

# **TRAFFIC IMPACT STUDY**

**APPLE BEAR COMMERCIAL PROJECT  
TOWN OF APPLE VALLEY  
SAN BERNARDINO COUNTY, CALIFORNIA**

This Traffic Impact Study has been prepared under the supervision of  
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The logo for LSA, consisting of the letters 'L', 'S', and 'A' in a bold, blue, sans-serif font.

May 2023

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## **APPLE BEAR COMMERCIAL PROJECT TOWN OF APPLE VALLEY SAN BERNARDINO COUNTY, CALIFORNIA**

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## 1.0 EXECUTIVE SUMMARY

The proposed Apple Bear Commercial Project (Project) in the Town of Apple Valley (Town) consists of a 23,256 square-foot (sf) grocery store (Sprouts), a 3,546 sf fast-food restaurant with drive-through (Raising Canes), a 1,310 sf fast-food restaurant with drive-through, a 2,500 sf fast-food restaurant with drive-through (Pad 3), 3,750 sf of quick serve restaurants, and a 5,500 sf car wash with a 131-foot wash tunnel.

The project is located on the southeast corner of Bear Valley Road and Apple Bear Road (future road) in the Town of Apple Valley, San Bernardino County (County) on Assessor Parcel Numbers (APNs) 0434-021-10, -34, and -37. According to the Town's General Plan, the project parcel is considered as General Commercial (C-G). The project is anticipated to be completed by Year 2024.

The project can be accessed via five driveways:

- Project Driveway 1 on Apple Bear Road;
- Project Driveway 2 on Apple Bear Road;
- Project Driveway 3 on Bear Valley Road;
- Project Driveway 4 on Flying Feather Road; and
- Project Driveway 5 on Flying Feather Road.

Project Driveway 1, Project Driveway 2, Project Driveway 4, and Project Driveway 5 will be full access driveways. Project Driveway 3 will be a right-in-right-out (RIRO) driveway. Based on discussion with Town staff, the project will extend the existing raised median along Bear Valley Road to the east of the intersection of Flying Feather Road and Bear Valley Road. This project design feature will restrict left-turns in and out of Flying Feather Road.

The project is forecast to generate 388 net passenger car equivalent (PCE) trips in the a.m. peak hour, 432 net PCE trips in the p.m. peak hour, and 5,120 net PCE daily trips.

The study area for the project was finalized based on the criteria defined in the San Bernardino County *Traffic Impact Study (TIS) Guidelines* (dated July 2019) and in consultation with Town staff. Based on the County's TIS Guidelines and discussions with Town staff during the scoping agreement process, the study area includes fifteen intersections.

Traffic conditions were examined for the weekday a.m. and p.m. peak hour conditions under the following scenarios:

- Existing Conditions;
- Opening Year No Project Conditions;
- Opening Year Plus Project Conditions;
- Cumulative No Project Conditions; and

- Cumulative Plus Project Conditions.

### 1.1 EXISTING CONDITIONS SUMMARY

Based on the criteria as discussed in Section 3.2, Level of Service Procedures and Criteria, of this report, the following intersections are currently operating at a deficient LOS under existing conditions:

1. Jacaranda Avenue/Bear Valley Road (p.m. peak hour only);
2. Mojave Fish Hatchery Road/Bear Valley Road (p.m. peak hour only);
6. Apple Valley Road/Bear Valley Road (both a.m. and p.m. peak hours); and
10. Kiowa Road/Bear Valley Road (both a.m. and p.m. peak hours).

All other study intersections are currently operating at a satisfactory LOS.

### 1.2 OPENING YEAR (2024) CONDITIONS SUMMARY

Based on the criteria as discussed in Section 3.2, Level of Service Procedures and Criteria, the following intersections are forecast to operate at a deficient LOS under opening year no project conditions:

1. Jacaranda Avenue/Bear Valley Road (both a.m. and p.m. peak hours);
2. Mojave Fish Hatchery Road/Bear Valley Road (both a.m. and p.m. peak hours);
6. Apple Valley Road/Bear Valley Road (both a.m. and p.m. peak hours);
8. Flying Feather Road/Bear Valley Road (both a.m. and p.m. peak hours); and
10. Kiowa Road/Bear Valley Road (both a.m. and p.m. peak hours).

All other intersections are forecast to operate at a satisfactory LOS under opening year no project conditions.

Under opening year plus project conditions, the following intersections are forecast to operate at a deficient LOS:

1. Jacaranda Avenue/Bear Valley Road (both a.m. and p.m. peak hours);
2. Mojave Fish Hatchery Road/Bear Valley Road (both a.m. and p.m. peak hours);
6. Apple Valley Road/Bear Valley Road (both a.m. and p.m. peak hours); and
10. Kiowa Road/Bear Valley Road (both a.m. and p.m. peak hours).



All other intersections are forecast to operate at a satisfactory LOS under opening year plus project conditions. It should be noted that under opening year plus project conditions, intersection 8 – Flying Feather Road/Bear Valley Road is no longer forecast to operate at a deficient LOS.

With the implementation of improvements recommended in Chapter 10, the intersections of Jacaranda Avenue/Bear Valley Road and Mojave Fish Hatchery Road/Bear Valley Road are forecast to operate at a satisfactory LOS under opening year plus project conditions.

It should be noted that with the implementation of the proposed improvements, the intersections of Apple Valley Road/Bear Valley Road and Kiowa Road/Bear Valley Road are still forecast to operate at a deficient LOS under opening year plus project conditions. However, the improvements will improve the delay under plus project conditions to better than the corresponding delay under no project conditions for both intersections.

It should be noted that the intersection of Westmont Drive – Apple Valley Road/Bear Valley Road would require addition of a dedicated eastbound right-turn lane for this intersection to operate at satisfactory LOS. However, Town staff is requiring the project to widen this intersection according to the Town’s General Plan Circulation Element requirements for Bear Valley Road. Therefore, the project would be required to widen the eastbound approach of Bear Valley Road at Westmont Drive – Apple Valley Road to include three eastbound through lanes and a dedicated right-turn lane.

Table 1-A summarizes the recommended improvements for study intersections and funding mechanism under opening year conditions.

### 1.3 CUMULATIVE (2045) CONDITIONS SUMMARY

Based on the criteria as discussed in Section 3.2, Level of Service Procedures and Criteria, the following intersections are forecast to operate at a deficient LOS under cumulative no project conditions:

1. Jacaranda Avenue/Bear Valley Road (both a.m. and p.m. peak hours);
2. Mojave Fish Hatchery Road/Bear Valley Road (both a.m. and p.m. peak hours);
6. Apple Valley Road/Bear Valley Road (both a.m. and p.m. peak hours);
8. Flying Feather Road/Bear Valley Road (both a.m. and p.m. peak hours); and
10. Kiowa Road/Bear Valley Road (both a.m. and p.m. peak hours).

All other intersections are forecast to operate at a satisfactory LOS under cumulative no project conditions.

Under cumulative plus project conditions, the following intersections are forecast to operate at a deficient LOS:

1. Jacaranda Avenue/Bear Valley Road (both a.m. and p.m. peak hours);

2. Mojave Fish Hatchery Road/Bear Valley Road (both a.m. and p.m. peak hours);
6. Apple Valley Road/Bear Valley Road (both a.m. and p.m. peak hours); and
10. Kiowa Road/Bear Valley Road (both a.m. and p.m. peak hours).

All other intersections are forecast to operate at a satisfactory LOS under cumulative plus project conditions. It should be noted that under cumulative plus project conditions, intersection 8 – Flying Feather Road/Bear Valley Road is no longer forecast to operate at a deficient LOS.

With the implementation of improvements recommended in Chapter 10, the intersections of Jacaranda Avenue/Bear Valley Road and Mojave Fish Hatchery Road/Bear Valley Road are forecast to operate at a satisfactory LOS under cumulative plus project conditions.

It should be noted that with the implementation of the proposed improvements, the intersections of Apple Valley Road/Bear Valley Road and Kiowa Road/Bear Valley Road are still forecast to operate at a deficient LOS under cumulative plus project conditions. However, the improvements will improve the delay under plus project conditions to better than the corresponding delay under no project conditions for both intersections.

It should be noted that the intersection of Westmont Drive – Apple Valley Road/Bear Valley Road would require addition of a dedicated eastbound right-turn lane for this intersection to operate at satisfactory LOS. However, Town staff is requiring the project to widen this intersection according to the Town’s General Plan Circulation Element requirements for Bear Valley Road. Therefore, the project would be required to widen the eastbound approach of Bear Valley Road at Westmont Drive – Apple Valley Road to include three eastbound through lanes and a dedicated right-turn lane.

Table 1-A summarizes the recommended improvements for study intersections and funding mechanism under cumulative conditions.

## **1.4 CALIFORNIA ENVIRONMENTAL QUALITY ACT ASSESSMENT – VEHICLE MILES TRAVELED ANALYSIS AND ACTIVE TRANSPORTATION AND PUBLIC TRANSIT ANALYSIS SUMMARY**

### **1.4.1 Vehicle Miles Traveled Analysis Summary**

Senate Bill 743 (SB 743) required changes made to CEQA regulations introducing VMT as the new metric for determining project traffic impacts. The Town recommends evaluation of a project screening criteria for purposes of a VMT analysis based on the County’s TIS Guidelines. Therefore, the project’s VMT screening evaluation will be based on the County’s TIS Guidelines. The project can be considered as local-serving retail that has a total square footage less than 50,000 sf. Pursuant to the County’s TIS VMT Analysis Guidelines, the project may be screened out from a VMT analysis and can be considered to have a less than significant impact on VMT.

### **1.4.2 Active Transportation and Public Transit Analysis Summary**

The project does not conflict with any existing or proposed bicycle, pedestrian, or public transit facilities. Additionally, the project will be constructing a paved sidewalk along the project frontage on the southern side of Bear Valley Road. Therefore, it can be considered to conform to all adopted policies, plans, or programs concerning these facilities and will not have a significant impact.

It should be noted that at present, there are no proposed service changes in the Victor Valley Transit Authority (VVTA) transit network. VVTA bus Routes 42 and 43 serve the study area with stops along Apple Valley Road and Bear Valley Road near the project site. Route 42 has an existing bus stop located on the southbound direction of Apple Valley Road approximately 1,400 feet northwest of the project site. Route 43 has an existing bus stop located on the eastbound direction of Bear Valley Road approximately 450 feet west of the project site and another stop located on the eastbound direction of Bear Valley Road approximately 950 feet east of the project site. Routes 42 and 43 share a stop located on the southbound direction of Apple Valley Road approximately 1,100 feet southwest of the project site.

## **1.5 LIST OF CHAPTER 1.0 TABLES**

- Table 1-A: Recommended Improvements for Intersections and Funding Mechanism

**Table 1-A - Recommended Improvements for Intersections and Funding Mechanism**

Intersection	Opening Year (2024) Plus Project Improvements	Cumulative (2045) Plus Project Improvements	Funding Mechanism	Improvements Covered by Nexus Study	Improvements Covered by Fair Share
1 . Jacaranda Avenue/Bear Valley Road	Restripe NBTR to NBR, add right-turn overlap to NBR, optimize signal timings	Restripe NBTR to NBR, add right-turn overlap to NBR, optimize signal timings	Fair Share	-	Restripe NBTR to NBR, add right-turn overlap to NBR, optimize signal timings
2 . Mojave Fish Hatchery Road/Bear Valley Road	Restripe NBTL to NBT, change N/S split phasing to protected left-turn phasing, optimize signal timings	Restripe NBTL to NBT, change N/S split phasing to protected left-turn phasing, optimize signal timings	Fair Share	-	Restripe NBTL to NBT, change N/S split phasing to protected left-turn phasing, optimize signal timings
6 . Apple Valley Road/Bear Valley Road	Add right-turn overlap to NBR, optimize signal timings	Add right-turn overlap to NBR, optimize signal timings	Fair Share	-	Add right-turn overlap to NBR, optimize signal timings
10 . Kiowa Road/Bear Valley Road	Add right-turn overlaps to EBR and SBR, optimize signal timings	Add right-turn overlaps to EBR and SBR, optimize signal timings	Fair Share	-	Add right-turn overlaps to EBR and SBR, optimize signal timings

**Notes:**

N = North; S = South; NBR = North Bound Right-turn; NBT = North Bound Through; NBTR = North Bound Through Right-turn; NBTL = North Bound Through Left-turn; EBR = East Bound Right-turn; SBR = South Bound Right-turn

## 2.0 INTRODUCTION

The Traffic Impact Study (TIS) has been prepared for the proposed Apple Bear Commercial Project (project) to be located on the southeast corner of Bear Valley Road and Apple Bear Road (future road) in the Town of Apple Valley (Town). Figure 2-1 illustrates the regional and project location. (Figures and tables are located at the end of each chapter.)

This report is intended to satisfy the requirements established by the San Bernardino County *Transportation Impact Study Guidelines* (dated July 2019). The scope of work for this TIS, including trip generation, trip distribution, study area, and analysis methodologies, has been approved by Town staff via the Scoping Agreement process. A copy of the Scoping Agreement is included in Appendix A.

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

- Existing Conditions;
- Opening Year No Project Conditions;
- Opening Year Plus Project Conditions;
- Cumulative No Project Conditions; and
- Cumulative Plus Project Conditions.

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

### 2.1 PROJECT DESCRIPTION

The proposed project consists of a 23,256 square-foot (sf) grocery store (Sprouts), a 3,546 sf fast-food restaurant with drive-through (Raising Canes), a 1,310 sf fast-food restaurant with drive-through, a 2,500 sf fast-food restaurant with drive-through (Pad 3), 3,750 sf of quick serve restaurants, and a 5,500 sf car wash with a 131-foot wash tunnel. Per the Town's General Plan, the project parcel is considered as General Commercial (C-G). The project is anticipated to be completed by Year 2024. The project will extend the existing raised median on Bear Valley Road east of the intersection of Flying Feather Road and Bear Valley Road. As such, the left-turn movements will be restricted at intersection of Flying Feather Road and Bear Valley Road as the project is built. Figure 2-2 illustrates the conceptual site plan for the proposed project.

As shown in Figure 2-2, the project can be accessed via five driveways:

- Project Driveway 1 on Apple Bear Road;
- Project Driveway 2 on Apple Bear Road;

- Project Driveway 3 on Bear Valley Road;
- Project Driveway 4 on Flying Feather Road; and
- Project Driveway 5 on Flying Feather Road.

Project Driveway 1, Project Driveway 2, Project Driveway 4, and Project Driveway 5 will be full access driveways. Project Driveway 3 will be a right-in-right-out (RIRO) driveway.

## 2.2 LIST OF CHAPTER 2.0 FIGURES

- Figure 2-1: Regional and Project Location
- Figure 2-2: Conceptual Site Plan

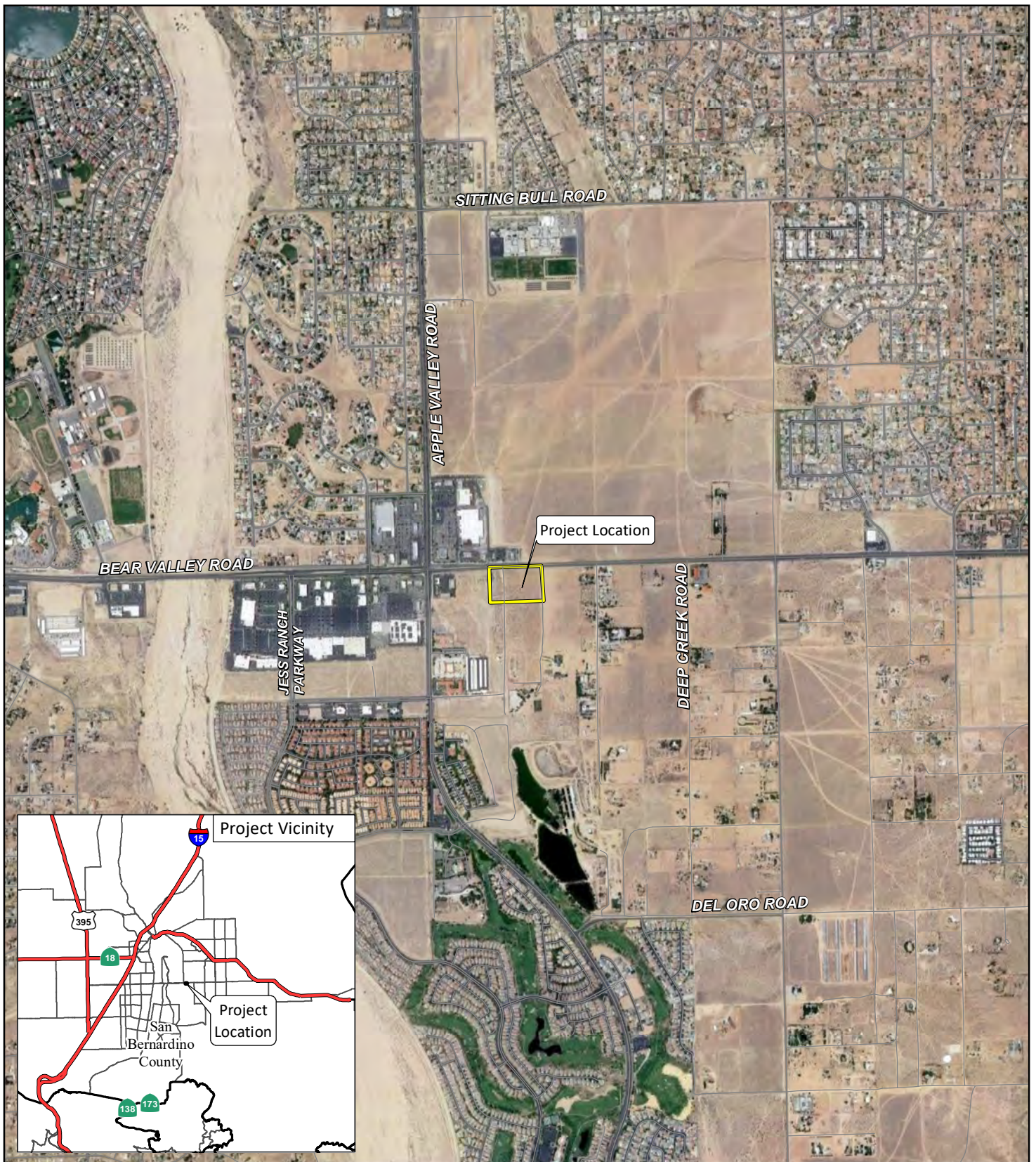
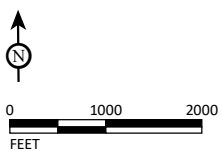


FIGURE 2-1

LSA



SOURCE: ESRI Streetmap, 2021; Google Earth, 2020.

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Apple Bear Commercial Project  
 Traffic Impact Study  
 Regional and Project Location

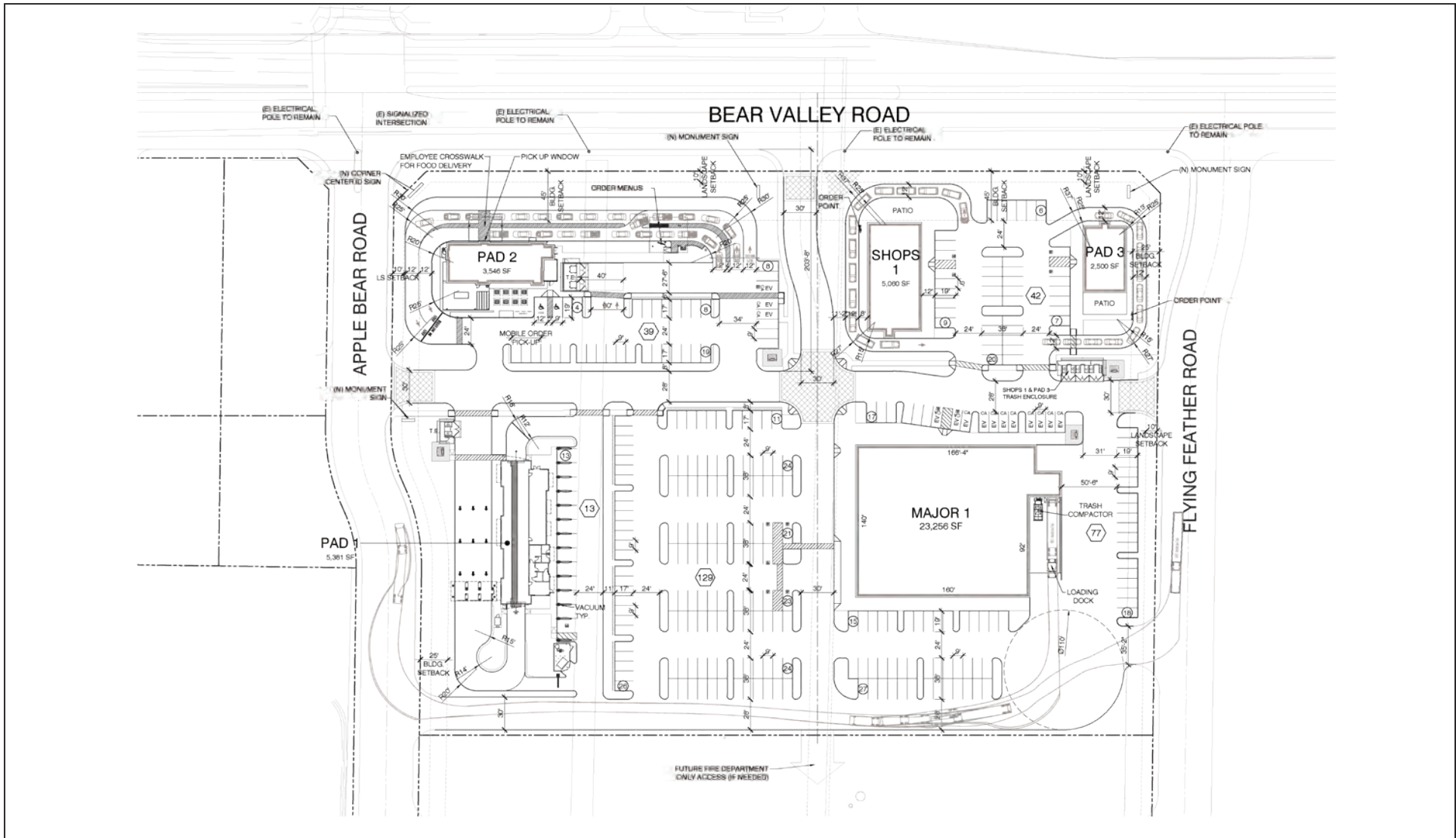
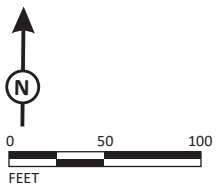


FIGURE 2-2

LSA



Apple Bear Commercial Project  
Traffic Impact Study

Conceptual Site Plan

SOURCE: MCG Architecture, December 2022.

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## 3.0 ANALYSIS METHODOLOGY AND CRITERIA

### 3.1 LEVEL OF SERVICE DEFINITIONS

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

A complete description of the meaning of LOS can be found in the Transportation Research Board Special Report 209, *Highway Capacity Manual* (HCM). The HCM establishes LOS A through F for intersections. A description of LOS for signalized and unsignalized intersections is summarized in Table 3-A. Table 3-B shows the LOS criteria for unsignalized and signalized intersections.

For all study area intersections, the *Highway Capacity Manual 6<sup>th</sup> Edition* (HCM 6) analysis methodologies were used to determine intersection LOS. Intersection LOS was calculated using the Synchro 11 software, which uses the HCM 6 methodologies.

### 3.2 LEVEL OF SERVICE PROCEDURES AND CRITERIA

Study intersections analyzed in this report are under the jurisdictions of the Town of Apple Valley, the City of Hesperia, and the City of Victorville. The Town of Apple Valley uses LOS C as its minimum level of service criterion for all intersections. The City of Hesperia and the City of Victorville use LOS D as their minimum level of service criterion for all intersections.

