |                                     | Growth Rate         | 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           | 5         | 3         | 1          | 0         | 0         | 2          | 0          | 11           |
|    |                                     | Other               | 0          | 0           | 0          | 0          | 0           | 0         | 0         | 0          | 0         | 0         | 0          | 0          | 0            |
|    |                                     | <b>Future Total</b> | <b>91</b>  | <b>1344</b> | <b>109</b> | <b>256</b> | <b>1225</b> | <b>93</b> | <b>86</b> | <b>115</b> | <b>61</b> | <b>50</b> | <b>125</b> | <b>241</b> | <b>3796</b>  |

Traffic Volume - Future Total Volume



## TTM 16397

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

Scenario 7 Year (2040) Without Project With Improvements

Report File: C:\...\IAM OYI.pdf

11/14/2019

**Intersection Analysis Summary**

| ID | Intersection Name                            | Control Type | Method   | Worst Mvmt | V/C   | Delay (s/veh) | LOS |
|----|--|--------------|----------|------------|-------|---------------|-----|
| 1  | Mesa View Drive (NS) at Dos Palmas Road (EW) | Two-way stop | HCM 2010 | NB Thru    | 0.006 | 9.5           | A   |
| 2  | Mesa View Drive (NS) at Luna Road (EW)       | Two-way stop | HCM 2010 | EB Thru    | 0.027 | 10.3          | B   |
| 3  | US-Route 395 (NS) at Palmdale Road (EW)      | Signalized   | HCM 2010 | NB Left    | 0.489 | 26.1          | C   |
| 4  | US-Route 395 (NS) at Dos Palmas Road (EW)    | Signalized   | HCM 2010 | EB Left    | 0.507 | 16.7          | B   |
| 5  | US-Route 395 (NS) at Luna Road (EW)          | Signalized   | HCM 2010 | SB Left    | 0.434 | 27.4          | 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: Mesa View Drive (NS) at Dos Palmas Road (EW)**

|                  |              |                           |       |
|------------------|--------------|---------------------------|-------|
| Control Type:    | Two-way stop | Delay (sec / veh):        | 9.5   |
| Analysis Method: | HCM 2010     | Level Of Service:         | A     |
| Analysis Period: | 15 minutes   | Volume to Capacity (v/c): | 0.006 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| 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      | 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]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | Yes        |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 0          | 5      | 52     | 14         | 12     | 0      | 0         | 8      | 3      | 14        | 5      | 3      |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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      | 6      | 0          | 0      | 0      | 0         | 0      | 0      | 1         | 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          | 5      | 58     | 14         | 12     | 0      | 0         | 8      | 3      | 15        | 5      | 3      |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| 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          | 1      | 15     | 4          | 3      | 0      | 0         | 2      | 1      | 4         | 1      | 1      |
| Total Analysis Volume [veh/h]           | 0          | 5      | 61     | 15         | 13     | 0      | 0         | 8      | 3      | 16        | 5      | 3      |
| Pedestrian Volume [ped/h]               | 0          |        |        | 0          |        |        | 0         |        |        | 0         |        |        |

**Intersection Settings**

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

**Movement, Approach, & Intersection Results**

|                                       |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| V/C, Movement V/C Ratio               | 0.00 | 0.01 | 0.06 | 0.02 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 |
| d_M, Delay for Movement [s/veh]       | 9.10 | 9.53 | 8.57 | 9.38 | 9.44 | 8.47 | 7.21 | 0.00 | 0.00 | 7.24 | 0.00 | 0.00 |
| Movement LOS                          | A    | A    | A    | A    | A    | A    | A    | A    | A    | A    | A    | A    |
| 95th-Percentile Queue Length [veh/ln] | 0.20 | 0.20 | 0.20 | 0.10 | 0.10 | 0.10 | 0.00 | 0.00 | 0.00 | 0.03 | 0.03 | 0.03 |
| 95th-Percentile Queue Length [ft/ln]  | 5.00 | 5.00 | 5.00 | 2.57 | 2.57 | 2.57 | 0.00 | 0.00 | 0.00 | 0.70 | 0.70 | 0.70 |
| d_A, Approach Delay [s/veh]           | 8.64 |      |      | 9.41 |      |      | 0.00 |      |      | 4.83 |      |      |
| Approach LOS                          | A    |      |      | A    |      |      | A    |      |      | A    |      |      |
| d_I, Intersection Delay [s/veh]       | 7.36 |      |      |      |      |      |      |      |      |      |      |      |
| Intersection LOS                      | A    |      |      |      |      |      |      |      |      |      |      |      |

**Intersection Level Of Service Report**  
**Intersection 2: Mesa View Drive (NS) at Luna Road (EW)**

|                  |              |                           |       |
|------------------|--------------|---------------------------|-------|
| Control Type:    | Two-way stop | Delay (sec / veh):        | 10.3  |
| Analysis Method: | HCM 2010     | Level Of Service:         | B     |
| Analysis Period: | 15 minutes   | Volume to Capacity (v/c): | 0.027 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| 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      | 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]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | Yes        |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 8          | 44     | 11     | 14         | 58     | 2      | 3         | 18     | 3      | 11        | 11     | 9      |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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          | 6      | 6      | 0          | 1      | 0      | 0         | 0      | 0      | 1         | 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]             | 8          | 50     | 17     | 14         | 59     | 2      | 3         | 18     | 3      | 12        | 11     | 9      |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| Other Adjustment Factor                 | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h]          | 2          | 13     | 4      | 4          | 16     | 1      | 1         | 5      | 1      | 3         | 3      | 2      |
| Total Analysis Volume [veh/h]           | 8          | 53     | 18     | 15         | 62     | 2      | 3         | 19     | 3      | 13        | 12     | 9      |
| Pedestrian Volume [ped/h]               | 0          |        |        | 0          |        |        | 0         |        |        | 0         |        |        |

**Intersection Settings**

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

**Movement, Approach, & Intersection Results**

|                                       |      |      |      |      |      |      |       |       |      |      |       |      |
|---------------------------------------|------|------|------|------|------|------|-------|-------|------|------|-------|------|
| V/C, Movement V/C Ratio               | 0.01 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00  | 0.03  | 0.00 | 0.02 | 0.02  | 0.01 |
| d_M, Delay for Movement [s/veh]       | 7.33 | 0.00 | 0.00 | 7.36 | 0.00 | 0.00 | 9.92  | 10.27 | 8.74 | 9.96 | 10.25 | 8.77 |
| Movement LOS                          | A    | A    | A    | A    | A    | A    | A     | B     | A    | A    | B     | A    |
| 95th-Percentile Queue Length [veh/ln] | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | 0.10  | 0.10  | 0.10 | 0.13 | 0.13  | 0.13 |
| 95th-Percentile Queue Length [ft/ln]  | 0.39 | 0.39 | 0.39 | 0.69 | 0.69 | 0.69 | 2.62  | 2.62  | 2.62 | 3.36 | 3.36  | 3.36 |
| d_A, Approach Delay [s/veh]           | 0.74 |      |      | 1.40 |      |      | 10.04 |       |      | 9.75 |       |      |
| Approach LOS                          | A    |      |      | A    |      |      | B     |       |      | A    |       |      |
| d_I, Intersection Delay [s/veh]       | 3.46 |      |      |      |      |      |       |       |      |      |       |      |
| Intersection LOS                      | B    |      |      |      |      |      |       |       |      |      |       |      |



**Intersection Level Of Service Report**  
**Intersection 3: US-Route 395 (NS) at Palmdale Road (EW)**

|                  |            |                           |       |
|------------------|------------|---------------------------|-------|
| Control Type:    | Signalized | Delay (sec / veh):        | 26.1  |
| Analysis Method: | HCM 2010   | Level Of Service:         | C     |
| Analysis Period: | 15 minutes | Volume to Capacity (v/c): | 0.489 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| 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      | 1      | 1         | 0      | 0      | 1         | 0      | 2      |
| Pocket Length [ft]     | 120.00     | 100.00 | 100.00 | 350.00     | 100.00 | 370.00 | 140.00    | 100.00 | 100.00 | 250.00    | 100.00 | 450.00 |
| Speed [mph]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | Yes        |        |        | No         |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 329        | 1022   | 117    | 129        | 740    | 52     | 83        | 699    | 438    | 129       | 508    | 86     |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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          | 5      | 3      | 0          | 1      | 0      | 0         | 0      | 0      | 1         | 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]             | 330        | 1027   | 120    | 129        | 741    | 52     | 83        | 699    | 438    | 130       | 508    | 86     |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| 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]          | 87         | 270    | 32     | 34         | 195    | 14     | 22        | 184    | 115    | 34        | 134    | 23     |
| Total Analysis Volume [veh/h]           | 347        | 1081   | 126    | 136        | 780    | 55     | 87        | 736    | 461    | 137       | 535    | 91     |
| 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            | Fixed time                   |
| Offset [s]                | 0.0                          |
| Offset Reference          | LeadGreen                    |
| Permissive Mode           | SingleBand                   |
| Lost time [s]             | 2.00                         |

**Phasing & Timing**

| Control Type                 | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss |
|------------------------------|----------|---------|---------|----------|---------|---------|----------|---------|---------|----------|---------|---------|
| Signal group                 | 5        | 2       | 0       | 1        | 6       | 0       | 3        | 8       | 0       | 7        | 4       | 0       |
| Auxiliary Signal Groups      |          |         |         |          |         |         |          |         |         |          |         |         |
| Lead / Lag                   | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       |
| Minimum Green [s]            | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       |
| Maximum Green [s]            | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       |
| Amber [s]                    | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| All red [s]                  | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     |
| Split [s]                    | 15       | 26      | 0       | 12       | 23      | 0       | 11       | 21      | 0       | 11       | 21      | 0       |
| Vehicle Extension [s]        | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| Walk [s]                     | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 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     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| I2, Clearance Lost Time [s]  | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| Minimum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Maximum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Pedestrian Recall            | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Detector Location [ft]       | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| Detector Length [ft]         | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| I, Upstream Filtering Factor | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    |

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

| Lane Group                              | L     | C     | R     | L     | C     | R     | L     | C     | R     | L     | C     | R     |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| C, Cycle Length [s]                     | 70    | 70    | 70    | 70    | 70    | 70    | 70    | 70    | 70    | 70    | 70    | 70    |
| L, Total Lost Time per Cycle [s]        | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  |
| l1_p, Permitted Start-Up Lost Time [s]  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| l2, Clearance Lost Time [s]             | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  |
| g_i, Effective Green Time [s]           | 11    | 22    | 22    | 8     | 19    | 19    | 7     | 17    | 17    | 7     | 17    | 17    |
| g / C, Green / Cycle                    | 0.16  | 0.31  | 0.31  | 0.11  | 0.27  | 0.27  | 0.10  | 0.24  | 0.24  | 0.10  | 0.24  | 0.24  |
| (v / s)_i Volume / Saturation Flow Rate | 0.10  | 0.22  | 0.08  | 0.04  | 0.16  | 0.04  | 0.03  | 0.15  | 0.17  | 0.04  | 0.11  | 0.06  |
| s, saturation flow rate [veh/h]         | 3329  | 4903  | 1530  | 3329  | 4903  | 1530  | 3329  | 4903  | 2708  | 3329  | 4903  | 1530  |
| c, Capacity [veh/h]                     | 523   | 1541  | 481   | 380   | 1331  | 415   | 333   | 1191  | 658   | 333   | 1191  | 372   |
| d1, Uniform Delay [s]                   | 27.76 | 21.11 | 17.93 | 28.63 | 22.09 | 19.27 | 29.11 | 23.61 | 24.18 | 29.57 | 22.52 | 21.33 |
| k, delay calibration                    | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  |
| 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]               | 6.50  | 2.69  | 1.32  | 2.61  | 1.90  | 0.66  | 1.90  | 2.41  | 6.14  | 3.73  | 1.23  | 1.56  |
| 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**

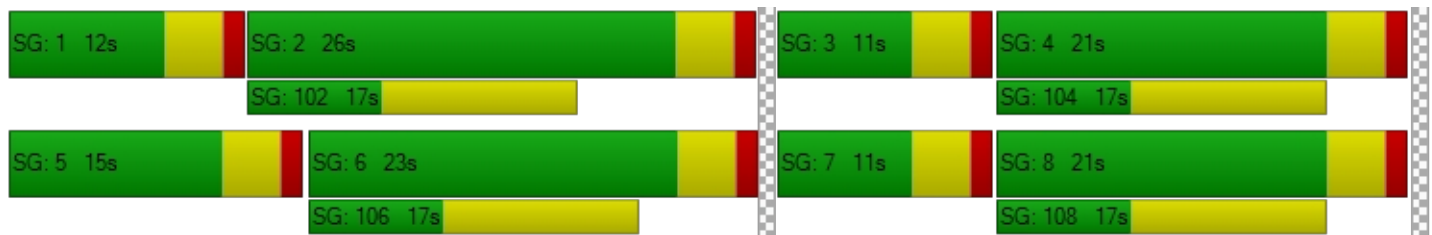
|                                       |        |        |       |       |        |       |       |        |        |       |        |       |
|---------------------------------------|--------|--------|-------|-------|--------|-------|-------|--------|--------|-------|--------|-------|
| X, volume / capacity                  | 0.66   | 0.70   | 0.26  | 0.36  | 0.59   | 0.13  | 0.26  | 0.62   | 0.70   | 0.41  | 0.45   | 0.24  |
| d, Delay for Lane Group [s/veh]       | 34.26  | 23.80  | 19.26 | 31.23 | 23.99  | 19.93 | 31.01 | 26.02  | 30.32  | 33.30 | 23.75  | 22.90 |
| Lane Group LOS                        | C      | C      | B     | C     | C      | B     | C     | C      | C      | C     | C      | C     |
| Critical Lane Group                   | Yes    | No     | No    | No    | Yes    | No    | No    | No     | Yes    | Yes   | No     | No    |
| 50th-Percentile Queue Length [veh/ln] | 3.09   | 5.21   | 1.61  | 1.15  | 3.72   | 0.72  | 0.74  | 3.68   | 3.85   | 1.22  | 2.50   | 1.31  |
| 50th-Percentile Queue Length [ft/ln]  | 77.20  | 130.35 | 40.29 | 28.86 | 93.05  | 18.00 | 18.52 | 92.08  | 96.22  | 30.41 | 62.62  | 32.67 |
| 95th-Percentile Queue Length [veh/ln] | 5.56   | 8.96   | 2.90  | 2.08  | 6.70   | 1.30  | 1.33  | 6.63   | 6.93   | 2.19  | 4.51   | 2.35  |
| 95th-Percentile Queue Length [ft/ln]  | 138.96 | 223.97 | 72.52 | 51.95 | 167.49 | 32.39 | 33.34 | 165.74 | 173.20 | 54.74 | 112.72 | 58.81 |

**Movement, Approach, & Intersection Results**

|                                 |       |       |       |       |       |       |       |       |       |       |       |       |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| d_M, Delay for Movement [s/veh] | 34.26 | 23.80 | 19.26 | 31.23 | 23.99 | 19.93 | 31.01 | 26.02 | 30.32 | 33.30 | 23.75 | 22.90 |
| Movement LOS                    | C     | C     | B     | C     | C     | B     | C     | C     | C     | C     | C     | C     |
| d_A, Approach Delay [s/veh]     | 25.77 |       |       | 24.77 |       |       | 27.90 |       |       | 25.36 |       |       |
| Approach LOS                    | C     |       |       | C     |       |       | C     |       |       | C     |       |       |
| d_I, Intersection Delay [s/veh] | 26.09 |       |       |       |       |       |       |       |       |       |       |       |
| Intersection LOS                | C     |       |       |       |       |       |       |       |       |       |       |       |
| Intersection V/C                | 0.489 |       |       |       |       |       |       |       |       |       |       |       |

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 4: US-Route 395 (NS) at Dos Palmas Road (EW)**

|                  |            |                           |       |
|------------------|------------|---------------------------|-------|
| Control Type:    | Signalized | Delay (sec / veh):        | 16.7  |
| Analysis Method: | HCM 2010   | Level Of Service:         | B     |
| Analysis Period: | 15 minutes | Volume to Capacity (v/c): | 0.507 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Approach               | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
| Lane Configuration     | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| 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      | 1      | 1          | 0      | 0      | 1         | 0      | 1      | 1         | 0      | 0      |
| Pocket Length [ft]     | 480.00     | 100.00 | 250.00 | 300.00     | 100.00 | 100.00 | 160.00    | 100.00 | 470.00 | 100.00    | 100.00 | 100.00 |
| Speed [mph]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | No         |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 11         | 1261   | 11     | 71         | 1231   | 77     | 150       | 35     | 65     | 36        | 11     | 109    |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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          | 4      | 0      | 0          | 1      | 1      | 5         | 1      | 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]             | 11         | 1265   | 11     | 71         | 1232   | 78     | 155       | 36     | 65     | 36        | 11     | 109    |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| 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]          | 3          | 333    | 3      | 19         | 324    | 21     | 41        | 9      | 17     | 9         | 3      | 29     |
| Total Analysis Volume [veh/h]           | 12         | 1332   | 12     | 75         | 1297   | 82     | 163       | 38     | 68     | 38        | 12     | 115    |
| 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]             | 2.00                         |

**Phasing & Timing**

| Control Type                 | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss |
|------------------------------|----------|---------|---------|----------|---------|---------|----------|---------|---------|----------|---------|---------|
| Signal group                 | 5        | 2       | 0       | 1        | 6       | 0       | 3        | 8       | 0       | 7        | 4       | 0       |
| Auxiliary Signal Groups      |          |         |         |          |         |         |          |         |         |          |         |         |
| Lead / Lag                   | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       |
| Minimum Green [s]            | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       |
| Maximum Green [s]            | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       |
| Amber [s]                    | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| All red [s]                  | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     |
| Split [s]                    | 11       | 23      | 0       | 11       | 23      | 0       | 12       | 23      | 0       | 13       | 24      | 0       |
| Vehicle Extension [s]        | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| Walk [s]                     | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 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     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| I2, Clearance Lost Time [s]  | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| Minimum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Maximum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Pedestrian Recall            | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Detector Location [ft]       | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| Detector Length [ft]         | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| I, Upstream Filtering Factor | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    |

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

| Lane Group                              | L     | C     | R    | L     | C     | C     | L     | C     | R     | L     | C     |
|---|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|
| C, Cycle Length [s]                     | 70    | 70    | 70   | 70    | 70    | 70    | 70    | 70    | 70    | 70    | 70    |
| L, Total Lost Time per Cycle [s]        | 4.00  | 4.00  | 4.00 | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  |
| l1_p, Permitted Start-Up Lost Time [s]  | 0.00  | 0.00  | 0.00 | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| l2, Clearance Lost Time [s]             | 2.00  | 2.00  | 2.00 | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  |
| g_i, Effective Green Time [s]           | 2     | 33    | 33   | 5     | 37    | 37    | 8     | 12    | 12    | 4     | 7     |
| g / C, Green / Cycle                    | 0.02  | 0.48  | 0.48 | 0.08  | 0.53  | 0.53  | 0.11  | 0.16  | 0.16  | 0.05  | 0.10  |
| (v / s)_i Volume / Saturation Flow Rate | 0.01  | 0.27  | 0.01 | 0.04  | 0.27  | 0.27  | 0.10  | 0.02  | 0.04  | 0.02  | 0.08  |
| s, saturation flow rate [veh/h]         | 1714  | 4903  | 1530 | 1714  | 3427  | 1746  | 1714  | 1800  | 1530  | 1714  | 1552  |
| c, Capacity [veh/h]                     | 39    | 2326  | 726  | 135   | 1817  | 925   | 197   | 297   | 252   | 93    | 162   |
| d1, Uniform Delay [s]                   | 33.78 | 13.33 | 9.79 | 31.19 | 10.57 | 10.57 | 30.40 | 25.02 | 25.63 | 32.12 | 30.70 |
| 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  |
| 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  |
| d2, Incremental Delay [s]               | 4.35  | 1.03  | 0.04 | 3.56  | 1.00  | 1.95  | 8.45  | 0.19  | 0.57  | 2.84  | 8.09  |
| d3, Initial Queue Delay [s]             | 0.00  | 0.00  | 0.00 | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| Rp, platoon ratio                       | 1.00  | 1.00  | 1.00 | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| PF, progression factor                  | 1.00  | 1.00  | 1.00 | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |

**Lane Group Results**

|                                       |       |        |      |       |        |        |        |       |       |       |        |
|---------------------------------------|-------|--------|------|-------|--------|--------|--------|-------|-------|-------|--------|
| X, volume / capacity                  | 0.31  | 0.57   | 0.02 | 0.56  | 0.50   | 0.50   | 0.83   | 0.13  | 0.27  | 0.41  | 0.78   |
| d, Delay for Lane Group [s/veh]       | 38.14 | 14.36  | 9.83 | 34.74 | 11.57  | 12.52  | 38.85  | 25.21 | 26.20 | 34.97 | 38.79  |
| Lane Group LOS                        | D     | B      | A    | C     | B      | B      | D      | C     | C     | C     | D      |
| Critical Lane Group                   | No    | Yes    | No   | Yes   | No     | No     | Yes    | No    | No    | No    | Yes    |
| 50th-Percentile Queue Length [veh/ln] | 0.24  | 4.69   | 0.10 | 1.32  | 4.13   | 4.46   | 3.05   | 0.54  | 0.99  | 0.68  | 2.38   |
| 50th-Percentile Queue Length [ft/ln]  | 6.07  | 117.14 | 2.42 | 32.90 | 103.34 | 111.40 | 76.26  | 13.39 | 24.81 | 16.95 | 59.52  |
| 95th-Percentile Queue Length [veh/ln] | 0.44  | 8.24   | 0.17 | 2.37  | 7.44   | 7.92   | 5.49   | 0.96  | 1.79  | 1.22  | 4.29   |
| 95th-Percentile Queue Length [ft/ln]  | 10.92 | 205.88 | 4.36 | 59.22 | 186.01 | 197.95 | 137.26 | 24.10 | 44.67 | 30.52 | 107.14 |

**Movement, Approach, & Intersection Results**

|                                 |       |       |      |       |       |       |       |       |       |       |       |       |
|---------------------------------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| d_M, Delay for Movement [s/veh] | 38.14 | 14.36 | 9.83 | 34.74 | 11.85 | 12.52 | 38.85 | 25.21 | 26.20 | 34.97 | 38.79 | 38.79 |
| Movement LOS                    | D     | B     | A    | C     | B     | B     | D     | C     | C     | C     | D     | D     |
| d_A, Approach Delay [s/veh]     | 14.53 |       |      | 13.07 |       |       | 33.73 |       |       | 37.91 |       |       |
| Approach LOS                    | B     |       |      | B     |       |       | C     |       |       | D     |       |       |
| d_I, Intersection Delay [s/veh] | 16.66 |       |      |       |       |       |       |       |       |       |       |       |
| Intersection LOS                | B     |       |      |       |       |       |       |       |       |       |       |       |
| Intersection V/C                | 0.507 |       |      |       |       |       |       |       |       |       |       |       |

**Sequence**

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





**Intersection Level Of Service Report**  
**Intersection 5: US-Route 395 (NS) at Luna Road (EW)**

|                  |            |                           |       |
|------------------|------------|---------------------------|-------|
| Control Type:    | Signalized | Delay (sec / veh):        | 27.4  |
| Analysis Method: | HCM 2010   | Level Of Service:         | C     |
| Analysis Period: | 15 minutes | Volume to Capacity (v/c): | 0.434 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Approach               | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
| Lane Configuration     | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| 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      | 1      | 1          | 0      | 1      | 1         | 0      | 0      | 1         | 0      | 0      |
| Pocket Length [ft]     | 360.00     | 100.00 | 450.00 | 400.00     | 100.00 | 400.00 | 125.00    | 100.00 | 100.00 | 425.00    | 100.00 | 100.00 |
| Speed [mph]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | No         |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 33         | 987    | 55     | 182        | 1076   | 24     | 67        | 79     | 68     | 76        | 45     | 221    |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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      | 1      | 4         | 1      | 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]             | 33         | 987    | 55     | 182        | 1076   | 25     | 71        | 80     | 68     | 76        | 45     | 221    |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| Other Adjustment Factor                 | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h]          | 9          | 260    | 14     | 48         | 283    | 7      | 19        | 21     | 18     | 20        | 12     | 58     |
| Total Analysis Volume [veh/h]           | 35         | 1039   | 58     | 192        | 1133   | 26     | 75        | 84     | 72     | 80        | 47     | 233    |
| 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            | Fixed time                   |
| Offset [s]                | 0.0                          |
| Offset Reference          | LeadGreen                    |
| Permissive Mode           | SingleBand                   |
| Lost time [s]             | 2.00                         |

**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]            | 7        | 7       | 0       | 7        | 7       | 0       | 0       | 7       | 0       | 0       | 7       | 0       |
| Maximum Green [s]            | 30       | 30      | 0       | 30       | 30      | 0       | 0       | 30      | 0       | 0       | 30      | 0       |
| Amber [s]                    | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 0.0     | 3.0     | 0.0     | 0.0     | 3.0     | 0.0     |
| All red [s]                  | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 0.0     | 1.0     | 0.0     | 0.0     | 1.0     | 0.0     |
| Split [s]                    | 15       | 26      | 0       | 12       | 23      | 0       | 0       | 21      | 0       | 0       | 21      | 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        | 7       | 0       | 0        | 7       | 0       | 0       | 7       | 0       | 0       | 7       | 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]  | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 0.0     | 2.0     | 0.0     | 0.0     | 2.0     | 0.0     |
| Minimum Recall               | No       | No      |         | No       | No      |         |         | No      |         |         | No      |         |
| Maximum Recall               | No       | No      |         | No       | No      |         |         | No      |         |         | No      |         |
| Pedestrian Recall            | No       | No      |         | No       | No      |         |         | No      |         |         | No      |         |
| Detector Location [ft]       | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| Detector Length [ft]         | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| I, Upstream Filtering Factor | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    |

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

| Lane Group                              | L     | C     | R     | L     | C     | R     | L     | C     | R     | L     | C     | R     |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| C, Cycle Length [s]                     | 70    | 70    | 70    | 70    | 70    | 70    | 70    | 70    | 70    | 70    | 70    | 70    |
| L, Total Lost Time per Cycle [s]        | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  |
| l1_p, Permitted Start-Up Lost Time [s]  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 2.00  | 0.00  | 0.00  | 2.00  | 0.00  | 0.00  |
| l2, Clearance Lost Time [s]             | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  |
| g_i, Effective Green Time [s]           | 11    | 22    | 22    | 8     | 19    | 19    | 17    | 17    | 17    | 17    | 17    | 17    |
| g / C, Green / Cycle                    | 0.16  | 0.31  | 0.31  | 0.11  | 0.27  | 0.27  | 0.24  | 0.24  | 0.24  | 0.24  | 0.24  | 0.24  |
| (v / s)_i Volume / Saturation Flow Rate | 0.02  | 0.21  | 0.04  | 0.06  | 0.23  | 0.02  | 0.05  | 0.05  | 0.05  | 0.06  | 0.03  | 0.15  |
| s, saturation flow rate [veh/h]         | 1714  | 4903  | 1530  | 3329  | 4903  | 1530  | 1380  | 1800  | 1530  | 1335  | 1800  | 1530  |
| c, Capacity [veh/h]                     | 269   | 1541  | 481   | 380   | 1331  | 415   | 371   | 437   | 372   | 339   | 437   | 372   |
| d1, Uniform Delay [s]                   | 25.38 | 20.88 | 17.11 | 29.14 | 24.16 | 18.90 | 24.04 | 21.05 | 21.06 | 25.20 | 20.60 | 23.67 |
| k, delay calibration                    | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  |
| 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]               | 1.00  | 2.38  | 0.51  | 4.72  | 7.01  | 0.29  | 1.23  | 0.98  | 1.16  | 1.63  | 0.50  | 7.78  |
| 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**

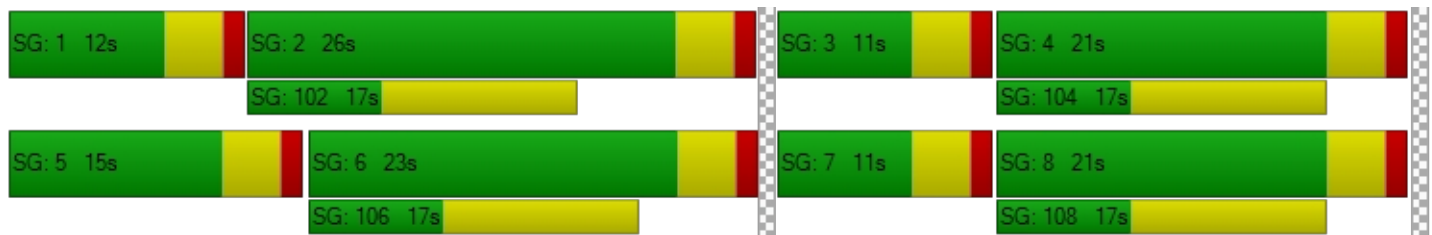
|                                       |       |        |       |       |        |       |       |       |       |       |       |        |
|---------------------------------------|-------|--------|-------|-------|--------|-------|-------|-------|-------|-------|-------|--------|
| X, volume / capacity                  | 0.13  | 0.67   | 0.12  | 0.50  | 0.85   | 0.06  | 0.20  | 0.19  | 0.19  | 0.24  | 0.11  | 0.63   |
| d, Delay for Lane Group [s/veh]       | 26.38 | 23.26  | 17.62 | 33.86 | 31.17  | 19.19 | 25.27 | 22.02 | 22.22 | 26.83 | 21.10 | 31.45  |
| Lane Group LOS                        | C     | C      | B     | C     | C      | B     | C     | C     | C     | C     | C     | C      |
| Critical Lane Group                   | No    | Yes    | No    | Yes   | No     | No    | No    | No    | No    | No    | No    | Yes    |
| 50th-Percentile Queue Length [veh/ln] | 0.56  | 4.93   | 0.70  | 1.71  | 6.41   | 0.33  | 1.14  | 1.16  | 1.01  | 1.27  | 0.63  | 4.06   |
| 50th-Percentile Queue Length [ft/ln]  | 13.92 | 123.28 | 17.46 | 42.75 | 160.13 | 8.29  | 28.52 | 29.04 | 25.36 | 31.74 | 15.79 | 101.43 |
| 95th-Percentile Queue Length [veh/ln] | 1.00  | 8.57   | 1.26  | 3.08  | 10.56  | 0.60  | 2.05  | 2.09  | 1.83  | 2.29  | 1.14  | 7.30   |
| 95th-Percentile Queue Length [ft/ln]  | 25.06 | 214.33 | 31.43 | 76.95 | 263.90 | 14.93 | 51.33 | 52.28 | 45.64 | 57.13 | 28.42 | 182.58 |