### 3.3 LIST OF CHAPTER 3.0 TABLES

- Table 3-A: Intersection Level of Service Definitions
- Table 3-B: Level of Service Criteria for Unsignalized and Signalized Intersections

**Table 3-A: Intersection Level of Service Definitions**

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

Source: Highway Capacity Manual (6<sup>th</sup> Edition)

**Table 3-B: Level of Service Criteria for Unsignalized and Signalized Intersections**

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

Source: Highway Capacity Manual (6<sup>th</sup> Edition)

## 4.0 EXISTING CONDITIONS

### 4.1 STUDY AREA

Based on the TIS Guidelines, the study area shall include all intersections at which the proposed project will add 50 or more peak hour trips. All study intersections were analyzed during the a.m. and p.m. peak hours. The a.m. peak hour is defined as the one hour of highest traffic volumes occurring between 7:00 a.m. and 9:00 a.m. while the p.m. peak hour is defined as the one hour of highest traffic volumes occurring between 4:00 p.m. and 6:00 p.m. All study intersections were approved by Town staff as part of the scoping process.

Per the Scoping Agreement (Appendix A), intersections analyzed in this study are as follows:

1. Jacaranda Avenue/Bear Valley Road (Hesperia, Victorville);
2. Mojave Fish Hatchery Road/Bear Valley Road (Hesperia, Victorville);
3. Jess Ranch Parkway/Bear Valley Road (Apple Valley);
4. Reata Road/Bear Valley Road (Apple Valley);
5. Apple Valley Road/Pimlico Road – Shopping Center Driveway (Apple Valley);
6. Apple Valley Road/Bear Valley Road (Apple Valley);
7. Westmont Drive – Apple Bear Road/Bear Valley Road (Apple Valley);
8. Flying Feather Road/Bear Valley Road (Apple Valley);
9. Deep Creek Road/Apple Valley Road (Apple Valley);
10. Kiowa Road/Bear Valley Road (Apple Valley);
11. Apple Bear Road/Project Driveway 1 (Apple Valley);
12. Apple Bear Road/Project Driveway 2 (Apple Valley);
13. Project Driveway 3/Bear Valley Road (Apple Valley);
14. Flying Feather Road/Project Driveway 4 (Apple Valley); and
15. Flying Feather Road/Project Driveway 5 (Apple Valley).

Figure 4-1 illustrates the locations of all study intersections.

### 4.2 EXISTING ROADWAY NETWORK

This section provides a description of the circulation network within the study area. Within the City of Hesperia, all major roadways are classified based on the Street Classification and Transportation Plan in the Circulation Element of the City of Hesperia *General Plan 2010*. Within the Town of Apple Valley, all major roadways are classified based on the Existing Roadway Classifications and Improvements provided in the Existing Environmental Conditions, Project Impacts and Mitigation Measures of the Town of Apple Valley *2009 General Plan Draft EIR (General Plan)*. Following is a brief description of major roadways within the study area:

- **Jacaranda Avenue:** Within the study area, Jacaranda Avenue is designated as an Arterial in the City of Hesperia *General Plan 2010*. Between Bear Valley Road and Carob Street, Jacaranda Avenue is a two-lane, undivided Arterial with a posted speed limit of 45 miles per hour. There are no bike facilities along either direction of this segment. There is no provision for on-street parking along either direction of this segment.
- **Bear Valley Road:** Within the study area, Bear Valley Road is designated as a Major Divided Arterial in the Town's General Plan. Between Jacaranda Avenue and Flying Feather Road, Bear Valley Road is a six-lane divided Arterial with a raised median and a posted speed limit of 50 miles per hour. There are no bike facilities nor provision for on-street parking along either direction of this segment. Between Flying Feather Road and Kiowa Road, Bear Valley Road is a four-lane divided Arterial with a painted median and a posted speed limit of 55 miles per hour. There are no bike facilities nor provision for on-street parking along either direction of this segment.
- **Apple Valley Road:** Within the study area, Apple Valley Road is designated as a Major Divided Arterial in the Town's General Plan. Between Pimlico Road and Bear Valley Road, Apple Valley Road is a six-lane divided Arterial with a raised median and a posted speed limit of 50 miles per hour. There are no bike facilities nor provision for on-street parking along either direction of this segment. Between Bear Valley Road and Town Center Drive, Apple Valley Road is a four-lane divided Arterial with a painted median and a posted speed limit of 50 miles per hour. There are bike lanes along both directions of this segment. There is no provision for on-street parking along either direction of this segment.
- **Flying Feather Road:** Within the study area, Flying Feather Road is a local street and has no designation in the Town's General Plan. Between Bear Valley Road and Oso Road, Flying Feather Road is a two-way, unpaved road. There are no bike facilities along either direction of this segment. There is no designated provision for on-street parking along either direction of this segment.
- **Deep Creek Road:** Within the study area, Deep Creek Road is designated as a Secondary Road in the Town's General Plan. Between Bear Valley Road and Wisconsin Street, Deep Creek Road is a two-lane, undivided road with a posted speed limit of 55 miles per hour. It should be noted that there is a proposed extension of Deep Creek Road between Bear Valley Road and Sitting Bull Road as outlined in the Town's General Plan. For purposes of this analysis, the extension has been considered only for the Cumulative scenarios. There are no bike facilities along either direction of this segment. There is no provision for on-street parking along either direction of this segment.
- **Kiowa Road:** Within the study area, Kiowa Road is designated as a Major Road in the Town's General Plan. Between Caddo Road and Puye Road, Kiowa Road is a two-lane divided road with a painted median and a posted speed limit of 50 miles per hour. There are bike lanes along both directions of this segment. There is no provision for on-street parking along either direction of this segment.

Figure 4-2 illustrates existing study intersection geometrics and traffic control. Figures 4-3, 4-4, and 4-5 illustrate Roadway Classifications for the Town of Apple Valley, the City of Hesperia, and the City of Victorville, respectively.

### **4.3 BICYCLE, PEDESTRIAN, AND TRANSIT FACILITIES**

#### **4.3.1 Bicycle Facilities**

The Town of Apple Valley promotes bicycling for recreation and mobility. Bicycling can be a viable alternative to local work commutes and offers children a healthy way to get to school. To facilitate and encourage bicycle trips, the Town has adopted a Non-Motorized Transportation Master Plan that includes a network of proposed facilities and capital improvement projects.

According to the Town of Apple Valley General Plan, the bikeway network within the Town is classified into three categories: Class I, Class II, and Class III. Class I bikeways provide a separate, paved right-of-way for bicycle travel, outside the roadbed but within the right of way. Class II bikeways provide a striped and stenciled lane for one-way travel on a street or highway. Class III bikeways are unmarked routes identified only by signage, which allow shared travel with pedestrians and motor vehicles. Furthermore, bicycle travel is allowed on all public roadways, except freeways and freeway ramps, within the Town.

As part of the Town's Bikeway Network, Class II bikeways have been to both directions of Apple Valley Road south of Bear Valley Road and Kiowa Road within the study area. Proposed future Class I bikeways have been planned to be added along the eastbound direction of Bear Valley Road east of the Mojave River and the northbound direction of Apple Valley Road north of Bear Valley Road within the study area. Proposed future Class II bikeways have been planned to be added along both directions of Bear Valley Road west of the Mojave River and Deep Creek Road within the study area. Figure 4-6 illustrates the existing and proposed bikeways within the Town of Apple Valley.

#### **4.3.2 Pedestrian Facilities**

The implementation of enhanced pedestrian linkage with a comprehensive trails system links residential areas, schools, parks, and commercial centers so that residents can travel within the community without driving. Safe and attractive sidewalks and walkways improve the walkability of the Town. Townwide, sidewalks are generally provided on both sides of the streets. Additionally, standard paved trails and non-standard unpaved trails are frequently used by bicyclists and pedestrians in the Town. Some trails are also available for equestrian riders. The existence of trails and sidewalks provides accessible facilities, provides safety features, and improves walkability in the Town of Apple Valley. According to the Town's General Plan, there is a proposed Lifeline Trail for multi-use and equestrian use along Bear Valley Road within the study area. Paved sidewalks are provided on both sides of Bear Valley Road east of the Mojave River, Apple Valley Road, and Kiowa Road. Figures 4-7, 4-8, and 4-9 illustrate the network of existing and proposed trails within the City of Hesperia, the City of Victorville, and the Town of Apple Valley, respectively.

#### **4.3.3 Transit Facilities**

The Victor Valley Transit Authority (VVTA) is the Regional Transit System operated by the high desert communities of Adelanto, Apple Valley, Hesperia, Victorville, and San Bernardino County. VVTA is responsible for coordinating transit services throughout the approximately 950-square-mile service

area. VVTA provides both local and regional services throughout the region with 32 fixed routes using 64 active vehicles. VVTA bus Routes 42, 43, and 47 operate within the study area. Route 42 has stops along Bear Valley Road, Mojave Fish Hatchery Road, Jess Ranch Parkway, and Apple Valley Road within the study area. Route 43 has stops along Bear Valley Road, Mojave Fish Hatchery Road, and Jess Ranch Parkway within the study area. Route 47 has stops along Kiowa Road within the study area.

#### 4.4 EXISTING TRAFFIC VOLUMES

Existing traffic volumes were developed based on counts collected by Counts Unlimited in November 2022. A.m. and p.m. peak hour turning movement counts were collected at study intersections. Detailed count sheets are included in Appendix B.

Vehicle classification counts were conducted at all study intersections. At these locations, counts were converted to Passenger Car Equivalent (PCE) volumes. The concept of PCEs accounts for the larger impact of trucks on traffic operations. It does so by assigning each type of truck a PCE factor that represents the number of passenger vehicles that could travel through an intersection in the same time that a particular type of truck could. PCE volumes at study intersections were computed using a factor of 1.5 for 2-axle trucks, 2.0 for 3-axle trucks, and 3.0 for trucks with four or more axles consistent with the San Bernardino County Transportation Authority (SBCTA) Congestion Management Plan (CMP) TIS guidelines.

#### 4.5 EXISTING LEVELS OF SERVICE

An intersection LOS analysis was conducted for existing conditions using the methodologies previously discussed. For all signalized intersections, existing signal timing sheets were obtained from the City of Victorville and Town of Apple Valley staff and the corresponding signal timings were included in the Synchro files. These timings were used for all the analysis scenarios. The signal timing sheets are included in Appendix B. Table 4-A summarizes the results of this analysis and shows that the following intersections are currently operating at a deficient LOS under existing conditions:

1. Jacaranda Avenue/Bear Valley Road (p.m. peak hour only);
2. Mojave Fish Hatchery Road/Bear Valley Road (p.m. peak hour only);
6. Apple Valley Road/Bear Valley Road (both a.m. and p.m. peak hours); and
10. Kiowa Road/Bear Valley Road (both a.m. and p.m. peak hours).

All other intersections are forecast to operate at a satisfactory LOS. Detailed LOS worksheets are included in Appendix D.

#### 4.6 LIST OF CHAPTER 4.0 FIGURES AND TABLES

- Figure 4-1: Study Area Intersections
- Figure 4-2: Existing Intersection Geometrics and Traffic Control
- Figure 4-3: Town of Apple Valley Roadway Classification
- Figure 4-4: City of Hesperia Roadway Classification

- 
- Figure 4-5: City of Victorville Roadway Classification
  - Figure 4-6: Town of Apple Valley Existing and Proposed Bikeways
  - Figure 4-7: City of Hesperia Master Plan of Bikeways and Trails
  - Figure 4-8: City of Victorville Master Plan of Bikeways and Trails
  - Figure 4-9: Town of Apple Valley Master Plan of Trails
  - Figure 4-10: Existing Peak Hour Traffic Volumes
  - Table 4-A: Existing Intersection Levels of Service

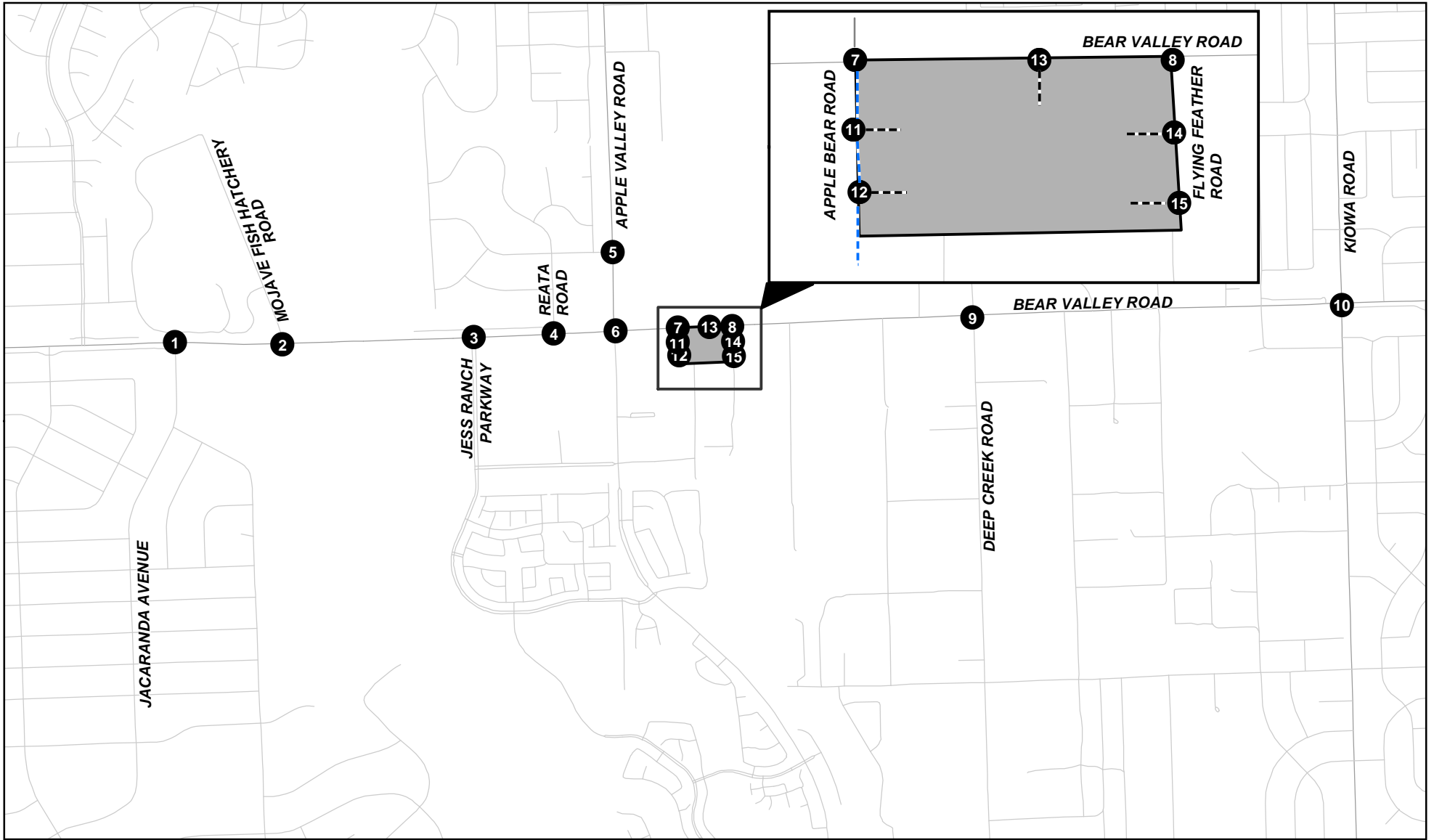


FIGURE 4-1

LSA

LEGEND

- Project Location
- Study Area Intersections
- Project Driveway
- Future Road



SOURCE: ESRI Streetmap, 2021.

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Apple Bear Commercial Project  
Traffic Impact Study  
Study Area Intersections



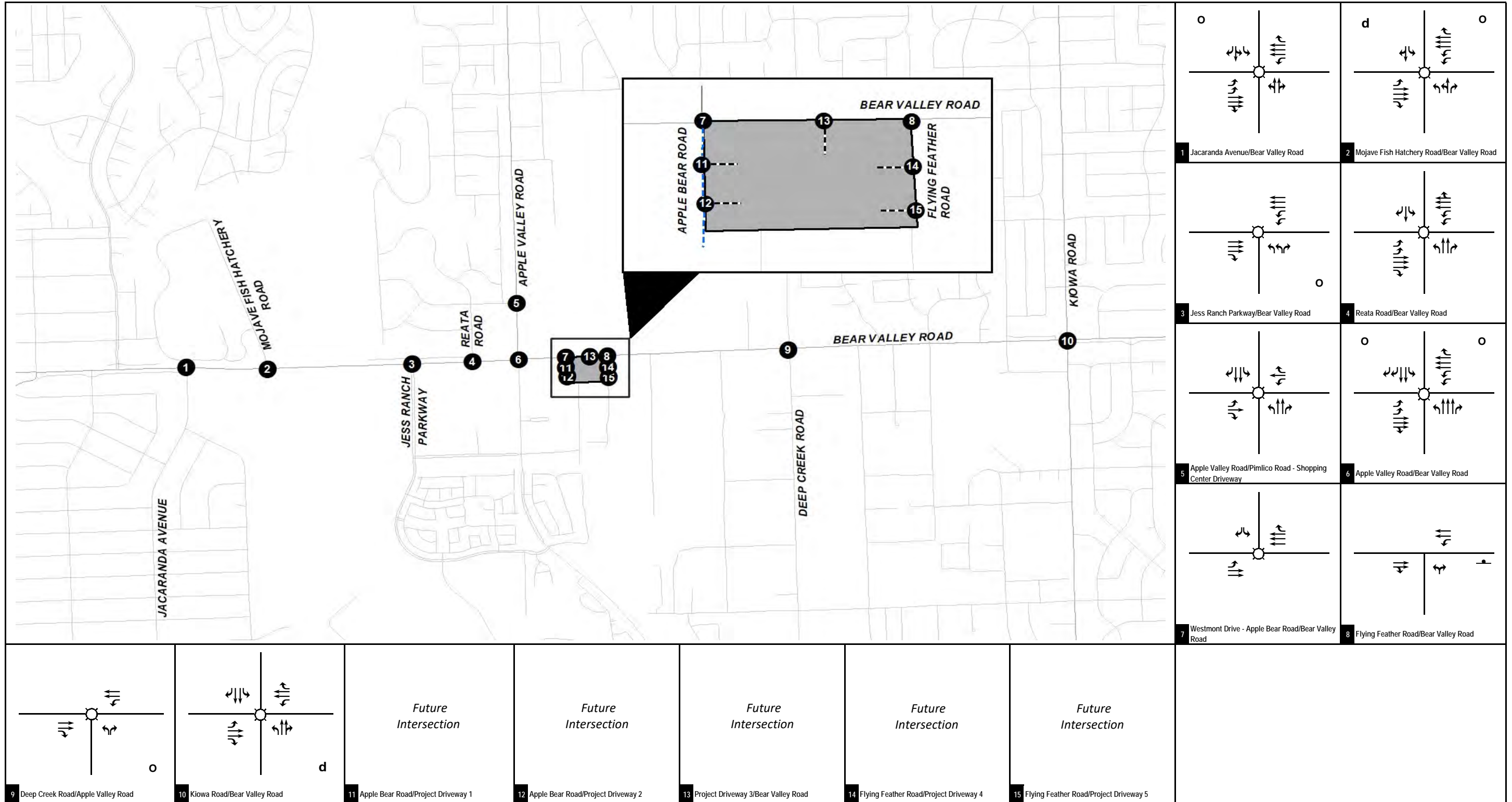


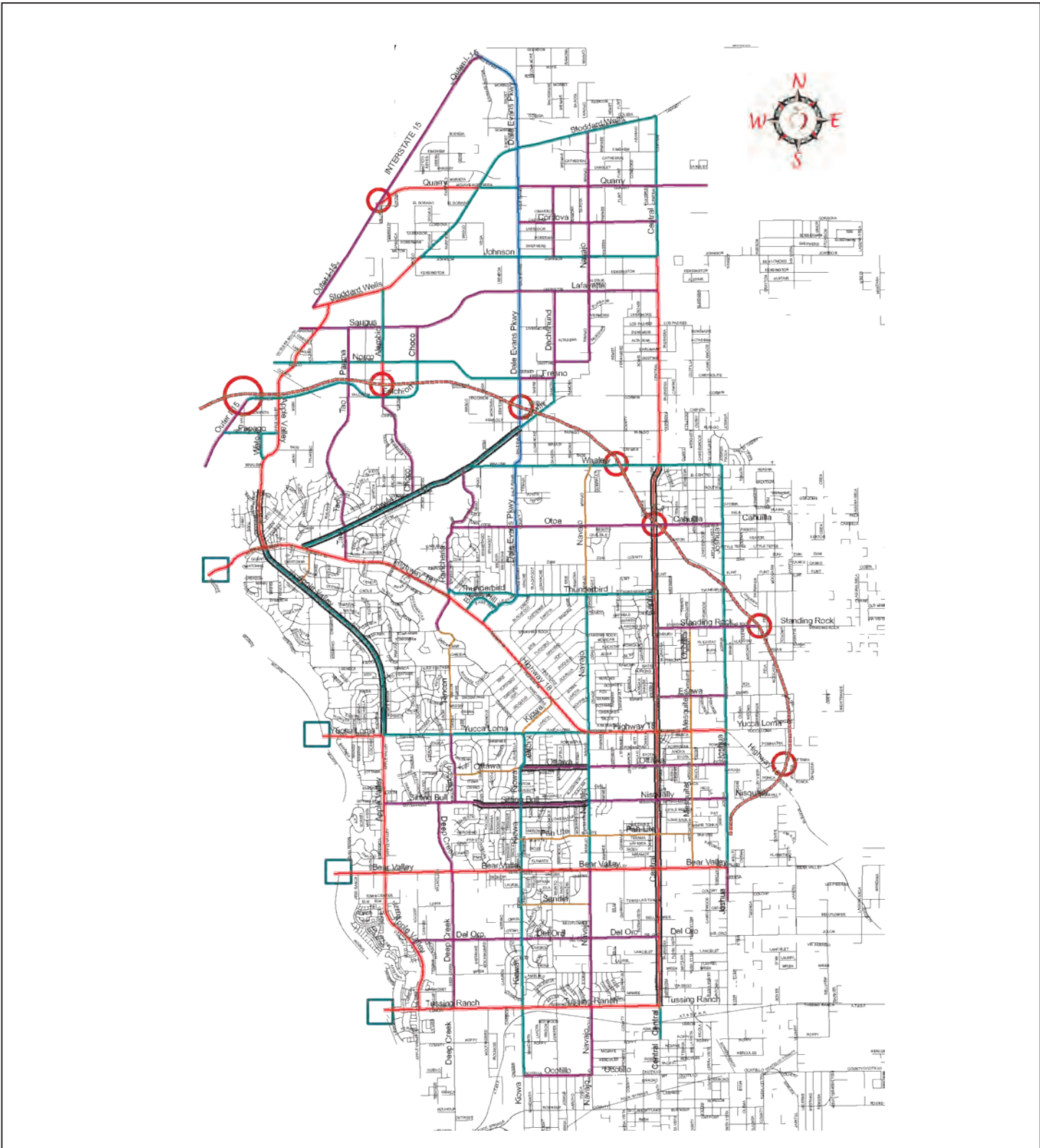
FIGURE 4-2



- Legend
- Signal
  - Right-Turn Overlap
  - ⊙ Stop Sign
  - d De-facto Right Turn

Apple Bear Commercial Project  
Traffic Impact Study

Existing Intersection Geometrics and Traffic Control



LSA

LEGEND

- Major Divided Parkway (142' ROW)
- Major Divided Arterial (128' ROW)
- Major Road (104' ROW)
- Secondary Road (88' ROW)
- Collector (80'-88' ROW)
- Modified Road Section
- - - High Desert Corridor (E-220)
- Future Bridges
- Future Interchange