**Movement, Approach, & Intersection Results**

|                                 |       |       |       |       |       |       |       |       |       |       |       |       |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| d_M, Delay for Movement [s/veh] | 26.38 | 23.26 | 17.62 | 33.86 | 31.17 | 19.19 | 25.27 | 22.02 | 22.22 | 26.83 | 21.10 | 31.45 |
| Movement LOS                    | C     | C     | B     | C     | C     | B     | C     | C     | C     | C     | C     | C     |
| d_A, Approach Delay [s/veh]     | 23.07 |       |       | 31.32 |       |       | 23.14 |       |       | 29.07 |       |       |
| Approach LOS                    | C     |       |       | C     |       |       | C     |       |       | C     |       |       |
| d_I, Intersection Delay [s/veh] | 27.40 |       |       |       |       |       |       |       |       |       |       |       |
| Intersection LOS                | C     |       |       |       |       |       |       |       |       |       |       |       |
| Intersection V/C                | 0.434 |       |       |       |       |       |       |       |       |       |       |       |

**Sequence**

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



## TTM 16397

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

Scenario 7 Year (2040) Without Project With Improvements

Report File: C:\...IAM OYI.pdf

11/14/2019

**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  | Mesa View Drive (NS) at Dos Palmas Road (EW) | Final Base          | 0          | 5        | 52        | 14         | 12        | 0        | 0         | 8        | 3        | 14        | 5        | 3        | 116          |   |
|    |  | Growth Rate         | 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        | 6         | 0          | 0         | 0        | 0         | 0        | 0        | 0         | 1        | 0        | 0            | 7 |
|    |  | Other               | 0          | 0        | 0         | 0          | 0         | 0        | 0         | 0        | 0        | 0         | 0        | 0        | 0            | 0 |
|    |  | <b>Future Total</b> | <b>0</b>   | <b>5</b> | <b>58</b> | <b>14</b>  | <b>12</b> | <b>0</b> | <b>0</b>  | <b>8</b> | <b>3</b> | <b>15</b> | <b>5</b> | <b>3</b> | <b>123</b>   |   |

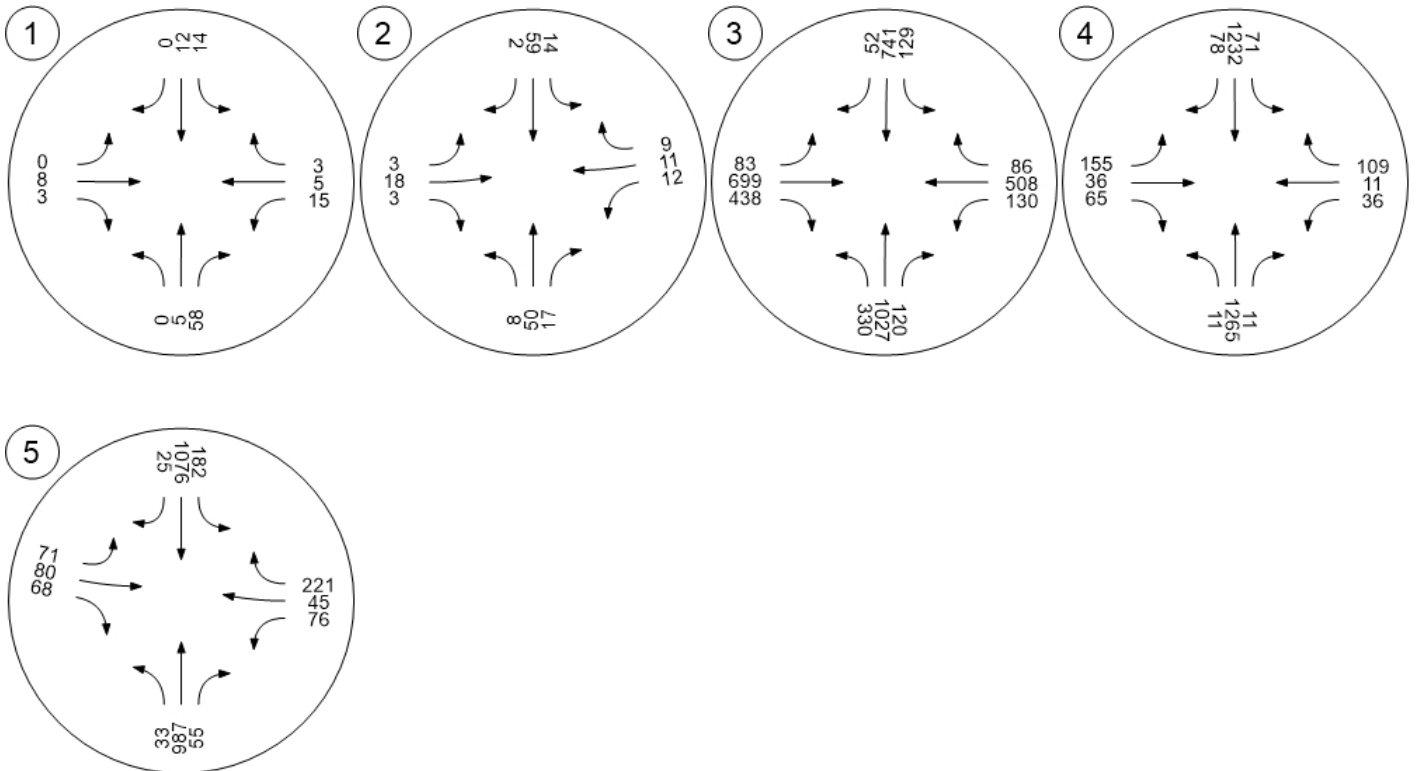
| ID | Intersection Name                      | Volume Type         | Northbound |           |           | Southbound |           |          | Eastbound |           |          | Westbound |           |          | Total Volume |    |
|----|--|---------------------|------------|-----------|-----------|------------|-----------|----------|-----------|-----------|----------|-----------|-----------|----------|--------------|----|
|    |  |                     | Left       | Thru      | Right     | Left       | Thru      | Right    | Left      | Thru      | Right    | Left      | Thru      | Right    |              |    |
| 2  | Mesa View Drive (NS) at Luna Road (EW) | Final Base          | 8          | 44        | 11        | 14         | 58        | 2        | 3         | 18        | 3        | 11        | 11        | 9        | 192          |    |
|    |  | Growth Rate         | 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          | 6         | 6         | 0          | 1         | 0        | 0         | 0         | 0        | 0         | 1         | 0        | 0            | 14 |
|    |  | Other               | 0          | 0         | 0         | 0          | 0         | 0        | 0         | 0         | 0        | 0         | 0         | 0        | 0            | 0  |
|    |  | <b>Future Total</b> | <b>8</b>   | <b>50</b> | <b>17</b> | <b>14</b>  | <b>59</b> | <b>2</b> | <b>3</b>  | <b>18</b> | <b>3</b> | <b>12</b> | <b>11</b> | <b>9</b> | <b>206</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  | US-Route 395 (NS) at Palmdale Road (EW) | Final Base          | 329        | 1022        | 117        | 129        | 740        | 52        | 83        | 699        | 438        | 129        | 508        | 86        | 4332         |    |
|    |   | Growth Rate         | 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          | 5           | 3          | 0          | 1          | 0         | 0         | 0          | 0          | 0          | 1          | 0         | 0            | 11 |
|    |   | Other               | 0          | 0           | 0          | 0          | 0          | 0         | 0         | 0          | 0          | 0          | 0          | 0         | 0            | 0  |
|    |   | <b>Future Total</b> | <b>330</b> | <b>1027</b> | <b>120</b> | <b>129</b> | <b>741</b> | <b>52</b> | <b>83</b> | <b>699</b> | <b>438</b> | <b>130</b> | <b>508</b> | <b>86</b> | <b>4343</b>  |    |

| ID | Intersection Name                         | Volume Type         | Northbound |             |           | Southbound |             |           | Eastbound  |           |           | Westbound |           |            | Total Volume |    |
|----|---|---------------------|------------|-------------|-----------|------------|-------------|-----------|------------|-----------|-----------|-----------|-----------|------------|--------------|----|
|    |   |                     | Left       | Thru        | Right     | Left       | Thru        | Right     | Left       | Thru      | Right     | Left      | Thru      | Right      |              |    |
| 4  | US-Route 395 (NS) at Dos Palmas Road (EW) | Final Base          | 11         | 1261        | 11        | 71         | 1231        | 77        | 150        | 35        | 65        | 36        | 11        | 109        | 3068         |    |
|    |   | Growth Rate         | 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          | 4           | 0         | 0          | 1           | 1         | 5          | 1         | 0         | 0         | 0         | 0          | 0            | 12 |
|    |   | Other               | 0          | 0           | 0         | 0          | 0           | 0         | 0          | 0         | 0         | 0         | 0         | 0          | 0            | 0  |
|    |   | <b>Future Total</b> | <b>11</b>  | <b>1265</b> | <b>11</b> | <b>71</b>  | <b>1232</b> | <b>78</b> | <b>155</b> | <b>36</b> | <b>65</b> | <b>36</b> | <b>11</b> | <b>109</b> | <b>3080</b>  |    |

| ID | Intersection Name                   | Volume Type         | Northbound |            |           | Southbound |             |           | Eastbound |           |           | Westbound |           |            | Total Volume |
|----|-------------------------------------|---------------------|------------|------------|-----------|------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|------------|--------------|
|    |                                     |                     | Left       | Thru       | Right     | Left       | Thru        | Right     | Left      | Thru      | Right     | Left      | Thru      | Right      |              |
| 5  | US-Route 395 (NS) at Luna Road (EW) | Final Base          | 33         | 987        | 55        | 182        | 1076        | 24        | 67        | 79        | 68        | 76        | 45        | 221        | 2913         |
|    |                                     | Growth Rate         | 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           | 1         | 4         | 1         | 0         | 0         | 0         | 0          | 6            |
|    |                                     | Other               | 0          | 0          | 0         | 0          | 0           | 0         | 0         | 0         | 0         | 0         | 0         | 0          | 0            |
|    |                                     | <b>Future Total</b> | <b>33</b>  | <b>987</b> | <b>55</b> | <b>182</b> | <b>1076</b> | <b>25</b> | <b>71</b> | <b>80</b> | <b>68</b> | <b>76</b> | <b>45</b> | <b>221</b> | <b>2919</b>  |

Traffic Volume - Future Total Volume



TTM 16397

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

Scenario 5 Year (2040) Without Project

Report File: C:\...\IAM LR.pdf

11/1/2019

**Intersection Analysis Summary**

| ID | Intersection Name                            | Control Type | Method   | Worst Mvmt | V/C        | Delay (s/veh) | LOS |
|----|--|--------------|----------|------------|------------|---------------|-----|
| 1  | Mesa View Drive (NS) at Dos Palmas Road (EW) | Two-way stop | HCM 2010 | NB Thru    | 0.006      | 9.5           | A   |
| 2  | Mesa View Drive (NS) at Luna Road (EW)       | Two-way stop | HCM 2010 | EB Thru    | 0.027      | 10.3          | B   |
| 3  | US-Route 395 (NS) at Palmdale Road (EW)      | Signalized   | HCM 2010 | NB Left    | 0.788      | 49.8          | D   |
| 4  | US-Route 395 (NS) at Dos Palmas Road (EW)    | Signalized   | HCM 2010 | NB Left    | 0.625      | 21.3          | C   |
| 5  | US-Route 395 (NS) at Luna Road (EW)          | Signalized   | HCM 2010 | SB Thru    | 10,204.505 | 60.6          | E   |

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: Mesa View Drive (NS) at Dos Palmas Road (EW)**

|                  |              |                           |       |
|------------------|--------------|---------------------------|-------|
| Control Type:    | Two-way stop | Delay (sec / veh):        | 9.5   |
| Analysis Method: | HCM 2010     | Level Of Service:         | A     |
| Analysis Period: | 15 minutes   | Volume to Capacity (v/c): | 0.006 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| 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      | 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]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | Yes        |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 0          | 5      | 52     | 14         | 12     | 0      | 0         | 8      | 3      | 14        | 5      | 3      |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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      | 6      | 0          | 0      | 0      | 0         | 0      | 0      | 1         | 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          | 5      | 58     | 14         | 12     | 0      | 0         | 8      | 3      | 15        | 5      | 3      |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| 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          | 1      | 15     | 4          | 3      | 0      | 0         | 2      | 1      | 4         | 1      | 1      |
| Total Analysis Volume [veh/h]           | 0          | 5      | 61     | 15         | 13     | 0      | 0         | 8      | 3      | 16        | 5      | 3      |
| Pedestrian Volume [ped/h]               | 0          |        |        | 0          |        |        | 0         |        |        | 0         |        |        |

**Intersection Settings**

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

**Movement, Approach, & Intersection Results**

|                                       |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| V/C, Movement V/C Ratio               | 0.00 | 0.01 | 0.06 | 0.02 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 |
| d_M, Delay for Movement [s/veh]       | 9.10 | 9.53 | 8.57 | 9.38 | 9.44 | 8.47 | 7.21 | 0.00 | 0.00 | 7.24 | 0.00 | 0.00 |
| Movement LOS                          | A    | A    | A    | A    | A    | A    | A    | A    | A    | A    | A    | A    |
| 95th-Percentile Queue Length [veh/ln] | 0.20 | 0.20 | 0.20 | 0.10 | 0.10 | 0.10 | 0.00 | 0.00 | 0.00 | 0.03 | 0.03 | 0.03 |
| 95th-Percentile Queue Length [ft/ln]  | 5.00 | 5.00 | 5.00 | 2.57 | 2.57 | 2.57 | 0.00 | 0.00 | 0.00 | 0.70 | 0.70 | 0.70 |
| d_A, Approach Delay [s/veh]           | 8.64 |      |      | 9.41 |      |      | 0.00 |      |      | 4.83 |      |      |
| Approach LOS                          | A    |      |      | A    |      |      | A    |      |      | A    |      |      |
| d_I, Intersection Delay [s/veh]       | 7.36 |      |      |      |      |      |      |      |      |      |      |      |
| Intersection LOS                      | A    |      |      |      |      |      |      |      |      |      |      |      |

**Intersection Level Of Service Report**  
**Intersection 2: Mesa View Drive (NS) at Luna Road (EW)**

|                  |              |                           |       |
|------------------|--------------|---------------------------|-------|
| Control Type:    | Two-way stop | Delay (sec / veh):        | 10.3  |
| Analysis Method: | HCM 2010     | Level Of Service:         | B     |
| Analysis Period: | 15 minutes   | Volume to Capacity (v/c): | 0.027 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| 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      | 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]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | Yes        |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 8          | 44     | 11     | 14         | 58     | 2      | 3         | 18     | 3      | 11        | 11     | 9      |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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          | 6      | 6      | 0          | 1      | 0      | 0         | 0      | 0      | 1         | 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]             | 8          | 50     | 17     | 14         | 59     | 2      | 3         | 18     | 3      | 12        | 11     | 9      |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| Other Adjustment Factor                 | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h]          | 2          | 13     | 4      | 4          | 16     | 1      | 1         | 5      | 1      | 3         | 3      | 2      |
| Total Analysis Volume [veh/h]           | 8          | 53     | 18     | 15         | 62     | 2      | 3         | 19     | 3      | 13        | 12     | 9      |
| Pedestrian Volume [ped/h]               | 0          |        |        | 0          |        |        | 0         |        |        | 0         |        |        |

**Intersection Settings**

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

**Movement, Approach, & Intersection Results**

|                                       |      |      |      |      |      |      |       |       |      |      |       |      |
|---------------------------------------|------|------|------|------|------|------|-------|-------|------|------|-------|------|
| V/C, Movement V/C Ratio               | 0.01 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00  | 0.03  | 0.00 | 0.02 | 0.02  | 0.01 |
| d_M, Delay for Movement [s/veh]       | 7.33 | 0.00 | 0.00 | 7.36 | 0.00 | 0.00 | 9.92  | 10.27 | 8.74 | 9.96 | 10.25 | 8.77 |
| Movement LOS                          | A    | A    | A    | A    | A    | A    | A     | B     | A    | A    | B     | A    |
| 95th-Percentile Queue Length [veh/ln] | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | 0.10  | 0.10  | 0.10 | 0.13 | 0.13  | 0.13 |
| 95th-Percentile Queue Length [ft/ln]  | 0.39 | 0.39 | 0.39 | 0.69 | 0.69 | 0.69 | 2.62  | 2.62  | 2.62 | 3.36 | 3.36  | 3.36 |
| d_A, Approach Delay [s/veh]           | 0.74 |      |      | 1.40 |      |      | 10.04 |       |      | 9.75 |       |      |
| Approach LOS                          | A    |      |      | A    |      |      | B     |       |      | A    |       |      |
| d_I, Intersection Delay [s/veh]       | 3.46 |      |      |      |      |      |       |       |      |      |       |      |
| Intersection LOS                      | B    |      |      |      |      |      |       |       |      |      |       |      |

**Intersection Level Of Service Report**  
**Intersection 3: US-Route 395 (NS) at Palmdale Road (EW)**

|                  |            |                           |       |
|------------------|------------|---------------------------|-------|
| Control Type:    | Signalized | Delay (sec / veh):        | 49.8  |
| Analysis Method: | HCM 2010   | Level Of Service:         | D     |
| Analysis Period: | 15 minutes | Volume to Capacity (v/c): | 0.788 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Approach               | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
| Lane Configuration     | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| 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      | 1      | 1         | 0      | 0      | 1         | 0      | 2      |
| Pocket Length [ft]     | 120.00     | 100.00 | 100.00 | 350.00     | 100.00 | 370.00 | 140.00    | 100.00 | 100.00 | 250.00    | 100.00 | 450.00 |
| Speed [mph]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | Yes        |        |        | No         |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 329        | 1022   | 117    | 129        | 740    | 52     | 83        | 699    | 438    | 129       | 508    | 86     |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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          | 5      | 3      | 0          | 1      | 0      | 0         | 0      | 0      | 1         | 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]             | 330        | 1027   | 120    | 129        | 741    | 52     | 83        | 699    | 438    | 130       | 508    | 86     |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| 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]          | 87         | 270    | 32     | 34         | 195    | 14     | 22        | 184    | 115    | 34        | 134    | 23     |
| Total Analysis Volume [veh/h]           | 347        | 1081   | 126    | 136        | 780    | 55     | 87        | 736    | 461    | 137       | 535    | 91     |
| 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]          | 100                          |
| Coordination Type         | Time of Day Pattern Isolated |
| Actuation Type            | Fixed time                   |
| Offset [s]                | 0.0                          |
| Offset Reference          | LeadGreen                    |
| Permissive Mode           | SingleBand                   |
| Lost time [s]             | 2.00                         |

**Phasing & Timing**

| Control Type                 | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss |
|------------------------------|----------|---------|---------|----------|---------|---------|----------|---------|---------|----------|---------|---------|
| Signal group                 | 5        | 2       | 0       | 1        | 6       | 0       | 3        | 8       | 0       | 7        | 4       | 0       |
| Auxiliary Signal Groups      |          |         |         |          |         |         |          |         |         |          |         |         |
| Lead / Lag                   | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       |
| Minimum Green [s]            | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       |
| Maximum Green [s]            | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       |
| Amber [s]                    | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| All red [s]                  | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     |
| Split [s]                    | 23       | 41      | 0       | 16       | 34      | 0       | 12       | 32      | 0       | 11       | 31      | 0       |
| Vehicle Extension [s]        | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| Walk [s]                     | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 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     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| I2, Clearance Lost Time [s]  | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| Minimum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Maximum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Pedestrian Recall            | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Detector Location [ft]       | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| Detector Length [ft]         | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| I, Upstream Filtering Factor | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    |

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

| Lane Group                              | L     | C     | R     | L     | C     | R     | L     | C     | R     | L     | C     | R     |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| C, Cycle Length [s]                     | 100   | 100   | 100   | 100   | 100   | 100   | 100   | 100   | 100   | 100   | 100   | 100   |
| L, Total Lost Time per Cycle [s]        | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  |
| l1_p, Permitted Start-Up Lost Time [s]  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| l2, Clearance Lost Time [s]             | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  |
| g_i, Effective Green Time [s]           | 19    | 37    | 37    | 12    | 30    | 30    | 8     | 28    | 28    | 7     | 27    | 27    |
| g / C, Green / Cycle                    | 0.19  | 0.37  | 0.37  | 0.12  | 0.30  | 0.30  | 0.08  | 0.28  | 0.28  | 0.07  | 0.27  | 0.27  |
| (v / s)_i Volume / Saturation Flow Rate | 0.20  | 0.32  | 0.08  | 0.08  | 0.23  | 0.04  | 0.05  | 0.21  | 0.30  | 0.04  | 0.16  | 0.06  |
| s, saturation flow rate [veh/h]         | 1714  | 3427  | 1530  | 1714  | 3427  | 1530  | 1714  | 3427  | 1530  | 3329  | 3427  | 1530  |
| c, Capacity [veh/h]                     | 326   | 1268  | 566   | 206   | 1028  | 459   | 137   | 960   | 428   | 233   | 925   | 413   |
| d1, Uniform Delay [s]                   | 40.50 | 28.99 | 21.63 | 42.06 | 31.72 | 25.41 | 44.58 | 33.01 | 36.00 | 45.10 | 31.57 | 28.33 |
| k, delay calibration                    | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  |
| 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]               | 68.23 | 7.38  | 0.91  | 15.50 | 5.25  | 0.53  | 20.27 | 5.85  | 65.37 | 10.43 | 2.63  | 1.23  |
| d3, Initial Queue Delay [s]             | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| Rp, platoon ratio                       | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| PF, progression factor                  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |

**Lane Group Results**

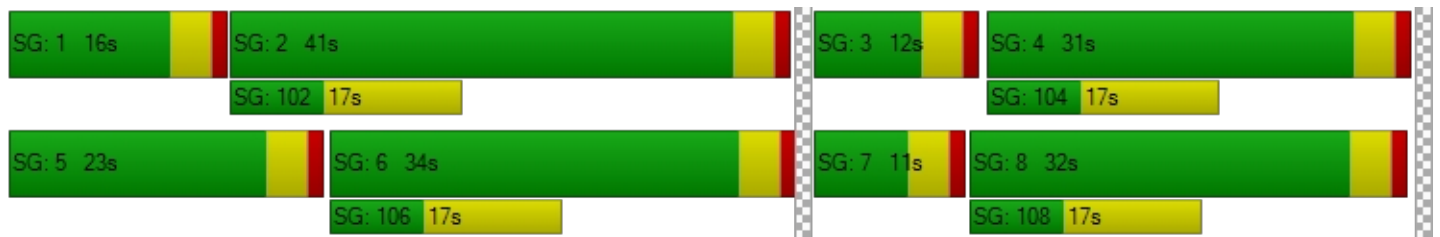
|                                       |        |        |       |        |        |       |        |        |        |       |        |       |
|---------------------------------------|--------|--------|-------|--------|--------|-------|--------|--------|--------|-------|--------|-------|
| X, volume / capacity                  | 1.07   | 0.85   | 0.22  | 0.66   | 0.76   | 0.12  | 0.63   | 0.77   | 1.08   | 0.59  | 0.58   | 0.22  |
| d, Delay for Lane Group [s/veh]       | 108.73 | 36.37  | 22.53 | 57.55  | 36.97  | 25.95 | 64.86  | 38.86  | 101.37 | 55.53 | 34.20  | 29.56 |
| Lane Group LOS                        | F      | D      | C     | E      | D      | C     | E      | D      | F      | E     | C      | C     |
| Critical Lane Group                   | Yes    | No     | No    | No     | Yes    | No    | No     | No     | Yes    | Yes   | No     | No    |
| 50th-Percentile Queue Length [veh/ln] | 14.06  | 12.84  | 2.15  | 4.07   | 9.11   | 1.01  | 2.85   | 8.80   | 17.96  | 1.98  | 5.85   | 1.82  |
| 50th-Percentile Queue Length [ft/ln]  | 351.54 | 320.99 | 53.74 | 101.76 | 227.78 | 25.32 | 71.26  | 220.01 | 449.07 | 49.43 | 146.29 | 45.59 |
| 95th-Percentile Queue Length [veh/ln] | 20.88  | 18.72  | 3.87  | 7.33   | 14.06  | 1.82  | 5.13   | 13.67  | 26.04  | 3.56  | 9.82   | 3.28  |
| 95th-Percentile Queue Length [ft/ln]  | 522.10 | 467.91 | 96.73 | 183.16 | 351.53 | 45.57 | 128.26 | 341.64 | 650.98 | 88.97 | 245.46 | 82.07 |

**Movement, Approach, & Intersection Results**

|                                 |        |       |       |       |       |       |       |       |        |       |       |       |
|---------------------------------|--------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|
| d_M, Delay for Movement [s/veh] | 108.73 | 36.37 | 22.53 | 57.55 | 36.97 | 25.95 | 64.86 | 38.86 | 101.37 | 55.53 | 34.20 | 29.56 |
| Movement LOS                    | F      | D     | C     | E     | D     | C     | E     | D     | F      | E     | C     | C     |
| d_A, Approach Delay [s/veh]     | 51.41  |       |       | 39.23 |       |       | 63.06 |       |        | 37.48 |       |       |
| Approach LOS                    | D      |       |       | D     |       |       | E     |       |        | D     |       |       |
| d_I, Intersection Delay [s/veh] | 49.77  |       |       |       |       |       |       |       |        |       |       |       |
| Intersection LOS                | D      |       |       |       |       |       |       |       |        |       |       |       |
| Intersection V/C                | 0.788  |       |       |       |       |       |       |       |        |       |       |       |

**Sequence**

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





**Intersection Level Of Service Report**  
**Intersection 4: US-Route 395 (NS) at Dos Palmas Road (EW)**

|                  |            |                           |       |
|------------------|------------|---------------------------|-------|
| Control Type:    | Signalized | Delay (sec / veh):        | 21.3  |
| Analysis Method: | HCM 2010   | Level Of Service:         | C     |
| Analysis Period: | 15 minutes | Volume to Capacity (v/c): | 0.625 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Approach               | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
| Lane Configuration     | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| 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      | 1      | 1          | 0      | 0      | 1         | 0      | 1      | 1         | 0      | 0      |
| Pocket Length [ft]     | 480.00     | 100.00 | 250.00 | 300.00     | 100.00 | 100.00 | 160.00    | 100.00 | 470.00 | 100.00    | 100.00 | 100.00 |
| Speed [mph]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | No         |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 11         | 1261   | 11     | 71         | 1231   | 77     | 150       | 35     | 65     | 36        | 11     | 109    |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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          | 4      | 0      | 0          | 1      | 1      | 5         | 1      | 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]             | 11         | 1265   | 11     | 71         | 1232   | 78     | 155       | 36     | 65     | 36        | 11     | 109    |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| 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]          | 3          | 333    | 3      | 19         | 324    | 21     | 41        | 9      | 17     | 9         | 3      | 29     |
| Total Analysis Volume [veh/h]           | 12         | 1332   | 12     | 75         | 1297   | 82     | 163       | 38     | 68     | 38        | 12     | 115    |
| 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]             | 2.00                         |

**Phasing & Timing**

| Control Type                 | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss |
|------------------------------|----------|---------|---------|----------|---------|---------|----------|---------|---------|----------|---------|---------|
| Signal group                 | 5        | 2       | 0       | 1        | 6       | 0       | 3        | 8       | 0       | 7        | 4       | 0       |
| Auxiliary Signal Groups      |          |         |         |          |         |         |          |         |         |          |         |         |
| Lead / Lag                   | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       |
| Minimum Green [s]            | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       |
| Maximum Green [s]            | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       |
| Amber [s]                    | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| All red [s]                  | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     |
| Split [s]                    | 11       | 22      | 0       | 11       | 22      | 0       | 14       | 30      | 0       | 17       | 33      | 0       |
| Vehicle Extension [s]        | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| Walk [s]                     | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 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     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| I2, Clearance Lost Time [s]  | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| Minimum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Maximum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Pedestrian Recall            | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Detector Location [ft]       | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| Detector Length [ft]         | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| I, Upstream Filtering Factor | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    |

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

| Lane Group                              | L     | C     | R    | L     | C     | C     | L     | C     | R     | L     | C     |
|---|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|
| C, Cycle Length [s]                     | 80    | 80    | 80   | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 80    |
| L, Total Lost Time per Cycle [s]        | 4.00  | 4.00  | 4.00 | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  |
| l1_p, Permitted Start-Up Lost Time [s]  | 0.00  | 0.00  | 0.00 | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| l2, Clearance Lost Time [s]             | 2.00  | 2.00  | 2.00 | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  |
| g_i, Effective Green Time [s]           | 2     | 41    | 41   | 6     | 45    | 45    | 9     | 13    | 13    | 4     | 8     |
| g / C, Green / Cycle                    | 0.02  | 0.51  | 0.51 | 0.07  | 0.56  | 0.56  | 0.12  | 0.17  | 0.17  | 0.05  | 0.10  |
| (v / s)_i Volume / Saturation Flow Rate | 0.01  | 0.39  | 0.01 | 0.04  | 0.39  | 0.39  | 0.10  | 0.02  | 0.04  | 0.02  | 0.08  |
| s, saturation flow rate [veh/h]         | 1714  | 3427  | 1530 | 1714  | 1800  | 1763  | 1714  | 1800  | 1530  | 1714  | 1552  |
| c, Capacity [veh/h]                     | 37    | 1747  | 780  | 123   | 1008  | 987   | 199   | 303   | 257   | 87    | 160   |
| d1, Uniform Delay [s]                   | 38.63 | 15.76 | 9.71 | 36.09 | 12.63 | 12.67 | 34.59 | 28.32 | 29.01 | 36.91 | 35.10 |
| 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  |
| 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  |
| d2, Incremental Delay [s]               | 5.10  | 3.21  | 0.04 | 4.81  | 3.86  | 4.00  | 8.10  | 0.18  | 0.54  | 3.41  | 8.62  |
| d3, Initial Queue Delay [s]             | 0.00  | 0.00  | 0.00 | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| Rp, platoon ratio                       | 1.00  | 1.00  | 1.00 | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| PF, progression factor                  | 1.00  | 1.00  | 1.00 | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |