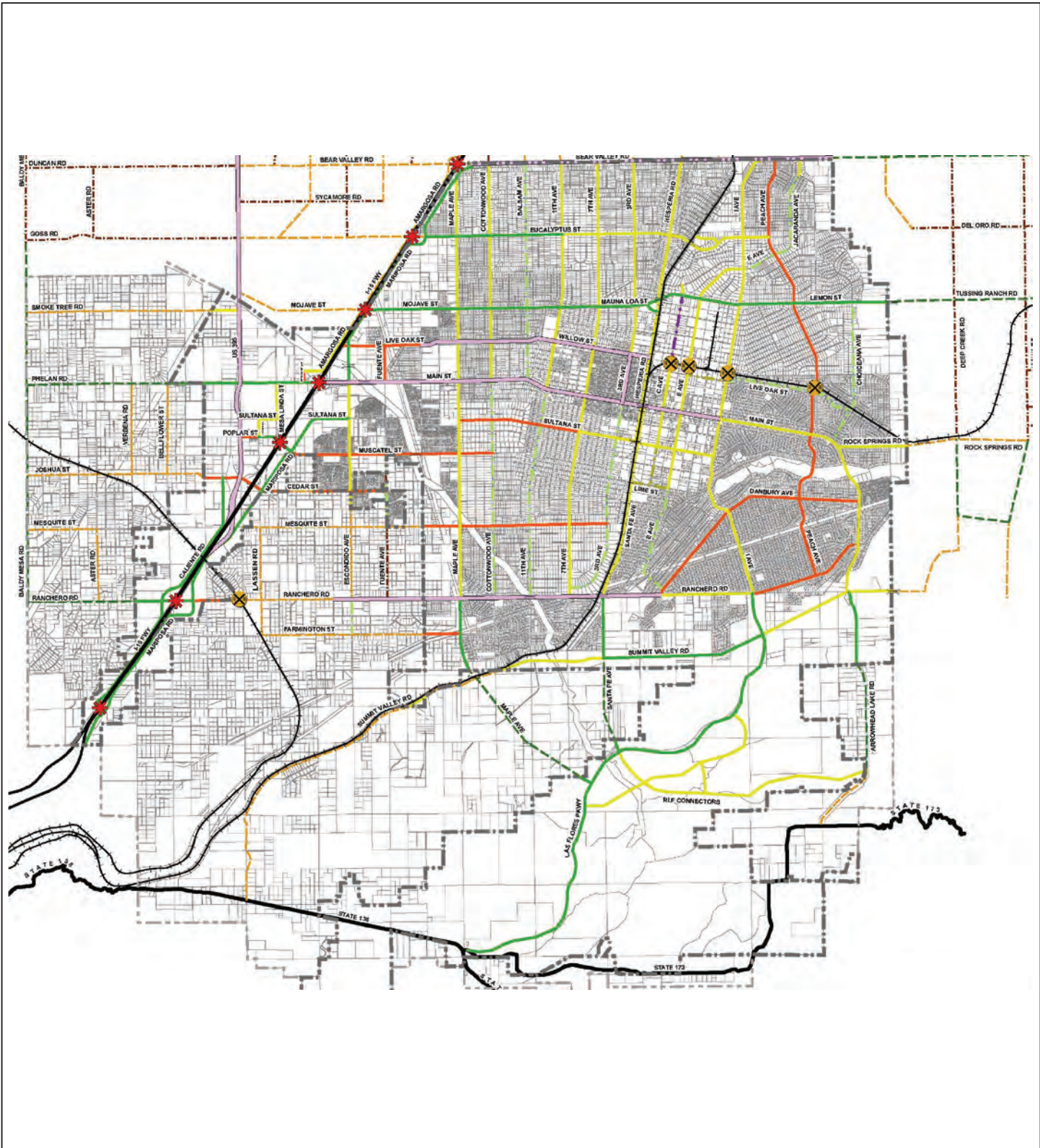
FIGURE 4-3

Apple Bear Commercial Project  
Traffic Impact Study

Town of Apple Valley Roadway Classification

SOURCE: Town of Apple Valley 2009 General Plan Draft EIR

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LSA



**LEGEND**

**Arterials**

- Major Arterial
- Arterial
- Secondary Arterial
- Industrial Collector
- Suburban Collector
- Rural Collector

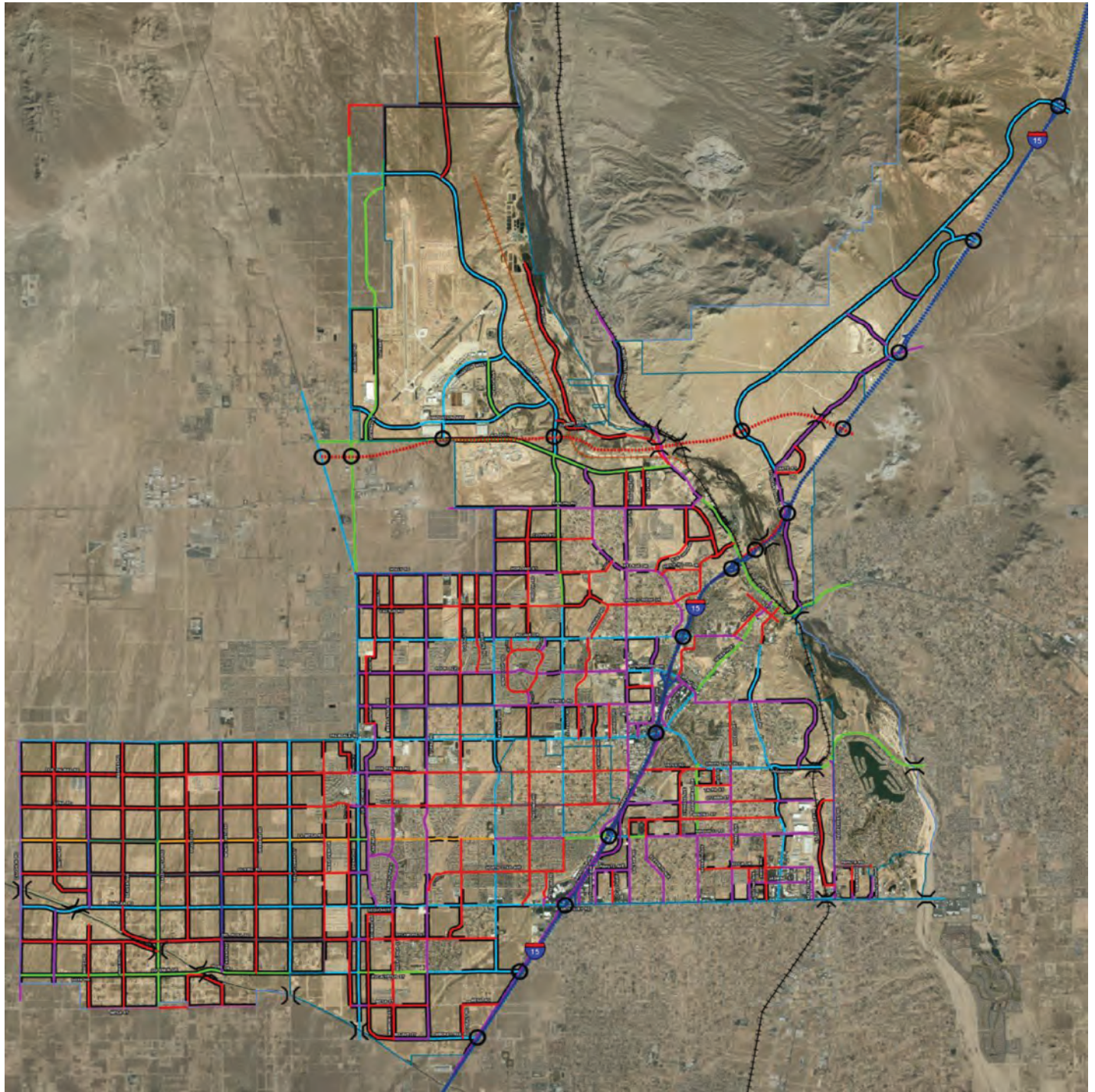
**Misc.**

- City Boundary
- Sphere of Influence
- Railroad
- ⊗ At Grade Crossing
- Bridge/overcrossing/undercrossing
- ★ Freeway Interchange

FIGURE 4-4

*Apple Bear Commercial Project  
Traffic Impact Study*

City of Hesperia Roadway Classification



LSA



LEGEND

Retrofit Street Sections

- Collector
- Arterial
- Major Arterial
- Residential Arterial
- Super Arterial

Street Sections

- Collector
- Arterial
- Major Arterial
- Residential Arterial
- Super Arterial

Victorville City Boundary	I-15
Victorville Sphere of Influence	BNSF Rail
High Desert Corridor Freeway	City Rail
Interchange	Bridge

FIGURE 4-5

*Apple Bear Commercial Project  
Traffic Impact Study*

City of Victorville Roadway Classification

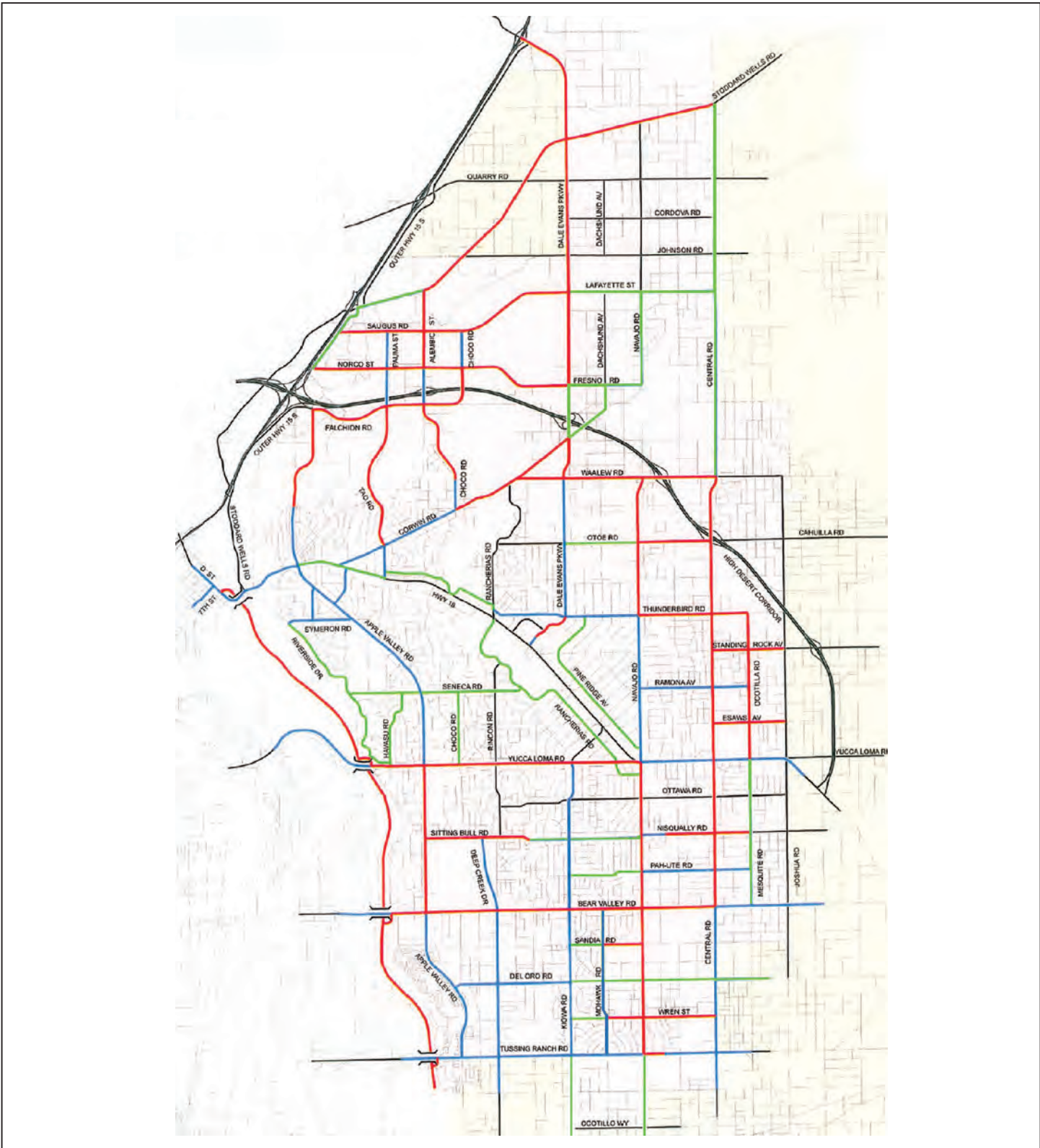


FIGURE 4-6

LSA

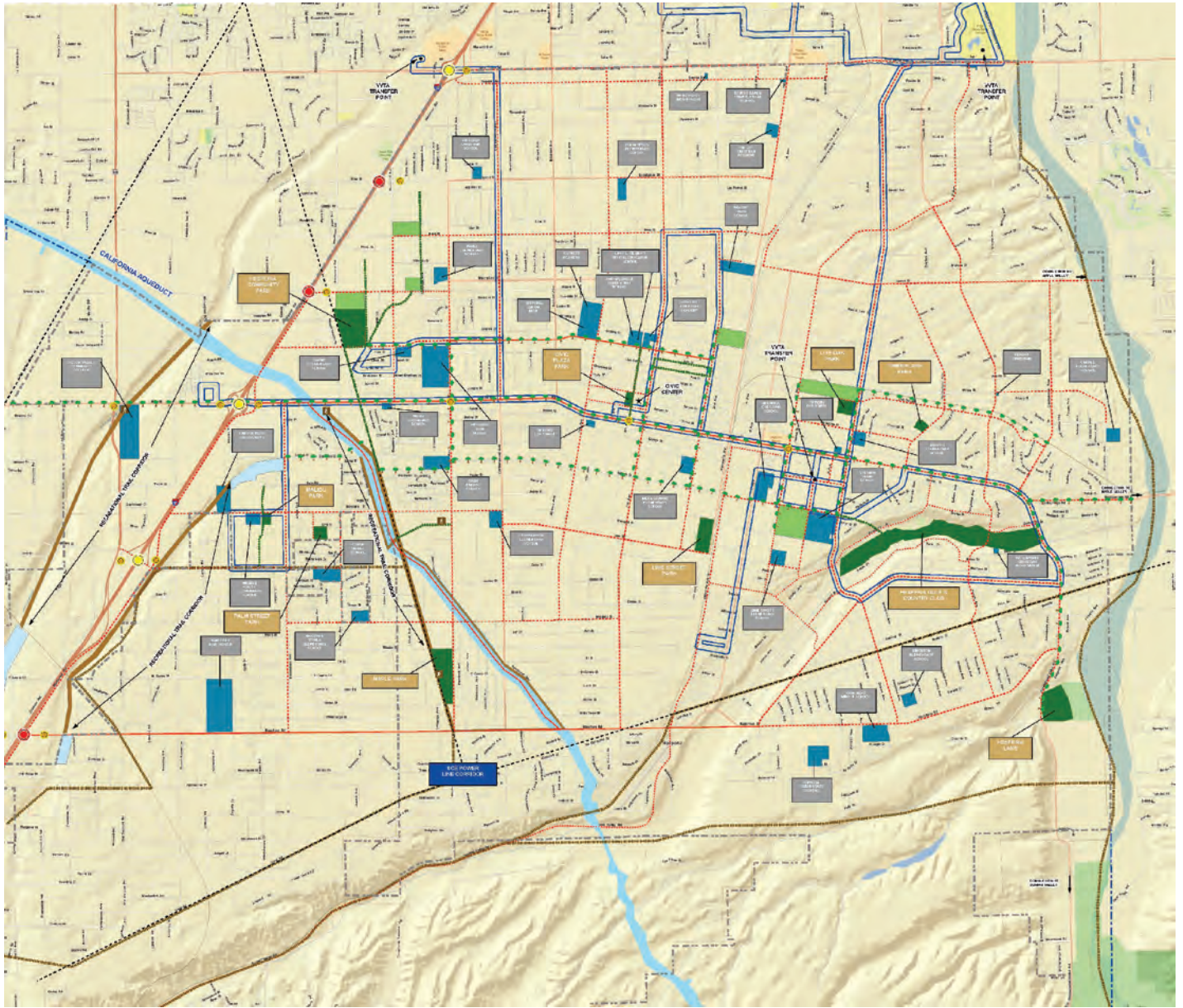
LEGEND

- Class I
- Class II
- ⋯ Class II on Frontage Roads
- Class III



Apple Bear Commercial Project  
Traffic Impact Study

Town of Apple Valley Existing and Proposed Bikeways



LSA

LEGEND

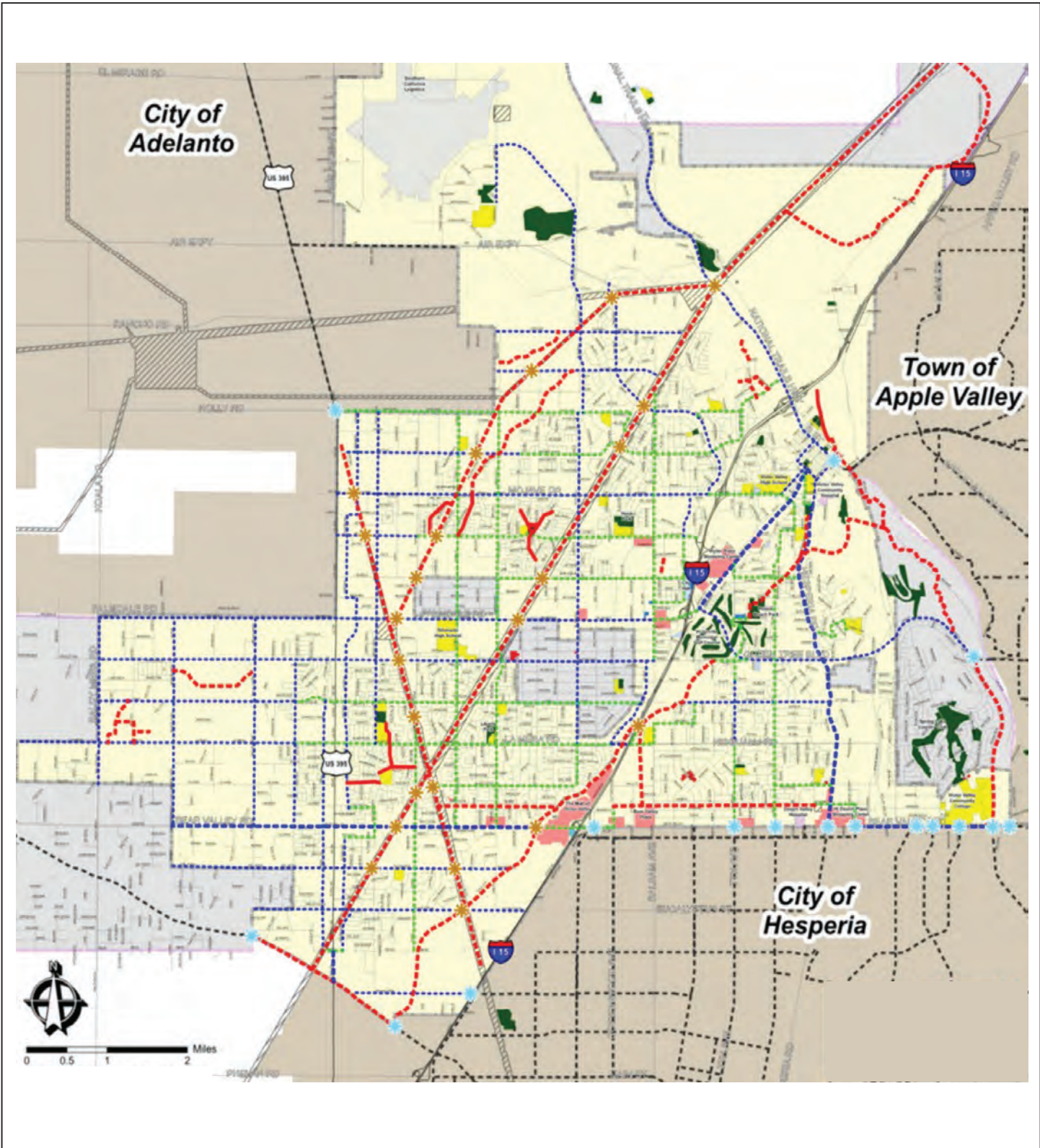
-  Recreational Trailhead
-  Class 1 Bike Trail
-  Class 2 Bike Trail
-  Class 3 Bike Trail
-  Equestrian Trail
-  PASEO



FIGURE 4-7

*Apple Bear Commercial Project  
Traffic Impact Study*

City of Hesperia Master Plan of Bikeways and Trails



LSA

LEGEND

- Existing Class 1 Trail/Path
- - - Proposed Class 1 Trail/Path
- - - Proposed Class 1 Trail/Path
- Proposed Class 2 Bike Lane
- - - Proposed Class 3 Shared Route
- - - Planned Regional Trail/Path
- ★ Regional Connection
- ★ Proposed Trail Crossings

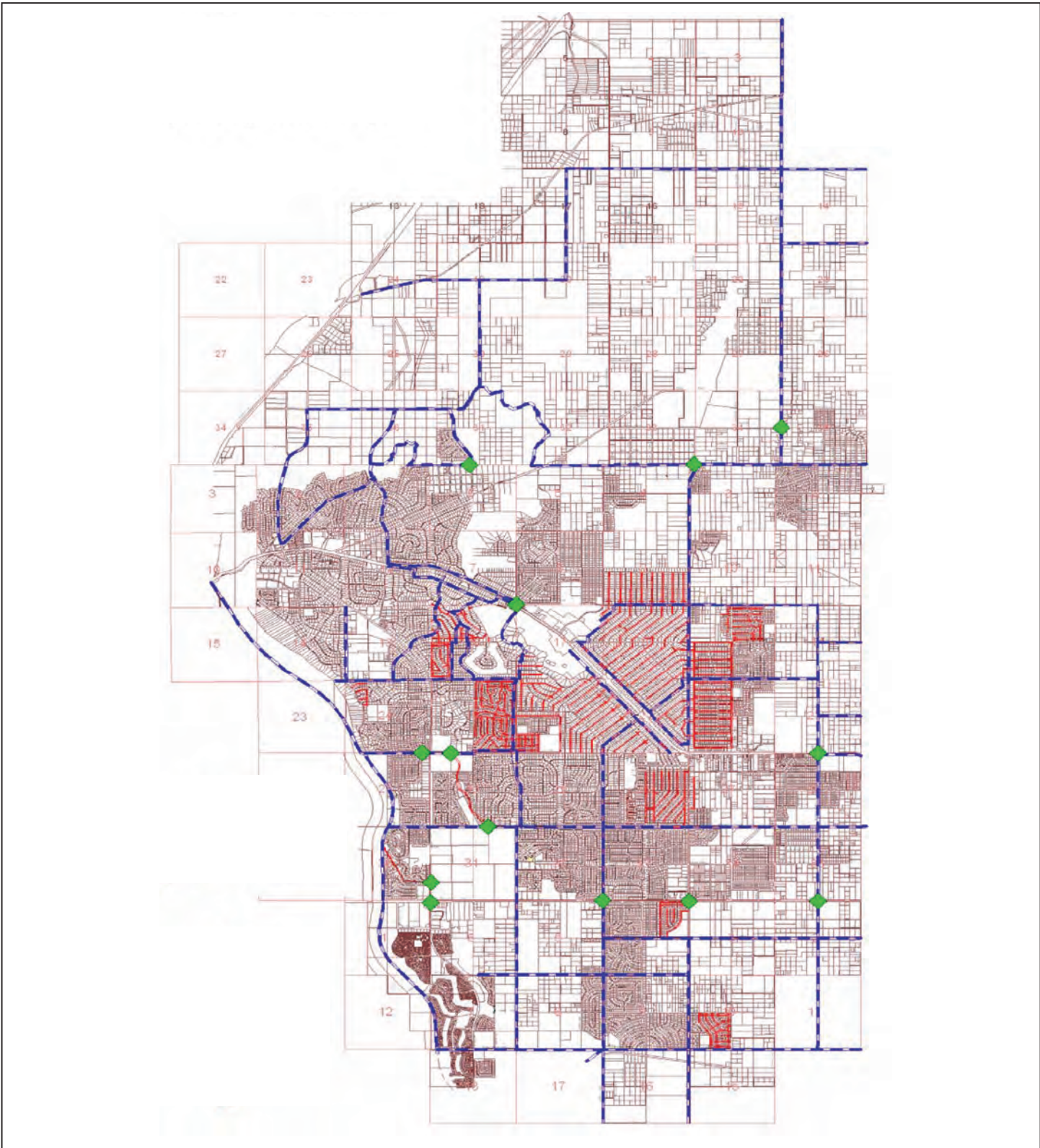
FIGURE 4-8

*Apple Bear Commercial Project  
Traffic Impact Study*

City of Victorville Master Plan of Bikeways and Trails

SOURCE: City of Victorville 2018 General Plan

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LSA

LEGEND

- Lifeline Trails (Multi-Use and Equestrian Use)
- Recorded Bridle Trails
- ◆ Major Street Crossings