**Lane Group Results**

|                                       |       |        |      |       |        |        |        |       |       |       |        |
|---------------------------------------|-------|--------|------|-------|--------|--------|--------|-------|-------|-------|--------|
| X, volume / capacity                  | 0.33  | 0.76   | 0.02 | 0.61  | 0.69   | 0.69   | 0.82   | 0.13  | 0.26  | 0.44  | 0.79   |
| d, Delay for Lane Group [s/veh]       | 43.74 | 18.97  | 9.74 | 40.90 | 16.49  | 16.67  | 42.70  | 28.50 | 29.55 | 40.32 | 43.73  |
| Lane Group LOS                        | D     | B      | A    | D     | B      | B      | D      | C     | C     | D     | D      |
| Critical Lane Group                   | No    | Yes    | No   | Yes   | No     | No     | Yes    | No    | No    | No    | Yes    |
| 50th-Percentile Queue Length [veh/ln] | 0.28  | 9.49   | 0.10 | 1.56  | 8.86   | 8.78   | 3.47   | 0.62  | 1.15  | 0.79  | 2.74   |
| 50th-Percentile Queue Length [ft/ln]  | 7.00  | 237.28 | 2.61 | 38.94 | 221.56 | 219.52 | 86.77  | 15.55 | 28.77 | 19.78 | 68.61  |
| 95th-Percentile Queue Length [veh/ln] | 0.50  | 14.54  | 0.19 | 2.80  | 13.74  | 13.64  | 6.25   | 1.12  | 2.07  | 1.42  | 4.94   |
| 95th-Percentile Queue Length [ft/ln]  | 12.61 | 363.60 | 4.70 | 70.10 | 343.61 | 341.02 | 156.18 | 27.99 | 51.78 | 35.60 | 123.49 |

**Movement, Approach, & Intersection Results**

|                                 |       |       |      |       |       |       |       |       |       |       |       |       |
|---------------------------------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| d_M, Delay for Movement [s/veh] | 43.74 | 18.97 | 9.74 | 40.90 | 16.57 | 16.67 | 42.70 | 28.50 | 29.55 | 40.32 | 43.73 | 43.73 |
| Movement LOS                    | D     | B     | A    | D     | B     | B     | D     | C     | C     | D     | D     | D     |
| d_A, Approach Delay [s/veh]     | 19.11 |       |      | 17.83 |       |       | 37.37 |       |       | 42.94 |       |       |
| Approach LOS                    | B     |       |      | B     |       |       | D     |       |       | D     |       |       |
| d_I, Intersection Delay [s/veh] | 21.26 |       |      |       |       |       |       |       |       |       |       |       |
| Intersection LOS                | C     |       |      |       |       |       |       |       |       |       |       |       |
| Intersection V/C                | 0.625 |       |      |       |       |       |       |       |       |       |       |       |

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 5: US-Route 395 (NS) at Luna Road (EW)**

|                  |            |                           |            |
|------------------|------------|---------------------------|------------|
| Control Type:    | Signalized | Delay (sec / veh):        | 60.6       |
| Analysis Method: | HCM 2010   | Level Of Service:         | E          |
| Analysis Period: | 15 minutes | Volume to Capacity (v/c): | 10,204.505 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Approach               | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| Lane Configuration     | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| 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      | 1      | 1          | 0      | 1      | 1         | 0      | 0      | 1         | 0      | 0      |
| Pocket Length [ft]     | 360.00     | 100.00 | 450.00 | 400.00     | 100.00 | 400.00 | 125.00    | 100.00 | 100.00 | 425.00    | 100.00 | 100.00 |
| Speed [mph]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | No         |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 33         | 987    | 55     | 182        | 1076   | 24     | 67        | 79     | 68     | 76        | 45     | 221    |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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      | 1      | 4         | 1      | 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]             | 33         | 987    | 55     | 182        | 1076   | 25     | 71        | 80     | 68     | 76        | 45     | 221    |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| Other Adjustment Factor                 | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h]          | 9          | 260    | 14     | 48         | 283    | 7      | 19        | 21     | 18     | 20        | 12     | 58     |
| Total Analysis Volume [veh/h]           | 35         | 1039   | 58     | 192        | 1133   | 26     | 75        | 84     | 72     | 80        | 47     | 233    |
| 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]          | 100                          |
| Coordination Type         | Time of Day Pattern Isolated |
| Actuation Type            | Fixed time                   |
| Offset [s]                | 0.0                          |
| Offset Reference          | LeadGreen                    |
| Permissive Mode           | SingleBand                   |
| Lost time [s]             | 2.00                         |

**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]            | 7        | 7       | 0       | 7        | 7       | 0       | 0       | 7       | 0       | 0       | 7       | 0       |
| Maximum Green [s]            | 30       | 30      | 0       | 30       | 30      | 0       | 0       | 30      | 0       | 0       | 30      | 0       |
| Amber [s]                    | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 0.0     | 3.0     | 0.0     | 0.0     | 3.0     | 0.0     |
| All red [s]                  | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 0.0     | 1.0     | 0.0     | 0.0     | 1.0     | 0.0     |
| Split [s]                    | 23       | 41      | 0       | 16       | 34      | 0       | 0       | 32      | 0       | 0       | 31      | 0       |
| Vehicle Extension [s]        | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 0.0     | 3.0     | 0.0     | 0.0     | 3.0     | 0.0     |
| Walk [s]                     | 0        | 7       | 0       | 0        | 7       | 0       | 0       | 7       | 0       | 0       | 7       | 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]  | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 0.0     | 2.0     | 0.0     | 0.0     | 2.0     | 0.0     |
| Minimum Recall               | No       | No      |         | No       | No      |         |         | No      |         |         | No      |         |
| Maximum Recall               | No       | No      |         | No       | No      |         |         | No      |         |         | No      |         |
| Pedestrian Recall            | No       | No      |         | No       | No      |         |         | No      |         |         | No      |         |
| Detector Location [ft]       | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| Detector Length [ft]         | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| I, Upstream Filtering Factor | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    |

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

| Lane Group                              | L     | C     | R     | L     | C     | R     | L     | C     | R     | L     | C     |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| C, Cycle Length [s]                     | 100   | 100   | 100   | 100   | 100   | 100   | 100   | 100   | 100   | 100   | 100   |
| L, Total Lost Time per Cycle [s]        | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  |
| l1_p, Permitted Start-Up Lost Time [s]  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 2.00  | 0.00  |
| l2, Clearance Lost Time [s]             | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 0.00  | 2.00  | 2.00  | 2.00  | 2.00  |
| g_i, Effective Green Time [s]           | 19    | 37    | 37    | 12    | 30    | 30    | 29    | 28    | 28    | 27    | 27    |
| g / C, Green / Cycle                    | 0.19  | 0.37  | 0.37  | 0.12  | 0.30  | 0.30  | 0.29  | 0.28  | 0.28  | 0.27  | 0.27  |
| (v / s)_i Volume / Saturation Flow Rate | 0.02  | 0.30  | 0.04  | 0.11  | 0.33  | 0.02  | 0.07  | 0.05  | 0.05  | 0.06  | 0.18  |
| s, saturation flow rate [veh/h]         | 1714  | 3427  | 1530  | 1714  | 3427  | 1530  | 1117  | 1800  | 1530  | 1335  | 1570  |
| c, Capacity [veh/h]                     | 326   | 1268  | 566   | 206   | 1028  | 459   | 219   | 504   | 428   | 359   | 424   |
| d1, Uniform Delay [s]                   | 33.49 | 28.48 | 20.63 | 43.60 | 35.00 | 24.92 | 41.37 | 27.19 | 27.20 | 32.80 | 32.43 |
| k, delay calibration                    | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  |
| 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  |
| d2, Incremental Delay [s]               | 0.66  | 6.00  | 0.36  | 47.45 | 60.29 | 0.24  | 4.23  | 0.71  | 0.85  | 1.44  | 7.87  |
| d3, Initial Queue Delay [s]             | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| Rp, platoon ratio                       | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| PF, progression factor                  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |

**Lane Group Results**

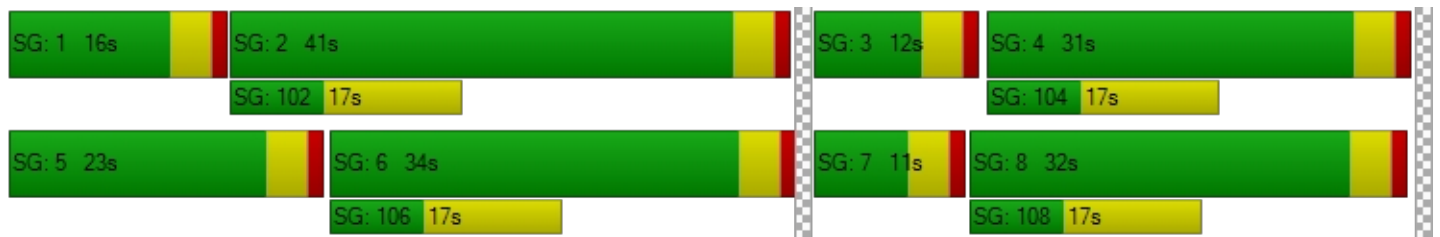
|                                       |       |        |       |        |        |       |       |       |       |       |        |
|---------------------------------------|-------|--------|-------|--------|--------|-------|-------|-------|-------|-------|--------|
| X, volume / capacity                  | 0.11  | 0.82   | 0.10  | 0.93   | 1.10   | 0.06  | 0.34  | 0.17  | 0.17  | 0.22  | 0.66   |
| d, Delay for Lane Group [s/veh]       | 34.15 | 34.47  | 20.99 | 91.05  | 95.29  | 25.16 | 45.60 | 27.90 | 28.05 | 34.23 | 40.30  |
| Lane Group LOS                        | C     | C      | C     | F      | F      | C     | D     | C     | C     | C     | D      |
| Critical Lane Group                   | No    | Yes    | No    | Yes    | No     | No    | Yes   | No    | No    | No    | No     |
| 50th-Percentile Queue Length [veh/ln] | 0.76  | 11.95  | 0.94  | 7.37   | 20.77  | 0.47  | 1.60  | 1.61  | 1.39  | 1.75  | 6.85   |
| 50th-Percentile Queue Length [ft/ln]  | 19.02 | 298.81 | 23.45 | 184.33 | 519.27 | 11.70 | 39.99 | 40.20 | 34.85 | 43.84 | 171.34 |
| 95th-Percentile Queue Length [veh/ln] | 1.37  | 17.62  | 1.69  | 11.83  | 29.99  | 0.84  | 2.88  | 2.89  | 2.51  | 3.16  | 11.15  |
| 95th-Percentile Queue Length [ft/ln]  | 34.24 | 440.55 | 42.22 | 295.66 | 749.63 | 21.06 | 71.98 | 72.36 | 62.73 | 78.92 | 278.68 |

**Movement, Approach, & Intersection Results**

|                                 |           |       |       |       |       |       |       |       |       |       |       |       |
|---------------------------------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| d_M, Delay for Movement [s/veh] | 34.15     | 34.47 | 20.99 | 91.05 | 95.29 | 25.16 | 45.60 | 27.90 | 28.05 | 34.23 | 40.30 | 40.30 |
| Movement LOS                    | C         | C     | C     | F     | F     | C     | D     | C     | C     | C     | D     | D     |
| d_A, Approach Delay [s/veh]     | 33.77     |       |       | 93.34 |       |       | 33.69 |       |       | 38.95 |       |       |
| Approach LOS                    | C         |       |       | F     |       |       | C     |       |       | D     |       |       |
| d_I, Intersection Delay [s/veh] | 60.55     |       |       |       |       |       |       |       |       |       |       |       |
| Intersection LOS                | E         |       |       |       |       |       |       |       |       |       |       |       |
| Intersection V/C                | 10204.505 |       |       |       |       |       |       |       |       |       |       |       |

**Sequence**

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





## TTM 16397

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

Scenario 5 Year (2040) Without Project

Report File: C:\...IAM LR.pdf

11/1/2019

**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  | Mesa View Drive (NS) at Dos Palmas Road (EW) | Final Base          | 0          | 5        | 52        | 14         | 12        | 0        | 0         | 8        | 3        | 14        | 5        | 3        | 116          |   |
|    |  | Growth Rate         | 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        | 6         | 0          | 0         | 0        | 0         | 0        | 0        | 0         | 1        | 0        | 0            | 7 |
|    |  | Other               | 0          | 0        | 0         | 0          | 0         | 0        | 0         | 0        | 0        | 0         | 0        | 0        | 0            | 0 |
|    |  | <b>Future Total</b> | <b>0</b>   | <b>5</b> | <b>58</b> | <b>14</b>  | <b>12</b> | <b>0</b> | <b>0</b>  | <b>8</b> | <b>3</b> | <b>15</b> | <b>5</b> | <b>3</b> | <b>123</b>   |   |

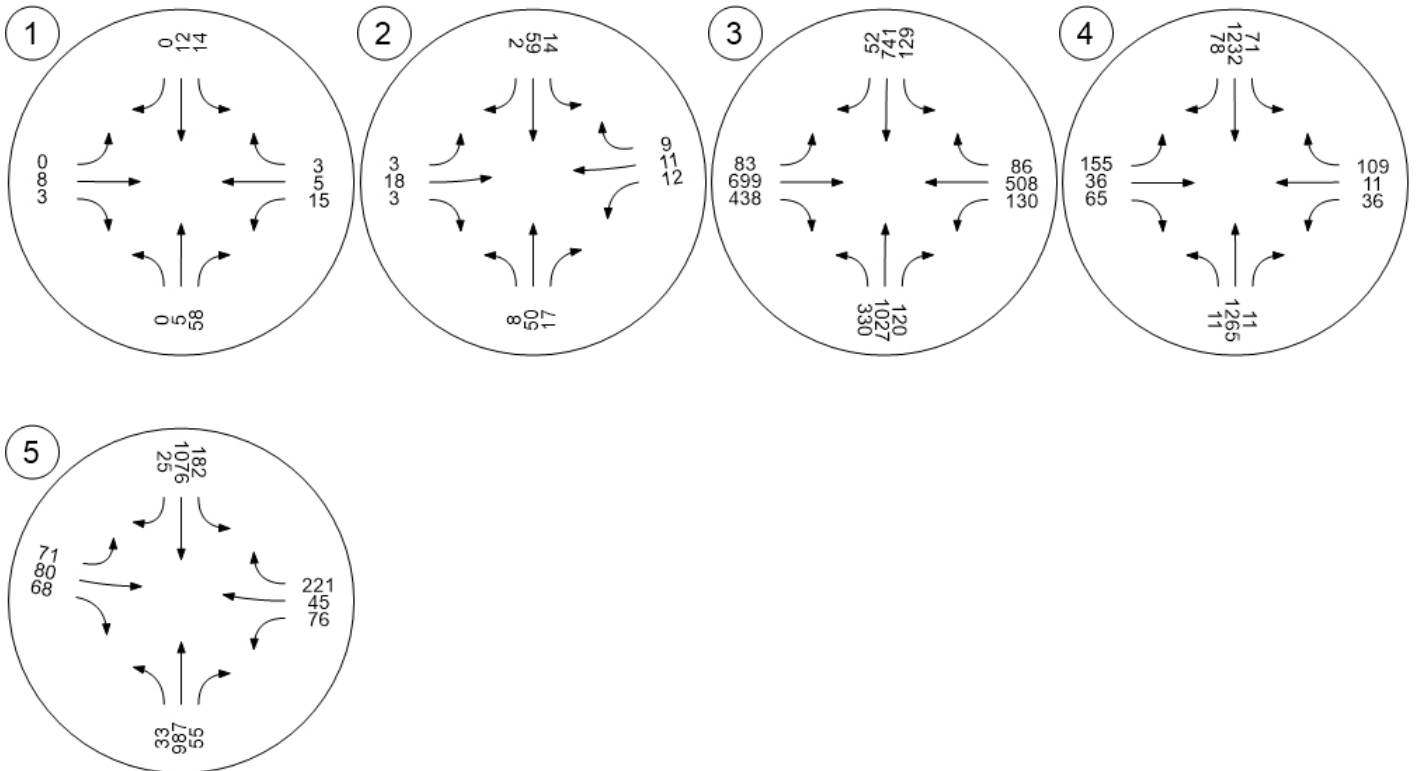
| ID | Intersection Name                      | Volume Type         | Northbound |           |           | Southbound |           |          | Eastbound |           |          | Westbound |           |          | Total Volume |    |
|----|--|---------------------|------------|-----------|-----------|------------|-----------|----------|-----------|-----------|----------|-----------|-----------|----------|--------------|----|
|    |  |                     | Left       | Thru      | Right     | Left       | Thru      | Right    | Left      | Thru      | Right    | Left      | Thru      | Right    |              |    |
| 2  | Mesa View Drive (NS) at Luna Road (EW) | Final Base          | 8          | 44        | 11        | 14         | 58        | 2        | 3         | 18        | 3        | 11        | 11        | 9        | 192          |    |
|    |  | Growth Rate         | 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          | 6         | 6         | 0          | 1         | 0        | 0         | 0         | 0        | 0         | 1         | 0        | 0            | 14 |
|    |  | Other               | 0          | 0         | 0         | 0          | 0         | 0        | 0         | 0         | 0        | 0         | 0         | 0        | 0            | 0  |
|    |  | <b>Future Total</b> | <b>8</b>   | <b>50</b> | <b>17</b> | <b>14</b>  | <b>59</b> | <b>2</b> | <b>3</b>  | <b>18</b> | <b>3</b> | <b>12</b> | <b>11</b> | <b>9</b> | <b>206</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  | US-Route 395 (NS) at Palmdale Road (EW) | Final Base          | 329        | 1022        | 117        | 129        | 740        | 52        | 83        | 699        | 438        | 129        | 508        | 86        | 4332         |    |
|    |   | Growth Rate         | 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          | 5           | 3          | 0          | 1          | 0         | 0         | 0          | 0          | 0          | 1          | 0         | 0            | 11 |
|    |   | Other               | 0          | 0           | 0          | 0          | 0          | 0         | 0         | 0          | 0          | 0          | 0          | 0         | 0            | 0  |
|    |   | <b>Future Total</b> | <b>330</b> | <b>1027</b> | <b>120</b> | <b>129</b> | <b>741</b> | <b>52</b> | <b>83</b> | <b>699</b> | <b>438</b> | <b>130</b> | <b>508</b> | <b>86</b> | <b>4343</b>  |    |

| ID | Intersection Name                         | Volume Type         | Northbound |             |           | Southbound |             |           | Eastbound  |           |           | Westbound |           |            | Total Volume |    |
|----|---|---------------------|------------|-------------|-----------|------------|-------------|-----------|------------|-----------|-----------|-----------|-----------|------------|--------------|----|
|    |   |                     | Left       | Thru        | Right     | Left       | Thru        | Right     | Left       | Thru      | Right     | Left      | Thru      | Right      |              |    |
| 4  | US-Route 395 (NS) at Dos Palmas Road (EW) | Final Base          | 11         | 1261        | 11        | 71         | 1231        | 77        | 150        | 35        | 65        | 36        | 11        | 109        | 3068         |    |
|    |   | Growth Rate         | 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          | 4           | 0         | 0          | 1           | 1         | 5          | 1         | 0         | 0         | 0         | 0          | 0            | 12 |
|    |   | Other               | 0          | 0           | 0         | 0          | 0           | 0         | 0          | 0         | 0         | 0         | 0         | 0          | 0            | 0  |
|    |   | <b>Future Total</b> | <b>11</b>  | <b>1265</b> | <b>11</b> | <b>71</b>  | <b>1232</b> | <b>78</b> | <b>155</b> | <b>36</b> | <b>65</b> | <b>36</b> | <b>11</b> | <b>109</b> | <b>3080</b>  |    |

| ID | Intersection Name                   | Volume Type         | Northbound |            |           | Southbound |             |           | Eastbound |           |           | Westbound |           |            | Total Volume |
|----|-------------------------------------|---------------------|------------|------------|-----------|------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|------------|--------------|
|    |                                     |                     | Left       | Thru       | Right     | Left       | Thru        | Right     | Left      | Thru      | Right     | Left      | Thru      | Right      |              |
| 5  | US-Route 395 (NS) at Luna Road (EW) | Final Base          | 33         | 987        | 55        | 182        | 1076        | 24        | 67        | 79        | 68        | 76        | 45        | 221        | 2913         |
|    |                                     | Growth Rate         | 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           | 1         | 4         | 1         | 0         | 0         | 0         | 0          | 6            |
|    |                                     | Other               | 0          | 0          | 0         | 0          | 0           | 0         | 0         | 0         | 0         | 0         | 0         | 0          | 0            |
|    |                                     | <b>Future Total</b> | <b>33</b>  | <b>987</b> | <b>55</b> | <b>182</b> | <b>1076</b> | <b>25</b> | <b>71</b> | <b>80</b> | <b>68</b> | <b>76</b> | <b>45</b> | <b>221</b> | <b>2919</b>  |

Traffic Volume - Future Total Volume



**Year 2040 With Project**

TTM 16397

Vistro File: C:\...\IPM.vistro

Scenario 8 Year (2040) With Project With Improvement

Report File: C:\...\IPM LRpl.pdf

11/14/2019

**Intersection Analysis Summary**

| ID | Intersection Name                            | Control Type | Method   | Worst Mvmt | V/C   | Delay (s/veh) | LOS |
|----|--|--------------|----------|------------|-------|---------------|-----|
| 1  | Mesa View Drive (NS) at Dos Palmas Road (EW) | Two-way stop | HCM 2010 | SB Left    | 0.045 | 14.4          | B   |
| 2  | Mesa View Drive (NS) at Luna Road (EW)       | Two-way stop | HCM 2010 | EB Left    | 0.018 | 12.5          | B   |
| 3  | US-Route 395 (NS) at Palmdale Road (EW)      | Signalized   | HCM 2010 | NB Left    | 0.710 | 40.5          | D   |
| 4  | US-Route 395 (NS) at Dos Palmas Road (EW)    | Signalized   | HCM 2010 | NB Left    | 0.726 | 30.4          | C   |
| 5  | US-Route 395 (NS) at Luna Road (EW)          | Signalized   | HCM 2010 | SB Left    | 0.639 | 51.2          | D   |

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: Mesa View Drive (NS) at Dos Palmas Road (EW)**

|                  |              |                           |       |
|------------------|--------------|---------------------------|-------|
| Control Type:    | Two-way stop | Delay (sec / veh):        | 14.4  |
| Analysis Method: | HCM 2010     | Level Of Service:         | B     |
| Analysis Period: | 15 minutes   | Volume to Capacity (v/c): | 0.045 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| 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      | 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]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | Yes        |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 8          | 27     | 68     | 18         | 24     | 0      | 0         | 12     | 0      | 53        | 9      | 36     |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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]            | 30         | 0      | 11     | 0          | 0      | 0      | 0         | 74     | 18     | 19        | 131    | 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]             | 38         | 27     | 79     | 18         | 24     | 0      | 0         | 86     | 18     | 72        | 140    | 36     |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| 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]          | 10         | 7      | 21     | 5          | 6      | 0      | 0         | 23     | 5      | 19        | 37     | 9      |
| Total Analysis Volume [veh/h]           | 40         | 28     | 83     | 19         | 25     | 0      | 0         | 91     | 19     | 76        | 147    | 38     |
| Pedestrian Volume [ped/h]               | 0          |        |        | 0          |        |        | 0         |        |        | 0         |        |        |

**Intersection Settings**

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

**Movement, Approach, & Intersection Results**

|                                       |       |       |       |       |       |      |      |      |      |      |      |      |
|---------------------------------------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|
| V/C, Movement V/C Ratio               | 0.08  | 0.06  | 0.09  | 0.05  | 0.05  | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 | 0.00 | 0.00 |
| d_M, Delay for Movement [s/veh]       | 13.82 | 13.95 | 10.30 | 14.38 | 13.14 | 9.90 | 7.57 | 0.00 | 0.00 | 7.54 | 0.00 | 0.00 |
| Movement LOS                          | B     | B     | B     | B     | B     | A    | A    | A    | A    | A    | A    | A    |
| 95th-Percentile Queue Length [veh/ln] | 0.86  | 0.86  | 0.86  | 0.32  | 0.32  | 0.32 | 0.00 | 0.00 | 0.00 | 0.15 | 0.15 | 0.15 |
| 95th-Percentile Queue Length [ft/ln]  | 21.47 | 21.47 | 21.47 | 7.91  | 7.91  | 7.91 | 0.00 | 0.00 | 0.00 | 3.80 | 3.80 | 3.80 |
| d_A, Approach Delay [s/veh]           | 11.91 |       |       | 13.67 |       |      | 0.00 |      |      | 2.20 |      |      |
| Approach LOS                          | B     |       |       | B     |       |      | A    |      |      | A    |      |      |
| d_I, Intersection Delay [s/veh]       | 5.25  |       |       |       |       |      |      |      |      |      |      |      |
| Intersection LOS                      | B     |       |       |       |       |      |      |      |      |      |      |      |

**Intersection Level Of Service Report**  
**Intersection 2: Mesa View Drive (NS) at Luna Road (EW)**

|                  |              |                           |       |
|------------------|--------------|---------------------------|-------|
| Control Type:    | Two-way stop | Delay (sec / veh):        | 12.5  |
| Analysis Method: | HCM 2010     | Level Of Service:         | B     |
| Analysis Period: | 15 minutes   | Volume to Capacity (v/c): | 0.018 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| 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      | 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]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | Yes        |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 12         | 99     | 20     | 20         | 52     | 8      | 9         | 15     | 9      | 9         | 27     | 33     |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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          | 25     | 5      | 18         | 21     | 0      | 0         | 0      | 0      | 9         | 0      | 30     |
| 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]             | 12         | 124    | 25     | 38         | 73     | 8      | 9         | 15     | 9      | 18        | 27     | 63     |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| 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]          | 3          | 33     | 7      | 10         | 19     | 2      | 2         | 4      | 2      | 5         | 7      | 17     |
| Total Analysis Volume [veh/h]           | 13         | 131    | 26     | 40         | 77     | 8      | 9         | 16     | 9      | 19        | 28     | 66     |
| Pedestrian Volume [ped/h]               | 0          |        |        | 0          |        |        | 0         |        |        | 0         |        |        |



**Intersection Settings**

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

**Movement, Approach, & Intersection Results**

|                                       |      |      |      |      |      |      |       |       |      |       |       |       |
|---------------------------------------|------|------|------|------|------|------|-------|-------|------|-------|-------|-------|
| V/C, Movement V/C Ratio               | 0.01 | 0.00 | 0.00 | 0.03 | 0.00 | 0.00 | 0.02  | 0.03  | 0.01 | 0.03  | 0.05  | 0.07  |
| d_M, Delay for Movement [s/veh]       | 7.38 | 0.00 | 0.00 | 7.58 | 0.00 | 0.00 | 12.47 | 11.78 | 9.00 | 12.13 | 12.26 | 9.86  |
| Movement LOS                          | A    | A    | A    | A    | A    | A    | B     | B     | A    | B     | B     | A     |
| 95th-Percentile Queue Length [veh/ln] | 0.02 | 0.02 | 0.02 | 0.08 | 0.08 | 0.08 | 0.18  | 0.18  | 0.18 | 0.55  | 0.55  | 0.55  |
| 95th-Percentile Queue Length [ft/ln]  | 0.60 | 0.60 | 0.60 | 2.04 | 2.04 | 2.04 | 4.40  | 4.40  | 4.40 | 13.66 | 13.66 | 13.66 |
| d_A, Approach Delay [s/veh]           | 0.56 |      |      | 2.43 |      |      | 11.23 |       |      | 10.84 |       |       |
| Approach LOS                          | A    |      |      | A    |      |      | B     |       |      | B     |       |       |
| d_I, Intersection Delay [s/veh]       | 4.54 |      |      |      |      |      |       |       |      |       |       |       |
| Intersection LOS                      | B    |      |      |      |      |      |       |       |      |       |       |       |

**Intersection Level Of Service Report**  
**Intersection 3: US-Route 395 (NS) at Palmdale Road (EW)**

|                  |            |                           |       |
|------------------|------------|---------------------------|-------|
| Control Type:    | Signalized | Delay (sec / veh):        | 40.5  |
| Analysis Method: | HCM 2010   | Level Of Service:         | D     |
| Analysis Period: | 15 minutes | Volume to Capacity (v/c): | 0.710 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| 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      | 1      | 1         | 0      | 0      | 1         | 0      | 2      |
| Pocket Length [ft]     | 120.00     | 100.00 | 100.00 | 350.00     | 100.00 | 370.00 | 140.00    | 100.00 | 100.00 | 250.00    | 100.00 | 450.00 |
| Speed [mph]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | Yes        |        |        | No         |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 455        | 1205   | 135    | 206        | 1046   | 64     | 139       | 868    | 414    | 347       | 1122   | 188    |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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]            | 7          | 27     | 29     | 0          | 47     | 0      | 0         | 0      | 12     | 54        | 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]             | 462        | 1232   | 164    | 206        | 1093   | 64     | 139       | 868    | 426    | 401       | 1122   | 188    |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| 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]          | 122        | 324    | 43     | 54         | 288    | 17     | 37        | 228    | 112    | 106       | 295    | 49     |
| Total Analysis Volume [veh/h]           | 486        | 1297   | 173    | 217        | 1151   | 67     | 146       | 914    | 448    | 422       | 1181   | 198    |
| 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]          | 90                           |
| Coordination Type         | Time of Day Pattern Isolated |
| Actuation Type            | Fixed time                   |
| Offset [s]                | 0.0                          |
| Offset Reference          | LeadGreen                    |
| Permissive Mode           | SingleBand                   |
| Lost time [s]             | 2.00                         |

**Phasing & Timing**

| Control Type                 | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss |
|------------------------------|----------|---------|---------|----------|---------|---------|----------|---------|---------|----------|---------|---------|
| Signal group                 | 5        | 2       | 0       | 1        | 6       | 0       | 3        | 8       | 0       | 7        | 4       | 0       |
| Auxiliary Signal Groups      |          |         |         |          |         |         |          |         |         |          |         |         |
| Lead / Lag                   | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       |
| Minimum Green [s]            | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       |
| Maximum Green [s]            | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       |
| Amber [s]                    | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| All red [s]                  | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     |
| Split [s]                    | 17       | 32      | 0       | 12       | 27      | 0       | 11       | 30      | 0       | 16       | 35      | 0       |
| Vehicle Extension [s]        | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| Walk [s]                     | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 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     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| I2, Clearance Lost Time [s]  | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| Minimum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Maximum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Pedestrian Recall            | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Detector Location [ft]       | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| Detector Length [ft]         | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| I, Upstream Filtering Factor | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    |

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

| Lane Group                              | L     | C     | R     | L     | C     | R     | L     | C     | R     | L     | C     | R     |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| C, Cycle Length [s]                     | 90    | 90    | 90    | 90    | 90    | 90    | 90    | 90    | 90    | 90    | 90    | 90    |
| L, Total Lost Time per Cycle [s]        | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  |
| l1_p, Permitted Start-Up Lost Time [s]  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| l2, Clearance Lost Time [s]             | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  |
| g_i, Effective Green Time [s]           | 13    | 28    | 28    | 8     | 23    | 23    | 7     | 26    | 26    | 12    | 31    | 31    |
| g / C, Green / Cycle                    | 0.14  | 0.31  | 0.31  | 0.09  | 0.26  | 0.26  | 0.08  | 0.29  | 0.29  | 0.13  | 0.34  | 0.34  |
| (v / s)_i Volume / Saturation Flow Rate | 0.15  | 0.26  | 0.11  | 0.07  | 0.23  | 0.04  | 0.04  | 0.19  | 0.17  | 0.13  | 0.24  | 0.13  |
| s, saturation flow rate [veh/h]         | 3329  | 4903  | 1530  | 3329  | 4903  | 1530  | 3329  | 4903  | 2708  | 3329  | 4903  | 1530  |
| c, Capacity [veh/h]                     | 481   | 1525  | 476   | 296   | 1253  | 391   | 259   | 1416  | 782   | 444   | 1689  | 527   |
| d1, Uniform Delay [s]                   | 38.50 | 29.04 | 24.08 | 39.96 | 32.59 | 26.08 | 40.03 | 27.97 | 27.27 | 38.71 | 25.47 | 22.21 |
| k, delay calibration                    | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  |
| 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]               | 43.73 | 6.14  | 2.14  | 14.88 | 12.17 | 0.95  | 8.61  | 2.28  | 3.04  | 32.01 | 2.43  | 2.04  |
| d3, Initial Queue Delay [s]             | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| Rp, platoon ratio                       | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| PF, progression factor                  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |

**Lane Group Results**

|                                       |        |        |        |        |        |       |       |        |        |        |        |        |
|---------------------------------------|--------|--------|--------|--------|--------|-------|-------|--------|--------|--------|--------|--------|
| X, volume / capacity                  | 1.01   | 0.85   | 0.36   | 0.73   | 0.92   | 0.17  | 0.56  | 0.65   | 0.57   | 0.95   | 0.70   | 0.38   |
| d, Delay for Lane Group [s/veh]       | 82.23  | 35.18  | 26.22  | 54.84  | 44.75  | 27.03 | 48.64 | 30.25  | 30.30  | 70.72  | 27.91  | 24.25  |
| Lane Group LOS                        | F      | D      | C      | D      | D      | C     | D     | C      | C      | E      | C      | C      |
| Critical Lane Group                   | Yes    | No     | No     | No     | Yes    | No    | No    | Yes    | No     | Yes    | No     | No     |
| 50th-Percentile Queue Length [veh/ln] | 8.12   | 9.30   | 3.08   | 2.92   | 9.30   | 1.21  | 1.85  | 5.88   | 4.33   | 6.51   | 7.38   | 3.37   |
| 50th-Percentile Queue Length [ft/ln]  | 203.02 | 232.39 | 77.00  | 73.01  | 232.41 | 30.13 | 46.24 | 146.90 | 108.18 | 162.80 | 184.60 | 84.25  |
| 95th-Percentile Queue Length [veh/ln] | 12.86  | 14.30  | 5.54   | 5.26   | 14.30  | 2.17  | 3.33  | 9.85   | 7.74   | 10.70  | 11.84  | 6.07   |
| 95th-Percentile Queue Length [ft/ln]  | 321.39 | 357.39 | 138.60 | 131.42 | 357.41 | 54.23 | 83.23 | 246.29 | 193.47 | 267.42 | 296.01 | 151.66 |

**Movement, Approach, & Intersection Results**

|                                 |       |       |       |       |       |       |       |       |       |       |       |       |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| d_M, Delay for Movement [s/veh] | 82.23 | 35.18 | 26.22 | 54.84 | 44.75 | 27.03 | 48.64 | 30.25 | 30.30 | 70.72 | 27.91 | 24.25 |
| Movement LOS                    | F     | D     | C     | D     | D     | C     | D     | C     | C     | E     | C     | C     |
| d_A, Approach Delay [s/veh]     | 46.07 |       |       | 45.45 |       |       | 32.04 |       |       | 37.54 |       |       |
| Approach LOS                    | D     |       |       | D     |       |       | C     |       |       | D     |       |       |
| d_I, Intersection Delay [s/veh] | 40.49 |       |       |       |       |       |       |       |       |       |       |       |
| Intersection LOS                | D     |       |       |       |       |       |       |       |       |       |       |       |
| Intersection V/C                | 0.710 |       |       |       |       |       |       |       |       |       |       |       |

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 4: US-Route 395 (NS) at Dos Palmas Road (EW)**

|                  |            |                           |       |
|------------------|------------|---------------------------|-------|
| Control Type:    | Signalized | Delay (sec / veh):        | 30.4  |
| Analysis Method: | HCM 2010   | Level Of Service:         | C     |
| Analysis Period: | 15 minutes | Volume to Capacity (v/c): | 0.726 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Approach               |            |        |        |            |        |        |           |        |        |           |        |        |
| 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      | 1      | 1          | 0      | 0      | 1         | 0      | 1      | 1         | 0      | 0      |
| Pocket Length [ft]     | 480.00     | 100.00 | 250.00 | 300.00     | 100.00 | 100.00 | 160.00    | 100.00 | 470.00 | 100.00    | 100.00 | 100.00 |
| Speed [mph]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | No         |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 56         | 1537   | 29     | 117        | 1554   | 249    | 182       | 49     | 52     | 20        | 36     | 114    |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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]            | 20         | 3      | 0      | 0          | 5      | 108    | 60        | 13     | 12     | 0         | 22     | 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]             | 76         | 1540   | 29     | 117        | 1559   | 357    | 242       | 62     | 64     | 20        | 58     | 114    |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| 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]          | 20         | 405    | 8      | 31         | 410    | 94     | 64        | 16     | 17     | 5         | 15     | 30     |
| Total Analysis Volume [veh/h]           | 80         | 1621   | 31     | 123        | 1641   | 376    | 255       | 65     | 67     | 21        | 61     | 120    |
| 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]          | 100                          |
| Coordination Type         | Time of Day Pattern Isolated |
| Actuation Type            | Fully actuated               |
| Offset [s]                | 0.0                          |
| Offset Reference          | LeadGreen                    |
| Permissive Mode           | SingleBand                   |
| Lost time [s]             | 2.00                         |

**Phasing & Timing**

| Control Type                 | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss |
|------------------------------|----------|---------|---------|----------|---------|---------|----------|---------|---------|----------|---------|---------|
| Signal group                 | 5        | 2       | 0       | 1        | 6       | 0       | 3        | 8       | 0       | 7        | 4       | 0       |
| Auxiliary Signal Groups      |          |         |         |          |         |         |          |         |         |          |         |         |
| Lead / Lag                   | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       |
| Minimum Green [s]            | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       |
| Maximum Green [s]            | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       |
| Amber [s]                    | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| All red [s]                  | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     |
| Split [s]                    | 38       | 46      | 0       | 13       | 21      | 0       | 20       | 30      | 0       | 11       | 21      | 0       |
| Vehicle Extension [s]        | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| Walk [s]                     | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 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     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| I2, Clearance Lost Time [s]  | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| Minimum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Maximum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Pedestrian Recall            | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Detector Location [ft]       | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| Detector Length [ft]         | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| I, Upstream Filtering Factor | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    |

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

| Lane Group                              | L     | C     | R     | L     | C     | C     | L     | C     | R     | L     | C     |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| C, Cycle Length [s]                     | 100   | 100   | 100   | 100   | 100   | 100   | 100   | 100   | 100   | 100   | 100   |
| L, Total Lost Time per Cycle [s]        | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  |
| l1_p, Permitted Start-Up Lost Time [s]  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| l2, Clearance Lost Time [s]             | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  |
| g_i, Effective Green Time [s]           | 6     | 46    | 46    | 9     | 49    | 49    | 16    | 26    | 26    | 3     | 13    |
| g / C, Green / Cycle                    | 0.06  | 0.46  | 0.46  | 0.09  | 0.49  | 0.49  | 0.16  | 0.26  | 0.26  | 0.03  | 0.13  |
| (v / s)_i Volume / Saturation Flow Rate | 0.05  | 0.33  | 0.02  | 0.07  | 0.40  | 0.40  | 0.15  | 0.04  | 0.04  | 0.01  | 0.11  |
| s, saturation flow rate [veh/h]         | 1714  | 4903  | 1530  | 1714  | 3427  | 1636  | 1714  | 1800  | 1530  | 1714  | 1611  |
| c, Capacity [veh/h]                     | 109   | 2257  | 704   | 152   | 1663  | 794   | 275   | 467   | 397   | 55    | 211   |
| d1, Uniform Delay [s]                   | 46.07 | 21.79 | 14.89 | 44.81 | 21.95 | 22.24 | 41.47 | 28.50 | 28.73 | 47.48 | 42.58 |
| 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  |
| 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  |
| d2, Incremental Delay [s]               | 9.25  | 2.00  | 0.12  | 9.82  | 4.54  | 9.93  | 12.99 | 0.13  | 0.20  | 4.27  | 9.57  |
| d3, Initial Queue Delay [s]             | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| Rp, platoon ratio                       | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| PF, progression factor                  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |

**Lane Group Results**

|                                       |        |        |       |        |        |        |        |       |       |       |        |
|---------------------------------------|--------|--------|-------|--------|--------|--------|--------|-------|-------|-------|--------|
| X, volume / capacity                  | 0.74   | 0.72   | 0.04  | 0.81   | 0.82   | 0.83   | 0.93   | 0.14  | 0.17  | 0.38  | 0.86   |
| d, Delay for Lane Group [s/veh]       | 55.32  | 23.80  | 15.01 | 54.63  | 26.48  | 32.17  | 54.46  | 28.63 | 28.93 | 51.76 | 52.15  |
| Lane Group LOS                        | E      | C      | B     | D      | C      | C      | D      | C     | C     | D     | D      |
| Critical Lane Group                   | Yes    | No     | No    | No     | No     | Yes    | Yes    | No    | No    | No    | Yes    |
| 50th-Percentile Queue Length [veh/ln] | 2.22   | 10.19  | 0.41  | 3.39   | 13.85  | 14.82  | 7.12   | 1.21  | 1.26  | 0.58  | 4.90   |
| 50th-Percentile Queue Length [ft/ln]  | 55.58  | 254.64 | 10.15 | 84.77  | 346.15 | 370.50 | 178.03 | 30.28 | 31.55 | 14.41 | 122.48 |
| 95th-Percentile Queue Length [veh/ln] | 4.00   | 15.42  | 0.73  | 6.10   | 19.95  | 21.13  | 11.50  | 2.18  | 2.27  | 1.04  | 8.53   |
| 95th-Percentile Queue Length [ft/ln]  | 100.04 | 385.49 | 18.26 | 152.58 | 498.71 | 528.34 | 287.44 | 54.50 | 56.79 | 25.94 | 213.23 |

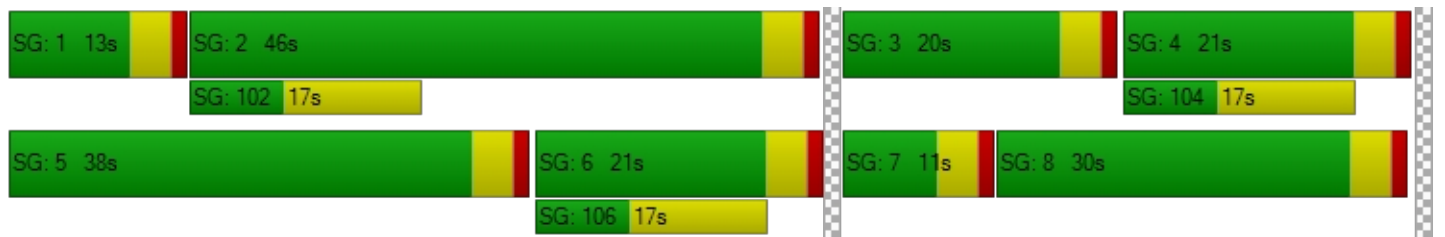


**Movement, Approach, & Intersection Results**

|                                 |       |       |       |       |       |       |       |       |       |       |       |       |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| d_M, Delay for Movement [s/veh] | 55.32 | 23.80 | 15.01 | 54.63 | 27.47 | 32.17 | 54.46 | 28.63 | 28.93 | 51.76 | 52.15 | 52.15 |
| Movement LOS                    | E     | C     | B     | D     | C     | C     | D     | C     | C     | D     | D     | D     |
| d_A, Approach Delay [s/veh]     | 25.10 |       |       | 29.86 |       |       | 45.70 |       |       | 52.11 |       |       |
| Approach LOS                    | C     |       |       | C     |       |       | D     |       |       | D     |       |       |
| d_I, Intersection Delay [s/veh] | 30.39 |       |       |       |       |       |       |       |       |       |       |       |
| Intersection LOS                | C     |       |       |       |       |       |       |       |       |       |       |       |
| Intersection V/C                | 0.726 |       |       |       |       |       |       |       |       |       |       |       |

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 5: US-Route 395 (NS) at Luna Road (EW)**

|                  |            |                           |       |
|------------------|------------|---------------------------|-------|
| Control Type:    | Signalized | Delay (sec / veh):        | 51.2  |
| Analysis Method: | HCM 2010   | Level Of Service:         | D     |
| Analysis Period: | 15 minutes | Volume to Capacity (v/c): | 0.639 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Approach               | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| Lane Configuration     | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| 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      | 1      | 1          | 0      | 1      | 1         | 0      | 0      | 1         | 0      | 0      |
| Pocket Length [ft]     | 360.00     | 100.00 | 450.00 | 400.00     | 100.00 | 400.00 | 125.00    | 100.00 | 100.00 | 425.00    | 100.00 | 100.00 |
| Speed [mph]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | No         |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 91         | 1344   | 109    | 256        | 1225   | 88     | 83        | 114    | 61     | 50        | 123    | 241    |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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]            | 20         | 20     | 0      | 0          | 12     | 5      | 3         | 13     | 12     | 0         | 22     | 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]             | 111        | 1364   | 109    | 256        | 1237   | 93     | 86        | 127    | 73     | 50        | 145    | 241    |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| 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]          | 29         | 359    | 29     | 67         | 326    | 24     | 23        | 33     | 19     | 13        | 38     | 63     |
| Total Analysis Volume [veh/h]           | 117        | 1436   | 115    | 269        | 1302   | 98     | 91        | 134    | 77     | 53        | 153    | 254    |
| 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]          | 90                           |
| Coordination Type         | Time of Day Pattern Isolated |
| Actuation Type            | Fixed time                   |
| Offset [s]                | 0.0                          |
| Offset Reference          | LeadGreen                    |
| Permissive Mode           | SingleBand                   |
| Lost time [s]             | 2.00                         |

**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]            | 7        | 7       | 0       | 7        | 7       | 0       | 0       | 7       | 0       | 0       | 7       | 0       |
| Maximum Green [s]            | 30       | 30      | 0       | 30       | 30      | 0       | 0       | 30      | 0       | 0       | 30      | 0       |
| Amber [s]                    | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 0.0     | 3.0     | 0.0     | 0.0     | 3.0     | 0.0     |
| All red [s]                  | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 0.0     | 1.0     | 0.0     | 0.0     | 1.0     | 0.0     |
| Split [s]                    | 17       | 32      | 0       | 12       | 27      | 0       | 0       | 30      | 0       | 0       | 35      | 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        | 7       | 0       | 0        | 7       | 0       | 0       | 7       | 0       | 0       | 7       | 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]  | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 0.0     | 2.0     | 0.0     | 0.0     | 2.0     | 0.0     |
| Minimum Recall               | No       | No      |         | No       | No      |         |         | No      |         |         | No      |         |
| Maximum Recall               | No       | No      |         | No       | No      |         |         | No      |         |         | No      |         |
| Pedestrian Recall            | No       | No      |         | No       | No      |         |         | No      |         |         | No      |         |
| Detector Location [ft]       | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| Detector Length [ft]         | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| I, Upstream Filtering Factor | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    |

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

| Lane Group                              | L     | C     | R     | L     | C     | R     | L     | C     | R     | L     | C     |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| C, Cycle Length [s]                     | 90    | 90    | 90    | 90    | 90    | 90    | 90    | 90    | 90    | 90    | 90    |
| L, Total Lost Time per Cycle [s]        | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  |
| l1_p, Permitted Start-Up Lost Time [s]  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 2.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| l2, Clearance Lost Time [s]             | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 0.00  | 2.00  |
| g_i, Effective Green Time [s]           | 13    | 28    | 28    | 8     | 23    | 23    | 26    | 26    | 26    | 31    | 31    |
| g / C, Green / Cycle                    | 0.14  | 0.31  | 0.31  | 0.09  | 0.26  | 0.26  | 0.29  | 0.29  | 0.29  | 0.34  | 0.34  |
| (v / s)_i Volume / Saturation Flow Rate | 0.07  | 0.29  | 0.08  | 0.08  | 0.27  | 0.06  | 0.09  | 0.07  | 0.05  | 0.04  | 0.25  |
| s, saturation flow rate [veh/h]         | 1714  | 4903  | 1530  | 3329  | 4903  | 1530  | 994   | 1800  | 1530  | 1318  | 1621  |
| c, Capacity [veh/h]                     | 248   | 1525  | 476   | 296   | 1253  | 391   | 127   | 520   | 442   | 499   | 558   |
| d1, Uniform Delay [s]                   | 35.35 | 30.20 | 23.09 | 40.64 | 33.50 | 26.65 | 43.92 | 24.59 | 23.96 | 20.11 | 25.82 |
| k, delay calibration                    | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  |
| 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  |
| d2, Incremental Delay [s]               | 6.34  | 12.77 | 1.20  | 33.45 | 36.16 | 1.53  | 29.41 | 1.20  | 0.86  | 0.43  | 8.12  |
| d3, Initial Queue Delay [s]             | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| Rp, platoon ratio                       | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| PF, progression factor                  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |

**Lane Group Results**

|                                       |        |        |       |        |        |       |        |        |       |       |        |
|---------------------------------------|--------|--------|-------|--------|--------|-------|--------|--------|-------|-------|--------|
| X, volume / capacity                  | 0.47   | 0.94   | 0.24  | 0.91   | 1.04   | 0.25  | 0.72   | 0.26   | 0.17  | 0.11  | 0.73   |
| d, Delay for Lane Group [s/veh]       | 41.69  | 42.97  | 24.29 | 74.09  | 69.66  | 28.18 | 73.33  | 25.78  | 24.82 | 20.54 | 33.94  |
| Lane Group LOS                        | D      | D      | C     | E      | F      | C     | E      | C      | C     | C     | C      |
| Critical Lane Group                   | No     | Yes    | No    | Yes    | No     | No    | No     | No     | No    | No    | Yes    |
| 50th-Percentile Queue Length [veh/ln] | 2.76   | 11.51  | 1.94  | 4.29   | 13.02  | 1.81  | 3.05   | 2.33   | 1.31  | 0.80  | 8.60   |
| 50th-Percentile Queue Length [ft/ln]  | 69.00  | 287.72 | 48.54 | 107.14 | 325.48 | 45.33 | 76.19  | 58.23  | 32.82 | 19.95 | 214.95 |
| 95th-Percentile Queue Length [veh/ln] | 4.97   | 17.07  | 3.49  | 7.68   | 19.36  | 3.26  | 5.49   | 4.19   | 2.36  | 1.44  | 13.41  |
| 95th-Percentile Queue Length [ft/ln]  | 124.19 | 426.81 | 87.37 | 192.02 | 483.95 | 81.59 | 137.14 | 104.81 | 59.08 | 35.91 | 335.17 |

**Movement, Approach, & Intersection Results**

|                                 |       |       |       |       |       |       |       |       |       |       |       |       |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| d_M, Delay for Movement [s/veh] | 41.69 | 42.97 | 24.29 | 74.09 | 69.66 | 28.18 | 73.33 | 25.78 | 24.82 | 20.54 | 33.94 | 33.94 |
| Movement LOS                    | D     | D     | C     | E     | F     | C     | E     | C     | C     | C     | C     | C     |
| d_A, Approach Delay [s/veh]     | 41.59 |       |       | 67.94 |       |       | 39.86 |       |       | 32.39 |       |       |
| Approach LOS                    | D     |       |       | E     |       |       | D     |       |       | C     |       |       |
| d_I, Intersection Delay [s/veh] | 51.16 |       |       |       |       |       |       |       |       |       |       |       |
| Intersection LOS                | D     |       |       |       |       |       |       |       |       |       |       |       |
| Intersection V/C                | 0.639 |       |       |       |       |       |       |       |       |       |       |       |

**Sequence**

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



## TTM 16397

Vistro File: C:\...IPM.vistro

Scenario 8 Year (2040) With Project With Improvement

Report File: C:\...IPM LRpl.pdf

11/14/2019

**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  | Mesa View Drive (NS) at Dos Palmas Road (EW) | Final Base          | 8          | 27        | 68        | 18         | 24        | 0        | 0         | 12       | 0         | 53        | 9         | 36         | 255          |            |
|    |  | Growth Rate         | 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       | 30         | 0         | 11        | 0          | 0         | 0        | 0         | 0        | 74        | 18        | 19        | 131        | 0            | 283        |
|    |  | Other               | 0          | 0         | 0         | 0          | 0         | 0        | 0         | 0        | 0         | 0         | 0         | 0          | 0            | 0          |
|    |  | <b>Future Total</b> | <b>38</b>  | <b>27</b> | <b>79</b> | <b>18</b>  | <b>24</b> | <b>0</b> | <b>0</b>  | <b>0</b> | <b>86</b> | <b>18</b> | <b>72</b> | <b>140</b> | <b>36</b>    | <b>538</b> |

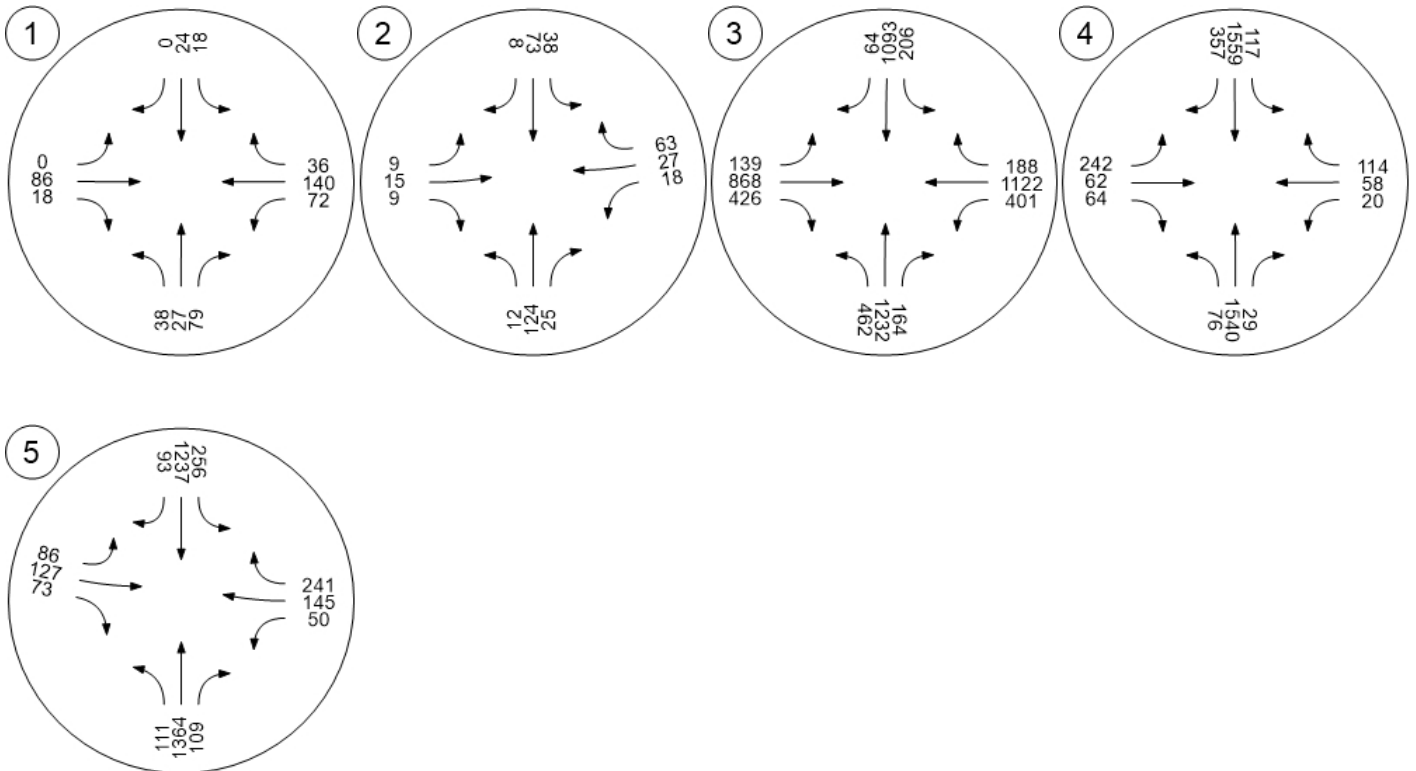
| ID | Intersection Name                      | Volume Type         | Northbound |            |           | Southbound |           |          | Eastbound |           |          | Westbound |           |           | Total Volume |   |
|----|--|---------------------|------------|------------|-----------|------------|-----------|----------|-----------|-----------|----------|-----------|-----------|-----------|--------------|---|
|    |  |                     | Left       | Thru       | Right     | Left       | Thru      | Right    | Left      | Thru      | Right    | Left      | Thru      | Right     |              |   |
| 2  | Mesa View Drive (NS) at Luna Road (EW) | Final Base          | 12         | 99         | 20        | 20         | 52        | 8        | 9         | 15        | 9        | 9         | 27        | 33        | 313          |   |
|    |  | Growth Rate         | 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          | 25         | 5         | 18         | 21        | 0        | 0         | 0         | 0        | 9         | 0         | 30        | 108          |   |
|    |  | Other               | 0          | 0          | 0         | 0          | 0         | 0        | 0         | 0         | 0        | 0         | 0         | 0         | 0            | 0 |
|    |  | <b>Future Total</b> | <b>12</b>  | <b>124</b> | <b>25</b> | <b>38</b>  | <b>73</b> | <b>8</b> | <b>9</b>  | <b>15</b> | <b>9</b> | <b>18</b> | <b>27</b> | <b>63</b> | <b>421</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  | US-Route 395 (NS) at Palmdale Road (EW) | Final Base          | 455        | 1205        | 135        | 206        | 1046        | 64        | 139        | 868        | 414        | 347        | 1122        | 188        | 6189         |
|    |   | Growth Rate         | 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       | 7          | 27          | 29         | 0          | 47          | 0         | 0          | 0          | 12         | 54         | 0           | 0          | 176          |
|    |   | Other               | 0          | 0           | 0          | 0          | 0           | 0         | 0          | 0          | 0          | 0          | 0           | 0          | 0            |
|    |   | <b>Future Total</b> | <b>462</b> | <b>1232</b> | <b>164</b> | <b>206</b> | <b>1093</b> | <b>64</b> | <b>139</b> | <b>868</b> | <b>426</b> | <b>401</b> | <b>1122</b> | <b>188</b> | <b>6365</b>  |

| ID | Intersection Name                         | Volume Type         | Northbound |             |           | Southbound |             |            | Eastbound  |           |           | Westbound |           |            | Total Volume |
|----|---|---------------------|------------|-------------|-----------|------------|-------------|------------|------------|-----------|-----------|-----------|-----------|------------|--------------|
|    |   |                     | Left       | Thru        | Right     | Left       | Thru        | Right      | Left       | Thru      | Right     | Left      | Thru      | Right      |              |
| 4  | US-Route 395 (NS) at Dos Palmas Road (EW) | Final Base          | 56         | 1537        | 29        | 117        | 1554        | 249        | 182        | 49        | 52        | 20        | 36        | 114        | 3995         |
|    |   | Growth Rate         | 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       | 20         | 3           | 0         | 0          | 5           | 108        | 60         | 13        | 12        | 0         | 22        | 0          | 243          |
|    |   | Other               | 0          | 0           | 0         | 0          | 0           | 0          | 0          | 0         | 0         | 0         | 0         | 0          | 0            |
|    |   | <b>Future Total</b> | <b>76</b>  | <b>1540</b> | <b>29</b> | <b>117</b> | <b>1559</b> | <b>357</b> | <b>242</b> | <b>62</b> | <b>64</b> | <b>20</b> | <b>58</b> | <b>114</b> | <b>4238</b>  |

| ID | Intersection Name                   | Volume Type         | Northbound |             |            | Southbound |             |           | Eastbound |            |           | Westbound |            |            | Total Volume |     |
|----|-------------------------------------|---------------------|------------|-------------|------------|------------|-------------|-----------|-----------|------------|-----------|-----------|------------|------------|--------------|-----|
|    |                                     |                     | Left       | Thru        | Right      | Left       | Thru        | Right     | Left      | Thru       | Right     | Left      | Thru       | Right      |              |     |
| 5  | US-Route 395 (NS) at Luna Road (EW) | Final Base          | 91         | 1344        | 109        | 256        | 1225        | 88        | 83        | 114        | 61        | 50        | 123        | 241        | 3785         |     |
|    |                                     | Growth Rate         | 1.00       | 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            | 0   |
|    |                                     | Net New Trips       | 20         | 20          | 0          | 0          | 12          | 5         | 3         | 13         | 12        | 0         | 22         | 0          | 0            | 107 |
|    |                                     | Other               | 0          | 0           | 0          | 0          | 0           | 0         | 0         | 0          | 0         | 0         | 0          | 0          | 0            | 0   |
|    |                                     | <b>Future Total</b> | <b>111</b> | <b>1364</b> | <b>109</b> | <b>256</b> | <b>1237</b> | <b>93</b> | <b>86</b> | <b>127</b> | <b>73</b> | <b>50</b> | <b>145</b> | <b>241</b> | <b>3892</b>  |     |