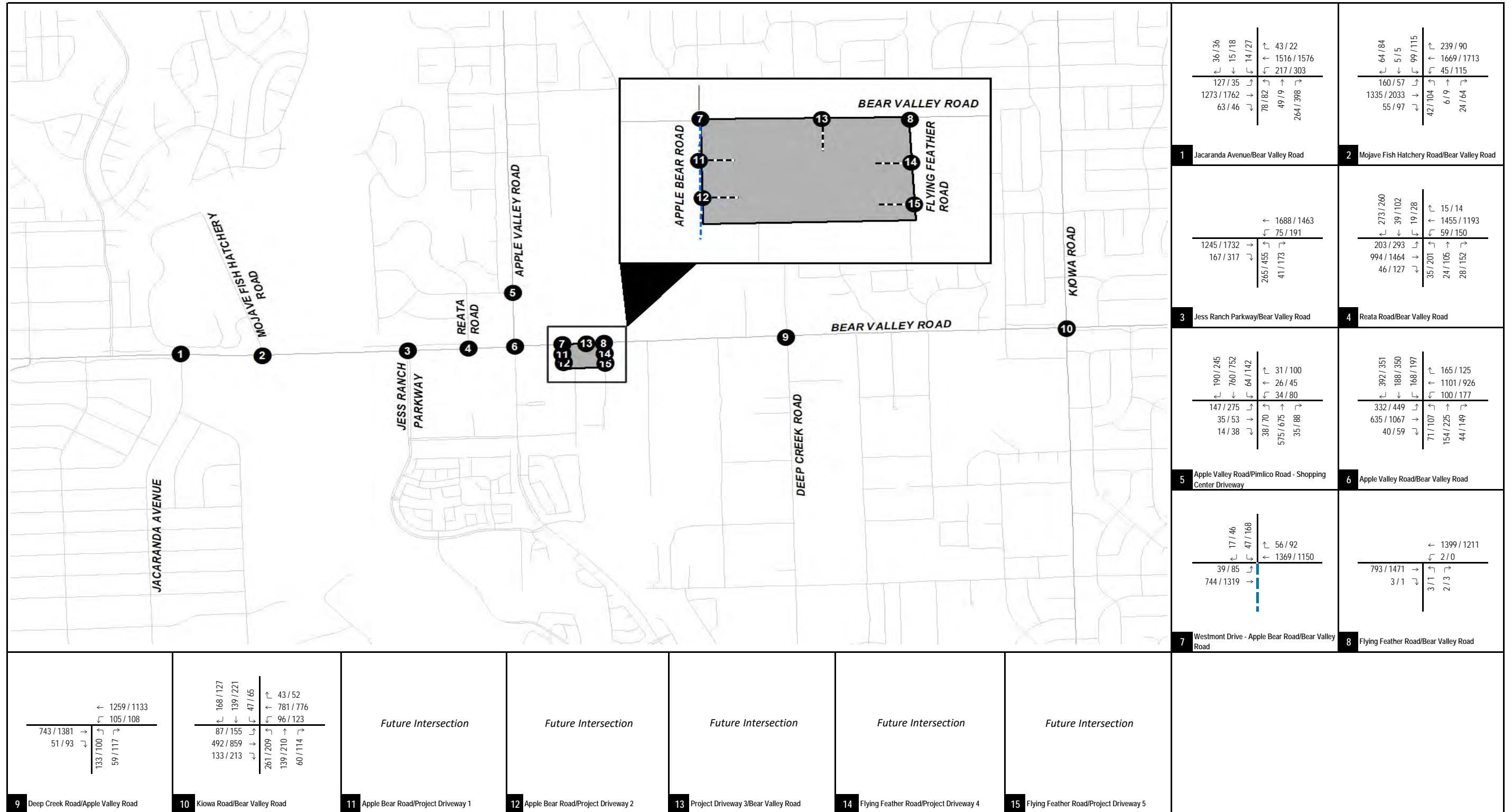
FIGURE 4-9

*Apple Bear Commercial Project  
Traffic Impact Study*

Town of Apple Valley Master Plan of Trails

SOURCE: Town of Apple Valley 2009 General Plan Draft EIR  
 P:\WDN2201\_Apple Bear Commercial Project\Technical Studies\Traffic and VMT\Traffic\GIS\Reports\fig4-9\_Trails\_Apple Valley.ai (2/16/2023)





XXXX / YYYY

AM / PM Peak Hour PCE Traffic Volumes

--- Project Driveway

--- Future Road

FIGURE 4-10

Apple Bear Commercial Project  
Traffic Impact Study

Existing Peak Hour Traffic Volumes

Table 4-A - Existing Intersection Levels of Service

Intersection	Jurisdiction	LOS Standard	Control	No Project			
				A.M. Peak Hour		P.M. Peak Hour	
				Delay (sec.)	LOS	Delay (sec.)	LOS
1 . Jacaranda Avenue/Bear Valley Road	City of Hesperia/City of Victorville	D	Signal	49.2	D	90.1	F *
2 . Mojave Fish Hatchery Road/Bear Valley Road	City of Hesperia/City of Victorville	D	Signal	49.1	D	55.7	E *
3 . Jess Ranch Parkway/Bear Valley Road	Town of Apple Valley	C	Signal	19.8	B	24.8	C
4 . Reata Road/Bear Valley Road	Town of Apple Valley	C	Signal	28.9	C	32.2	C
5 . Apple Valley Road/Pimlico Road - Shopping Center Driveway	Town of Apple Valley	C	Signal	17.5	B	27.6	C
6 . Apple Valley Road/Bear Valley Road	Town of Apple Valley	C	Signal	55.1	E *	62.0	E *
7 . Westmont Drive - Apple Bear Road/Bear Valley Road	Town of Apple Valley	C	Signal	14.8	B	17.0	B
8 . Flying Feather Road/Bear Valley Road	Town of Apple Valley	C	OWSC	22.4	C	21.4	C
9 . Deep Creek Road/Apple Valley Road	Town of Apple Valley	C	Signal	18.3	B	21.2	C
10 . Kiowa Road/Bear Valley Road	Town of Apple Valley	C	Signal	45.2	D *	44.3	D *
11 . Apple Bear Road/Project Driveway 1	Town of Apple Valley	C	-	Does Not Exist		Does Not Exist	
12 . Apple Bear Road/Project Driveway 2	Town of Apple Valley	C	-	Does Not Exist		Does Not Exist	
13 . Project Driveway 3/Bear Valley Road	Town of Apple Valley	C	-	Does Not Exist		Does Not Exist	
14 . Flying Feather Road/Project Driveway 4	Town of Apple Valley	C	-	Does Not Exist		Does Not Exist	
15 . Flying Feather Road/Project Driveway 5	Town of Apple Valley	C	-	Does Not Exist		Does Not Exist	

Notes:

OWSC = One-Way Stop Control; LOS = Level of Service

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

\* Exceeds LOS Standard

## 5.0 PROJECT TRAFFIC

### 5.1 EXISTING TRAFFIC REASSIGNMENT

The intersection of Flying Feather Road and Bear Valley Road is currently an unsignalized intersection with one-way stop control (OWSC) on Flying Feather Road. Vehicles traveling westbound on Bear Valley Road are currently able to make a left-turn maneuver onto Flying Feather Road using the available painted median on Bear Valley Road. Vehicles traveling northbound on Flying Feather Road are currently able to make a left-turn maneuver onto Bear Valley Road. The project will extend the raised median on Bear Valley Road eastward past the intersection of Flying Feather Road and Bear Valley Road, restricting left-turn ingress and egress to and from Flying Feather Road. Therefore, existing left-turn trips at this intersection have been redistributed to study intersection 7 – Westmont Drive – Apple Bear Road/Bear Valley Road, study intersection 12 – Apple Bear Road/Project Driveway 2, and study intersection 15 – Flying Feather Road/Project Driveway 5. The reassignment of existing trips was developed taking into the consideration the project site layout and driveway locations.

### 5.2 PROJECT TRIP GENERATION

The trip generation for the proposed project was developed using rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (11<sup>th</sup> Edition) for Land Use 850 – “Supermarket”, Land Use 933 – “Fast-Food Restaurant without Drive-Through Window”, and Land Use 934 – “Fast-Food Restaurant with Drive-Through Window”. Since the ITE *Trip Generation Manual* does not provide trip generation rates for automated car washes, the trip generation for this facility was developed using the survey rates used in traffic studies for similar automated car wash studies. As such, the following two traffic studies were evaluated:

1. Arbor Car Wash Traffic Impact Analysis (City of Rancho Cucamonga) – using survey rates from Fast5 Xpress car wash in the City of Murrieta; and
2. Newport Pointe Project Traffic Impact Analysis (City of Menifee) – using survey rates from Victorville Speedwash facility located at 12147 Industrial Boulevard.

Since the Victorville Speedwash facility rates were higher, these rates have been used to estimate the trip generation for the automated car wash component of the project as a conservative measure. Appendix A includes the trip generation rates for both facilities.

Table 5-A summarizes the daily, a.m., and p.m. peak hour project trip generation. As shown in Table 5-A, the project is anticipated to generate 8,865 gross daily trips, with 643 gross trips occurring during the a.m. peak hour and 739 gross trips occurring during the p.m. peak hour.

Supermarkets, fast-food restaurants, and automated car wash facilities will typically draw some trips from the traffic passing the site on an adjacent street or from traffic on other roadways within the vicinity. These trips are not “new” trips made for the sole purpose of visiting the site, but are trips made as an intermediate stop en route to a final destination. Trips from traffic passing the site on an adjacent street are referred to as “pass-by” trips and will only affect traffic at project driveways and on streets adjacent to the project.

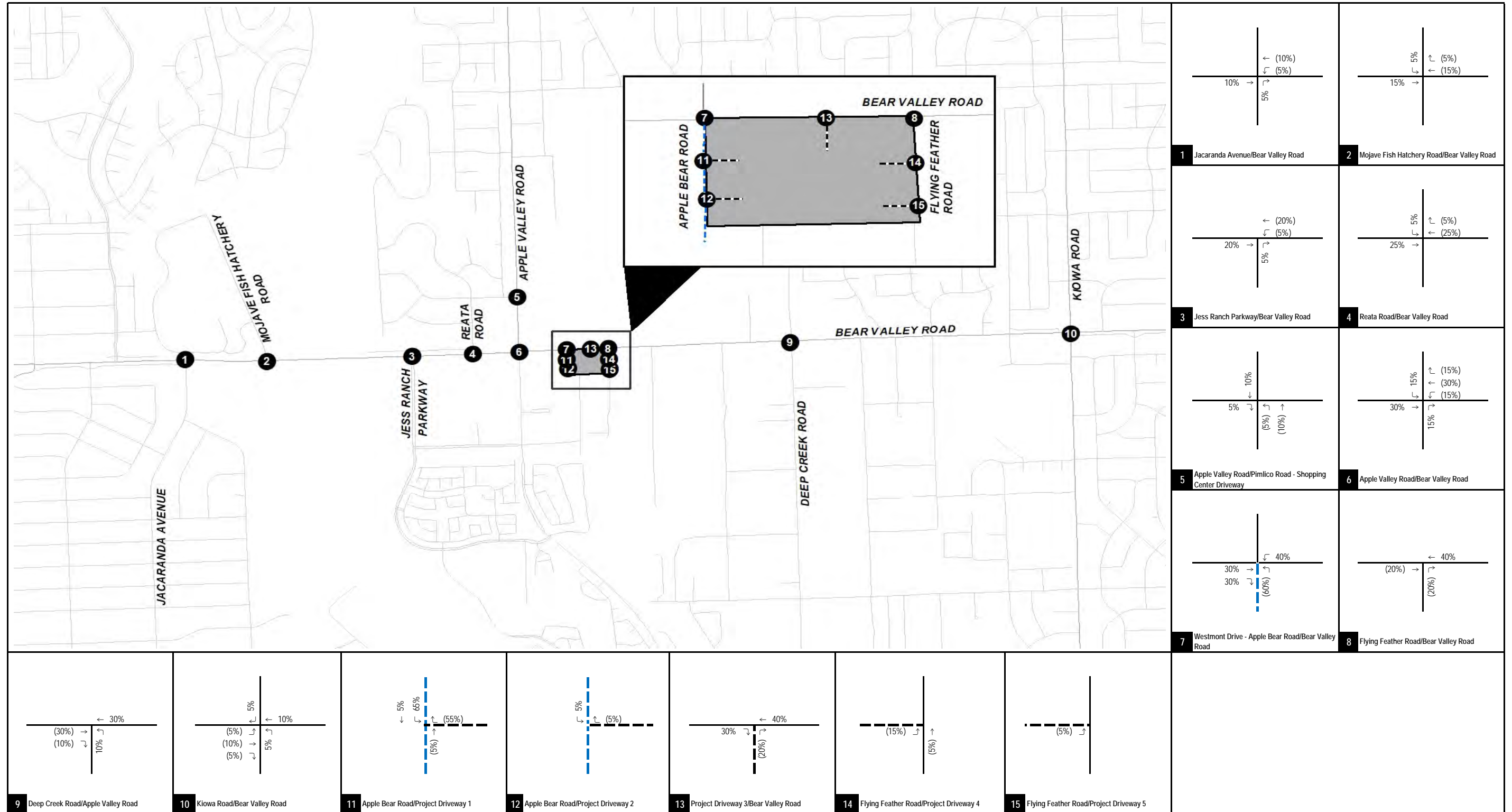
Pass-by trip percentages for the supermarket, fast-food restaurants, and automated car wash were obtained from the ITE *Trip Generation Manual*. Total pass-by trips were subtracted from the gross external trips to obtain the net external trips for the project. After accounting for pass-by trips, the project is anticipated to generate 5,120 net daily trips, with 388 net trips occurring during the a.m. peak hour and 432 net trips occurring during the p.m. peak hour.

### 5.3 PROJECT TRIP DISTRIBUTION AND ASSIGNMENT

The project trip distribution patterns were based on the regional roadway network and the location of residential, employment, and commercial centers in relation to the proposed project. Figure 5-1 illustrates the project trip distribution for the proposed project. Figure 5-2 illustrates the total pass-by trip assignment. The project trip assignment at the study intersections is the product of the project trip generation and the corresponding trip distribution percentages. Figure 5-3 illustrates the total project trip assignment.

### 5.4 LIST OF CHAPTER 5.0 FIGURES AND TABLES

- Figure 5-1: Project Trip Distribution
- Figure 5-2: Project Total Pass-by Trip Assignment
- Figure 5-3: Total Project Trip Assignment
- Table 5-A: Project Trip Generation



LSA

XX% (YY%)

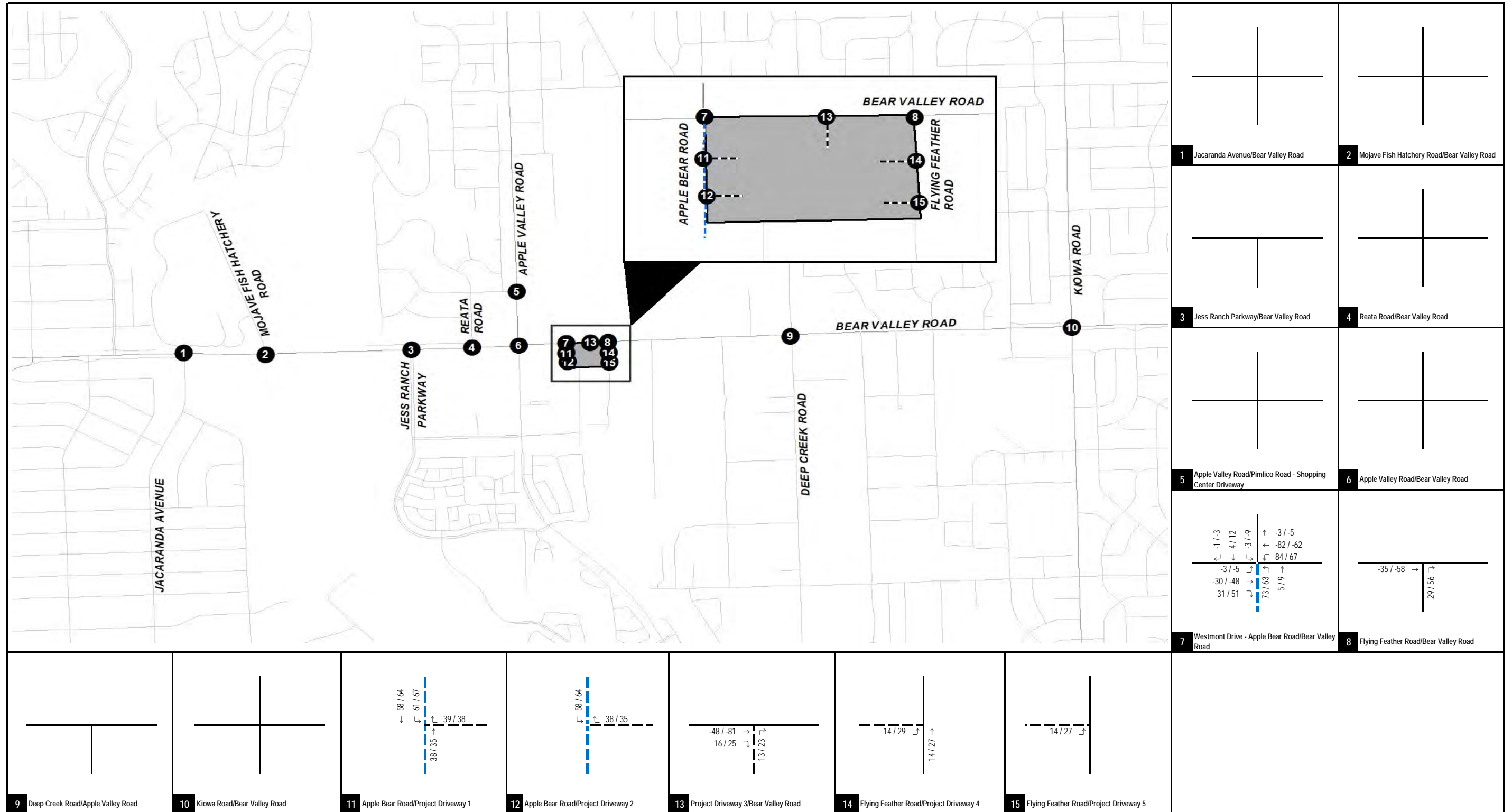
Inbound (Outbound) Distribution

--- Project Driveway

--- Future Road

FIGURE 5-1

Apple Bear Commercial Project  
Traffic Impact Study  
Project Trip Distribution

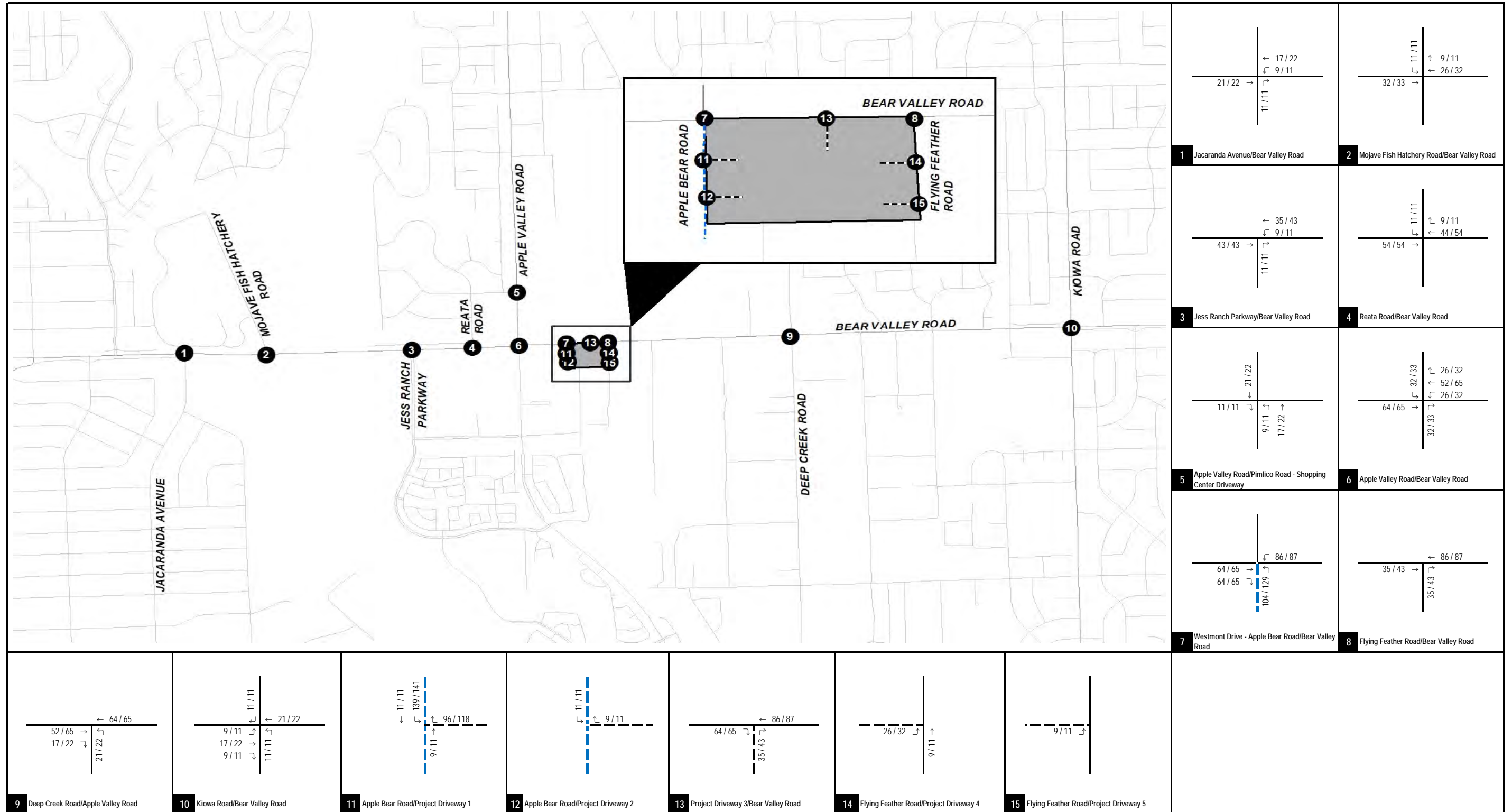


LSA

XX / YY  
 AM / PM Peak Hour Trips  
 --- Project Driveway  
 --- Future Road

FIGURE 5-2

Apple Bear Commercial Project  
 Traffic Impact Study  
 Project Total Pass-by Trip Assignment



LSA

XXX / YYY

AM / PM Peak Hour Trips

--- Project Driveway

- - - Future Road

Apple Bear Commercial Project  
Traffic Impact Study

Total Project Trip Assignment

FIGURE 5-3

Table 5-A - Project Trip Generation

Land Use	Units	A.M. Peak Hour			P.M. Peak Hour			Daily
		In	Out	Total	In	Out	Total	
<b>Major 1 - Grocery Store</b>	23.26 TSF							
Trips/Unit <sup>1</sup>		1.69	1.17	2.86	4.48	4.47	8.95	93.84
Trip Generation		39	27	66	104	104	208	2,182
Pass-By Trips <sup>2</sup>		0	0	0	(25)	(25)	(50)	(524)
Net Trip Generation		39	27	66	79	79	158	1,658
<b>Pad 2, Pad 3, and Shops 1 - Fast-Food with Drive-Through</b>	7.36 TSF							
Trips/Unit <sup>3</sup>		22.75	21.86	44.61	17.18	15.85	33.03	467.48
Trip Generation		167	161	328	126	117	243	3,439
Pass-By Trips <sup>4</sup>		(84)	(81)	(165)	(69)	(64)	(133)	(1,805)
Net Trip Generation		83	80	163	57	53	110	1,634
<b>Shops 1 - Fast-Food without Drive-Through</b>	3.75 TSF							
Trips/Unit <sup>5</sup>		25.04	18.14	43.18	16.61	16.60	33.21	450.49
Trip Generation		94	68	162	62	62	124	1,689
Pass-By Trips <sup>6</sup>		(47)	(34)	(81)	(34)	(34)	(68)	(887)
Net Trip Generation		47	34	81	28	28	56	802
<b>Pad 1 - Automated Car Wash</b>	131.00 LF							
Trips/Unit <sup>7</sup>		0.38	0.28	0.66	0.62	0.63	1.25	11.87
Trip Generation		50	37	87	81	83	164	1,555
Pass-by Trips <sup>8</sup>		(5)	(4)	(9)	(28)	(28)	(56)	(529)
Net Trip Generation		45	33	78	53	55	108	1,026
<b>Total Gross Trip Generation</b>		<b>350</b>	<b>293</b>	<b>643</b>	<b>373</b>	<b>366</b>	<b>739</b>	<b>8,865</b>
<b>Total Pass-By Trips</b>		<b>(136)</b>	<b>(119)</b>	<b>(255)</b>	<b>(156)</b>	<b>(151)</b>	<b>(307)</b>	<b>(3,745)</b>
<b>Total Net Trip Generation</b>		<b>214</b>	<b>174</b>	<b>388</b>	<b>217</b>	<b>215</b>	<b>432</b>	<b>5,120</b>

Note:

TSF = Thousand Square Feet; LF = Linear Feet

<sup>1</sup> Rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (11<sup>th</sup> Edition), Land Use 850 - "Supermarket", Setting/Location - "General Urban/Suburban."

<sup>2</sup> Pass-by rates based on Land Use 850 - "Supermarket" from ITE *Trip Generation Manual* (11th Edition). No a.m. and daily pass-by rates are available. The p.m. pass-by rate used is 24.00%. Since the daily pass-by rate was not available, the p.m. pass-by rate was applied as the daily rate.

<sup>3</sup> Rates based on Land Use 934 - "Fast-Food Restaurant with Drive-Through Window" from ITE *Trip Generation Manual* (11th Edition). Setting/Location - "General Urban/Suburban."

<sup>4</sup> Pass-by rates based on Land Use 934 - "Fast-Food Restaurant with Drive-Through Window" from ITE *Trip Generation Manual* (11th Edition). The a.m. pass-by rate used is 50%. The p.m. pass-by rate used is 55%. Since the daily pass-by rate was not available, the average of the a.m. and p.m. pass-by rates was applied as the daily rate.

<sup>5</sup> Rates based on Land Use 933 - "Fast-Food Restaurant without Drive-Through Window" from ITE *Trip Generation Manual* (11th Edition). Setting/Location - "General Urban/Suburban."

<sup>6</sup> Pass-by rates for Land Use 933 - "Fast-Food Restaurant without Drive-Through Window" are not available. Therefore, pass-by rates for Land Use 934 - "Fast-Food Restaurant with Drive-Through Window" was used. The a.m. pass-by rate used is 50%. The p.m. pass-by rate used is 55%. Since the daily pass-by rate was not available, the average of the a.m. and p.m. pass-by rates was applied as the daily rate.

<sup>7</sup> Trip generation rates from Linscott, Law & Greenspan, Engineers *Newport Pointe Traffic Impact Analysis Report*, April 2021. Rates based on traffic surveys from the Victorville Speedwash at 12147 Industrial Boulevard, Victorville, CA.

<sup>8</sup> Pass-by rates from Linscott, Law & Greenspan, Engineers *Newport Pointe Traffic Impact Analysis Report*, April 2021. Pass-by based on ITE *Trip Generation Handbook*, 3rd Edition.



## 6.0 OPENING YEAR ANALYSIS

### 6.1 PROJECT DESIGN FEATURES

The project will include the following project design features at the following intersections:

7. Westmont Drive – Apple Bear Road/Bear Valley Road
  - Add a dedicated eastbound right turn lane;
  - Add a dedicated westbound left turn lane (by removing a portion of the existing raised median); and
  - Conversion of the dedicated southbound right turn lane to a through-right turn lane.
8. Flying Feather Road/Bear Valley Road
  - Extension of the existing raised median on Bear Valley Road to extend eastward past the intersection; and
  - Add a dedicated eastbound right turn lane.
13. Project Driveway 3/Bear Valley Road
  - Add an eastbound through-right turn lane.
14. Flying Feather Road/Project Driveway 4
  - Conversion of the northbound through lane to a through-left turn lane; and
  - Conversion of the southbound through lane to a through-right turn lane.
15. Flying Feather Road/Project Driveway 5
  - Conversion of the northbound through lane to a through-left turn lane; and
  - Conversion of the southbound through lane to a through-right turn lane.

Apple Bear Road will be constructed from Bear Valley Road to provide the primary access to and from the project site. Flying Feather Road is currently an unpaved road that will be constructed to allow access to the eastern portion of the project site. Based on discussion with Town staff, the median on Bear Valley Road will be extended eastward past the intersection of Flying Feather Road and Bear Valley Road which will restrict left-turns in and out of Flying Feather Road. The project driveways on Apple Bear Road and Flying Feather Road will be full access driveways. The project driveway on Bear Valley Road will be a RIRO driveway. Figure 6-1 illustrates opening year plus project study intersection geometrics and traffic control.

### 6.2 OPENING YEAR (2024) NO PROJECT TRAFFIC VOLUMES

As approved during the Town's scoping agreement process (Appendix A), traffic volumes for opening year no project conditions were developed by applying a growth of 2.0 percent per annum to existing traffic volumes and adding trips from approved and pending development projects in the area. This methodology was applied for all study intersections. Information concerning cumulative projects in the vicinity of the proposed project was obtained from Town staff and the nearby

jurisdictions of Victorville, Hesperia, and San Bernardino County. Figure 6-2 illustrates the cumulative project locations. Trip generation for cumulative projects was either obtained from the respective traffic studies prepared for the projects or developed using rates from the *ITE Trip Generation Manual* (11<sup>th</sup> Edition). Table 6-A lists the cumulative projects included in this analysis and shows the cumulative projects are estimated to generate 1,342 net PCE trips in the a.m. peak hour, 1,535 net PCE trips in the p.m. peak hour, and 15,325 net daily PCE trips.

Cumulative project trips were assigned to the roadway network based on their locations in relation to surrounding land uses and regional arterials. Figure 6-3 illustrates the total peak hour cumulative project trip assignment at study area intersections. Figure 6-4 illustrates the peak hour traffic volumes at study intersections under opening year no project conditions.

Detailed volume development worksheets are included in Appendix C.

### **6.3 OPENING YEAR (2024) PLUS PROJECT TRAFFIC VOLUMES**

Opening year plus project traffic volumes were developed by adding proposed project traffic to the opening year no project traffic volumes. Figure 6-5 illustrates the opening year plus project peak hour traffic volumes at study intersections.

Detailed volume development worksheets are included in Appendix C.

### **6.4 OPENING YEAR (2024) NO PROJECT LEVELS OF SERVICE**

An intersection LOS analysis was conducted for opening year no project conditions using the methodologies previously discussed. Table 6-B summarizes the results of the analysis and shows that the following intersections are forecast to operate at a deficient LOS under opening year no project conditions:

1. Jacaranda Avenue/Bear Valley Road (both a.m. and p.m. peak hours);
2. Mojave Fish Hatchery Road/Bear Valley Road (both a.m. and p.m. peak hours);
6. Apple Valley Road/Bear Valley Road (both a.m. and p.m. peak hours);
8. Flying Feather Road/Bear Valley Road (both a.m. and p.m. peak hours); and
10. Kiowa Road/Bear Valley Road (both a.m. and p.m. peak hours).

All other intersections are forecast to operate at a satisfactory LOS. Detailed LOS worksheets are included in Appendix D.

### **6.5 OPENING YEAR (2024) PLUS PROJECT LEVELS OF SERVICE**

An intersection LOS analysis was conducted for opening year plus project conditions using the methodologies previously discussed. Table 6-B summarizes the results of the analysis and shows that the following intersections are forecast to operate at a deficient LOS under opening year plus project conditions:

1. Jacaranda Avenue/Bear Valley Road (both a.m. and p.m. peak hours);

2. Mojave Fish Hatchery Road/Bear Valley Road (both a.m. and p.m. peak hours);
6. Apple Valley Road/Bear Valley Road (both a.m. and p.m. peak hours); and
10. Kiowa Road/Bear Valley Road (both a.m. and p.m. peak hours).

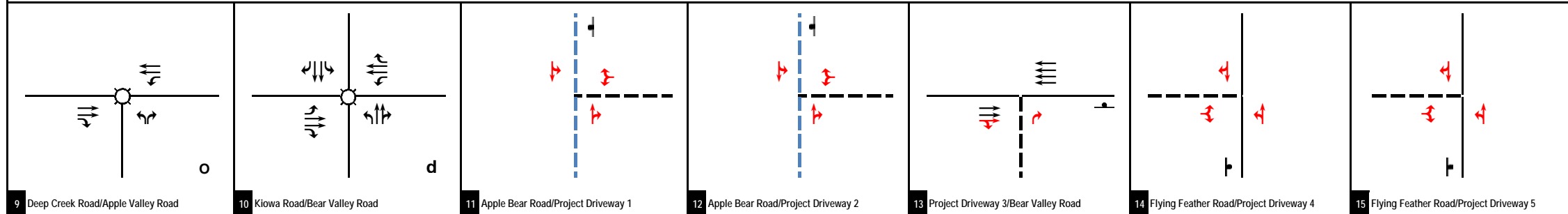
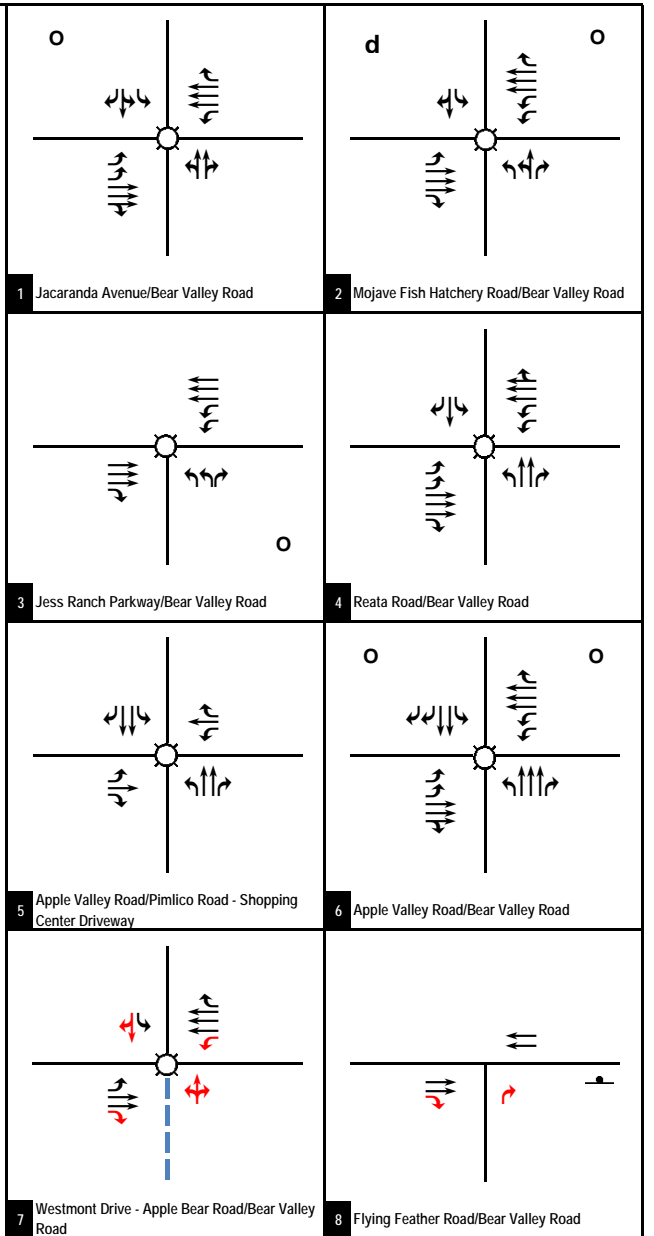
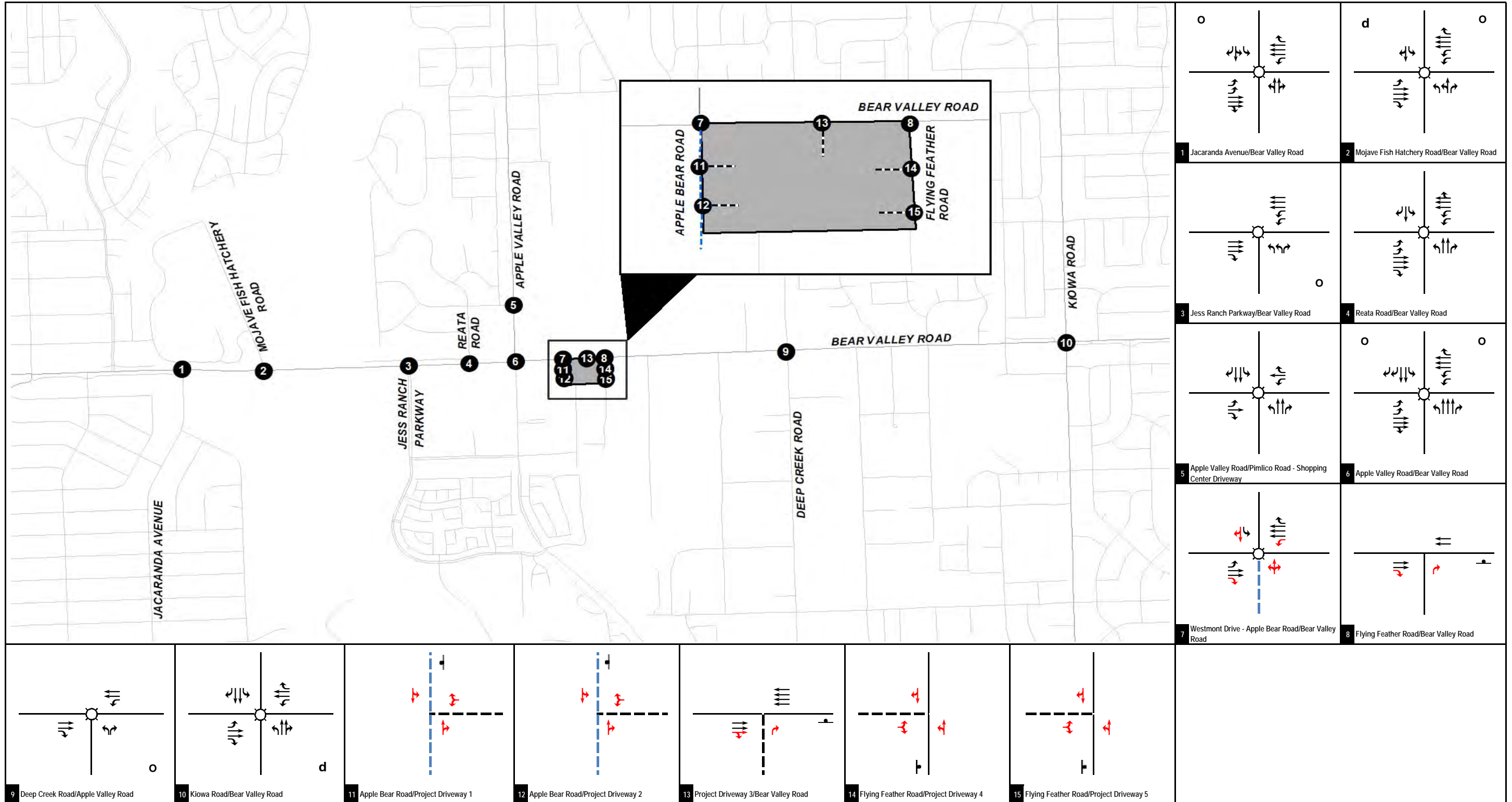
These intersections are also forecast to operate at a deficient LOS even under opening year no project conditions. Therefore, the project would contribute to the forecast deficiency at these intersections. As such, improvements would be required at those intersections.

It should be noted that under opening year plus project conditions, intersection 8 – Flying Feather Road/Bear Valley Road is no longer forecast to operate at a deficient LOS upon construction of the proposed project.

All other intersections are forecast to operate at a satisfactory LOS under opening year plus project conditions. Detailed LOS worksheets are included in Appendix D.

## 6.6 LIST OF CHAPTER 6.0 FIGURES AND TABLES

- Figure 6-1: Opening Year (2024) Plus Project Study Intersection Geometrics and Traffic Control
- Figure 6-2: Cumulative Project Locations
- Figure 6-3: Cumulative Projects Trip Assignment
- Figure 6-4: Opening Year (2024) No Project Peak Hour Traffic Volumes
- Figure 6-5: Opening Year (2024) Plus Project Peak Hour Traffic Volumes
- Table 6-A: Cumulative Projects Trip Generation
- Table 6-B: Opening Year (2024) Intersection Levels of Service



LSA

FIGURE 6-1

- Legend
- Signal
  - ⊙ Right-Turn Overlap
  - ⊙ De-facto Right Turn
  - ⊙ Project Design Feature
  - ⊙ Stop Sign
  - ⊙ Project Driveway
  - ⊙ Future Road

Apple Bear Commercial Project  
Traffic Impact Study

Opening Year (2024) Plus Project Study Intersection Geometrics and Traffic Control

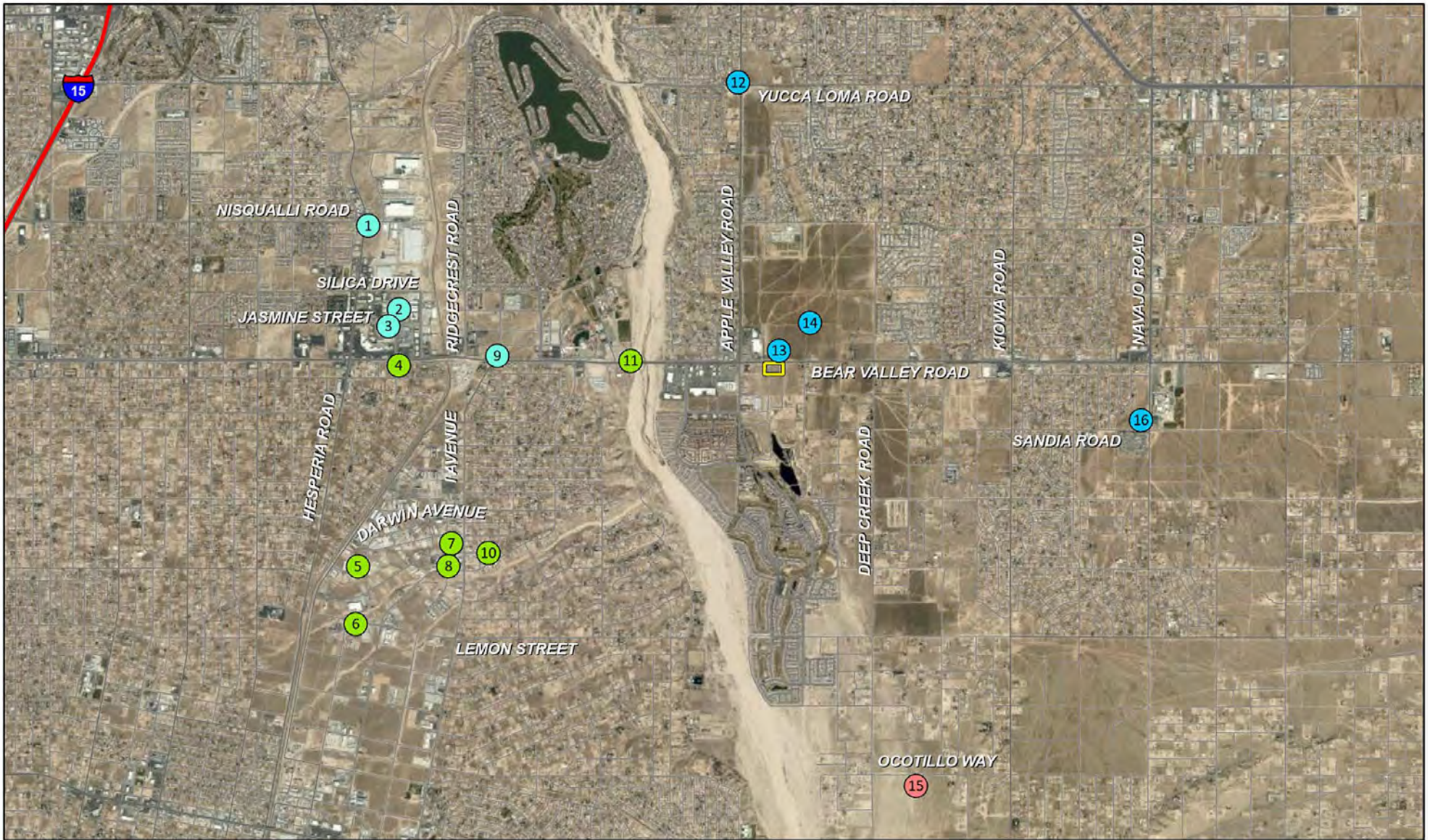


FIGURE 6-2

LSA

LEGEND

Project Site

Cumulative Projects

- City of Victorville
- City of Hesperia
- Town of Apple Valley
- San Bernardino County



SOURCE: Google Earth, 2021; ESRI Streetmap, 2021

P:\WDN2201\_Apple Bear Commercial Project\Technical Studies\Traffic and VMT\Traffic\GIS\PRO\fig6-2\_CumulProjLoc\fig6-2\_CumulProjLoc.aprx (2/15/2023)

Apple Bear Commercial Project  
Traffic Impact Study  
Cumulative Project Locations



FIGURE 6-3

LSA

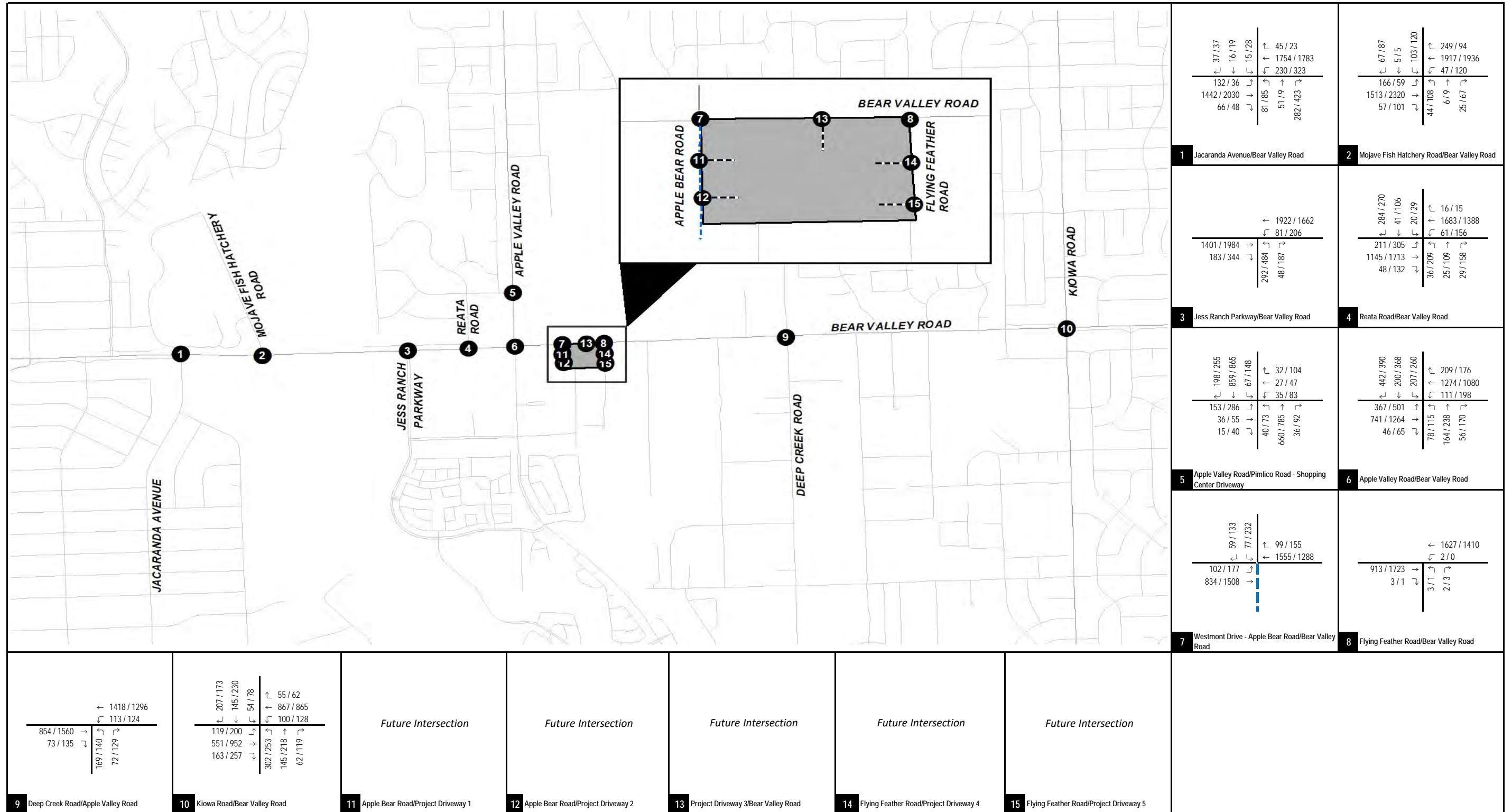
XXX / YYY

AM / PM Peak Hour Trips

--- Project Driveway

... Future Road

Apple Bear Commercial Project  
Traffic Impact Study  
Cumulative Project Trip Assignment