Traffic Volume - Future Total Volume





## TTM 16397

Vistro File: C:\...\IPM.vistro

Scenario 6 Year (2040) With Project

Report File: C:\...\IPM LRp.pdf

11/1/2019

**Intersection Analysis Summary**

| ID | Intersection Name                            | Control Type | Method   | Worst Mvmt | V/C   | Delay (s/veh) | LOS |
|----|--|--------------|----------|------------|-------|---------------|-----|
| 1  | Mesa View Drive (NS) at Dos Palmas Road (EW) | Two-way stop | HCM 2010 | SB Left    | 0.045 | 14.4          | B   |
| 2  | Mesa View Drive (NS) at Luna Road (EW)       | Two-way stop | HCM 2010 | EB Left    | 0.018 | 12.5          | B   |
| 3  | US-Route 395 (NS) at Palmdale Road (EW)      | Signalized   | HCM 2010 | NB Left    | 1.063 | 111.8         | F   |
| 4  | US-Route 395 (NS) at Dos Palmas Road (EW)    | Signalized   | HCM 2010 | SB Right   | 0.918 | 61.0          | E   |
| 5  | US-Route 395 (NS) at Luna Road (EW)          | Signalized   | HCM 2010 | SB Thru    | 0.838 | 132.2         | F   |

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: Mesa View Drive (NS) at Dos Palmas Road (EW)**

|                  |              |                           |       |
|------------------|--------------|---------------------------|-------|
| Control Type:    | Two-way stop | Delay (sec / veh):        | 14.4  |
| Analysis Method: | HCM 2010     | Level Of Service:         | B     |
| Analysis Period: | 15 minutes   | Volume to Capacity (v/c): | 0.045 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| 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      | 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]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | Yes        |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 8          | 27     | 68     | 18         | 24     | 0      | 0         | 12     | 0      | 53        | 9      | 36     |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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]            | 30         | 0      | 11     | 0          | 0      | 0      | 0         | 74     | 18     | 19        | 131    | 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]             | 38         | 27     | 79     | 18         | 24     | 0      | 0         | 86     | 18     | 72        | 140    | 36     |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| 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]          | 10         | 7      | 21     | 5          | 6      | 0      | 0         | 23     | 5      | 19        | 37     | 9      |
| Total Analysis Volume [veh/h]           | 40         | 28     | 83     | 19         | 25     | 0      | 0         | 91     | 19     | 76        | 147    | 38     |
| Pedestrian Volume [ped/h]               | 0          |        |        | 0          |        |        | 0         |        |        | 0         |        |        |

**Intersection Settings**

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

**Movement, Approach, & Intersection Results**

|                                       |       |       |       |       |       |      |      |      |      |      |      |      |
|---------------------------------------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|
| V/C, Movement V/C Ratio               | 0.08  | 0.06  | 0.09  | 0.05  | 0.05  | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 | 0.00 | 0.00 |
| d_M, Delay for Movement [s/veh]       | 13.82 | 13.95 | 10.30 | 14.38 | 13.14 | 9.90 | 7.57 | 0.00 | 0.00 | 7.54 | 0.00 | 0.00 |
| Movement LOS                          | B     | B     | B     | B     | B     | A    | A    | A    | A    | A    | A    | A    |
| 95th-Percentile Queue Length [veh/ln] | 0.86  | 0.86  | 0.86  | 0.32  | 0.32  | 0.32 | 0.00 | 0.00 | 0.00 | 0.15 | 0.15 | 0.15 |
| 95th-Percentile Queue Length [ft/ln]  | 21.47 | 21.47 | 21.47 | 7.91  | 7.91  | 7.91 | 0.00 | 0.00 | 0.00 | 3.80 | 3.80 | 3.80 |
| d_A, Approach Delay [s/veh]           | 11.91 |       |       | 13.67 |       |      | 0.00 |      |      | 2.20 |      |      |
| Approach LOS                          | B     |       |       | B     |       |      | A    |      |      | A    |      |      |
| d_I, Intersection Delay [s/veh]       | 5.25  |       |       |       |       |      |      |      |      |      |      |      |
| Intersection LOS                      | B     |       |       |       |       |      |      |      |      |      |      |      |

**Intersection Level Of Service Report**  
**Intersection 2: Mesa View Drive (NS) at Luna Road (EW)**

|                  |              |                           |       |
|------------------|--------------|---------------------------|-------|
| Control Type:    | Two-way stop | Delay (sec / veh):        | 12.5  |
| Analysis Method: | HCM 2010     | Level Of Service:         | B     |
| Analysis Period: | 15 minutes   | Volume to Capacity (v/c): | 0.018 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| 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      | 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]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | Yes        |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 12         | 99     | 20     | 20         | 52     | 8      | 9         | 15     | 9      | 9         | 27     | 33     |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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          | 25     | 5      | 18         | 21     | 0      | 0         | 0      | 0      | 9         | 0      | 30     |
| 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]             | 12         | 124    | 25     | 38         | 73     | 8      | 9         | 15     | 9      | 18        | 27     | 63     |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| 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]          | 3          | 33     | 7      | 10         | 19     | 2      | 2         | 4      | 2      | 5         | 7      | 17     |
| Total Analysis Volume [veh/h]           | 13         | 131    | 26     | 40         | 77     | 8      | 9         | 16     | 9      | 19        | 28     | 66     |
| Pedestrian Volume [ped/h]               | 0          |        |        | 0          |        |        | 0         |        |        | 0         |        |        |

**Intersection Settings**

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

**Movement, Approach, & Intersection Results**

|                                       |      |      |      |      |      |      |       |       |      |       |       |       |
|---------------------------------------|------|------|------|------|------|------|-------|-------|------|-------|-------|-------|
| V/C, Movement V/C Ratio               | 0.01 | 0.00 | 0.00 | 0.03 | 0.00 | 0.00 | 0.02  | 0.03  | 0.01 | 0.03  | 0.05  | 0.07  |
| d_M, Delay for Movement [s/veh]       | 7.38 | 0.00 | 0.00 | 7.58 | 0.00 | 0.00 | 12.47 | 11.78 | 9.00 | 12.13 | 12.26 | 9.86  |
| Movement LOS                          | A    | A    | A    | A    | A    | A    | B     | B     | A    | B     | B     | A     |
| 95th-Percentile Queue Length [veh/ln] | 0.02 | 0.02 | 0.02 | 0.08 | 0.08 | 0.08 | 0.18  | 0.18  | 0.18 | 0.55  | 0.55  | 0.55  |
| 95th-Percentile Queue Length [ft/ln]  | 0.60 | 0.60 | 0.60 | 2.04 | 2.04 | 2.04 | 4.40  | 4.40  | 4.40 | 13.66 | 13.66 | 13.66 |
| d_A, Approach Delay [s/veh]           | 0.56 |      |      | 2.43 |      |      | 11.23 |       |      | 10.84 |       |       |
| Approach LOS                          | A    |      |      | A    |      |      | B     |       |      | B     |       |       |
| d_I, Intersection Delay [s/veh]       | 4.54 |      |      |      |      |      |       |       |      |       |       |       |
| Intersection LOS                      | B    |      |      |      |      |      |       |       |      |       |       |       |

**Intersection Level Of Service Report**  
**Intersection 3: US-Route 395 (NS) at Palmdale Road (EW)**

|                  |            |                           |       |
|------------------|------------|---------------------------|-------|
| Control Type:    | Signalized | Delay (sec / veh):        | 111.8 |
| Analysis Method: | HCM 2010   | Level Of Service:         | F     |
| Analysis Period: | 15 minutes | Volume to Capacity (v/c): | 1.063 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Approach               | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
| Lane Configuration     | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| 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      | 1      | 1         | 0      | 0      | 1         | 0      | 2      |
| Pocket Length [ft]     | 120.00     | 100.00 | 100.00 | 350.00     | 100.00 | 370.00 | 140.00    | 100.00 | 100.00 | 250.00    | 100.00 | 450.00 |
| Speed [mph]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | Yes        |        |        | No         |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 455        | 1205   | 135    | 206        | 1046   | 64     | 139       | 868    | 414    | 347       | 1122   | 188    |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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]            | 7          | 27     | 29     | 0          | 47     | 0      | 0         | 0      | 12     | 54        | 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]             | 462        | 1232   | 164    | 206        | 1093   | 64     | 139       | 868    | 426    | 401       | 1122   | 188    |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| 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]          | 122        | 324    | 43     | 54         | 288    | 17     | 37        | 228    | 112    | 106       | 295    | 49     |
| Total Analysis Volume [veh/h]           | 486        | 1297   | 173    | 217        | 1151   | 67     | 146       | 914    | 448    | 422       | 1181   | 198    |
| 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]          | 150                          |
| Coordination Type         | Time of Day Pattern Isolated |
| Actuation Type            | Fixed time                   |
| Offset [s]                | 0.0                          |
| Offset Reference          | LeadGreen                    |
| Permissive Mode           | SingleBand                   |
| Lost time [s]             | 2.00                         |

**Phasing & Timing**

| Control Type                 | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss |
|------------------------------|----------|---------|---------|----------|---------|---------|----------|---------|---------|----------|---------|---------|
| Signal group                 | 5        | 2       | 0       | 1        | 6       | 0       | 3        | 8       | 0       | 7        | 4       | 0       |
| Auxiliary Signal Groups      |          |         |         |          |         |         |          |         |         |          |         |         |
| Lead / Lag                   | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       |
| Minimum Green [s]            | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       |
| Maximum Green [s]            | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       |
| Amber [s]                    | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| All red [s]                  | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     |
| Split [s]                    | 37       | 61      | 0       | 23       | 47      | 0       | 15       | 46      | 0       | 20       | 51      | 0       |
| Vehicle Extension [s]        | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| Walk [s]                     | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 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     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| I2, Clearance Lost Time [s]  | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| Minimum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Maximum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Pedestrian Recall            | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Detector Location [ft]       | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| Detector Length [ft]         | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| I, Upstream Filtering Factor | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    |

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

| Lane Group                              | L      | C     | R     | L     | C     | R     | L      | C     | R     | L      | C     | R     |
|---|--------|-------|-------|-------|-------|-------|--------|-------|-------|--------|-------|-------|
| C, Cycle Length [s]                     | 150    | 150   | 150   | 150   | 150   | 150   | 150    | 150   | 150   | 150    | 150   | 150   |
| L, Total Lost Time per Cycle [s]        | 4.00   | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00   | 4.00  | 4.00  | 4.00   | 4.00  | 4.00  |
| l1_p, Permitted Start-Up Lost Time [s]  | 0.00   | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00   | 0.00  | 0.00  | 0.00   | 0.00  | 0.00  |
| l2, Clearance Lost Time [s]             | 2.00   | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00   | 2.00  | 2.00  | 2.00   | 2.00  | 2.00  |
| g_i, Effective Green Time [s]           | 33     | 57    | 57    | 19    | 43    | 43    | 11     | 42    | 42    | 16     | 47    | 47    |
| g / C, Green / Cycle                    | 0.22   | 0.38  | 0.38  | 0.13  | 0.29  | 0.29  | 0.07   | 0.28  | 0.28  | 0.11   | 0.31  | 0.31  |
| (v / s)_i Volume / Saturation Flow Rate | 0.28   | 0.38  | 0.11  | 0.13  | 0.34  | 0.04  | 0.09   | 0.27  | 0.29  | 0.13   | 0.34  | 0.13  |
| s, saturation flow rate [veh/h]         | 1714   | 3427  | 1530  | 1714  | 3427  | 1530  | 1714   | 3427  | 1530  | 3329   | 3427  | 1530  |
| c, Capacity [veh/h]                     | 377    | 1302  | 581   | 217   | 982   | 439   | 126    | 960   | 428   | 355    | 1074  | 479   |
| d1, Uniform Delay [s]                   | 58.50  | 46.38 | 32.51 | 65.49 | 53.50 | 39.91 | 69.50  | 53.02 | 54.00 | 67.00  | 51.50 | 40.62 |
| k, delay calibration                    | 0.50   | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50   | 0.50  | 0.50  | 0.50   | 0.50  | 0.50  |
| 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]               | 148.52 | 23.98 | 1.31  | 60.91 | 88.15 | 0.74  | 130.12 | 19.61 | 55.94 | 109.52 | 58.97 | 2.62  |
| d3, Initial Queue Delay [s]             | 0.00   | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00   | 0.00  | 0.00  | 0.00   | 0.00  | 0.00  |
| Rp, platoon ratio                       | 1.00   | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00   | 1.00  | 1.00  | 1.00   | 1.00  | 1.00  |
| PF, progression factor                  | 1.00   | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00   | 1.00  | 1.00  | 1.00   | 1.00  | 1.00  |

**Lane Group Results**

|                                       |         |        |        |        |         |       |        |        |        |        |         |        |
|---------------------------------------|---------|--------|--------|--------|---------|-------|--------|--------|--------|--------|---------|--------|
| X, volume / capacity                  | 1.29    | 1.00   | 0.30   | 1.00   | 1.17    | 0.15  | 1.16   | 0.95   | 1.05   | 1.19   | 1.10    | 0.41   |
| d, Delay for Lane Group [s/veh]       | 207.02  | 70.37  | 33.81  | 126.40 | 141.65  | 40.65 | 199.62 | 72.63  | 109.94 | 176.52 | 110.47  | 43.24  |
| Lane Group LOS                        | F       | E      | C      | F      | F       | D     | F      | E      | F      | F      | F       | D      |
| Critical Lane Group                   | Yes     | No     | No     | No     | Yes     | No    | Yes    | No     | No     | No     | Yes     | No     |
| 50th-Percentile Queue Length [veh/ln] | 29.88   | 28.28  | 4.69   | 12.00  | 30.51   | 1.97  | 9.39   | 19.51  | 22.79  | 12.23  | 28.91   | 6.20   |
| 50th-Percentile Queue Length [ft/ln]  | 746.98  | 707.05 | 117.18 | 299.95 | 762.76  | 49.26 | 234.77 | 487.80 | 569.76 | 305.66 | 722.79  | 154.99 |
| 95th-Percentile Queue Length [veh/ln] | 44.22   | 37.00  | 8.24   | 17.68  | 43.53   | 3.55  | 15.16  | 26.76  | 31.50  | 19.20  | 40.14   | 10.28  |
| 95th-Percentile Queue Length [ft/ln]  | 1105.39 | 925.09 | 205.95 | 441.97 | 1088.33 | 88.67 | 378.88 | 668.91 | 787.60 | 479.99 | 1003.48 | 257.07 |

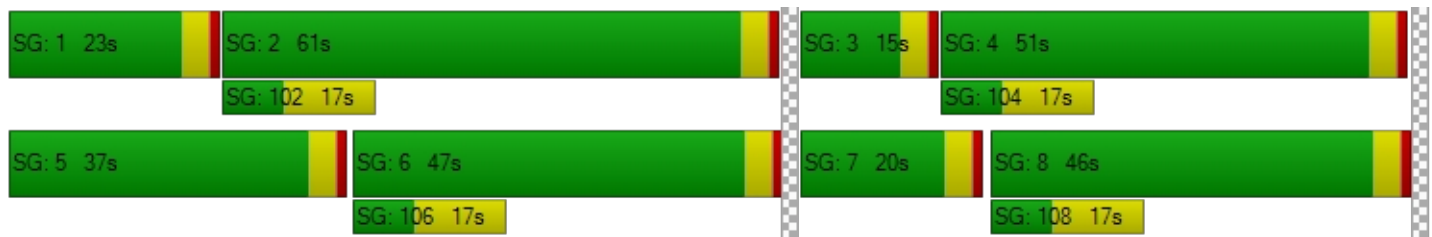


**Movement, Approach, & Intersection Results**

|                                 |        |       |       |        |        |       |        |       |        |        |        |       |
|---------------------------------|--------|-------|-------|--------|--------|-------|--------|-------|--------|--------|--------|-------|
| d_M, Delay for Movement [s/veh] | 207.02 | 70.37 | 33.81 | 126.40 | 141.65 | 40.65 | 199.62 | 72.63 | 109.94 | 176.52 | 110.47 | 43.24 |
| Movement LOS                    | F      | E     | C     | F      | F      | D     | F      | E     | F      | F      | F      | D     |
| d_A, Approach Delay [s/veh]     | 101.09 |       |       | 134.63 |        |       | 96.01  |       |        | 118.55 |        |       |
| Approach LOS                    | F      |       |       | F      |        |       | F      |       |        | F      |        |       |
| d_I, Intersection Delay [s/veh] | 111.82 |       |       |        |        |       |        |       |        |        |        |       |
| Intersection LOS                | F      |       |       |        |        |       |        |       |        |        |        |       |
| Intersection V/C                | 1.063  |       |       |        |        |       |        |       |        |        |        |       |

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 4: US-Route 395 (NS) at Dos Palmas Road (EW)**

|                  |            |                           |       |
|------------------|------------|---------------------------|-------|
| Control Type:    | Signalized | Delay (sec / veh):        | 61.0  |
| Analysis Method: | HCM 2010   | Level Of Service:         | E     |
| Analysis Period: | 15 minutes | Volume to Capacity (v/c): | 0.918 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Approach               | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
| Lane Configuration     | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| 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      | 1      | 1          | 0      | 0      | 1         | 0      | 1      | 1         | 0      | 0      |
| Pocket Length [ft]     | 480.00     | 100.00 | 250.00 | 300.00     | 100.00 | 100.00 | 160.00    | 100.00 | 470.00 | 100.00    | 100.00 | 100.00 |
| Speed [mph]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | No         |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 56         | 1537   | 29     | 117        | 1554   | 249    | 182       | 49     | 52     | 20        | 36     | 114    |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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]            | 20         | 3      | 0      | 0          | 5      | 108    | 60        | 13     | 12     | 0         | 22     | 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]             | 76         | 1540   | 29     | 117        | 1559   | 357    | 242       | 62     | 64     | 20        | 58     | 114    |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| 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]          | 20         | 405    | 8      | 31         | 410    | 94     | 64        | 16     | 17     | 5         | 15     | 30     |
| Total Analysis Volume [veh/h]           | 80         | 1621   | 31     | 123        | 1641   | 376    | 255       | 65     | 67     | 21        | 61     | 120    |
| 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]          | 140                          |
| Coordination Type         | Time of Day Pattern Isolated |
| Actuation Type            | Fully actuated               |
| Offset [s]                | 0.0                          |
| Offset Reference          | LeadGreen                    |
| Permissive Mode           | SingleBand                   |
| Lost time [s]             | 2.00                         |

**Phasing & Timing**

| Control Type                 | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss |
|------------------------------|----------|---------|---------|----------|---------|---------|----------|---------|---------|----------|---------|---------|
| Signal group                 | 5        | 2       | 0       | 1        | 6       | 0       | 3        | 8       | 0       | 7        | 4       | 0       |
| Auxiliary Signal Groups      |          |         |         |          |         |         |          |         |         |          |         |         |
| Lead / Lag                   | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       |
| Minimum Green [s]            | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       |
| Maximum Green [s]            | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       |
| Amber [s]                    | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| All red [s]                  | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     |
| Split [s]                    | 12       | 78      | 0       | 15       | 81      | 0       | 26       | 34      | 0       | 13       | 21      | 0       |
| Vehicle Extension [s]        | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| Walk [s]                     | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 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     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| I2, Clearance Lost Time [s]  | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| Minimum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Maximum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Pedestrian Recall            | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Detector Location [ft]       | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| Detector Length [ft]         | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| I, Upstream Filtering Factor | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    |

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

| Lane Group                              | L     | C     | R     | L     | C     | C     | L     | C     | R     | L     | C     |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| C, Cycle Length [s]                     | 140   | 140   | 140   | 140   | 140   | 140   | 140   | 140   | 140   | 140   | 140   |
| L, Total Lost Time per Cycle [s]        | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  |
| l1_p, Permitted Start-Up Lost Time [s]  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| l2, Clearance Lost Time [s]             | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  |
| g_i, Effective Green Time [s]           | 8     | 74    | 74    | 11    | 77    | 77    | 22    | 35    | 35    | 4     | 17    |
| g / C, Green / Cycle                    | 0.06  | 0.53  | 0.53  | 0.08  | 0.55  | 0.55  | 0.16  | 0.25  | 0.25  | 0.03  | 0.12  |
| (v / s)_i Volume / Saturation Flow Rate | 0.05  | 0.47  | 0.02  | 0.07  | 0.56  | 0.60  | 0.15  | 0.04  | 0.04  | 0.01  | 0.11  |
| s, saturation flow rate [veh/h]         | 1714  | 3427  | 1530  | 1714  | 1800  | 1689  | 1714  | 1800  | 1530  | 1714  | 1611  |
| c, Capacity [veh/h]                     | 98    | 1813  | 809   | 135   | 991   | 929   | 270   | 449   | 382   | 48    | 194   |
| d1, Uniform Delay [s]                   | 65.23 | 29.47 | 15.85 | 63.99 | 31.47 | 31.47 | 58.40 | 40.88 | 41.21 | 66.92 | 60.97 |
| k, delay calibration                    | 0.11  | 0.50  | 0.50  | 0.11  | 0.50  | 0.50  | 0.23  | 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  |
| d2, Incremental Delay [s]               | 14.61 | 7.28  | 0.09  | 19.61 | 33.20 | 55.35 | 25.70 | 0.15  | 0.22  | 6.00  | 17.27 |
| d3, Initial Queue Delay [s]             | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| Rp, platoon ratio                       | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| PF, progression factor                  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |

**Lane Group Results**

|                                       |        |        |       |        |         |         |        |       |       |       |        |
|---------------------------------------|--------|--------|-------|--------|---------|---------|--------|-------|-------|-------|--------|
| X, volume / capacity                  | 0.81   | 0.89   | 0.04  | 0.91   | 1.02    | 1.09    | 0.95   | 0.14  | 0.18  | 0.43  | 0.93   |
| d, Delay for Lane Group [s/veh]       | 79.85  | 36.75  | 15.94 | 83.60  | 64.67   | 86.82   | 84.10  | 41.03 | 41.43 | 72.91 | 78.24  |
| Lane Group LOS                        | E      | D      | B     | F      | F       | F       | F      | D     | D     | E     | E      |
| Critical Lane Group                   | Yes    | No     | No    | No     | No      | Yes     | Yes    | No    | No    | No    | Yes    |
| 50th-Percentile Queue Length [veh/ln] | 3.23   | 25.58  | 0.51  | 5.10   | 41.31   | 44.48   | 10.88  | 1.79  | 1.86  | 0.82  | 7.31   |
| 50th-Percentile Queue Length [ft/ln]  | 80.85  | 639.45 | 12.71 | 127.54 | 1032.86 | 1112.07 | 271.96 | 44.76 | 46.60 | 20.57 | 182.87 |
| 95th-Percentile Queue Length [veh/ln] | 5.82   | 33.87  | 0.92  | 8.81   | 52.67   | 59.28   | 16.29  | 3.22  | 3.36  | 1.48  | 11.75  |
| 95th-Percentile Queue Length [ft/ln]  | 145.53 | 846.81 | 22.88 | 220.14 | 1316.70 | 1481.99 | 407.19 | 80.56 | 83.89 | 37.03 | 293.76 |

**Movement, Approach, & Intersection Results**

|                                 |       |       |       |       |       |       |       |       |       |       |       |       |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| d_M, Delay for Movement [s/veh] | 79.85 | 36.75 | 15.94 | 83.60 | 73.21 | 86.82 | 84.10 | 41.03 | 41.43 | 72.91 | 78.24 | 78.24 |
| Movement LOS                    | E     | D     | B     | F     | E     | F     | F     | D     | D     | E     | E     | E     |
| d_A, Approach Delay [s/veh]     | 38.37 |       |       | 76.20 |       |       | 69.48 |       |       | 77.69 |       |       |
| Approach LOS                    | D     |       |       | E     |       |       | E     |       |       | E     |       |       |
| d_I, Intersection Delay [s/veh] | 61.00 |       |       |       |       |       |       |       |       |       |       |       |
| Intersection LOS                | E     |       |       |       |       |       |       |       |       |       |       |       |
| Intersection V/C                | 0.918 |       |       |       |       |       |       |       |       |       |       |       |

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 5: US-Route 395 (NS) at Luna Road (EW)**

|                  |            |                           |       |
|------------------|------------|---------------------------|-------|
| Control Type:    | Signalized | Delay (sec / veh):        | 132.2 |
| Analysis Method: | HCM 2010   | Level Of Service:         | F     |
| Analysis Period: | 15 minutes | Volume to Capacity (v/c): | 0.838 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Approach               | ⇌⇌⇌        |        |        | ⇌⇌⇌        |        |        | ⇌⇌⇌       |        |        | ⇌⇌⇌       |        |        |
| 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      | 1      | 1          | 0      | 1      | 1         | 0      | 0      | 1         | 0      | 0      |
| Pocket Length [ft]     | 360.00     | 100.00 | 450.00 | 400.00     | 100.00 | 400.00 | 125.00    | 100.00 | 100.00 | 425.00    | 100.00 | 100.00 |
| Speed [mph]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | No         |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 91         | 1344   | 109    | 256        | 1225   | 88     | 83        | 114    | 61     | 50        | 123    | 241    |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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]            | 20         | 20     | 0      | 0          | 12     | 5      | 3         | 13     | 12     | 0         | 22     | 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]             | 111        | 1364   | 109    | 256        | 1237   | 93     | 86        | 127    | 73     | 50        | 145    | 241    |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| 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]          | 29         | 359    | 29     | 67         | 326    | 24     | 23        | 33     | 19     | 13        | 38     | 63     |
| Total Analysis Volume [veh/h]           | 117        | 1436   | 115    | 269        | 1302   | 98     | 91        | 134    | 77     | 53        | 153    | 254    |
| 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]          | 150                          |
| Coordination Type         | Time of Day Pattern Isolated |
| Actuation Type            | Fixed time                   |
| Offset [s]                | 0.0                          |
| Offset Reference          | LeadGreen                    |
| Permissive Mode           | SingleBand                   |
| Lost time [s]             | 2.00                         |

**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]            | 7        | 7       | 0       | 7        | 7       | 0       | 0       | 7       | 0       | 0       | 7       | 0       |
| Maximum Green [s]            | 30       | 30      | 0       | 30       | 30      | 0       | 0       | 30      | 0       | 0       | 30      | 0       |
| Amber [s]                    | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 0.0     | 3.0     | 0.0     | 0.0     | 3.0     | 0.0     |
| All red [s]                  | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 0.0     | 1.0     | 0.0     | 0.0     | 1.0     | 0.0     |
| Split [s]                    | 37       | 61      | 0       | 23       | 47      | 0       | 0       | 46      | 0       | 0       | 51      | 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        | 7       | 0       | 0        | 7       | 0       | 0       | 7       | 0       | 0       | 7       | 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]  | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 0.0     | 2.0     | 0.0     | 0.0     | 2.0     | 0.0     |
| Minimum Recall               | No       | No      |         | No       | No      |         |         | No      |         |         | No      |         |
| Maximum Recall               | No       | No      |         | No       | No      |         |         | No      |         |         | No      |         |
| Pedestrian Recall            | No       | No      |         | No       | No      |         |         | No      |         |         | No      |         |
| Detector Location [ft]       | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| Detector Length [ft]         | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| I, Upstream Filtering Factor | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    |

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

| Lane Group                              | L     | C     | R     | L      | C      | R     | L      | C     | R     | L     | C     |
|---|-------|-------|-------|--------|--------|-------|--------|-------|-------|-------|-------|
| C, Cycle Length [s]                     | 150   | 150   | 150   | 150    | 150    | 150   | 150    | 150   | 150   | 150   | 150   |
| L, Total Lost Time per Cycle [s]        | 4.00  | 4.00  | 4.00  | 4.00   | 4.00   | 4.00  | 4.00   | 4.00  | 4.00  | 4.00  | 4.00  |
| l1_p, Permitted Start-Up Lost Time [s]  | 0.00  | 0.00  | 0.00  | 0.00   | 0.00   | 0.00  | 2.00   | 0.00  | 0.00  | 0.00  | 0.00  |
| l2, Clearance Lost Time [s]             | 2.00  | 2.00  | 2.00  | 2.00   | 2.00   | 2.00  | 2.00   | 2.00  | 2.00  | 0.00  | 2.00  |
| g_i, Effective Green Time [s]           | 33    | 57    | 57    | 19     | 43     | 43    | 42     | 42    | 42    | 47    | 47    |
| g / C, Green / Cycle                    | 0.22  | 0.38  | 0.38  | 0.13   | 0.29   | 0.29  | 0.28   | 0.28  | 0.28  | 0.31  | 0.31  |
| (v / s)_i Volume / Saturation Flow Rate | 0.07  | 0.42  | 0.08  | 0.16   | 0.38   | 0.06  | 0.09   | 0.07  | 0.05  | 0.04  | 0.25  |
| s, saturation flow rate [veh/h]         | 1714  | 3427  | 1530  | 1714   | 3427   | 1530  | 994    | 1800  | 1530  | 1303  | 1621  |
| c, Capacity [veh/h]                     | 377   | 1302  | 581   | 217    | 982    | 439   | 84     | 504   | 428   | 405   | 508   |
| d1, Uniform Delay [s]                   | 48.97 | 46.50 | 31.17 | 65.50  | 53.50  | 40.78 | 73.82  | 42.01 | 40.94 | 37.30 | 47.21 |
| k, delay calibration                    | 0.50  | 0.50  | 0.50  | 0.50   | 0.50   | 0.50  | 0.50   | 0.50  | 0.50  | 0.50  | 0.50  |
| 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  |
| d2, Incremental Delay [s]               | 2.13  | 58.01 | 0.76  | 140.38 | 153.48 | 1.18  | 121.21 | 1.29  | 0.92  | 0.67  | 12.52 |
| d3, Initial Queue Delay [s]             | 0.00  | 0.00  | 0.00  | 0.00   | 0.00   | 0.00  | 0.00   | 0.00  | 0.00  | 0.00  | 0.00  |
| Rp, platoon ratio                       | 1.00  | 1.00  | 1.00  | 1.00   | 1.00   | 1.00  | 1.00   | 1.00  | 1.00  | 1.00  | 1.00  |
| PF, progression factor                  | 1.00  | 1.00  | 1.00  | 1.00   | 1.00   | 1.00  | 1.00   | 1.00  | 1.00  | 1.00  | 1.00  |