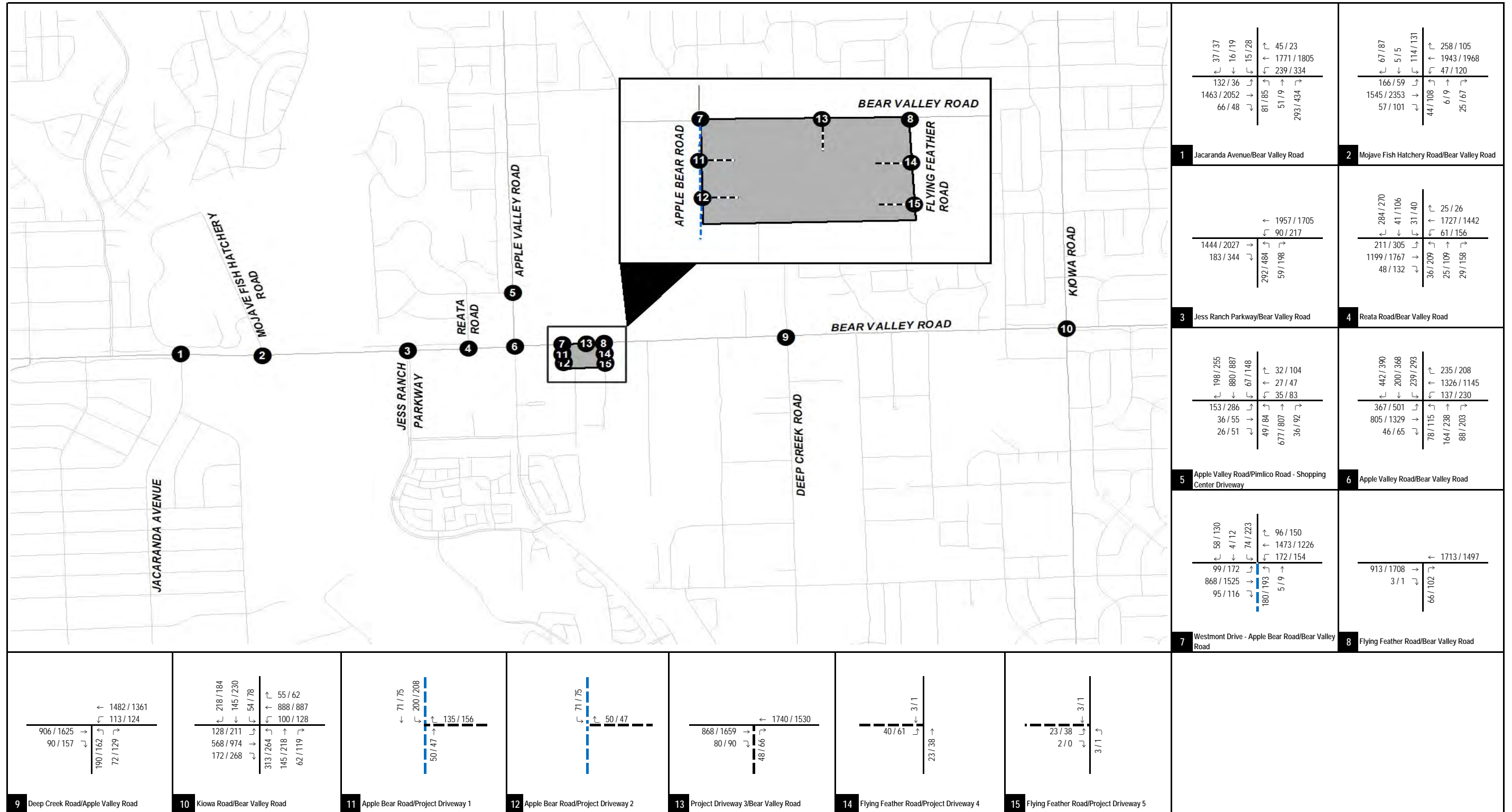
LSA

XXXX / YYYY  
 AM / PM Peak Hour PCE Traffic Volumes  
 --- Project Driveway  
 --- Future Road

FIGURE 6-4

Apple Bear Commercial Project  
 Traffic Impact Study

Opening Year (2024) No Project Peak Hour Traffic Volumes



LSA

XXXX / YYYY  
 AM / PM Peak Hour PCE Traffic Volumes  
 --- Project Driveway  
 --- Future Road

FIGURE 6-5

Apple Bear Commercial Project  
 Traffic Impact Study

Opening Year (2024) Plus Project Peak Hour Traffic Volumes



Table 6-A - Cumulative Projects Trip Generation

Project No.	Land Use/Builder/Applicant/Project Name	Units	A.M. Peak Hour			P.M. Peak Hour			Daily
			In	Out	Total	In	Out	Total	
<b>1 . PLAN20-00006</b>									
Southeast corner of Hesperia Road and Nisqualli Road.									
	Convenience Store/Gas Station - GFA (4-5.5k) <sup>1</sup>	16 VFP							
	Trips/Unit		13.52	13.52	27.04	11.38	11.38	22.76	257.13
	Trip Generation		216	216	432	182	182	364	4,114
	Pass-by Trips <sup>2</sup>		(130)	(130)	(259)	(102)	(102)	(204)	(2,386)
	Net New Trips		86	86	173	80	80	160	1,728
	<b>Truck Stop<sup>3</sup></b>	4 VFP							
	Trips/Unit (Cars)		0.380	0.280	0.660	0.620	0.630	1.250	11.870
	Trips/Unit (2-Axle Trucks)		0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Trips/Unit (3-Axle Trucks)		0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Trips/Unit (4+ Axle Trucks)		0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Trips/Unit (Total)		6.850	7.120	13.970	8.170	7.250	15.420	224.000
	Trip Generation (Cars)		2	1	3	2	3	5	47
	Trip Generation (2-Axle Trucks)		0	0	0	0	0	0	0
	Trip Generation (3-Axle Trucks)		0	0	0	0	0	0	0
	Trip Generation (4+ Axle Trucks)		0	0	0	0	0	0	0
	Trip Generation (Total)		2	1	3	2	3	5	47
	Trip Generation (Cars)		2	1	3	2	3	5	47
	PCE Trip Generation (2-Axle Trucks)		0	0	0	0	0	0	0
	PCE Trip Generation (3-Axle Trucks)		0	0	0	0	0	0	0
	PCE Trip Generation (4+ Axle Trucks)		0	0	0	0	0	0	0
	Total Trip Generation		2	1	3	2	3	5	47
	Auto Trips		2	1	3	2	3	5	47
	Truck PCE Trips		0	0	0	0	0	0	0
	Total PCE Trip Generation		2	1	3	2	3	5	47
	Gross Trip Generation		218	217	435	184	185	369	4,161
	Pass-by Trips		(130)	(130)	(259)	(102)	(102)	(204)	(2,386)
	Net Trip Generation		88	87	176	82	83	165	1,775
<b>2 . PLAN20-00027</b>									
12454 Industrial Center Drive									
	Business Park <sup>4</sup>	32.182 TSF							
	Trips/Unit		1.15	0.20	1.35	0.32	0.90	1.22	12.44
	Trip Generation		37	6	43	10	29	39	400
<b>3 . PLAN19-00023</b>									
East of Yuma Street and west of Apatite Lane									
	Medical-Dental Office Building - Stand-Alone <sup>5</sup>	16.500 TSF							
	Trips/Unit		2.45	0.65	3.10	1.18	2.75	3.93	36.00
	Trip Generation		40	11	51	19	45	64	594
<b>4 . SPR21-00010</b>									
Southeast corner of Apatite Avenue and Outer Bear Valley Road									
	General Office Building <sup>6</sup>	25.548 TSF							
	Trips/Unit		1.34	0.18	1.52	0.24	1.20	1.44	10.84
	Trip Generation		34	5	39	6	31	37	277

Table 6-A - Cumulative Projects Trip Generation

Project No.	Land Use/Builder/Applicant/Project Name	Units	A.M. Peak Hour			P.M. Peak Hour			Daily
			In	Out	Total	In	Out	Total	
<b>5 . SPR20-00006</b>									
North side of Darwin Avenue, approximately 890' east of Santa Fe Avenue									
	General Light Industrial <sup>7</sup>	26.821 TSF							
	Trips/Unit (Cars)		0.512	0.070	0.582	0.072	0.439	0.511	3.828
	Trips/Unit (2-Axle Trucks)		0.031	0.021	0.052	0.023	0.023	0.045	0.390
	Trips/Unit (3-Axle Trucks)		0.017	0.011	0.028	0.012	0.012	0.025	0.190
	Trips/Unit (4+ Axle Trucks)		0.047	0.031	0.078	0.034	0.034	0.069	0.463
	Trips/Unit (Total)		0.65	0.090	0.740	0.090	0.560	0.650	4.870
	Trip Generation (Cars)		14	2	16	2	12	14	103
	Trip Generation (2-Axle Trucks)		1	0	1	1	0	1	10
	Trip Generation (3-Axle Trucks)		0	1	1	0	1	1	5
	Trip Generation (4+ Axle Trucks)		1	1	2	1	1	2	12
	Trip Generation (Total)		16	4	20	4	14	18	130
	Trip Generation (Cars)		14	2	16	2	12	14	103
	PCE Trip Generation (2-Axle Trucks)		2	0	2	2	0	2	15
	PCE Trip Generation (3-Axle Trucks)		0	2	2	0	2	2	10
	PCE Trip Generation (4+ Axle Trucks)		3	3	6	3	3	6	36
	Total Trip Generation		16	4	20	4	14	18	130
	Auto Trips		14	2	16	2	12	14	103
	Truck PCE Trips		5	5	10	5	5	10	61
	Total PCE Trip Generation		19	7	26	7	17	24	164
<b>6 . CUP22-00018</b>									
17147 Lemon Street									
	Mini Warehouse <sup>8</sup>	37.500 TSF							
	Trips/Unit		0.05	0.04	0.09	0.07	0.08	0.15	1.45
	Trip Generation		2	2	4	3	3	6	54
	RV Storage <sup>9</sup>	105 Spaces							
	Trips/Unit		0.50	0.50	0.03	0.50	0.50	0.04	0.48
	Trip Generation		53	53	106	53	53	106	50
	Net Trip Generation		55	55	110	56	56	112	104
<b>7 . SPR21-00011</b>									
11099 G Avenue									
	General Light Industrial <sup>7</sup>	6.000 TSF							
	Trips/Unit (Cars)		0.512	0.070	0.582	0.072	0.439	0.511	3.828
	Trips/Unit (2-Axle Trucks)		0.031	0.021	0.052	0.023	0.023	0.045	0.390
	Trips/Unit (3-Axle Trucks)		0.017	0.011	0.028	0.012	0.012	0.025	0.190
	Trips/Unit (4+ Axle Trucks)		0.047	0.031	0.078	0.034	0.034	0.069	0.463
	Trips/Unit (Total)		0.65	0.090	0.740	0.090	0.560	0.650	4.870
	Trip Generation (Cars)		3	0	3	0	3	3	23
	Trip Generation (2-Axle Trucks)		0	0	0	0	0	0	2
	Trip Generation (3-Axle Trucks)		0	0	0	0	0	0	1
	Trip Generation (4+ Axle Trucks)		0	0	0	0	0	0	3
	Trip Generation (Total)		3	0	3	0	3	3	29
	Trip Generation (Cars)		3	0	3	0	3	3	23
	PCE Trip Generation (2-Axle Trucks)		0	0	0	0	0	0	3
	PCE Trip Generation (3-Axle Trucks)		0	0	0	0	0	0	2
	PCE Trip Generation (4+ Axle Trucks)		0	0	0	0	0	0	9
	Total Trip Generation		3	0	3	0	3	3	29
	Auto Trips		3	0	3	0	3	3	23
	Truck PCE Trips		0	0	0	0	0	0	14
	Total PCE Trip Generation		3	0	3	0	3	3	37

Table 6-A - Cumulative Projects Trip Generation

Project No.	Land Use/Builder/Applicant/Project Name	Units	A.M. Peak Hour			P.M. Peak Hour			Daily
			In	Out	Total	In	Out	Total	
<b>8 . SPR22-00001</b>									
	East of G Avenue, approximately 180 feet north of E Avenue								
	Manufacturing <sup>10</sup>	3.160 TSF							
	Trips/Unit (Cars)		0.406	0.128	0.534	0.180	0.401	0.582	3.734
	Trips/Unit (2-Axle Trucks)		0.027	0.021	0.048	0.021	0.031	0.052	0.380
	Trips/Unit (3-Axle Trucks)		0.015	0.011	0.026	0.012	0.017	0.028	0.185
	Trips/Unit (4+ Axle Trucks)		0.040	0.032	0.072	0.032	0.046	0.078	0.451
	Trips/Unit (Total)		0.52	0.160	0.680	0.230	0.510	0.740	4.750
	Trip Generation (Cars)		1	1	2	1	1	2	12
	Trip Generation (2-Axle Trucks)		0	0	0	0	0	0	1
	Trip Generation (3-Axle Trucks)		0	0	0	0	0	0	1
	Trip Generation (4+ Axle Trucks)		0	0	0	0	0	0	1
	Trip Generation (Total)		1	1	2	1	1	2	15
	Trip Generation (Cars)		1	1	2	1	1	2	12
	PCE Trip Generation (2-Axle Trucks)		0	0	0	0	0	0	2
	PCE Trip Generation (3-Axle Trucks)		0	0	0	0	0	0	2
	PCE Trip Generation (4+ Axle Trucks)		0	0	0	0	0	0	3
	Total Trip Generation		1	1	2	1	1	2	15
	Auto Trips		1	1	2	1	1	2	12
	Truck PCE Trips		0	0	0	0	0	0	7
	Total PCE Trip Generation		1	1	2	1	1	2	19
<b>9 . PLAN20-00020</b>									
	17876 Bear Valey Road								
	Convenience Store/Gas Station - GFA (4-5.5k) <sup>1</sup>	16 VFP							
	Trips/Unit		13.52	13.52	27.04	11.38	11.38	22.76	257.13
	Trip Generation		216	216	432	182	182	364	4,114
	Pass-by Trips <sup>2</sup>		(130)	(130)	(259)	(102)	(102)	(204)	(2,386)
	Net New Trips		86	86	173	80	80	160	1,728
<b>10 . SPR21-00015</b>									
	South of Mesa Street, approximately 980 feet west of I Avenue								
	General Light Industrial <sup>7</sup>	3.293 TSF							
	Trips/Unit (Cars)		0.512	0.070	0.582	0.072	0.439	0.511	3.828
	Trips/Unit (2-Axle Trucks)		0.031	0.021	0.052	0.023	0.023	0.045	0.390
	Trips/Unit (3-Axle Trucks)		0.017	0.011	0.028	0.012	0.012	0.025	0.190
	Trips/Unit (4+ Axle Trucks)		0.047	0.031	0.078	0.034	0.034	0.069	0.463
	Trips/Unit (Total)		0.65	0.090	0.740	0.090	0.560	0.650	4.870
	Trip Generation (Cars)		2	0	2	0	2	2	13
	Trip Generation (2-Axle Trucks)		0	0	0	0	0	0	1
	Trip Generation (3-Axle Trucks)		0	0	0	0	0	0	1
	Trip Generation (4+ Axle Trucks)		0	0	0	0	0	0	2
	Trip Generation (Total)		2	0	2	0	2	2	17
	Trip Generation (Cars)		2	0	2	0	2	2	13
	PCE Trip Generation (2-Axle Trucks)		0	0	0	0	0	0	2
	PCE Trip Generation (3-Axle Trucks)		0	0	0	0	0	0	2
	PCE Trip Generation (4+ Axle Trucks)		0	0	0	0	0	0	6
	Total Trip Generation		2	0	2	0	2	2	17
	Auto Trips		2	0	2	0	2	2	13
	Truck PCE Trips		0	0	0	0	0	0	10
	<b>Total PCE Trip Generation</b>		<b>2</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>23</b>

Table 6-A - Cumulative Projects Trip Generation

Project No.	Land Use/Builder/Applicant/Project Name	Units	A.M. Peak Hour			P.M. Peak Hour			Daily
			In	Out	Total	In	Out	Total	
<b>11 . CUPR21-00003</b>	South side of Bear Valley, approximately 600 feet east of Fish Hatchery Road								
	Strip Retail Plaza (<40k) <sup>11</sup>	9.600 TSF							
	Trips/Unit		1.42	0.94	2.36	3.30	3.29	6.59	54.45
	Trip Generation		14	9	23	32	32	64	523
	Pass-by Trips <sup>12</sup>		0	0	0	(13)	(13)	(26)	(209)
	Net New Trips		14	9	23	19	19	38	314
	<b>High-Turnover (Sit-Down) Restaurant<sup>13</sup></b>	3.400 TSF							
	Trips/Unit		5.26	4.31	9.57	5.52	3.53	9.05	107.20
	Trip Generation		18	15	33	19	12	31	364
	Pass-by Trips <sup>14</sup>		0	0	0	(8)	(5)	(13)	(157)
	Net New Trips		18	15	33	11	7	18	207
	Gross Trip Generation		32	24	56	51	44	95	887
	Pass-by Trips		0	0	0	(21)	(18)	(39)	(366)
	Net Trip Generation		32	24	56	30	26	56	521
<b>12 . New Gas Station</b>	Northwest corner of Yucca Loma and Apple Valley Road								
	Convenience Store/Gas Station - GFA (5.5-10k) <sup>15</sup>	12 VFP							
	Trips/Unit		15.80	15.80	31.60	13.45	13.45	26.90	345.75
	Trip Generation		190	190	380	161	161	322	4,149
	Pass-by Trips <sup>16</sup>		(114)	(114)	(228)	(90)	(90)	(180)	(2,406)
	Net New Trips		76	76	152	71	71	142	1,743
<b>13 . Grocery Store and Retail<sup>17</sup></b>	North side of Bear Valley Road, approximately 1,070 feet from Apple Valley Road								
	Major A - Supermarket <sup>18</sup>	43.000 TSF							
	Trips/Unit		2.29	1.53	3.82	4.71	4.53	9.24	106.78
	Trip Generation		98	66	164	203	195	398	4,592
	Pass-by Trips <sup>19</sup>		0	0	0	(64)	(63)	(127)	(1,540)
	Net New Trips		90	57	147	113	112	225	2,737
	<b>Shops - Retail<sup>20</sup></b>	6.995 TSF							
	Trips/Unit		0.58	0.36	0.94	1.83	1.98	3.81	37.75
	Trip Generation		4	3	7	13	14	27	264
	Pass-by Trips <sup>21</sup>		0	0	0	(4)	(4)	(8)	(85)
	Net New Trips		4	3	7	7	9	16	164
	Gross Trip Generation		102	69	171	216	209	425	4,856
	Pass-by Trips		0	0	0	(68)	(67)	(135)	(1,625)
	Net Trip Generation		102	69	171	148	142	290	3,231
<b>14 . Residential Project</b>	Northwest of Deep Creek Road and Bear Valley Road.								
	Single-Family Detached Housing <sup>22</sup>	137 DU							
	Trips/Unit		0.18	0.52	0.70	0.59	0.35	0.94	9.43
	Trip Generation		25	71	96	81	48	129	1,292
<b>15 . PEXT-2021-00020</b>	East of Deep Creek Road and Ocotillo Way								
	Single-Family Detached Housing <sup>22</sup>	202 DU							
	Trips/Unit		0.18	0.52	0.70	0.59	0.35	0.94	9.43
	Trip Generation		36	105	141	119	71	190	1,905



Table 6-B - Opening Year (2024) Intersection Levels of Service

Intersection	Jurisdiction	LOS Standard	No Project				Plus Project				A.M. Peak Hour Increase in Delay (sec.)	P.M. Peak Hour Increase in Delay (sec.)	Improvement Required?		
			Control	A.M. Peak Hour		P.M. Peak Hour		Control	A.M. Peak Hour					P.M. Peak Hour	
				Delay (sec.)	LOS	Delay (sec.)	LOS		Delay (sec.)	LOS				Delay (sec.)	LOS
1 . Jacaranda Avenue/Bear Valley Road	City of Hesperia/City of Victorville	D	Signal	55.1	E *	123.1	F *	Signal	57.5	E *	128.0	F *	2.4	4.9	Yes
2 . Mojave Fish Hatchery Road/Bear Valley Road	City of Hesperia/City of Victorville	D	Signal	74.3	E *	88.1	F *	Signal	77.3	E *	92.6	F *	3.0	4.5	Yes
3 . Jess Ranch Parkway/Bear Valley Road	Town of Apple Valley	C	Signal	20.9	C	27.2	C	Signal	21.3	C	28.1	C	0.4	0.9	No
4 . Reata Road/Bear Valley Road	Town of Apple Valley	C	Signal	30.4	C	33.3	C	Signal	30.7	C	33.6	C	0.3	0.3	No
5 . Apple Valley Road/Pimlico Road - Shopping Center Driveway	Town of Apple Valley	C	Signal	17.4	B	28.1	C	Signal	17.8	B	28.5	C	0.4	0.4	No
6 . Apple Valley Road/Bear Valley Road	Town of Apple Valley	C	Signal	60.7	E *	72.0	E *	Signal	66.4	E *	78.5	E *	5.7	6.5	Yes
7 . Westmont Drive - Apple Bear Road/Bear Valley Road	Town of Apple Valley	C	Signal	18.7	B	21.4	C	Signal	24.5	C	31.8	C	5.8	10.4	No
8 . Flying Feather Road/Bear Valley Road	Town of Apple Valley	C	OWSC	31.6	D *	42.6	E *	OWSC	10.6	B	17.3	C	-21.0	-25.3	No
9 . Deep Creek Road/Apple Valley Road	Town of Apple Valley	C	Signal	19.7	B	24.4	C	Signal	20.2	C	25.7	C	0.5	1.3	No
10 . Kiowa Road/Bear Valley Road	Town of Apple Valley	C	Signal	50.6	D *	50.0	D *	Signal	52.7	D *	51.6	D *	2.1	1.6	Yes
11 . Apple Bear Road/Project Driveway 1	Town of Apple Valley	C	-	Does Not Exist		Does Not Exist		OWSC	9.1	A	9.2	A	9.1	9.2	No
12 . Apple Bear Road/Project Driveway 2	Town of Apple Valley	C	-	Does Not Exist		Does Not Exist		OWSC	0.0	A	0.0	A	0.0	0.0	No
13 . Project Driveway 3/Bear Valley Road	Town of Apple Valley	C	-	Does Not Exist		Does Not Exist		OWSC	10.3	B	12.1	B	10.3	12.1	No
14 . Flying Feather Road/Project Driveway 4	Town of Apple Valley	C	-	Does Not Exist		Does Not Exist		OWSC	8.8	A	9.0	A	8.8	9.0	No
15 . Flying Feather Road/Project Driveway 5	Town of Apple Valley	C	-	Does Not Exist		Does Not Exist		OWSC	8.6	A	8.7	A	8.6	8.7	No

Notes:  
 OWSC = One-Way Stop Control; LOS = Level of Service  
 Delay = Average control delay in seconds (For OWSC intersections, reported delay is for worst-case movement).  
 \* Exceeds LOS Standard

## 7.0 CUMULATIVE ANALYSIS

### 7.1 CUMULATIVE (2045) NO PROJECT TRAFFIC VOLUMES

Traffic volumes for cumulative no project conditions were developed by using forecast traffic volumes obtained from the San Bernardino Transportation Analysis Model (SBTAM). The methodology to develop cumulative no project volumes at study area intersections is consistent with the San Bernardino County Transportation Authority (SBCTA) procedures for post-processing of modeled traffic volumes.

As per the Town's General Plan, there is a planned extension of Deep Creek Road between Bear Valley Road and Sitting Bull Road. For purposes of this analysis, this extension has been included for cumulative conditions. Figure 7-1 illustrates cumulative plus project study intersection geometrics and traffic control. Figure 7-2 illustrates cumulative no project peak hour traffic volumes at study intersections.

Detailed volume development worksheets are included in Appendix C.

### 7.2 CUMULATIVE (2045) PLUS PROJECT TRAFFIC VOLUMES

Cumulative plus project traffic volumes were developed by adding proposed project traffic to the cumulative no project traffic volumes.

Figure 7-3 illustrates cumulative plus project peak hour traffic volumes at study intersections.

Detailed volume development worksheets are included in Appendix C.

### 7.3 CUMULATIVE (2045) NO PROJECT LEVELS OF SERVICE

An intersection LOS analysis was conducted for cumulative no project conditions using the methodologies previously discussed. Table 7-A summarizes the results of the analysis and shows that the following intersections are forecast to operate at a deficient LOS under cumulative no project conditions:

1. Jacaranda Avenue/Bear Valley Road (both a.m. and p.m. peak hours);
2. Mojave Fish Hatchery Road/Bear Valley Road (both a.m. and p.m. peak hours);
6. Apple Valley Road/Bear Valley Road (both a.m. and p.m. peak hours);
8. Flying Feather Road/Bear Valley Road (both a.m. and p.m. peak hours); and
10. Kiowa Road/Bear Valley Road (both a.m. and p.m. peak hours).

All other intersections are forecast to operate at a satisfactory LOS. Detailed LOS worksheets are included in Appendix D.

### 7.4 CUMULATIVE (2045) PLUS PROJECT LEVELS OF SERVICE

An intersection LOS analysis was conducted for cumulative plus project conditions using the methodologies previously discussed. Previously referenced Table 7-A summarizes the results of the

analysis and shows that the following intersections are forecast to operate at a deficient LOS under cumulative plus project conditions:

1. Jacaranda Avenue/Bear Valley Road (both a.m. and p.m. peak hours);
2. Mojave Fish Hatchery Road/Bear Valley Road (both a.m. and p.m. peak hours);
6. Apple Valley Road/Bear Valley Road (both a.m. and p.m. peak hours); and
10. Kiowa Road/Bear Valley Road (both a.m. and p.m. peak hours).

These intersections are forecast to operate at a deficient LOS even under cumulative no project conditions. Therefore, the project would contribute to the forecast deficiency at these intersections. As such, improvements would be required at those intersections.

It should be noted that under cumulative plus project conditions, intersection 8 – Flying Feather Road/Bear Valley Road is no longer forecast to operate at a deficient LOS upon construction of the proposed project. All other intersections are forecast to operate at a satisfactory LOS under cumulative plus project conditions.

Detailed LOS worksheets are included in Appendix D.

## 7.5 LIST OF CHAPTER 7.0 FIGURES AND TABLES

- Figure 7-1: Cumulative (2045) Plus Project Study Intersection Geometrics and Traffic Control
- Figure 7-2: Cumulative (2045) No Project Peak Hour Traffic Volumes
- Figure 7-3: Cumulative (2045) Plus Project Peak Hour Traffic Volumes
- Table 7-A: Cumulative (2045) Intersection Levels of Service



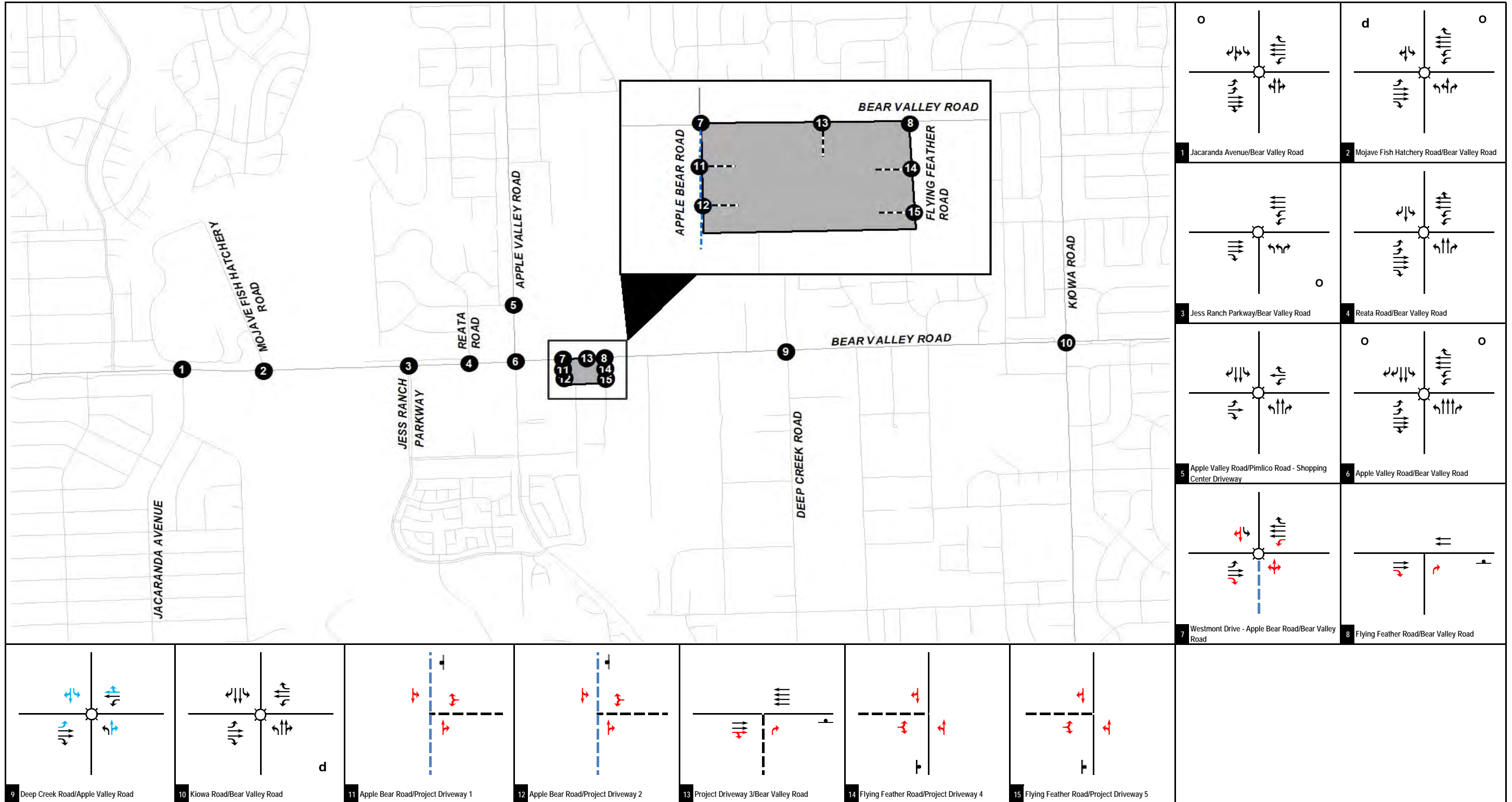


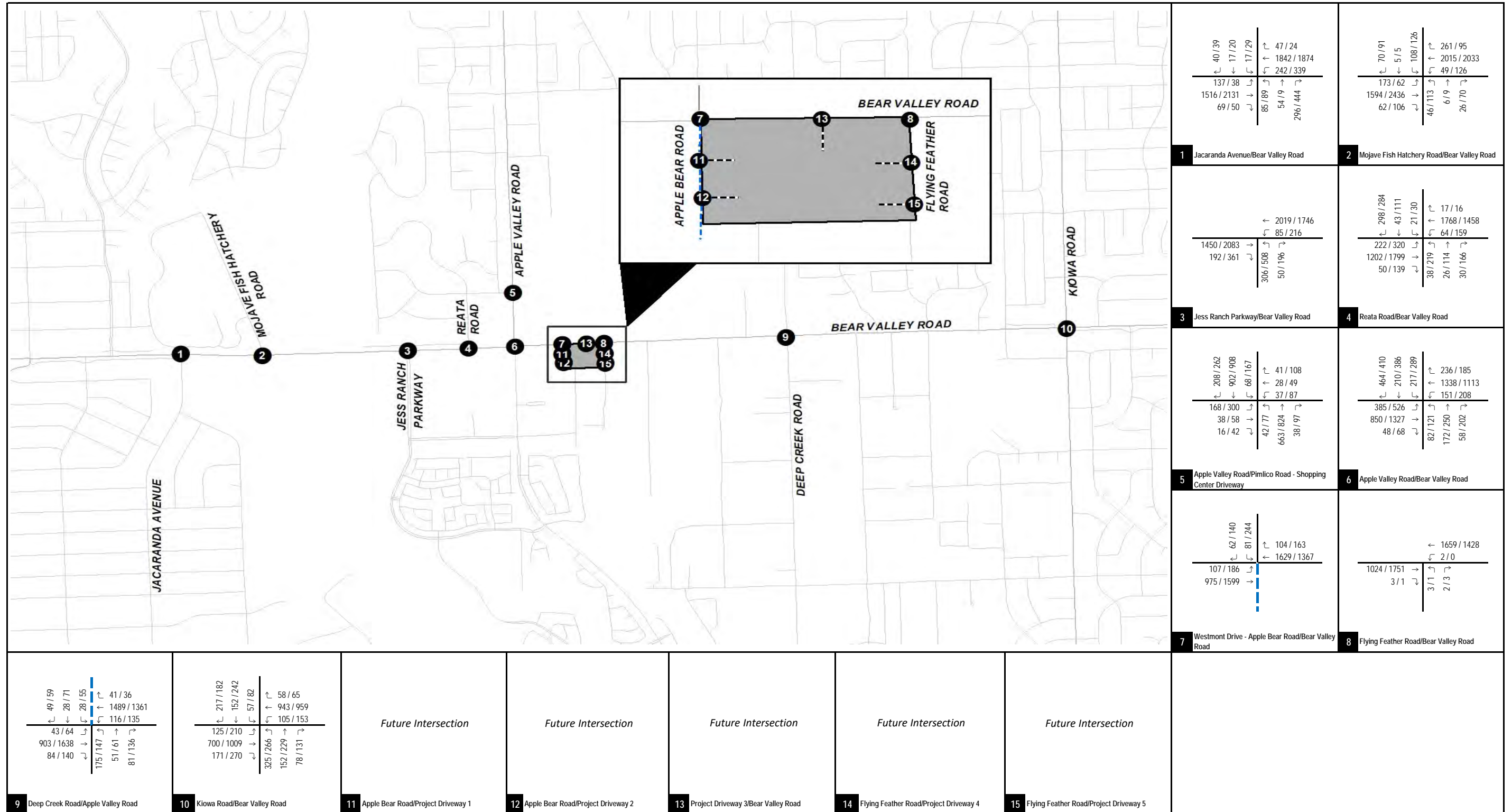
FIGURE 7-1

LSA

- Legend
- Signal
  - ⊙ Right-Turn Overlap
  - ⊙ De-facto Right Turn
  - ⊙ Project Design Feature
  - ⊙ Deep Creek Road Extension
  - ⊙ Stop Sign
  - ⊙ Project Driveway
  - ⊙ Future Road

Apple Bear Commercial Project  
Traffic Impact Study

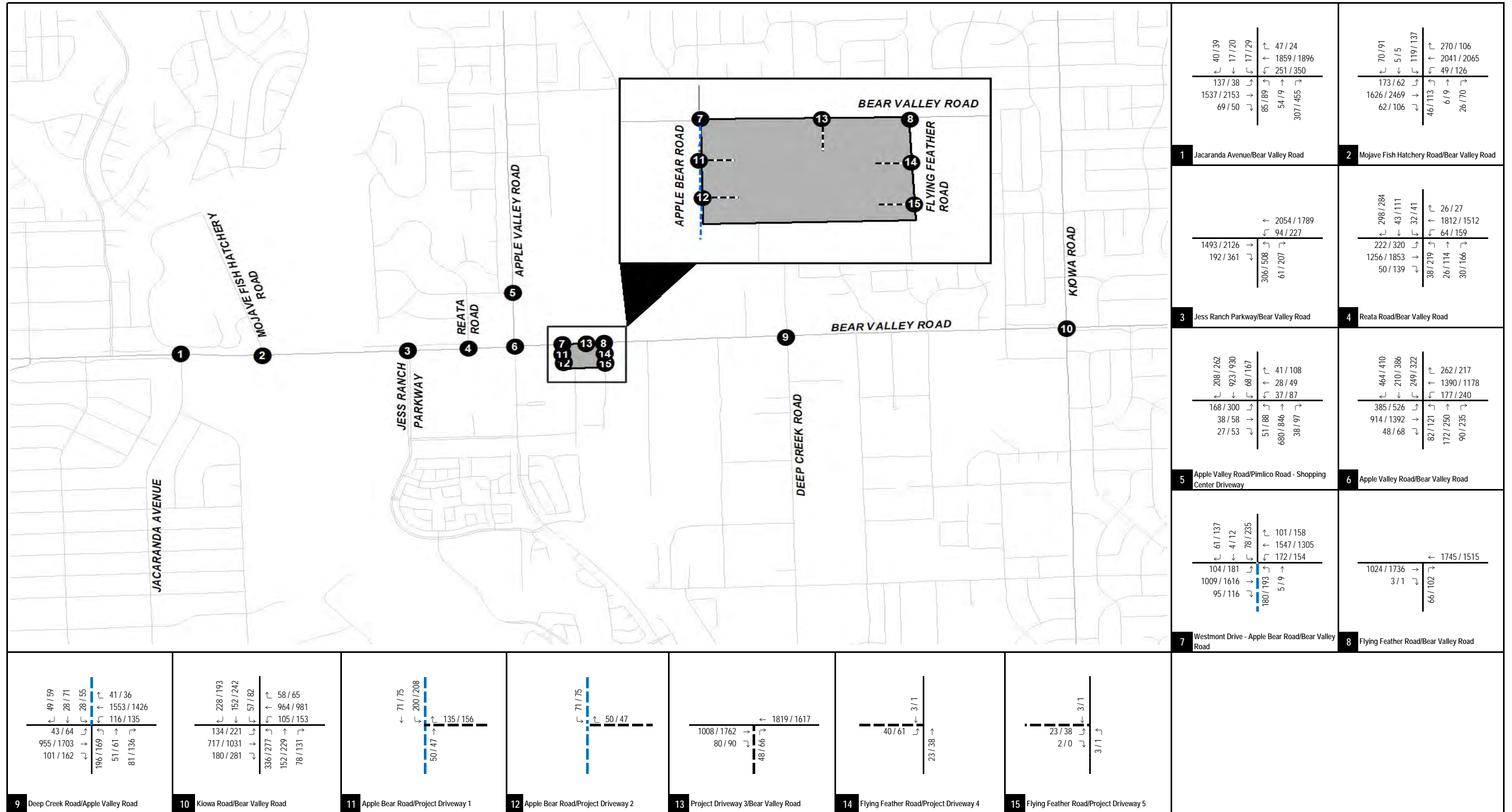
Cumulative (2045) Plus Project Study Intersection Geometrics and Traffic Control



XXXX / YYYY  
 AM / PM Peak Hour PCE Traffic Volumes  
 --- Project Driveway  
 --- Future Road

FIGURE 7-2

Apple Bear Commercial Project  
 Traffic Impact Study  
 Cumulative (2045) No Project Peak Hour Traffic Volumes



LSA

XXXX / YYYY

AM / PM Peak Hour PCE Traffic Volumes

- Project Driveway
- Future Road

Apple Bear Commercial Project  
Traffic Impact Study

Cumulative (2045) Plus Project Peak Hour Traffic Volumes

FIGURE 7-3

Table 7-A - Cumulative (2045) Intersection Levels of Service

Intersection	Jurisdiction	LOS Standard	No Project						Plus Project						A.M. Peak Hour Increase in Delay (sec.)	P.M. Peak Hour Increase in Delay (sec.)	Improvement Required?
			Control	A.M. Peak Hour		P.M. Peak Hour		Control	A.M. Peak Hour		P.M. Peak Hour						
				Delay (sec.)	LOS	Delay (sec.)	LOS		Delay (sec.)	LOS	Delay (sec.)	LOS					
1 . Jacaranda Avenue/Bear Valley Road	City of Hesperia/City of Victorville	D	Signal	59.3	E *	138.8	F *	Signal	62.5	E *	143.9	F *	3.2	5.1	Yes		
2 . Mojave Fish Hatchery Road/Bear Valley Road	City of Hesperia/City of Victorville	D	Signal	89.0	F *	106.8	F *	Signal	92.1	F *	111.9	F *	3.1	5.1	Yes		
3 . Jess Ranch Parkway/Bear Valley Road	Town of Apple Valley	C	Signal	21.4	C	29.0	C	Signal	21.8	C	30.3	C	0.4	1.3	No		
4 . Reata Road/Bear Valley Road	Town of Apple Valley	C	Signal	31.3	C	34.1	C	Signal	31.7	C	34.4	C	0.4	0.3	No		
5 . Apple Valley Road/Pimlico Road - Shopping Center Driveway	Town of Apple Valley	C	Signal	18.2	B	29.5	C	Signal	18.6	B	29.8	C	0.4	0.3	No		
6 . Apple Valley Road/Bear Valley Road	Town of Apple Valley	C	Signal	61.3	E *	77.9	E *	Signal	66.8	E *	85.2	F *	5.5	7.3	Yes		
7 . Westmont Drive - Apple Bear Road/Bear Valley Road	Town of Apple Valley	C	Signal	18.9	B	22.4	C	Signal	25.3	C	33.3	C	6.4	10.9	No		
8 . Flying Feather Road/Bear Valley Road	Town of Apple Valley	C	OWSC	31.9	D *	47.4	E *	OWSC	10.8	B	18.5	C	-21.1	-28.9	No		
9 . Deep Creek Road/Apple Valley Road	Town of Apple Valley	C	Signal	34.0	C	12.6	B	Signal	34.8	C	19.2	B	0.8	6.6	No		
10 . Kiowa Road/Bear Valley Road	Town of Apple Valley	C	Signal	53.5	D *	53.8	D *	Signal	55.8	E *	55.9	E *	2.3	2.1	Yes		
11 . Apple Bear Road/Project Driveway 1	Town of Apple Valley	C	-	Does Not Exist		Does Not Exist		OWSC	9.1	A	9.2	A	9.1	9.2	No		
12 . Apple Bear Road/Project Driveway 2	Town of Apple Valley	C	-	Does Not Exist		Does Not Exist		OWSC	0.0	A	0.0	A	0.0	0.0	No		
13 . Project Driveway 3/Bear Valley Road	Town of Apple Valley	C	-	Does Not Exist		Does Not Exist		OWSC	10.5	B	12.6	B	10.5	12.6	No		
14 . Flying Feather Road/Project Driveway 4	Town of Apple Valley	C	-	Does Not Exist		Does Not Exist		OWSC	8.8	A	9.0	A	8.8	9.0	No		
15 . Flying Feather Road/Project Driveway 5	Town of Apple Valley	C	-	Does Not Exist		Does Not Exist		OWSC	8.6	A	8.7	A	8.6	8.7	No		

Notes:  
 OWSC = One-Way Stop Control; LOS = Level of Service  
 Delay = Average control delay in seconds (For OWSC intersections, reported delay is for worst-case movement).  
 \* Exceeds LOS Standard

## 8.0 SITE ACCESS ANALYSIS

### 8.1 SIGHT DISTANCE ANALYSIS

A sight distance analysis was conducted at Project Driveway 3 and Flying Feather Road along Bear Valley Road to evaluate safe access in and out of the project. Sight distance is the length of the visible roadway a driver can see approaching vehicles before their line of sight is blocked by any object. For purposes of this analysis, both the stopping sight distance and corner sight distance have been evaluated. That is because these are the two sight distance lengths that would affect safe maneuver of ingress/egress traffic from Project Driveway 3 and Flying Feather Road.

According to the Caltrans Highway Design Manual (HDM) (dated July 2020), the stopping sight distance is the minimum sight distance along a roadway required to allow a driver to decrease their speed from the design speed to a complete stop. The corner sight distance is the minimum sight distance in which a driver at a stop-controlled approach can see oncoming traffic on the major street to safely maneuver onto the roadway.

The stopping sight distance was evaluated on the street abutting the project (i.e., Bear Valley Road). The posted speed limit on Bear Valley Road is 55 mph. For purposes of this analysis, the posted speed limit has been considered as the design speed. As stated in Table 201.1 of the HDM, the minimum stopping distance is 500 feet for a design speed of 55 mph. Therefore, the minimum stopping sight distance for Project Driveway 3 and Flying Feather Road have been considered as 500 feet.

As for corner sight distance, Section 405.1 of the HDM states that corner sight distance requirements are not applicable for urban driveways unless signalized. However, as a conservative approach, corner sight distances were also evaluated for Project Driveway 3 and Flying Feather Road. The minimum corner sight distance was based on design speed, time gap and type of vehicles from the minor roads (Project Driveway 3 and Flying Feather Road) to enter the major road (Bear Valley Road). Based on the requirements established in the HDM, it was determined that a minimum corner sight distance of 530 feet would be required for right turns coming out of Project Driveway 3 and Flying Feather Road.

Since the corner sight distance required at the minor roads would be greater than the stopping sight distance (530 feet compared to 500 feet), sight triangle figures were created using corner sight distance as a conservative approach. Figures 8-1 and 8-2 illustrate the sight distance triangles at Project Driveway 3 and Flying Feather Road, respectively, along Bear Valley Road. It should be noted that the electrical poles along Bear Valley Road will partially obstruct vision of oncoming traffic on Bear Valley Road as illustrated in the sight distance triangles in Figures 8-1 and 8-2.

### 8.2 BICYCLE, PEDESTRIAN, AND TRANSIT ACCESSIBILITY

#### 8.2.1 Bicycle Accessibility

As part of the Town's Bikeway Network, Class II bikeways have been to both directions of Apple Valley Road south of Bear Valley Road and Kiowa Road within the study area. Proposed future Class I bikeways have been planned to be added along the eastbound direction of Bear Valley Road east of

the Mojave River and the northbound direction of Apple Valley Road north of Bear Valley Road within the study area. Proposed future Class II bikeways have been planned to be added along both directions of Bear Valley Road west of the Mojave River and Deep Creek Road within the study area. There are no existing bike facilities along Bear Valley Road or Flying Feather Road. However, since bicycle travel is allowed on all public roadways within the Town, bicyclists will be able to access the project site from Apple Bear Road, Bear Valley Road, and Flying Feather Road.