**Lane Group Results**

|                                       |        |         |        |        |         |        |        |        |        |       |        |
|---------------------------------------|--------|---------|--------|--------|---------|--------|--------|--------|--------|-------|--------|
| X, volume / capacity                  | 0.31   | 1.10    | 0.20   | 1.24   | 1.33    | 0.22   | 1.08   | 0.27   | 0.18   | 0.13  | 0.80   |
| d, Delay for Lane Group [s/veh]       | 51.10  | 104.51  | 31.93  | 205.88 | 206.98  | 41.95  | 195.03 | 43.30  | 41.86  | 37.97 | 59.73  |
| Lane Group LOS                        | D      | F       | C      | F      | F       | D      | F      | D      | D      | D     | E      |
| Critical Lane Group                   | No     | Yes     | No     | Yes    | No      | No     | No     | No     | No     | No    | Yes    |
| 50th-Percentile Queue Length [veh/ln] | 3.94   | 34.60   | 2.98   | 16.80  | 39.42   | 2.95   | 6.11   | 4.11   | 2.31   | 1.48  | 15.75  |
| 50th-Percentile Queue Length [ft/ln]  | 98.56  | 864.88  | 74.42  | 419.95 | 985.61  | 73.84  | 152.72 | 102.65 | 57.70  | 37.05 | 393.67 |
| 95th-Percentile Queue Length [veh/ln] | 7.10   | 47.39   | 5.36   | 25.70  | 58.16   | 5.32   | 10.56  | 7.39   | 4.15   | 2.67  | 22.25  |
| 95th-Percentile Queue Length [ft/ln]  | 177.40 | 1184.83 | 133.95 | 642.48 | 1453.89 | 132.91 | 264.00 | 184.78 | 103.85 | 66.69 | 556.37 |

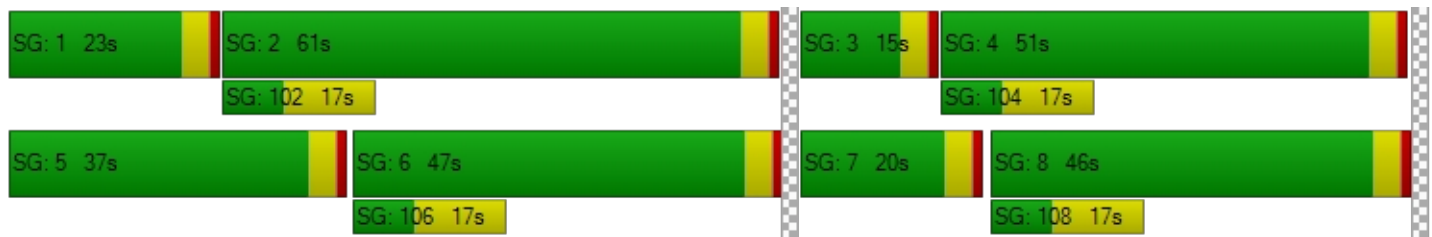


**Movement, Approach, & Intersection Results**

|                                 |        |        |       |        |        |       |        |       |       |       |       |       |
|---------------------------------|--------|--------|-------|--------|--------|-------|--------|-------|-------|-------|-------|-------|
| d_M, Delay for Movement [s/veh] | 51.10  | 104.51 | 31.93 | 205.88 | 206.98 | 41.95 | 195.03 | 43.30 | 41.86 | 37.97 | 59.73 | 59.73 |
| Movement LOS                    | D      | F      | C     | F      | F      | D     | F      | D     | D     | D     | E     | E     |
| d_A, Approach Delay [s/veh]     | 95.76  |        |       | 197.11 |        |       | 88.65  |       |       | 57.23 |       |       |
| Approach LOS                    | F      |        |       | F      |        |       | F      |       |       | E     |       |       |
| d_I, Intersection Delay [s/veh] | 132.18 |        |       |        |        |       |        |       |       |       |       |       |
| Intersection LOS                | F      |        |       |        |        |       |        |       |       |       |       |       |
| Intersection V/C                | 0.838  |        |       |        |        |       |        |       |       |       |       |       |

**Sequence**

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



## TTM 16397

Vistro File: C:\...IPM.vistro

Scenario 6 Year (2040) With Project

Report File: C:\...IPM LRp.pdf

11/1/2019

**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  | Mesa View Drive (NS) at Dos Palmas Road (EW) | Final Base          | 8          | 27        | 68        | 18         | 24        | 0        | 0         | 12       | 0         | 53        | 9         | 36         | 255          |            |
|    |  | Growth Rate         | 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       | 30         | 0         | 11        | 0          | 0         | 0        | 0         | 0        | 74        | 18        | 19        | 131        | 0            | 283        |
|    |  | Other               | 0          | 0         | 0         | 0          | 0         | 0        | 0         | 0        | 0         | 0         | 0         | 0          | 0            | 0          |
|    |  | <b>Future Total</b> | <b>38</b>  | <b>27</b> | <b>79</b> | <b>18</b>  | <b>24</b> | <b>0</b> | <b>0</b>  | <b>0</b> | <b>86</b> | <b>18</b> | <b>72</b> | <b>140</b> | <b>36</b>    | <b>538</b> |

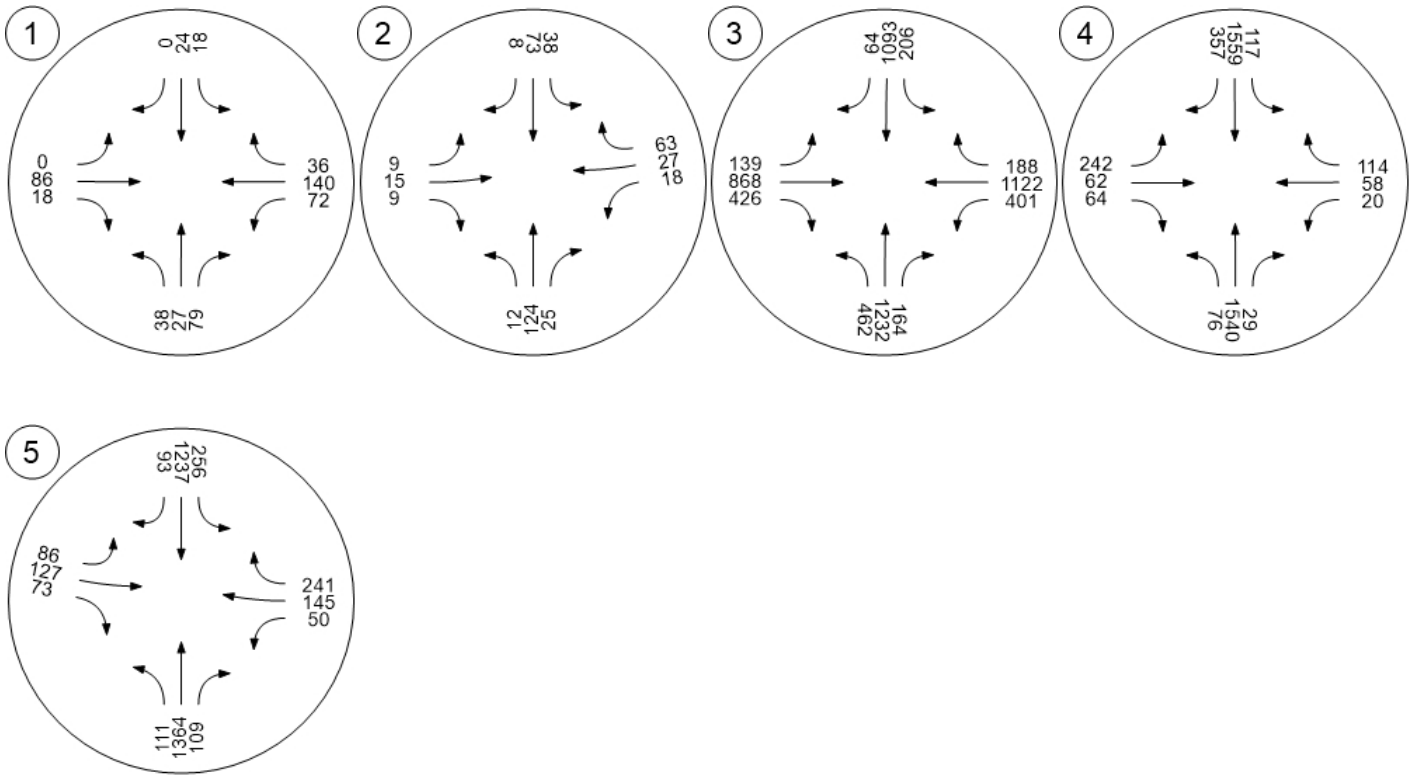
| ID | Intersection Name                      | Volume Type         | Northbound |            |           | Southbound |           |          | Eastbound |           |          | Westbound |           |           | Total Volume |   |
|----|--|---------------------|------------|------------|-----------|------------|-----------|----------|-----------|-----------|----------|-----------|-----------|-----------|--------------|---|
|    |  |                     | Left       | Thru       | Right     | Left       | Thru      | Right    | Left      | Thru      | Right    | Left      | Thru      | Right     |              |   |
| 2  | Mesa View Drive (NS) at Luna Road (EW) | Final Base          | 12         | 99         | 20        | 20         | 52        | 8        | 9         | 15        | 9        | 9         | 27        | 33        | 313          |   |
|    |  | Growth Rate         | 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          | 25         | 5         | 18         | 21        | 0        | 0         | 0         | 0        | 9         | 0         | 30        | 108          |   |
|    |  | Other               | 0          | 0          | 0         | 0          | 0         | 0        | 0         | 0         | 0        | 0         | 0         | 0         | 0            | 0 |
|    |  | <b>Future Total</b> | <b>12</b>  | <b>124</b> | <b>25</b> | <b>38</b>  | <b>73</b> | <b>8</b> | <b>9</b>  | <b>15</b> | <b>9</b> | <b>18</b> | <b>27</b> | <b>63</b> | <b>421</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  | US-Route 395 (NS) at Palmdale Road (EW) | Final Base          | 455        | 1205        | 135        | 206        | 1046        | 64        | 139        | 868        | 414        | 347        | 1122        | 188        | 6189         |
|    |   | Growth Rate         | 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       | 7          | 27          | 29         | 0          | 47          | 0         | 0          | 0          | 12         | 54         | 0           | 0          | 176          |
|    |   | Other               | 0          | 0           | 0          | 0          | 0           | 0         | 0          | 0          | 0          | 0          | 0           | 0          | 0            |
|    |   | <b>Future Total</b> | <b>462</b> | <b>1232</b> | <b>164</b> | <b>206</b> | <b>1093</b> | <b>64</b> | <b>139</b> | <b>868</b> | <b>426</b> | <b>401</b> | <b>1122</b> | <b>188</b> | <b>6365</b>  |

| ID | Intersection Name                         | Volume Type         | Northbound |             |           | Southbound |             |            | Eastbound  |           |           | Westbound |           |            | Total Volume |
|----|---|---------------------|------------|-------------|-----------|------------|-------------|------------|------------|-----------|-----------|-----------|-----------|------------|--------------|
|    |   |                     | Left       | Thru        | Right     | Left       | Thru        | Right      | Left       | Thru      | Right     | Left      | Thru      | Right      |              |
| 4  | US-Route 395 (NS) at Dos Palmas Road (EW) | Final Base          | 56         | 1537        | 29        | 117        | 1554        | 249        | 182        | 49        | 52        | 20        | 36        | 114        | 3995         |
|    |   | Growth Rate         | 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       | 20         | 3           | 0         | 0          | 5           | 108        | 60         | 13        | 12        | 0         | 22        | 0          | 243          |
|    |   | Other               | 0          | 0           | 0         | 0          | 0           | 0          | 0          | 0         | 0         | 0         | 0         | 0          | 0            |
|    |   | <b>Future Total</b> | <b>76</b>  | <b>1540</b> | <b>29</b> | <b>117</b> | <b>1559</b> | <b>357</b> | <b>242</b> | <b>62</b> | <b>64</b> | <b>20</b> | <b>58</b> | <b>114</b> | <b>4238</b>  |

| ID | Intersection Name                   | Volume Type         | Northbound |             |            | Southbound |             |           | Eastbound |            |           | Westbound |            |            | Total Volume |     |
|----|-------------------------------------|---------------------|------------|-------------|------------|------------|-------------|-----------|-----------|------------|-----------|-----------|------------|------------|--------------|-----|
|    |                                     |                     | Left       | Thru        | Right      | Left       | Thru        | Right     | Left      | Thru       | Right     | Left      | Thru       | Right      |              |     |
| 5  | US-Route 395 (NS) at Luna Road (EW) | Final Base          | 91         | 1344        | 109        | 256        | 1225        | 88        | 83        | 114        | 61        | 50        | 123        | 241        | 3785         |     |
|    |                                     | Growth Rate         | 1.00       | 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            | 0   |
|    |                                     | Net New Trips       | 20         | 20          | 0          | 0          | 12          | 5         | 3         | 13         | 12        | 0         | 22         | 0          | 0            | 107 |
|    |                                     | Other               | 0          | 0           | 0          | 0          | 0           | 0         | 0         | 0          | 0         | 0         | 0          | 0          | 0            | 0   |
|    |                                     | <b>Future Total</b> | <b>111</b> | <b>1364</b> | <b>109</b> | <b>256</b> | <b>1237</b> | <b>93</b> | <b>86</b> | <b>127</b> | <b>73</b> | <b>50</b> | <b>145</b> | <b>241</b> | <b>3892</b>  |     |

Traffic Volume - Future Total Volume



## TTM 16397

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

Scenario 8 Year (2040) With Project With Improvements

Report File: C:\...\IAM LRpl.pdf

11/14/2019

**Intersection Analysis Summary**

| ID | Intersection Name                            | Control Type | Method   | Worst Mvmt | V/C   | Delay (s/veh) | LOS |
|----|--|--------------|----------|------------|-------|---------------|-----|
| 1  | Mesa View Drive (NS) at Dos Palmas Road (EW) | Two-way stop | HCM 2010 | SB Left    | 0.024 | 11.0          | B   |
| 2  | Mesa View Drive (NS) at Luna Road (EW)       | Two-way stop | HCM 2010 | WB Thru    | 0.019 | 11.0          | B   |
| 3  | US-Route 395 (NS) at Palmdale Road (EW)      | Signalized   | HCM 2010 | NB Left    | 0.501 | 26.3          | C   |
| 4  | US-Route 395 (NS) at Dos Palmas Road (EW)    | Signalized   | HCM 2010 | WB Right   | 0.567 | 20.0          | C   |
| 5  | US-Route 395 (NS) at Luna Road (EW)          | Signalized   | HCM 2010 | EB Left    | 0.466 | 30.5          | 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: Mesa View Drive (NS) at Dos Palmas Road (EW)**

|                  |              |                           |       |
|------------------|--------------|---------------------------|-------|
| Control Type:    | Two-way stop | Delay (sec / veh):        | 11.0  |
| Analysis Method: | HCM 2010     | Level Of Service:         | B     |
| Analysis Period: | 15 minutes   | Volume to Capacity (v/c): | 0.024 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Approach               | +          |        |        | +          |        |        | +         |        |        | +         |        |        |
| 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      | 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]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | Yes        |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 0          | 5      | 52     | 14         | 12     | 0      | 0         | 8      | 3      | 14        | 5      | 3      |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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]            | 9          | 0      | 15     | 0          | 0      | 0      | 0         | 116    | 27     | 4         | 39     | 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]             | 9          | 5      | 67     | 14         | 12     | 0      | 0         | 124    | 30     | 18        | 44     | 3      |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| Other Adjustment Factor                 | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h]          | 2          | 1      | 18     | 4          | 3      | 0      | 0         | 33     | 8      | 5         | 12     | 1      |
| Total Analysis Volume [veh/h]           | 9          | 5      | 71     | 15         | 13     | 0      | 0         | 131    | 32     | 19        | 46     | 3      |
| Pedestrian Volume [ped/h]               | 0          |        |        | 0          |        |        | 0         |        |        | 0         |        |        |

**Intersection Settings**

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

**Movement, Approach, & Intersection Results**

|                                       |       |       |      |       |       |      |      |      |      |      |      |      |
|---------------------------------------|-------|-------|------|-------|-------|------|------|------|------|------|------|------|
| V/C, Movement V/C Ratio               | 0.01  | 0.01  | 0.08 | 0.02  | 0.02  | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 |
| d_M, Delay for Movement [s/veh]       | 10.59 | 10.91 | 9.44 | 11.05 | 10.81 | 8.77 | 7.29 | 0.00 | 0.00 | 7.56 | 0.00 | 0.00 |
| Movement LOS                          | B     | B     | A    | B     | B     | A    | A    | A    | A    | A    | A    | A    |
| 95th-Percentile Queue Length [veh/ln] | 0.33  | 0.33  | 0.33 | 0.14  | 0.14  | 0.14 | 0.00 | 0.00 | 0.00 | 0.04 | 0.04 | 0.04 |
| 95th-Percentile Queue Length [ft/ln]  | 8.20  | 8.20  | 8.20 | 3.46  | 3.46  | 3.46 | 0.00 | 0.00 | 0.00 | 0.96 | 0.96 | 0.96 |
| d_A, Approach Delay [s/veh]           | 9.64  |       |      | 10.94 |       |      | 0.00 |      |      | 2.11 |      |      |
| Approach LOS                          | A     |       |      | B     |       |      | A    |      |      | A    |      |      |
| d_I, Intersection Delay [s/veh]       | 3.69  |       |      |       |       |      |      |      |      |      |      |      |
| Intersection LOS                      | B     |       |      |       |       |      |      |      |      |      |      |      |

**Intersection Level Of Service Report**  
**Intersection 2: Mesa View Drive (NS) at Luna Road (EW)**

|                  |              |                           |       |
|------------------|--------------|---------------------------|-------|
| Control Type:    | Two-way stop | Delay (sec / veh):        | 11.0  |
| Analysis Method: | HCM 2010     | Level Of Service:         | B     |
| Analysis Period: | 15 minutes   | Volume to Capacity (v/c): | 0.019 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| 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      | 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]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | Yes        |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 8          | 44     | 11     | 14         | 58     | 2      | 3         | 18     | 3      | 11        | 11     | 9      |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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          | 12     | 6      | 27         | 19     | 0      | 0         | 0      | 0      | 1         | 0      | 9      |
| 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]             | 8          | 56     | 17     | 41         | 77     | 2      | 3         | 18     | 3      | 12        | 11     | 18     |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| Other Adjustment Factor                 | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h]          | 2          | 15     | 4      | 11         | 20     | 1      | 1         | 5      | 1      | 3         | 3      | 5      |
| Total Analysis Volume [veh/h]           | 8          | 59     | 18     | 43         | 81     | 2      | 3         | 19     | 3      | 13        | 12     | 19     |
| Pedestrian Volume [ped/h]               | 0          |        |        | 0          |        |        | 0         |        |        | 0         |        |        |



**Intersection Settings**

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

**Movement, Approach, & Intersection Results**

|                                       |      |      |      |      |      |      |       |       |      |       |       |      |
|---------------------------------------|------|------|------|------|------|------|-------|-------|------|-------|-------|------|
| V/C, Movement V/C Ratio               | 0.01 | 0.00 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00  | 0.03  | 0.00 | 0.02  | 0.02  | 0.02 |
| d_M, Delay for Movement [s/veh]       | 7.37 | 0.00 | 0.00 | 7.41 | 0.00 | 0.00 | 10.77 | 10.98 | 8.88 | 10.76 | 10.99 | 8.89 |
| Movement LOS                          | A    | A    | A    | A    | A    | A    | B     | B     | A    | B     | B     | A    |
| 95th-Percentile Queue Length [veh/ln] | 0.02 | 0.02 | 0.02 | 0.08 | 0.08 | 0.08 | 0.12  | 0.12  | 0.12 | 0.18  | 0.18  | 0.18 |
| 95th-Percentile Queue Length [ft/ln]  | 0.40 | 0.40 | 0.40 | 2.06 | 2.06 | 2.06 | 2.97  | 2.97  | 2.97 | 4.59  | 4.59  | 4.59 |
| d_A, Approach Delay [s/veh]           | 0.69 |      |      | 2.53 |      |      | 10.70 |       |      | 10.01 |       |      |
| Approach LOS                          | A    |      |      | A    |      |      | B     |       |      | B     |       |      |
| d_I, Intersection Delay [s/veh]       | 3.88 |      |      |      |      |      |       |       |      |       |       |      |
| Intersection LOS                      | B    |      |      |      |      |      |       |       |      |       |       |      |

**Intersection Level Of Service Report**  
**Intersection 3: US-Route 395 (NS) at Palmdale Road (EW)**

|                  |            |                           |       |
|------------------|------------|---------------------------|-------|
| Control Type:    | Signalized | Delay (sec / veh):        | 26.3  |
| Analysis Method: | HCM 2010   | Level Of Service:         | C     |
| Analysis Period: | 15 minutes | Volume to Capacity (v/c): | 0.501 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| 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      | 1      | 1         | 0      | 0      | 1         | 0      | 2      |
| Pocket Length [ft]     | 120.00     | 100.00 | 100.00 | 350.00     | 100.00 | 370.00 | 140.00    | 100.00 | 100.00 | 250.00    | 100.00 | 450.00 |
| Speed [mph]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | Yes        |        |        | No         |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 329        | 1022   | 117    | 129        | 740    | 52     | 83        | 699    | 438    | 129       | 508    | 86     |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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]            | 10         | 41     | 47     | 0          | 13     | 0      | 0         | 0      | 3      | 16        | 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]             | 339        | 1063   | 164    | 129        | 753    | 52     | 83        | 699    | 441    | 145       | 508    | 86     |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| 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]          | 89         | 280    | 43     | 34         | 198    | 14     | 22        | 184    | 116    | 38        | 134    | 23     |
| Total Analysis Volume [veh/h]           | 357        | 1119   | 173    | 136        | 793    | 55     | 87        | 736    | 464    | 153       | 535    | 91     |
| 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            | Fixed time                   |
| Offset [s]                | 0.0                          |
| Offset Reference          | LeadGreen                    |
| Permissive Mode           | SingleBand                   |
| Lost time [s]             | 2.00                         |

**Phasing & Timing**

| Control Type                 | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss |
|------------------------------|----------|---------|---------|----------|---------|---------|----------|---------|---------|----------|---------|---------|
| Signal group                 | 5        | 2       | 0       | 1        | 6       | 0       | 3        | 8       | 0       | 7        | 4       | 0       |
| Auxiliary Signal Groups      |          |         |         |          |         |         |          |         |         |          |         |         |
| Lead / Lag                   | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       |
| Minimum Green [s]            | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       |
| Maximum Green [s]            | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       |
| Amber [s]                    | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| All red [s]                  | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     |
| Split [s]                    | 14       | 25      | 0       | 11       | 22      | 0       | 11       | 23      | 0       | 11       | 23      | 0       |
| Vehicle Extension [s]        | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| Walk [s]                     | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 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     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| I2, Clearance Lost Time [s]  | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| Minimum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Maximum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Pedestrian Recall            | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Detector Location [ft]       | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| Detector Length [ft]         | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| I, Upstream Filtering Factor | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    |

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

| Lane Group                              | L     | C     | R     | L     | C     | R     | L     | C     | R     | L     | C     | R     |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| C, Cycle Length [s]                     | 70    | 70    | 70    | 70    | 70    | 70    | 70    | 70    | 70    | 70    | 70    | 70    |
| L, Total Lost Time per Cycle [s]        | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  |
| l1_p, Permitted Start-Up Lost Time [s]  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| l2, Clearance Lost Time [s]             | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  |
| g_i, Effective Green Time [s]           | 10    | 21    | 21    | 7     | 18    | 18    | 7     | 19    | 19    | 7     | 19    | 19    |
| g / C, Green / Cycle                    | 0.14  | 0.30  | 0.30  | 0.10  | 0.26  | 0.26  | 0.10  | 0.27  | 0.27  | 0.10  | 0.27  | 0.27  |
| (v / s)_i Volume / Saturation Flow Rate | 0.11  | 0.23  | 0.11  | 0.04  | 0.16  | 0.04  | 0.03  | 0.15  | 0.17  | 0.05  | 0.11  | 0.06  |
| s, saturation flow rate [veh/h]         | 3329  | 4903  | 1530  | 3329  | 4903  | 1530  | 3329  | 4903  | 2708  | 3329  | 4903  | 1530  |
| c, Capacity [veh/h]                     | 476   | 1471  | 459   | 333   | 1261  | 393   | 333   | 1331  | 735   | 333   | 1331  | 415   |
| d1, Uniform Delay [s]                   | 28.80 | 22.22 | 19.34 | 29.56 | 23.04 | 20.03 | 29.11 | 21.86 | 22.42 | 29.72 | 20.85 | 19.75 |
| k, delay calibration                    | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  |
| 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]               | 10.42 | 3.76  | 2.35  | 3.68  | 2.39  | 0.74  | 1.90  | 1.66  | 4.09  | 4.51  | 0.91  | 1.21  |
| 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                  | 0.75   | 0.76   | 0.38   | 0.41  | 0.63   | 0.14  | 0.26  | 0.55   | 0.63   | 0.46  | 0.40   | 0.22  |
| d, Delay for Lane Group [s/veh]       | 39.23  | 25.98  | 21.69  | 33.24 | 25.43  | 20.78 | 31.01 | 23.52  | 26.51  | 34.23 | 21.76  | 20.97 |
| Lane Group LOS                        | D      | C      | C      | C     | C      | C     | C     | C      | C      | C     | C      | C     |
| Critical Lane Group                   | No     | Yes    | No     | Yes   | No     | No    | No    | No     | Yes    | Yes   | No     | No    |
| 50th-Percentile Queue Length [veh/ln] | 3.44   | 5.70   | 2.39   | 1.21  | 3.92   | 0.74  | 0.74  | 3.46   | 3.58   | 1.38  | 2.37   | 1.23  |
| 50th-Percentile Queue Length [ft/ln]  | 86.11  | 142.41 | 59.81  | 30.16 | 98.10  | 18.52 | 18.52 | 86.53  | 89.41  | 34.52 | 59.25  | 30.79 |
| 95th-Percentile Queue Length [veh/ln] | 6.20   | 9.61   | 4.31   | 2.17  | 7.06   | 1.33  | 1.33  | 6.23   | 6.44   | 2.49  | 4.27   | 2.22  |
| 95th-Percentile Queue Length [ft/ln]  | 154.99 | 240.26 | 107.65 | 54.29 | 176.57 | 33.33 | 33.34 | 155.76 | 160.94 | 62.13 | 106.66 | 55.42 |

**Movement, Approach, & Intersection Results**

|                                 |       |       |       |       |       |       |       |       |       |       |       |       |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| d_M, Delay for Movement [s/veh] | 39.23 | 25.98 | 21.69 | 33.24 | 25.43 | 20.78 | 31.01 | 23.52 | 26.51 | 34.23 | 21.76 | 20.97 |
| Movement LOS                    | D     | C     | C     | C     | C     | C     | C     | C     | C     | C     | C     | C     |
| d_A, Approach Delay [s/veh]     | 28.40 |       |       | 26.25 |       |       | 25.10 |       |       | 24.12 |       |       |
| Approach LOS                    | C     |       |       | C     |       |       | C     |       |       | C     |       |       |
| d_I, Intersection Delay [s/veh] | 26.34 |       |       |       |       |       |       |       |       |       |       |       |
| Intersection LOS                | C     |       |       |       |       |       |       |       |       |       |       |       |
| Intersection V/C                | 0.501 |       |       |       |       |       |       |       |       |       |       |       |

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 4: US-Route 395 (NS) at Dos Palmas Road (EW)**

|                  |            |                           |       |
|------------------|------------|---------------------------|-------|
| Control Type:    | Signalized | Delay (sec / veh):        | 20.0  |
| Analysis Method: | HCM 2010   | Level Of Service:         | C     |
| Analysis Period: | 15 minutes | Volume to Capacity (v/c): | 0.567 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Approach               | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
| Lane Configuration     | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| 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      | 1      | 1          | 0      | 0      | 1         | 0      | 1      | 1         | 0      | 0      |
| Pocket Length [ft]     | 480.00     | 100.00 | 250.00 | 300.00     | 100.00 | 100.00 | 160.00    | 100.00 | 470.00 | 100.00    | 100.00 | 100.00 |
| Speed [mph]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | No         |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 11         | 1261   | 11     | 71         | 1231   | 77     | 150       | 35     | 65     | 36        | 11     | 109    |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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          | 4      | 0      | 0          | 1      | 31     | 94        | 19     | 18     | 0         | 6      | 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]             | 17         | 1265   | 11     | 71         | 1232   | 108    | 244       | 54     | 83     | 36        | 17     | 109    |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| Other Adjustment Factor                 | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h]          | 4          | 333    | 3      | 19         | 324    | 28     | 64        | 14     | 22     | 9         | 4      | 29     |
| Total Analysis Volume [veh/h]           | 18         | 1332   | 12     | 75         | 1297   | 114    | 257       | 57     | 87     | 38        | 18     | 115    |
| 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]             | 2.00                         |

**Phasing & Timing**

| Control Type                 | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss |
|------------------------------|----------|---------|---------|----------|---------|---------|----------|---------|---------|----------|---------|---------|
| Signal group                 | 5        | 2       | 0       | 1        | 6       | 0       | 3        | 8       | 0       | 7        | 4       | 0       |
| Auxiliary Signal Groups      |          |         |         |          |         |         |          |         |         |          |         |         |
| Lead / Lag                   | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       |
| Minimum Green [s]            | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       |
| Maximum Green [s]            | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       |
| Amber [s]                    | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| All red [s]                  | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     |
| Split [s]                    | 11       | 21      | 0       | 11       | 21      | 0       | 16       | 25      | 0       | 13       | 22      | 0       |
| Vehicle Extension [s]        | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| Walk [s]                     | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 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     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| I2, Clearance Lost Time [s]  | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| Minimum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Maximum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Pedestrian Recall            | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Detector Location [ft]       | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| Detector Length [ft]         | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| I, Upstream Filtering Factor | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    |

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

| Lane Group                              | L     | C     | R     | L     | C     | C     | L     | C     | R     | L     | C     |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| C, Cycle Length [s]                     | 70    | 70    | 70    | 70    | 70    | 70    | 70    | 70    | 70    | 70    | 70    |
| L, Total Lost Time per Cycle [s]        | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  |
| l1_p, Permitted Start-Up Lost Time [s]  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| l2, Clearance Lost Time [s]             | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  |
| g_i, Effective Green Time [s]           | 2     | 29    | 29    | 5     | 32    | 32    | 12    | 16    | 16    | 4     | 8     |
| g / C, Green / Cycle                    | 0.03  | 0.42  | 0.42  | 0.08  | 0.46  | 0.46  | 0.17  | 0.23  | 0.23  | 0.05  | 0.11  |
| (v / s)_i Volume / Saturation Flow Rate | 0.01  | 0.27  | 0.01  | 0.04  | 0.26  | 0.26  | 0.15  | 0.03  | 0.06  | 0.02  | 0.09  |
| s, saturation flow rate [veh/h]         | 1714  | 4903  | 1530  | 1714  | 3808  | 1721  | 1714  | 1800  | 1530  | 1714  | 1562  |
| c, Capacity [veh/h]                     | 54    | 2029  | 633   | 135   | 1755  | 793   | 295   | 406   | 345   | 93    | 169   |
| d1, Uniform Delay [s]                   | 33.29 | 16.57 | 12.17 | 31.19 | 13.71 | 13.71 | 28.34 | 21.76 | 22.34 | 32.12 | 30.55 |
| 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  |
| 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  |
| d2, Incremental Delay [s]               | 3.53  | 1.68  | 0.05  | 3.56  | 1.27  | 2.78  | 7.95  | 0.16  | 0.38  | 2.84  | 7.92  |
| d3, Initial Queue Delay [s]             | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| Rp, platoon ratio                       | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| PF, progression factor                  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |

**Lane Group Results**

|                                       |       |        |       |       |        |        |        |       |       |       |        |
|---------------------------------------|-------|--------|-------|-------|--------|--------|--------|-------|-------|-------|--------|
| X, volume / capacity                  | 0.33  | 0.66   | 0.02  | 0.56  | 0.55   | 0.55   | 0.87   | 0.14  | 0.25  | 0.41  | 0.79   |
| d, Delay for Lane Group [s/veh]       | 36.83 | 18.25  | 12.22 | 34.74 | 14.98  | 16.49  | 36.29  | 21.92 | 22.72 | 34.97 | 38.47  |
| Lane Group LOS                        | D     | B      | B     | C     | B      | B      | D      | C     | C     | C     | D      |
| Critical Lane Group                   | No    | Yes    | No    | Yes   | No     | No     | Yes    | No    | No    | No    | Yes    |
| 50th-Percentile Queue Length [veh/ln] | 0.34  | 5.50   | 0.11  | 1.32  | 5.26   | 5.09   | 4.66   | 0.74  | 1.16  | 0.68  | 2.48   |
| 50th-Percentile Queue Length [ft/ln]  | 8.60  | 137.49 | 2.81  | 32.90 | 131.44 | 127.15 | 116.42 | 18.40 | 29.06 | 16.95 | 62.01  |
| 95th-Percentile Queue Length [veh/ln] | 0.62  | 9.35   | 0.20  | 2.37  | 9.02   | 8.78   | 8.20   | 1.33  | 2.09  | 1.22  | 4.46   |
| 95th-Percentile Queue Length [ft/ln]  | 15.49 | 233.64 | 5.06  | 59.22 | 225.44 | 219.61 | 204.89 | 33.13 | 52.30 | 30.52 | 111.62 |

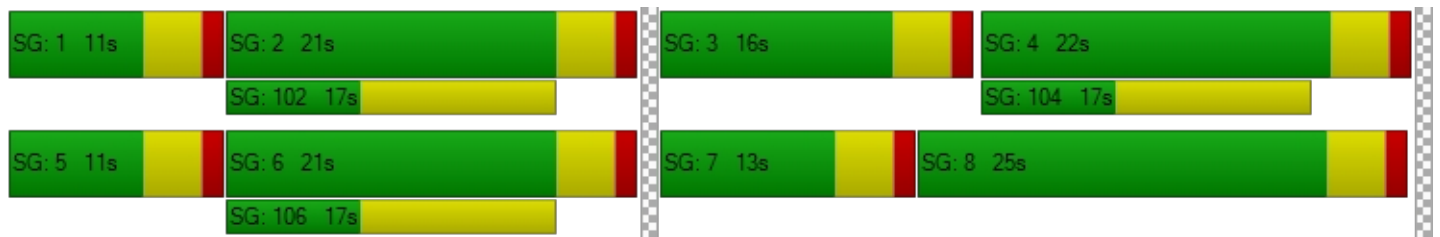


**Movement, Approach, & Intersection Results**

|                                 |       |       |       |       |       |       |       |       |       |       |       |       |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| d_M, Delay for Movement [s/veh] | 36.83 | 18.25 | 12.22 | 34.74 | 15.36 | 16.49 | 36.29 | 21.92 | 22.72 | 34.97 | 38.47 | 38.47 |
| Movement LOS                    | D     | B     | B     | C     | B     | B     | D     | C     | C     | C     | D     | D     |
| d_A, Approach Delay [s/veh]     | 18.44 |       |       | 16.42 |       |       | 31.30 |       |       | 37.69 |       |       |
| Approach LOS                    | B     |       |       | B     |       |       | C     |       |       | D     |       |       |
| d_I, Intersection Delay [s/veh] | 20.04 |       |       |       |       |       |       |       |       |       |       |       |
| Intersection LOS                | C     |       |       |       |       |       |       |       |       |       |       |       |
| Intersection V/C                | 0.567 |       |       |       |       |       |       |       |       |       |       |       |

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 5: US-Route 395 (NS) at Luna Road (EW)**

|                  |            |                           |       |
|------------------|------------|---------------------------|-------|
| Control Type:    | Signalized | Delay (sec / veh):        | 30.5  |
| Analysis Method: | HCM 2010   | Level Of Service:         | C     |
| Analysis Period: | 15 minutes | Volume to Capacity (v/c): | 0.466 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Approach               | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| Lane Configuration     | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| 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      | 1      | 1          | 0      | 1      | 1         | 0      | 0      | 1         | 0      | 0      |
| Pocket Length [ft]     | 360.00     | 100.00 | 450.00 | 400.00     | 100.00 | 400.00 | 125.00    | 100.00 | 100.00 | 425.00    | 100.00 | 100.00 |
| Speed [mph]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | No         |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 33         | 987    | 55     | 182        | 1076   | 24     | 67        | 79     | 68     | 76        | 45     | 221    |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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          | 6      | 0      | 0          | 18     | 1      | 4         | 19     | 18     | 0         | 6      | 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]             | 39         | 993    | 55     | 182        | 1094   | 25     | 71        | 98     | 86     | 76        | 51     | 221    |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| 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]          | 10         | 261    | 14     | 48         | 288    | 7      | 19        | 26     | 23     | 20        | 13     | 58     |
| Total Analysis Volume [veh/h]           | 41         | 1045   | 58     | 192        | 1152   | 26     | 75        | 103    | 91     | 80        | 54     | 233    |
| 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            | Fixed time                   |
| Offset [s]                | 0.0                          |
| Offset Reference          | LeadGreen                    |
| Permissive Mode           | SingleBand                   |
| Lost time [s]             | 2.00                         |

**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]            | 7        | 7       | 0       | 7        | 7       | 0       | 0       | 7       | 0       | 0       | 7       | 0       |
| Maximum Green [s]            | 30       | 30      | 0       | 30       | 30      | 0       | 0       | 30      | 0       | 0       | 30      | 0       |
| Amber [s]                    | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 0.0     | 3.0     | 0.0     | 0.0     | 3.0     | 0.0     |
| All red [s]                  | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 0.0     | 1.0     | 0.0     | 0.0     | 1.0     | 0.0     |
| Split [s]                    | 14       | 25      | 0       | 11       | 22      | 0       | 0       | 23      | 0       | 0       | 23      | 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        | 7       | 0       | 0        | 7       | 0       | 0       | 7       | 0       | 0       | 7       | 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]  | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 0.0     | 2.0     | 0.0     | 0.0     | 2.0     | 0.0     |
| Minimum Recall               | No       | No      |         | No       | No      |         |         | No      |         |         | No      |         |
| Maximum Recall               | No       | No      |         | No       | No      |         |         | No      |         |         | No      |         |
| Pedestrian Recall            | No       | No      |         | No       | No      |         |         | No      |         |         | No      |         |
| Detector Location [ft]       | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| Detector Length [ft]         | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| I, Upstream Filtering Factor | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    |

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

| Lane Group                              | L     | C     | R     | L     | C     | R     | L     | C     | R     | L     | C     |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| C, Cycle Length [s]                     | 70    | 70    | 70    | 70    | 70    | 70    | 70    | 70    | 70    | 70    | 70    |
| L, Total Lost Time per Cycle [s]        | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  |
| l1_p, Permitted Start-Up Lost Time [s]  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 2.00  | 0.00  | 0.00  | 2.00  | 0.00  |
| l2, Clearance Lost Time [s]             | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  |
| g_i, Effective Green Time [s]           | 10    | 21    | 21    | 7     | 18    | 18    | 19    | 19    | 19    | 19    | 19    |
| g / C, Green / Cycle                    | 0.14  | 0.30  | 0.30  | 0.10  | 0.26  | 0.26  | 0.27  | 0.27  | 0.27  | 0.27  | 0.27  |
| (v / s)_i Volume / Saturation Flow Rate | 0.02  | 0.21  | 0.04  | 0.06  | 0.23  | 0.02  | 0.07  | 0.06  | 0.06  | 0.06  | 0.18  |
| s, saturation flow rate [veh/h]         | 1714  | 4903  | 1530  | 3329  | 4903  | 1530  | 1109  | 1800  | 1530  | 1312  | 1574  |
| c, Capacity [veh/h]                     | 245   | 1471  | 459   | 333   | 1261  | 393   | 192   | 489   | 415   | 363   | 427   |
| d1, Uniform Delay [s]                   | 26.34 | 21.80 | 17.83 | 30.09 | 25.25 | 19.65 | 31.74 | 19.71 | 19.75 | 23.94 | 22.72 |
| k, delay calibration                    | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  |
| 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  |
| d2, Incremental Delay [s]               | 1.47  | 2.94  | 0.57  | 7.10  | 11.63 | 0.32  | 5.88  | 0.98  | 1.21  | 1.39  | 8.16  |
| d3, Initial Queue Delay [s]             | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| Rp, platoon ratio                       | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| PF, progression factor                  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |

**Lane Group Results**

|                                       |       |        |       |       |        |       |       |       |       |       |        |
|---------------------------------------|-------|--------|-------|-------|--------|-------|-------|-------|-------|-------|--------|
| X, volume / capacity                  | 0.17  | 0.71   | 0.13  | 0.58  | 0.91   | 0.07  | 0.39  | 0.21  | 0.22  | 0.22  | 0.67   |
| d, Delay for Lane Group [s/veh]       | 27.82 | 24.73  | 18.39 | 37.19 | 36.88  | 19.97 | 37.62 | 20.69 | 20.97 | 25.33 | 30.88  |
| Lane Group LOS                        | C     | C      | B     | D     | D      | B     | D     | C     | C     | C     | C      |
| Critical Lane Group                   | No    | Yes    | No    | Yes   | No     | No    | No    | No    | No    | No    | Yes    |
| 50th-Percentile Queue Length [veh/ln] | 0.68  | 5.15   | 0.72  | 1.82  | 7.16   | 0.34  | 1.52  | 1.37  | 1.23  | 1.22  | 4.93   |
| 50th-Percentile Queue Length [ft/ln]  | 16.98 | 128.71 | 17.97 | 45.43 | 179.00 | 8.53  | 37.99 | 34.15 | 30.79 | 30.56 | 123.22 |
| 95th-Percentile Queue Length [veh/ln] | 1.22  | 8.87   | 1.29  | 3.27  | 11.55  | 0.61  | 2.74  | 2.46  | 2.22  | 2.20  | 8.57   |
| 95th-Percentile Queue Length [ft/ln]  | 30.56 | 221.74 | 32.35 | 81.78 | 288.71 | 15.35 | 68.39 | 61.46 | 55.42 | 55.01 | 214.25 |

**Movement, Approach, & Intersection Results**

|                                 |       |       |       |       |       |       |       |       |       |       |       |       |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| d_M, Delay for Movement [s/veh] | 27.82 | 24.73 | 18.39 | 37.19 | 36.88 | 19.97 | 37.62 | 20.69 | 20.97 | 25.33 | 30.88 | 30.88 |
| Movement LOS                    | C     | C     | B     | D     | D     | B     | D     | C     | C     | C     | C     | C     |
| d_A, Approach Delay [s/veh]     | 24.52 |       |       | 36.60 |       |       | 25.50 |       |       | 29.67 |       |       |
| Approach LOS                    | C     |       |       | D     |       |       | C     |       |       | C     |       |       |
| d_I, Intersection Delay [s/veh] | 30.46 |       |       |       |       |       |       |       |       |       |       |       |
| Intersection LOS                | C     |       |       |       |       |       |       |       |       |       |       |       |
| Intersection V/C                | 0.466 |       |       |       |       |       |       |       |       |       |       |       |

**Sequence**

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



TTM 16397

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Scenario 8 Year (2040) With Project With Improvements

Report File: C:\...IAM LRpl.pdf

11/14/2019

**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  | Mesa View Drive (NS) at Dos Palmas Road (EW) | Final Base          | 0          | 5        | 52        | 14         | 12        | 0        | 0         | 8          | 3         | 14        | 5         | 3        | 116          |
|    |  | Growth Rate         | 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       | 9          | 0        | 15        | 0          | 0         | 0        | 0         | 116        | 27        | 4         | 39        | 0        | 210          |
|    |  | Other               | 0          | 0        | 0         | 0          | 0         | 0        | 0         | 0          | 0         | 0         | 0         | 0        | 0            |
|    |  | <b>Future Total</b> | <b>9</b>   | <b>5</b> | <b>67</b> | <b>14</b>  | <b>12</b> | <b>0</b> | <b>0</b>  | <b>124</b> | <b>30</b> | <b>18</b> | <b>44</b> | <b>3</b> | <b>326</b>   |

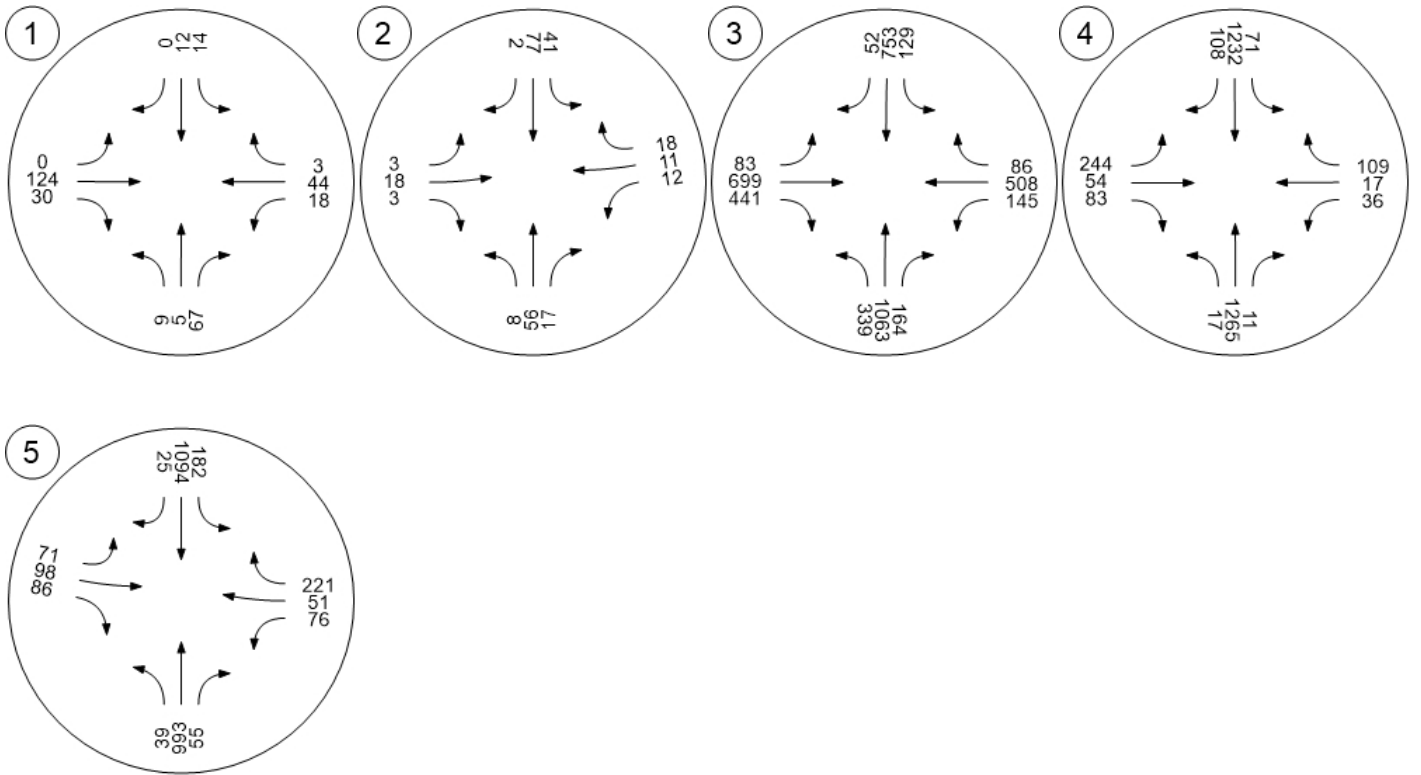
| ID | Intersection Name                      | Volume Type         | Northbound |           |           | Southbound |           |          | Eastbound |           |          | Westbound |           |           | Total Volume |
|----|--|---------------------|------------|-----------|-----------|------------|-----------|----------|-----------|-----------|----------|-----------|-----------|-----------|--------------|
|    |  |                     | Left       | Thru      | Right     | Left       | Thru      | Right    | Left      | Thru      | Right    | Left      | Thru      | Right     |              |
| 2  | Mesa View Drive (NS) at Luna Road (EW) | Final Base          | 8          | 44        | 11        | 14         | 58        | 2        | 3         | 18        | 3        | 11        | 11        | 9         | 192          |
|    |  | Growth Rate         | 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          | 12        | 6         | 27         | 19        | 0        | 0         | 0         | 0        | 1         | 0         | 9         | 74           |
|    |  | Other               | 0          | 0         | 0         | 0          | 0         | 0        | 0         | 0         | 0        | 0         | 0         | 0         | 0            |
|    |  | <b>Future Total</b> | <b>8</b>   | <b>56</b> | <b>17</b> | <b>41</b>  | <b>77</b> | <b>2</b> | <b>3</b>  | <b>18</b> | <b>3</b> | <b>12</b> | <b>11</b> | <b>18</b> | <b>266</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  | US-Route 395 (NS) at Palmdale Road (EW) | Final Base          | 329        | 1022        | 117        | 129        | 740        | 52        | 83        | 699        | 438        | 129        | 508        | 86        | 4332         |
|    |   | Growth Rate         | 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       | 10         | 41          | 47         | 0          | 13         | 0         | 0         | 0          | 3          | 16         | 0          | 0         | 130          |
|    |   | Other               | 0          | 0           | 0          | 0          | 0          | 0         | 0         | 0          | 0          | 0          | 0          | 0         | 0            |
|    |   | <b>Future Total</b> | <b>339</b> | <b>1063</b> | <b>164</b> | <b>129</b> | <b>753</b> | <b>52</b> | <b>83</b> | <b>699</b> | <b>441</b> | <b>145</b> | <b>508</b> | <b>86</b> | <b>4462</b>  |

| ID | Intersection Name                         | Volume Type         | Northbound |             |           | Southbound |             |            | Eastbound  |           |           | Westbound |           |            | Total Volume |
|----|---|---------------------|------------|-------------|-----------|------------|-------------|------------|------------|-----------|-----------|-----------|-----------|------------|--------------|
|    |   |                     | Left       | Thru        | Right     | Left       | Thru        | Right      | Left       | Thru      | Right     | Left      | Thru      | Right      |              |
| 4  | US-Route 395 (NS) at Dos Palmas Road (EW) | Final Base          | 11         | 1261        | 11        | 71         | 1231        | 77         | 150        | 35        | 65        | 36        | 11        | 109        | 3068         |
|    |   | Growth Rate         | 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          | 4           | 0         | 0          | 1           | 31         | 94         | 19        | 18        | 0         | 6         | 0          | 179          |
|    |   | Other               | 0          | 0           | 0         | 0          | 0           | 0          | 0          | 0         | 0         | 0         | 0         | 0          | 0            |
|    |   | <b>Future Total</b> | <b>17</b>  | <b>1265</b> | <b>11</b> | <b>71</b>  | <b>1232</b> | <b>108</b> | <b>244</b> | <b>54</b> | <b>83</b> | <b>36</b> | <b>17</b> | <b>109</b> | <b>3247</b>  |

| ID | Intersection Name                   | Volume Type         | Northbound |            |           | Southbound |             |           | Eastbound |           |           | Westbound |           |            | Total Volume |
|----|-------------------------------------|---------------------|------------|------------|-----------|------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|------------|--------------|
|    |                                     |                     | Left       | Thru       | Right     | Left       | Thru        | Right     | Left      | Thru      | Right     | Left      | Thru      | Right      |              |
| 5  | US-Route 395 (NS) at Luna Road (EW) | Final Base          | 33         | 987        | 55        | 182        | 1076        | 24        | 67        | 79        | 68        | 76        | 45        | 221        | 2913         |
|    |                                     | Growth Rate         | 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          | 6          | 0         | 0          | 18          | 1         | 4         | 19        | 18        | 0         | 6         | 0          | 78           |
|    |                                     | Other               | 0          | 0          | 0         | 0          | 0           | 0         | 0         | 0         | 0         | 0         | 0         | 0          | 0            |
|    |                                     | <b>Future Total</b> | <b>39</b>  | <b>993</b> | <b>55</b> | <b>182</b> | <b>1094</b> | <b>25</b> | <b>71</b> | <b>98</b> | <b>86</b> | <b>76</b> | <b>51</b> | <b>221</b> | <b>2991</b>  |

Traffic Volume - Future Total Volume





## TTM 16397

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Scenario 6 Year (2040) With Project

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11/1/2019

**Intersection Analysis Summary**

| ID | Intersection Name                            | Control Type | Method   | Worst Mvmt | V/C        | Delay (s/veh) | LOS |
|----|--|--------------|----------|------------|------------|---------------|-----|
| 1  | Mesa View Drive (NS) at Dos Palmas Road (EW) | Two-way stop | HCM 2010 | SB Left    | 0.024      | 11.0          | B   |
| 2  | Mesa View Drive (NS) at Luna Road (EW)       | Two-way stop | HCM 2010 | WB Thru    | 0.019      | 11.0          | B   |
| 3  | US-Route 395 (NS) at Palmdale Road (EW)      | Signalized   | HCM 2010 | EB Right   | 0.803      | 51.6          | D   |
| 4  | US-Route 395 (NS) at Dos Palmas Road (EW)    | Signalized   | HCM 2010 | WB Right   | 0.683      | 27.4          | C   |
| 5  | US-Route 395 (NS) at Luna Road (EW)          | Signalized   | HCM 2010 | SB Left    | 10,185.610 | 60.3          | E   |

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: Mesa View Drive (NS) at Dos Palmas Road (EW)**

|                  |              |                           |       |
|------------------|--------------|---------------------------|-------|
| Control Type:    | Two-way stop | Delay (sec / veh):        | 11.0  |
| Analysis Method: | HCM 2010     | Level Of Service:         | B     |
| Analysis Period: | 15 minutes   | Volume to Capacity (v/c): | 0.024 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| 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      | 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]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | Yes        |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 0          | 5      | 52     | 14         | 12     | 0      | 0         | 8      | 3      | 14        | 5      | 3      |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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]            | 9          | 0      | 15     | 0          | 0      | 0      | 0         | 116    | 27     | 4         | 39     | 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]             | 9          | 5      | 67     | 14         | 12     | 0      | 0         | 124    | 30     | 18        | 44     | 3      |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| Other Adjustment Factor                 | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h]          | 2          | 1      | 18     | 4          | 3      | 0      | 0         | 33     | 8      | 5         | 12     | 1      |
| Total Analysis Volume [veh/h]           | 9          | 5      | 71     | 15         | 13     | 0      | 0         | 131    | 32     | 19        | 46     | 3      |
| Pedestrian Volume [ped/h]               | 0          |        |        | 0          |        |        | 0         |        |        | 0         |        |        |

**Intersection Settings**

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

**Movement, Approach, & Intersection Results**

|                                       |       |       |      |       |       |      |      |      |      |      |      |      |
|---------------------------------------|-------|-------|------|-------|-------|------|------|------|------|------|------|------|
| V/C, Movement V/C Ratio               | 0.01  | 0.01  | 0.08 | 0.02  | 0.02  | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 |
| d_M, Delay for Movement [s/veh]       | 10.59 | 10.91 | 9.44 | 11.05 | 10.81 | 8.77 | 7.29 | 0.00 | 0.00 | 7.56 | 0.00 | 0.00 |
| Movement LOS                          | B     | B     | A    | B     | B     | A    | A    | A    | A    | A    | A    | A    |
| 95th-Percentile Queue Length [veh/ln] | 0.33  | 0.33  | 0.33 | 0.14  | 0.14  | 0.14 | 0.00 | 0.00 | 0.00 | 0.04 | 0.04 | 0.04 |
| 95th-Percentile Queue Length [ft/ln]  | 8.20  | 8.20  | 8.20 | 3.46  | 3.46  | 3.46 | 0.00 | 0.00 | 0.00 | 0.96 | 0.96 | 0.96 |
| d_A, Approach Delay [s/veh]           | 9.64  |       |      | 10.94 |       |      | 0.00 |      |      | 2.11 |      |      |
| Approach LOS                          | A     |       |      | B     |       |      | A    |      |      | A    |      |      |
| d_I, Intersection Delay [s/veh]       | 3.69  |       |      |       |       |      |      |      |      |      |      |      |
| Intersection LOS                      | B     |       |      |       |       |      |      |      |      |      |      |      |

**Intersection Level Of Service Report**  
**Intersection 2: Mesa View Drive (NS) at Luna Road (EW)**

|                  |              |                           |       |
|------------------|--------------|---------------------------|-------|
| Control Type:    | Two-way stop | Delay (sec / veh):        | 11.0  |
| Analysis Method: | HCM 2010     | Level Of Service:         | B     |
| Analysis Period: | 15 minutes   | Volume to Capacity (v/c): | 0.019 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| 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      | 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]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | Yes        |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 8          | 44     | 11     | 14         | 58     | 2      | 3         | 18     | 3      | 11        | 11     | 9      |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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          | 12     | 6      | 27         | 19     | 0      | 0         | 0      | 0      | 1         | 0      | 9      |
| 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]             | 8          | 56     | 17     | 41         | 77     | 2      | 3         | 18     | 3      | 12        | 11     | 18     |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| Other Adjustment Factor                 | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h]          | 2          | 15     | 4      | 11         | 20     | 1      | 1         | 5      | 1      | 3         | 3      | 5      |
| Total Analysis Volume [veh/h]           | 8          | 59     | 18     | 43         | 81     | 2      | 3         | 19     | 3      | 13        | 12     | 19     |
| Pedestrian Volume [ped/h]               | 0          |        |        | 0          |        |        | 0         |        |        | 0         |        |        |

**Intersection Settings**

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

**Movement, Approach, & Intersection Results**

|                                       |      |      |      |      |      |      |       |       |      |       |       |      |
|---------------------------------------|------|------|------|------|------|------|-------|-------|------|-------|-------|------|
| V/C, Movement V/C Ratio               | 0.01 | 0.00 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00  | 0.03  | 0.00 | 0.02  | 0.02  | 0.02 |
| d_M, Delay for Movement [s/veh]       | 7.37 | 0.00 | 0.00 | 7.41 | 0.00 | 0.00 | 10.77 | 10.98 | 8.88 | 10.76 | 10.99 | 8.89 |
| Movement LOS                          | A    | A    | A    | A    | A    | A    | B     | B     | A    | B     | B     | A    |
| 95th-Percentile Queue Length [veh/ln] | 0.02 | 0.02 | 0.02 | 0.08 | 0.08 | 0.08 | 0.12  | 0.12  | 0.12 | 0.18  | 0.18  | 0.18 |
| 95th-Percentile Queue Length [ft/ln]  | 0.40 | 0.40 | 0.40 | 2.06 | 2.06 | 2.06 | 2.97  | 2.97  | 2.97 | 4.59  | 4.59  | 4.59 |
| d_A, Approach Delay [s/veh]           | 0.69 |      |      | 2.53 |      |      | 10.70 |       |      | 10.01 |       |      |
| Approach LOS                          | A    |      |      | A    |      |      | B     |       |      | B     |       |      |
| d_I, Intersection Delay [s/veh]       | 3.88 |      |      |      |      |      |       |       |      |       |       |      |
| Intersection LOS                      | B    |      |      |      |      |      |       |       |      |       |       |      |

**Intersection Level Of Service Report**  
**Intersection 3: US-Route 395 (NS) at Palmdale Road (EW)**

|                  |            |                           |       |
|------------------|------------|---------------------------|-------|
| Control Type:    | Signalized | Delay (sec / veh):        | 51.6  |
| Analysis Method: | HCM 2010   | Level Of Service:         | D     |
| Analysis Period: | 15 minutes | Volume to Capacity (v/c): | 0.803 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Approach               | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
| Lane Configuration     | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| 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      | 1      | 1         | 0      | 0      | 1         | 0      | 2      |
| Pocket Length [ft]     | 120.00     | 100.00 | 100.00 | 350.00     | 100.00 | 370.00 | 140.00    | 100.00 | 100.00 | 250.00    | 100.00 | 450.00 |
| Speed [mph]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | Yes        |        |        | No         |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 329        | 1022   | 117    | 129        | 740    | 52     | 83        | 699    | 438    | 129       | 508    | 86     |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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]            | 10         | 41     | 47     | 0          | 13     | 0      | 0         | 0      | 3      | 16        | 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]             | 339        | 1063   | 164    | 129        | 753    | 52     | 83        | 699    | 441    | 145       | 508    | 86     |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| 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]          | 89         | 280    | 43     | 34         | 198    | 14     | 22        | 184    | 116    | 38        | 134    | 23     |
| Total Analysis Volume [veh/h]           | 357        | 1119   | 173    | 136        | 793    | 55     | 87        | 736    | 464    | 153       | 535    | 91     |
| 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]          | 110                          |
| Coordination Type         | Time of Day Pattern Isolated |
| Actuation Type            | Fixed time                   |
| Offset [s]                | 0.0                          |
| Offset Reference          | LeadGreen                    |
| Permissive Mode           | SingleBand                   |
| Lost time [s]             | 2.00                         |

**Phasing & Timing**

| Control Type                 | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss |
|------------------------------|----------|---------|---------|----------|---------|---------|----------|---------|---------|----------|---------|---------|
| Signal group                 | 5        | 2       | 0       | 1        | 6       | 0       | 3        | 8       | 0       | 7        | 4       | 0       |
| Auxiliary Signal Groups      |          |         |         |          |         |         |          |         |         |          |         |         |
| Lead / Lag                   | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       |
| Minimum Green [s]            | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       |
| Maximum Green [s]            | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       |
| Amber [s]                    | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| All red [s]                  | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     |
| Split [s]                    | 26       | 47      | 0       | 17       | 38      | 0       | 12       | 35      | 0       | 11       | 34      | 0       |
| Vehicle Extension [s]        | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| Walk [s]                     | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 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     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| I2, Clearance Lost Time [s]  | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| Minimum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Maximum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Pedestrian Recall            | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Detector Location [ft]       | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| Detector Length [ft]         | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| I, Upstream Filtering Factor | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    |

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

| Lane Group                              | L     | C     | R     | L     | C     | R     | L     | C     | R     | L     | C     | R     |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| C, Cycle Length [s]                     | 110   | 110   | 110   | 110   | 110   | 110   | 110   | 110   | 110   | 110   | 110   | 110   |
| L, Total Lost Time per Cycle [s]        | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  |
| l1_p, Permitted Start-Up Lost Time [s]  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| l2, Clearance Lost Time [s]             | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  |
| g_i, Effective Green Time [s]           | 22    | 43    | 43    | 13    | 34    | 34    | 8     | 31    | 31    | 7     | 30    | 30    |
| g / C, Green / Cycle                    | 0.20  | 0.39  | 0.39  | 0.12  | 0.31  | 0.31  | 0.07  | 0.28  | 0.28  | 0.06  | 0.27  | 0.27  |
| (v / s)_i Volume / Saturation Flow Rate | 0.21  | 0.33  | 0.11  | 0.08  | 0.23  | 0.04  | 0.05  | 0.21  | 0.30  | 0.05  | 0.16  | 0.06  |
| s, saturation flow rate [veh/h]         | 1714  | 3427  | 1530  | 1714  | 3427  | 1530  | 1714  | 3427  | 1530  | 3329  | 3427  | 1530  |
| c, Capacity [veh/h]                     | 343   | 1340  | 598   | 203   | 1059  | 473   | 125   | 966   | 431   | 212   | 935   | 417   |
| d1, Uniform Delay [s]                   | 44.00 | 30.30 | 23.01 | 46.45 | 34.16 | 27.23 | 49.82 | 36.13 | 39.50 | 50.55 | 34.47 | 30.93 |
| k, delay calibration                    | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  |
| 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]               | 59.74 | 6.28  | 1.22  | 16.34 | 4.85  | 0.50  | 27.70 | 5.67  | 65.24 | 19.15 | 2.54  | 1.20  |
| d3, Initial Queue Delay [s]             | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| Rp, platoon ratio                       | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| PF, progression factor                  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |

**Lane Group Results**

|                                       |        |        |        |        |        |       |        |        |        |        |        |       |
|---------------------------------------|--------|--------|--------|--------|--------|-------|--------|--------|--------|--------|--------|-------|
| X, volume / capacity                  | 1.04   | 0.84   | 0.29   | 0.67   | 0.75   | 0.12  | 0.70   | 0.76   | 1.08   | 0.72   | 0.57   | 0.22  |
| d, Delay for Lane Group [s/veh]       | 103.74 | 36.58  | 24.23  | 62.79  | 39.01  | 27.73 | 77.52  | 41.79  | 104.74 | 69.70  | 37.02  | 32.13 |
| Lane Group LOS                        | F      | D      | C      | E      | D      | C     | E      | D      | F      | E      | D      | C     |
| Critical Lane Group                   | Yes    | No     | No     | No     | Yes    | No    | No     | No     | Yes    | Yes    | No     | No    |
| 50th-Percentile Queue Length [veh/ln] | 14.93  | 14.23  | 3.27   | 4.47   | 10.12  | 1.11  | 3.29   | 9.69   | 19.26  | 2.63   | 6.46   | 2.01  |
| 50th-Percentile Queue Length [ft/ln]  | 373.24 | 355.84 | 81.76  | 111.84 | 252.91 | 27.64 | 82.29  | 242.32 | 481.43 | 65.66  | 161.50 | 50.25 |
| 95th-Percentile Queue Length [veh/ln] | 21.74  | 20.42  | 5.89   | 7.94   | 15.33  | 1.99  | 5.93   | 14.80  | 27.66  | 4.73   | 10.63  | 3.62  |
| 95th-Percentile Queue Length [ft/ln]  | 543.40 | 510.52 | 147.16 | 198.56 | 383.32 | 49.75 | 148.13 | 369.96 | 691.59 | 118.19 | 265.71 | 90.45 |

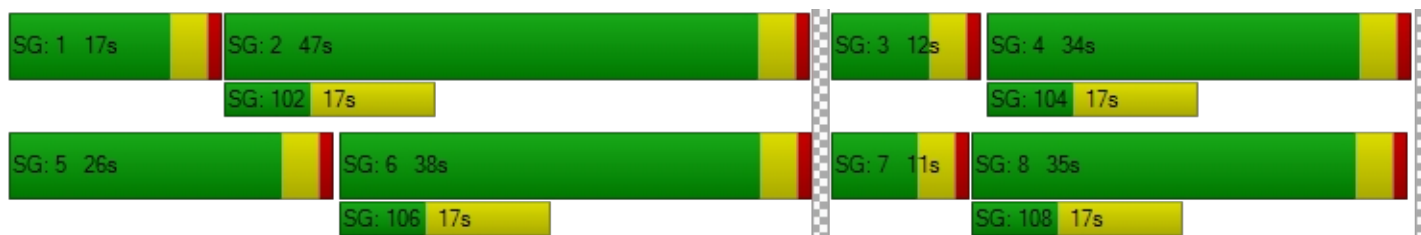


**Movement, Approach, & Intersection Results**

|                                 |        |       |       |       |       |       |       |       |        |       |       |       |
|---------------------------------|--------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|
| d_M, Delay for Movement [s/veh] | 103.74 | 36.58 | 24.23 | 62.79 | 39.01 | 27.73 | 77.52 | 41.79 | 104.74 | 69.70 | 37.02 | 32.13 |
| Movement LOS                    | F      | D     | C     | E     | D     | C     | E     | D     | F      | E     | D     | C     |
| d_A, Approach Delay [s/veh]     | 49.82  |       |       | 41.67 |       |       | 66.90 |       |        | 42.86 |       |       |
| Approach LOS                    | D      |       |       | D     |       |       | E     |       |        | D     |       |       |
| d_I, Intersection Delay [s/veh] | 51.64  |       |       |       |       |       |       |       |        |       |       |       |
| Intersection LOS                | D      |       |       |       |       |       |       |       |        |       |       |       |
| Intersection V/C                | 0.803  |       |       |       |       |       |       |       |        |       |       |       |

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 4: US-Route 395 (NS) at Dos Palmas Road (EW)**

|                  |            |                           |       |
|------------------|------------|---------------------------|-------|
| Control Type:    | Signalized | Delay (sec / veh):        | 27.4  |
| Analysis Method: | HCM 2010   | Level Of Service:         | C     |
| Analysis Period: | 15 minutes | Volume to Capacity (v/c): | 0.683 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Approach               | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| Lane Configuration     | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| 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      | 1      | 1          | 0      | 0      | 1         | 0      | 1      | 1         | 0      | 0      |
| Pocket Length [ft]     | 480.00     | 100.00 | 250.00 | 300.00     | 100.00 | 100.00 | 160.00    | 100.00 | 470.00 | 100.00    | 100.00 | 100.00 |
| Speed [mph]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | No         |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 11         | 1261   | 11     | 71         | 1231   | 77     | 150       | 35     | 65     | 36        | 11     | 109    |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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          | 4      | 0      | 0          | 1      | 31     | 94        | 19     | 18     | 0         | 6      | 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]             | 17         | 1265   | 11     | 71         | 1232   | 108    | 244       | 54     | 83     | 36        | 17     | 109    |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| Other Adjustment Factor                 | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h]          | 4          | 333    | 3      | 19         | 324    | 28     | 64        | 14     | 22     | 9         | 4      | 29     |
| Total Analysis Volume [veh/h]           | 18         | 1332   | 12     | 75         | 1297   | 114    | 257       | 57     | 87     | 38        | 18     | 115    |
| 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]          | 90                           |
| Coordination Type         | Time of Day Pattern Isolated |
| Actuation Type            | Fully actuated               |
| Offset [s]                | 0.0                          |
| Offset Reference          | LeadGreen                    |
| Permissive Mode           | SingleBand                   |
| Lost time [s]             | 2.00                         |

**Phasing & Timing**

| Control Type                 | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss | Protecte | Permiss | Permiss |
|------------------------------|----------|---------|---------|----------|---------|---------|----------|---------|---------|----------|---------|---------|
| Signal group                 | 5        | 2       | 0       | 1        | 6       | 0       | 3        | 8       | 0       | 7        | 4       | 0       |
| Auxiliary Signal Groups      |          |         |         |          |         |         |          |         |         |          |         |         |
| Lead / Lag                   | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       | Lead     | -       | -       |
| Minimum Green [s]            | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       | 7        | 7       | 0       |
| Maximum Green [s]            | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       | 30       | 30      | 0       |
| Amber [s]                    | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| All red [s]                  | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     |
| Split [s]                    | 11       | 21      | 0       | 11       | 21      | 0       | 19       | 40      | 0       | 18       | 39      | 0       |
| Vehicle Extension [s]        | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     |
| Walk [s]                     | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 0       | 0        | 7       | 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     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| I2, Clearance Lost Time [s]  | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     |
| Minimum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Maximum Recall               | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Pedestrian Recall            | No       | No      |         | No       | No      |         | No       | No      |         | No       | No      |         |
| Detector Location [ft]       | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| Detector Length [ft]         | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     |
| I, Upstream Filtering Factor | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    |

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

| Lane Group                              | L     | C     | R     | L     | C     | C     | L     | C     | R     | L     | C     |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| C, Cycle Length [s]                     | 90    | 90    | 90    | 90    | 90    | 90    | 90    | 90    | 90    | 90    | 90    |
| L, Total Lost Time per Cycle [s]        | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  |
| l1_p, Permitted Start-Up Lost Time [s]  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| l2, Clearance Lost Time [s]             | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  |
| g_i, Effective Green Time [s]           | 3     | 44    | 44    | 6     | 47    | 47    | 15    | 20    | 20    | 4     | 10    |
| g / C, Green / Cycle                    | 0.03  | 0.48  | 0.48  | 0.07  | 0.52  | 0.52  | 0.17  | 0.22  | 0.22  | 0.05  | 0.11  |
| (v / s)_i Volume / Saturation Flow Rate | 0.01  | 0.39  | 0.01  | 0.04  | 0.40  | 0.40  | 0.15  | 0.03  | 0.06  | 0.02  | 0.09  |
| s, saturation flow rate [veh/h]         | 1714  | 3427  | 1530  | 1714  | 1800  | 1750  | 1714  | 1800  | 1530  | 1714  | 1562  |
| c, Capacity [veh/h]                     | 51    | 1653  | 738   | 115   | 935   | 909   | 286   | 404   | 343   | 84    | 166   |
| d1, Uniform Delay [s]                   | 42.91 | 19.77 | 12.18 | 41.04 | 17.22 | 17.31 | 36.81 | 28.03 | 28.77 | 41.69 | 39.36 |
| 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  |
| 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  |
| d2, Incremental Delay [s]               | 4.15  | 4.31  | 0.04  | 6.11  | 5.84  | 6.19  | 9.83  | 0.16  | 0.38  | 3.75  | 8.60  |
| d3, Initial Queue Delay [s]             | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| Rp, platoon ratio                       | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| PF, progression factor                  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |

**Lane Group Results**

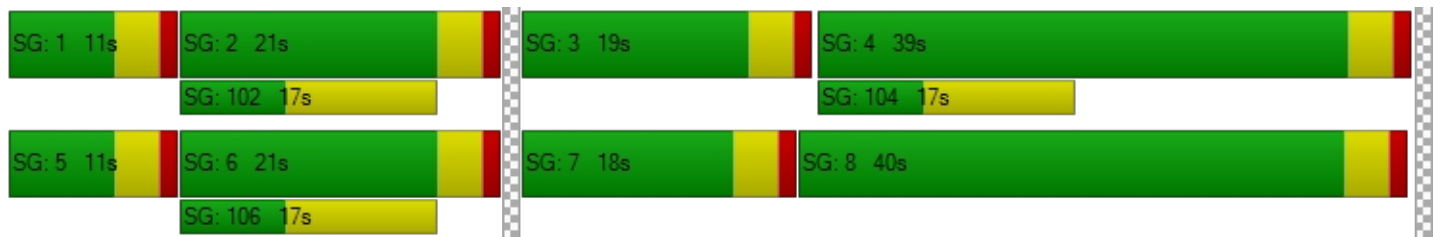
|                                       |       |        |       |       |        |        |        |       |       |       |        |
|---------------------------------------|-------|--------|-------|-------|--------|--------|--------|-------|-------|-------|--------|
| X, volume / capacity                  | 0.35  | 0.81   | 0.02  | 0.65  | 0.76   | 0.77   | 0.90   | 0.14  | 0.25  | 0.45  | 0.80   |
| d, Delay for Lane Group [s/veh]       | 47.05 | 24.09  | 12.22 | 47.15 | 23.07  | 23.50  | 46.64  | 28.18 | 29.16 | 45.44 | 47.96  |
| Lane Group LOS                        | D     | C      | B     | D     | C      | C      | D      | C     | C     | D     | D      |
| Critical Lane Group                   | No    | Yes    | No    | Yes   | No     | No     | Yes    | No    | No    | No    | Yes    |
| 50th-Percentile Queue Length [veh/ln] | 0.45  | 11.93  | 0.13  | 1.80  | 12.26  | 12.14  | 6.21   | 0.99  | 1.56  | 0.90  | 3.23   |
| 50th-Percentile Queue Length [ft/ln]  | 11.20 | 298.30 | 3.24  | 45.03 | 306.55 | 303.55 | 155.33 | 24.77 | 39.04 | 22.52 | 80.77  |
| 95th-Percentile Queue Length [veh/ln] | 0.81  | 17.60  | 0.23  | 3.24  | 18.00  | 17.86  | 10.30  | 1.78  | 2.81  | 1.62  | 5.82   |
| 95th-Percentile Queue Length [ft/ln]  | 20.16 | 439.92 | 5.84  | 81.06 | 450.12 | 446.41 | 257.53 | 44.59 | 70.28 | 40.54 | 145.39 |

**Movement, Approach, & Intersection Results**

|                                 |       |       |       |       |       |       |       |       |       |       |       |       |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| d_M, Delay for Movement [s/veh] | 47.05 | 24.09 | 12.22 | 47.15 | 23.26 | 23.50 | 46.64 | 28.18 | 29.16 | 45.44 | 47.96 | 47.96 |
| Movement LOS                    | D     | C     | B     | D     | C     | C     | D     | C     | C     | D     | D     | D     |
| d_A, Approach Delay [s/veh]     | 24.28 |       |       | 24.49 |       |       | 40.22 |       |       | 47.40 |       |       |
| Approach LOS                    | C     |       |       | C     |       |       | D     |       |       | D     |       |       |
| d_I, Intersection Delay [s/veh] | 27.40 |       |       |       |       |       |       |       |       |       |       |       |
| Intersection LOS                | C     |       |       |       |       |       |       |       |       |       |       |       |
| Intersection V/C                | 0.683 |       |       |       |       |       |       |       |       |       |       |       |

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 5: US-Route 395 (NS) at Luna Road (EW)**

|                  |            |                           |            |
|------------------|------------|---------------------------|------------|
| Control Type:    | Signalized | Delay (sec / veh):        | 60.3       |
| Analysis Method: | HCM 2010   | Level Of Service:         | E          |
| Analysis Period: | 15 minutes | Volume to Capacity (v/c): | 10,185.610 |

**Intersection Setup**

| Name                   | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Approach               | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| Lane Configuration     | [Diagram]  |        |        | [Diagram]  |        |        | [Diagram] |        |        | [Diagram] |        |        |
| 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      | 1      | 1          | 0      | 1      | 1         | 0      | 0      | 1         | 0      | 0      |
| Pocket Length [ft]     | 360.00     | 100.00 | 450.00 | 400.00     | 100.00 | 400.00 | 125.00    | 100.00 | 100.00 | 425.00    | 100.00 | 100.00 |
| Speed [mph]            | 30.00      |        |        | 30.00      |        |        | 30.00     |        |        | 30.00     |        |        |
| Grade [%]              | 0.00       |        |        | 0.00       |        |        | 0.00      |        |        | 0.00      |        |        |
| Crosswalk              | No         |        |        | Yes        |        |        | Yes       |        |        | Yes       |        |        |

**Volumes**

| Name                                    | Northbound |        |        | Southbound |        |        | Eastbound |        |        | Westbound |        |        |
|---|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Base Volume Input [veh/h]               | 33         | 987    | 55     | 182        | 1076   | 24     | 67        | 79     | 68     | 76        | 45     | 221    |
| Base Volume Adjustment Factor           | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 | 1.0000    | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   | 0.00      | 0.00   | 0.00   |
| Growth Rate                             | 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          | 6      | 0      | 0          | 18     | 1      | 4         | 19     | 18     | 0         | 6      | 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]             | 39         | 993    | 55     | 182        | 1094   | 25     | 71        | 98     | 86     | 76        | 51     | 221    |
| Peak Hour Factor                        | 0.9500     | 0.9500 | 0.9500 | 0.9500     | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 | 0.9500    | 0.9500 | 0.9500 |
| 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]          | 10         | 261    | 14     | 48         | 288    | 7      | 19        | 26     | 23     | 20        | 13     | 58     |
| Total Analysis Volume [veh/h]           | 41         | 1045   | 58     | 192        | 1152   | 26     | 75        | 103    | 91     | 80        | 54     | 233    |
| 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]          | 110                          |
| Coordination Type         | Time of Day Pattern Isolated |
| Actuation Type            | Fixed time                   |
| Offset [s]                | 0.0                          |
| Offset Reference          | LeadGreen                    |
| Permissive Mode           | SingleBand                   |
| Lost time [s]             | 2.00                         |

**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]            | 7        | 7       | 0       | 7        | 7       | 0       | 0       | 7       | 0       | 0       | 7       | 0       |
| Maximum Green [s]            | 30       | 30      | 0       | 30       | 30      | 0       | 0       | 30      | 0       | 0       | 30      | 0       |
| Amber [s]                    | 3.0      | 3.0     | 0.0     | 3.0      | 3.0     | 0.0     | 0.0     | 3.0     | 0.0     | 0.0     | 3.0     | 0.0     |
| All red [s]                  | 1.0      | 1.0     | 0.0     | 1.0      | 1.0     | 0.0     | 0.0     | 1.0     | 0.0     | 0.0     | 1.0     | 0.0     |
| Split [s]                    | 26       | 47      | 0       | 17       | 38      | 0       | 0       | 35      | 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        | 7       | 0       | 0        | 7       | 0       | 0       | 7       | 0       | 0       | 7       | 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]  | 2.0      | 2.0     | 0.0     | 2.0      | 2.0     | 0.0     | 0.0     | 2.0     | 0.0     | 0.0     | 2.0     | 0.0     |
| Minimum Recall               | No       | No      |         | No       | No      |         |         | No      |         |         | No      |         |
| Maximum Recall               | No       | No      |         | No       | No      |         |         | No      |         |         | No      |         |
| Pedestrian Recall            | No       | No      |         | No       | No      |         |         | No      |         |         | No      |         |
| Detector Location [ft]       | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| Detector Length [ft]         | 0.0      | 0.0     | 0.0     | 0.0      | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| I, Upstream Filtering Factor | 1.00     | 1.00    | 1.00    | 1.00     | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    |

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

| Lane Group                              | L     | C     | R     | L     | C     | R     | L     | C     | R     | L     | C     |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| C, Cycle Length [s]                     | 110   | 110   | 110   | 110   | 110   | 110   | 110   | 110   | 110   | 110   | 110   |
| L, Total Lost Time per Cycle [s]        | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  |
| l1_p, Permitted Start-Up Lost Time [s]  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 2.00  | 0.00  |
| l2, Clearance Lost Time [s]             | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 0.00  | 2.00  | 2.00  | 2.00  | 2.00  |
| g_i, Effective Green Time [s]           | 22    | 43    | 43    | 13    | 34    | 34    | 32    | 31    | 31    | 30    | 30    |
| g / C, Green / Cycle                    | 0.20  | 0.39  | 0.39  | 0.12  | 0.31  | 0.31  | 0.29  | 0.28  | 0.28  | 0.27  | 0.27  |
| (v / s)_i Volume / Saturation Flow Rate | 0.02  | 0.30  | 0.04  | 0.11  | 0.34  | 0.02  | 0.07  | 0.06  | 0.06  | 0.06  | 0.18  |
| s, saturation flow rate [veh/h]         | 1714  | 3427  | 1530  | 1714  | 3427  | 1530  | 1109  | 1800  | 1530  | 1312  | 1574  |
| c, Capacity [veh/h]                     | 343   | 1340  | 598   | 203   | 1059  | 473   | 208   | 507   | 431   | 342   | 429   |
| d1, Uniform Delay [s]                   | 36.06 | 29.36 | 21.21 | 48.16 | 38.00 | 26.71 | 45.71 | 30.09 | 30.16 | 36.47 | 35.58 |
| k, delay calibration                    | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  |
| 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  |
| d2, Incremental Delay [s]               | 0.71  | 4.55  | 0.32  | 50.90 | 54.60 | 0.22  | 4.78  | 0.90  | 1.11  | 1.60  | 8.02  |
| d3, Initial Queue Delay [s]             | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| Rp, platoon ratio                       | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| PF, progression factor                  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |

**Lane Group Results**

|                                       |       |        |       |        |        |       |       |       |       |       |        |
|---------------------------------------|-------|--------|-------|--------|--------|-------|-------|-------|-------|-------|--------|
| X, volume / capacity                  | 0.12  | 0.78   | 0.10  | 0.95   | 1.09   | 0.05  | 0.36  | 0.20  | 0.21  | 0.23  | 0.67   |
| d, Delay for Lane Group [s/veh]       | 36.77 | 33.91  | 21.53 | 99.06  | 92.60  | 26.93 | 50.49 | 30.99 | 31.28 | 38.06 | 43.59  |
| Lane Group LOS                        | D     | C      | C     | F      | F      | C     | D     | C     | C     | D     | D      |
| Critical Lane Group                   | No    | Yes    | No    | Yes    | No     | No    | Yes   | No    | No    | No    | No     |
| 50th-Percentile Queue Length [veh/ln] | 0.97  | 12.67  | 1.00  | 8.07   | 22.01  | 0.51  | 1.77  | 2.21  | 1.98  | 1.96  | 7.74   |
| 50th-Percentile Queue Length [ft/ln]  | 24.34 | 316.74 | 25.04 | 201.67 | 550.16 | 12.78 | 44.29 | 55.24 | 49.44 | 49.00 | 193.59 |
| 95th-Percentile Queue Length [veh/ln] | 1.75  | 18.51  | 1.80  | 12.72  | 31.32  | 0.92  | 3.19  | 3.98  | 3.56  | 3.53  | 12.31  |
| 95th-Percentile Queue Length [ft/ln]  | 43.80 | 462.67 | 45.08 | 318.12 | 783.00 | 23.00 | 79.72 | 99.42 | 88.99 | 88.21 | 307.68 |

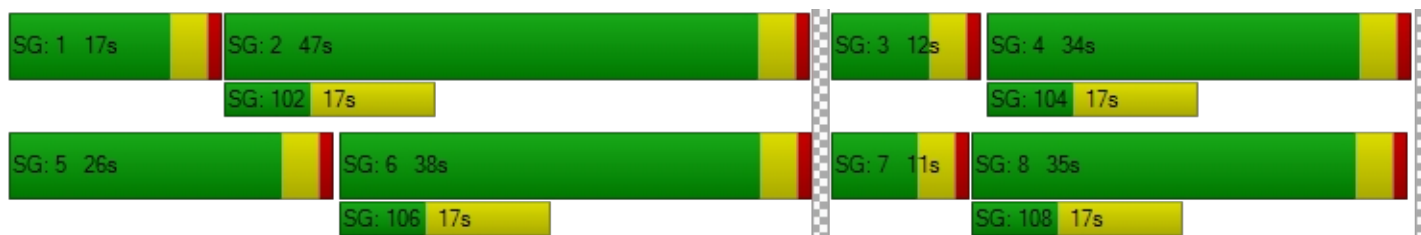


**Movement, Approach, & Intersection Results**

|                                 |           |       |       |       |       |       |       |       |       |       |       |       |
|---------------------------------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| d_M, Delay for Movement [s/veh] | 36.77     | 33.91 | 21.53 | 99.06 | 92.60 | 26.93 | 50.49 | 30.99 | 31.28 | 38.06 | 43.59 | 43.59 |
| Movement LOS                    | D         | C     | C     | F     | F     | C     | D     | C     | C     | D     | D     | D     |
| d_A, Approach Delay [s/veh]     | 33.38     |       |       | 92.26 |       |       | 36.52 |       |       | 42.39 |       |       |
| Approach LOS                    | C         |       |       | F     |       |       | D     |       |       | D     |       |       |
| d_I, Intersection Delay [s/veh] | 60.31     |       |       |       |       |       |       |       |       |       |       |       |
| Intersection LOS                | E         |       |       |       |       |       |       |       |       |       |       |       |
| Intersection V/C                | 10185.610 |       |       |       |       |       |       |       |       |       |       |       |

**Sequence**

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



TTM 16397

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

Scenario 6 Year (2040) With Project

Report File: C:\...IAM LRp\_.pdf

11/1/2019

**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  | Mesa View Drive (NS) at Dos Palmas Road (EW) | Final Base          | 0          | 5        | 52        | 14         | 12        | 0        | 0         | 8          | 3         | 14        | 5         | 3        | 116          |
|    |  | Growth Rate         | 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       | 9          | 0        | 15        | 0          | 0         | 0        | 0         | 116        | 27        | 4         | 39        | 0        | 210          |
|    |  | Other               | 0          | 0        | 0         | 0          | 0         | 0        | 0         | 0          | 0         | 0         | 0         | 0        | 0            |
|    |  | <b>Future Total</b> | <b>9</b>   | <b>5</b> | <b>67</b> | <b>14</b>  | <b>12</b> | <b>0</b> | <b>0</b>  | <b>124</b> | <b>30</b> | <b>18</b> | <b>44</b> | <b>3</b> | <b>326</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  | Mesa View Drive (NS) at Luna Road (EW) | Final Base          | 8          | 44        | 11        | 14         | 58        | 2        | 3         | 18        | 3        | 11        | 11        | 9         | 192          |
|    |  | Growth Rate         | 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          | 12        | 6         | 27         | 19        | 0        | 0         | 0         | 0        | 1         | 0         | 9         | 74           |
|    |  | Other               | 0          | 0         | 0         | 0          | 0         | 0        | 0         | 0         | 0        | 0         | 0         | 0         | 0            |
|    |  | <b>Future Total</b> | <b>8</b>   | <b>56</b> | <b>17</b> | <b>41</b>  | <b>77</b> | <b>2</b> | <b>3</b>  | <b>18</b> | <b>3</b> | <b>12</b> | <b>11</b> | <b>18</b> | <b>266</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  | US-Route 395 (NS) at Palmdale Road (EW) | Final Base          | 329        | 1022        | 117        | 129        | 740        | 52        | 83        | 699        | 438        | 129        | 508        | 86        | 4332         |
|    |   | Growth Rate         | 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       | 10         | 41          | 47         | 0          | 13         | 0         | 0         | 0          | 3          | 16         | 0          | 0         | 130          |
|    |   | Other               | 0          | 0           | 0          | 0          | 0          | 0         | 0         | 0          | 0          | 0          | 0          | 0         | 0            |
|    |   | <b>Future Total</b> | <b>339</b> | <b>1063</b> | <b>164</b> | <b>129</b> | <b>753</b> | <b>52</b> | <b>83</b> | <b>699</b> | <b>441</b> | <b>145</b> | <b>508</b> | <b>86</b> | <b>4462</b>  |

| ID | Intersection Name                         | Volume Type         | Northbound |             |           | Southbound |             |            | Eastbound  |           |           | Westbound |           |            | Total Volume |
|----|---|---------------------|------------|-------------|-----------|------------|-------------|------------|------------|-----------|-----------|-----------|-----------|------------|--------------|
|    |   |                     | Left       | Thru        | Right     | Left       | Thru        | Right      | Left       | Thru      | Right     | Left      | Thru      | Right      |              |
| 4  | US-Route 395 (NS) at Dos Palmas Road (EW) | Final Base          | 11         | 1261        | 11        | 71         | 1231        | 77         | 150        | 35        | 65        | 36        | 11        | 109        | 3068         |
|    |   | Growth Rate         | 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          | 4           | 0         | 0          | 1           | 31         | 94         | 19        | 18        | 0         | 6         | 0          | 179          |
|    |   | Other               | 0          | 0           | 0         | 0          | 0           | 0          | 0          | 0         | 0         | 0         | 0         | 0          | 0            |
|    |   | <b>Future Total</b> | <b>17</b>  | <b>1265</b> | <b>11</b> | <b>71</b>  | <b>1232</b> | <b>108</b> | <b>244</b> | <b>54</b> | <b>83</b> | <b>36</b> | <b>17</b> | <b>109</b> | <b>3247</b>  |

| ID | Intersection Name                   | Volume Type         | Northbound |            |           | Southbound |             |           | Eastbound |           |           | Westbound |           |            | Total Volume |
|----|-------------------------------------|---------------------|------------|------------|-----------|------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|------------|--------------|
|    |                                     |                     | Left       | Thru       | Right     | Left       | Thru        | Right     | Left      | Thru      | Right     | Left      | Thru      | Right      |              |
| 5  | US-Route 395 (NS) at Luna Road (EW) | Final Base          | 33         | 987        | 55        | 182        | 1076        | 24        | 67        | 79        | 68        | 76        | 45        | 221        | 2913         |
|    |                                     | Growth Rate         | 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          | 6          | 0         | 0          | 18          | 1         | 4         | 19        | 18        | 0         | 6         | 0          | 78           |
|    |                                     | Other               | 0          | 0          | 0         | 0          | 0           | 0         | 0         | 0         | 0         | 0         | 0         | 0          | 0            |
|    |                                     | <b>Future Total</b> | <b>39</b>  | <b>993</b> | <b>55</b> | <b>182</b> | <b>1094</b> | <b>25</b> | <b>71</b> | <b>98</b> | <b>86</b> | <b>76</b> | <b>51</b> | <b>221</b> | <b>2991</b>  |

Traffic Volume - Future Total Volume