### **8.2.2 Pedestrian Accessibility**

Paved sidewalks are provided along both directions of Bear Valley Road. However, there are currently no existing trails or paved sidewalks on the eastbound direction of Bear Valley Road or either direction of Flying Feather Road directly adjacent to the project site. Per the conceptual site plan previously illustrated in Figure 2-2, paved sidewalks will be added along the project perimeter on Apple Bear Road, Bear Valley Road, and Flying Feather Road. As such, pedestrians will be able to safely access the project site from Apple Bear Road, Bear Valley Road, and Flying Feather Road.

### **8.2.3 Transit Accessibility**

VVTA bus Routes 42 and 43 serve the study area with stops along Apple Valley Road and Bear Valley Road near the project site. Route 42 has an existing bus stop located on the southbound direction of Apple Valley Road approximately 1,400 feet northwest of the project site. Route 43 has an existing bus stop located on the eastbound direction of Bear Valley Road approximately 450 feet west of the project site and another stop located on the eastbound direction of Bear Valley Road approximately 950 feet east of the project site. Routes 42 and 43 share a stop located on the southbound direction of Apple Valley Road approximately 1,100 feet southwest of the project site.

## **8.3 LIST OF CHAPTER 8.0 FIGURES**

- Figure 8-1: Corner Sight Distance at Project Driveway 3
- Figure 8-2: Corner Sight Distance at Flying Feather Road

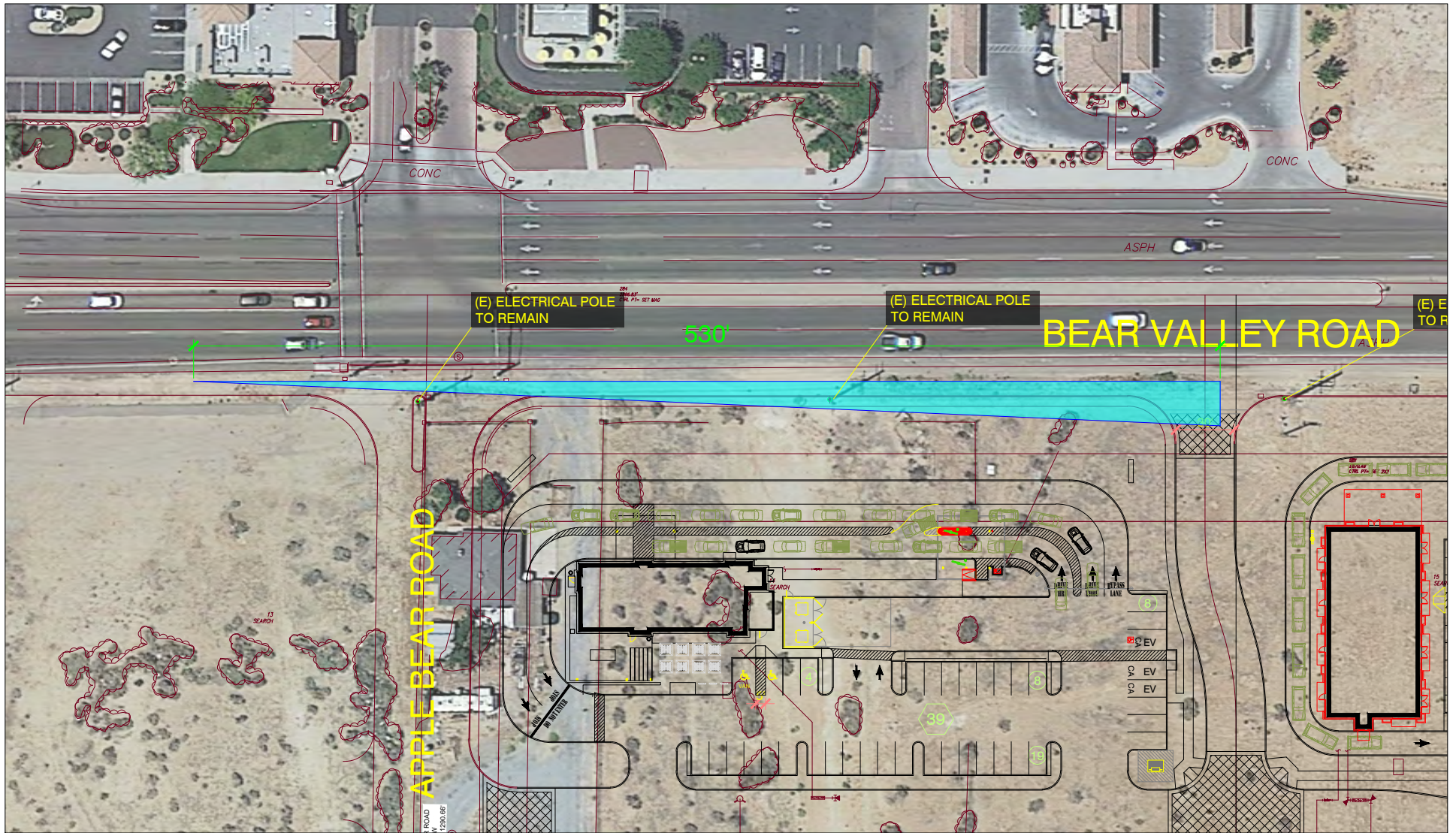


FIGURE 8-1

LSA



LEGEND

Sight Distance Triangle

*Apple Bear Commercial Project  
Traffic Impact Study*

Corner Sight Distance at Project Driveway 3

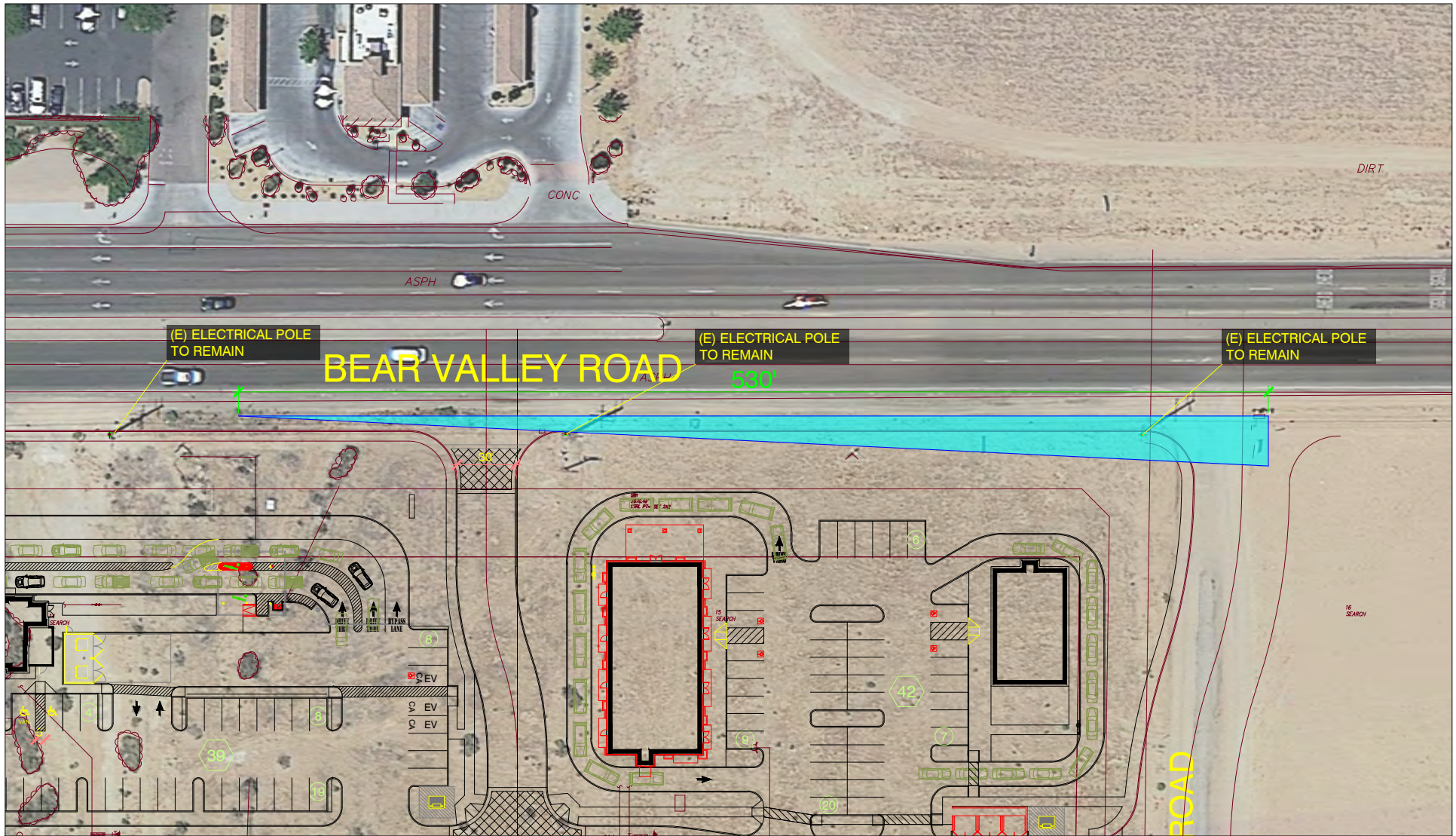


FIGURE 8-2

LSA



LEGEND

Sight Distance Triangle

*Apple Bear Commercial Project  
Traffic Impact Study*

Corner Sight Distance at Flying Feather Road

SOURCE: MCG Architecture, December 2022

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## 9.0 CEQA ASSESSMENT – VEHICLE MILES TRAVELED ANALYSIS AND ACTIVE TRANSPORTATION AND PUBLIC TRANSIT ANALYSIS

### 9.1 VEHICLE MILES TRAVELED ANALYSIS

On December 28, 2018, the California Office of Administrative Law cleared the revised CEQA Guidelines for use. Among the changes to the CEQA Guidelines was the removal of vehicle delay and LOS from consideration under CEQA. With the adopted CEQA Guidelines, transportation impacts are to be evaluated based on a project's effect on VMT.

Senate Bill 743 (SB 743) required changes made to CEQA regulations introducing VMT as the new metric for determining project traffic impacts. The Town recommends evaluation of a project screening criteria for purposes of a VMT analysis based on the County's TIS Guidelines. Therefore, the project's VMT screening evaluation will be based on the County's TIS Guidelines. The project can be considered as local-serving retail that has a total square footage less than 50,000 sf. Pursuant to the County's TIS VMT Analysis Guidelines, the project may be screened out from a VMT analysis and can be considered to have a less than significant impact on VMT.

### 9.2 ACTIVE TRANSPORTATION AND PUBLIC TRANSIT ANALYSIS

According to the County's TIS Guidelines, a significant impact occurs when a project conflicts with adopted plans, policies, or programs regarding active transportation or public transit facilities, or otherwise decreases the performance or safety of such facilities.

Based on the Town's *Plan of Bike Paths*, at present, Class II bikeways have been to both directions of Apple Valley Road south of Bear Valley Road and Kiowa Road within the study area. Proposed future Class I bikeways have been planned to be added along the eastbound direction of Bear Valley Road east of the Mojave River and the northbound direction of Apple Valley Road north of Bear Valley Road within the study area. Proposed future Class II bikeways have been planned to be added along both directions of Bear Valley Road west of the Mojave River and Deep Creek Road within the study area. As such, the project would not decrease the performance or safety of any existing or proposed bicycle facility.

According to the Town of Apple Valley *General Plan Circulation Element*, sidewalks are generally provided on both sides of the streets. Additionally, standard paved trails and non-standard unpaved trails are frequently used by bicyclists and pedestrians in the Town. Some trails are also available for equestrian riders. According to the Town's General Plan, there is a proposed Lifeline Trail for multi-use and equestrian use along Bear Valley Road within the study area. Paved sidewalks are provided on both sides of Bear Valley Road east of the Mojave River, Apple Valley Road, and Kiowa Road. The project would not affect any existing sidewalks. As such, the project would not decrease the performance or safety of any existing or proposed pedestrian facility.

VVTA bus Routes 42, 43, and 47 operate within the study area. Route 42 has stops along Bear Valley Road, Mojave Fish Hatchery Road, Jess Ranch Parkway, and Apple Valley Road within the study area. Route 43 has stops along Bear Valley Road, Mojave Fish Hatchery Road, and Jess Ranch Parkway within the study area. Route 47 has stops along Kiowa Road within the study area. Route 42 has two existing bus stops on the southbound direction of Apple Valley Road near the project site. Route 43

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has one existing bus stop on the southbound direction of Apple Valley Road and two existing stops on the eastbound direction of Bear Valley Road near the project site.

The project does not conflict with any existing or proposed bicycle, pedestrian, or public transit facilities. Therefore, it can be considered to conform to all adopted policies, plans, or programs concerning these facilities and would not have a significant impact.

## 10.0 CIRCULATION IMPROVEMENTS AND FUNDING SOURCES

### 10.1 RECOMMENDED IMPROVEMENTS

Roadway network circulation improvements have been recommended at study intersections where the project is forecast to create or contribute to operational deficiencies under opening year and cumulative conditions where feasible improvements could be identified. Table 10-A summarizes the recommended improvements for study intersections for all analysis scenarios. Tables 10-B and 10-C summarize the post-improvement intersection levels of service under opening year and cumulative conditions, respectively.

The intersections of Jacaranda Avenue/Bear Valley Road and Mojave Fish Hatchery Road/Bear Valley Road are forecast to operate at a satisfactory LOS under opening year and cumulative conditions with the recommended improvements.

It should be noted that with the implementation of the proposed improvements, the intersections of Apple Valley Road/Bear Valley Road and Kiowa Road/Bear Valley Road are still forecast to operate at a deficient LOS under opening year and cumulative conditions. However, the improvements will improve the delay under plus project conditions to better than the corresponding delay under no project conditions for both intersections.

As summarized in Table 10-A, the intersection of Westmont Drive – Apple Valley Road/Bear Valley Road would require addition of a dedicated eastbound right-turn lane for this intersection to operate at satisfactory LOS. However, Town staff is requiring the project to widen this intersection according to the Town’s General Plan Circulation Element requirements for Bear Valley Road. Therefore, the project would be required to widen the eastbound approach of Bear Valley Road at Westmont Drive – Apple Valley Road to include three eastbound through lanes and a dedicated right-turn lane.

Figure 10-1 illustrates the proposed full widening of the eastbound approach of Bear Valley Road at Westmont Drive – Apple Valley Road.

### 10.2 FUNDING SOURCES AND MECHANISMS

Where there is a funding mechanism (fee program) for the recommended improvements, payment into the fee program may be considered sufficient project obligation to alleviate project-related operational deficiencies. At study intersections where the project adds to or creates a forecast deficiency and there is no funding mechanism in place, the project is responsible for its fair-share payment toward the implementation of the improvements.

#### 10.2.1 SBCTA Nexus Study

The SBCTA Nexus Study identifies the fair share contributions from new development for regional transportation improvements. This program identifies a Nexus Study Network, representing regional roadways in the urbanized areas of San Bernardino County. Roadway improvement projects must be located on this network for their costs to be included in the Nexus Study and to be eligible to receive or expend fair share contributions.

### 10.2.2 Project Fair Share

In the absence of a fee program, the project shall pay its fair share of the cost required to offset operational deficiencies. Since the recommended improvements at the intersections of Jacaranda Avenue/Bear Valley Road, Mojave Fish Hatchery Road/Bear Valley Road, Apple Valley Road/Bear Valley Road, and Kiowa Road/Bear Valley Road are not covered under the Nexus Study or any other fee program, the project's fair share has been calculated based on project traffic as a percentage of total growth from existing to cumulative conditions. Previously referenced Table 10-A summarizes the project's fair share at the intersections where the project is forecasted to create a deficiency or add to an existing deficiency.

### 10.3 LIST OF CHAPTER 10.0 FIGURES AND TABLES

- Figure 10-1: Proposed Improvements at Intersection of Westmont Drive – Apple Bear Road/Bear Valley Road
- Table 10-A: Recommended Improvements for Intersections, Funding Mechanism, and Fair Share
- Table 10-B: Opening Year (2024) Plus Project with Recommended Improvements Intersection Levels of Service
- Table 10-C: Cumulative (2045) Plus Project with Recommended Improvements Intersection Levels of Service

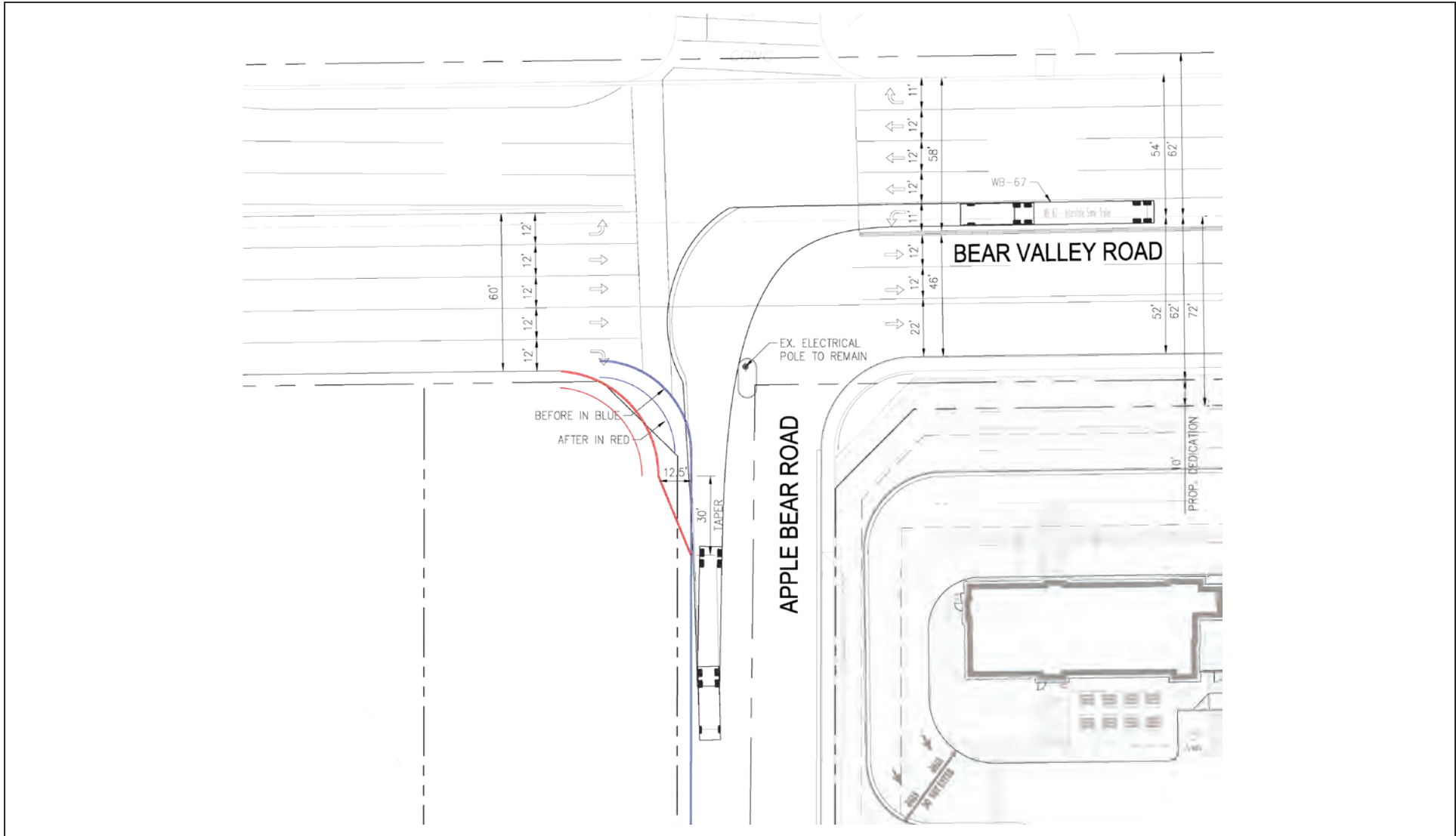
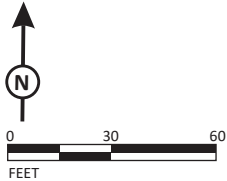


FIGURE 10-1

LSA



Apple Bear Commercial Project  
Traffic Impact Study

Proposed Improvements at Intersection of Westmont Drive - Apple Bear Road/Bear Valley Road

SOURCE: MCG Architecture, April 2023.  
P:\WDM2201\_Apple Bear Commercial Project\Technical Studies\Traffic and VMT\Traffic\fig10-1\_Curb\_ints7.ai (4/25/2023)

Table 10-A - Recommended Improvements for Intersections, Funding Mechanism, and Fair Share

Intersection	Opening Year (2024) Plus Project Improvements	Cumulative (2045) Plus Project Improvements	Funding Mechanism	Improvements Covered by Nexus Study	Improvements Covered by Fair Share	Fair Share Percentage
1 . Jacaranda Avenue/Bear Valley Road	Restripe NBTR to NBR, add right-turn overlap to NBR, optimize signal timings	Restripe NBTR to NBR, add right-turn overlap to NBR, optimize signal timings	Fair Share	-	Restripe NBTR to NBR, add right-turn overlap to NBR, optimize signal timings	7.88%
2 . Mojave Fish Hatchery Road/Bear Valley Road	Restripe NBTL to NBT, change N/S split phasing to protected left-turn phasing, optimize signal timings	Restripe NBTL to NBT, change N/S split phasing to protected left-turn phasing, optimize signal timings	Fair Share	-	Restripe NBTL to NBT, change N/S split phasing to protected left-turn phasing, optimize signal timings	9.97%
6 . Apple Valley Road/Bear Valley Road	Add right-turn overlap to NBR, optimize signal timings	Add right-turn overlap to NBR, optimize signal timings	Fair Share	-	Add right-turn overlap to NBR, optimize signal timings	22.36%
10 . Kiowa Road/Bear Valley Road	Add right-turn overlaps to EBR and SBR, optimize signal timings	Add right-turn overlaps to EBR and SBR, optimize signal timings	Fair Share	-	Add right-turn overlaps to EBR and SBR, optimize signal timings	11.55%

Notes:

N = North; S = South; NBR = North Bound Right-turn; NBT = North Bound Through; NBTR = North Bound Through Right-turn; NBTL = North Bound Through Left-turn; EBR = East Bound Right-turn; SBR = South Bound Right-turn  
 1 Project Fair Share Percentage is the highest fair share value of the AM and PM peak hour when both peak hours require improvements, or only in the peak hour that require improvements.

Table 10-B - Opening Year (2024) Plus Project with Recommended Improvements Intersection Levels of Service

Intersection	Jurisdiction	LOS Standard	No Project Without Improvements						Plus Project Without Improvements						Plus Project With Improvements								
			Control	A.M. Peak Hour			P.M. Peak Hour			Control	A.M. Peak Hour			P.M. Peak Hour			Control	A.M. Peak Hour			P.M. Peak Hour		
				Delay (sec.)	LOS		Delay (sec.)	LOS			Delay (sec.)	LOS		Delay (sec.)	LOS			Delay (sec.)	LOS		Delay (sec.)	LOS	
1 . Jacaranda Avenue/Bear Valley Road	City of Hesperia/City of Victorville	D	Signal	55.1	E	*	123.1	F	*	Signal	57.5	E	*	128.0	F	*	Signal	42.0	D		54.3	D	
2 . Mojave Fish Hatchery Road/Bear Valley Road	City of Hesperia/City of Victorville	D	Signal	74.3	E	*	88.1	F	*	Signal	77.3	E	*	92.6	F	*	Signal	36.8	D		39.3	D	
6 . Apple Valley Road/Bear Valley Road	Town of Apple Valley	C	Signal	60.7	E	*	72.0	E	*	Signal	66.4	E	*	78.5	E	*	Signal	60.3	E	*	65.8	E	*
10 . Kiowa Road/Bear Valley Road	Town of Apple Valley	C	Signal	50.6	D	*	50.0	D	*	Signal	52.7	D	*	51.6	D	*	Signal	47.6	D	*	48.6	D	*

Notes:  
 OWSC = One-Way Stop Control; LOS = Level of Service  
 Delay = Average control delay in seconds (For OWSC intersections, reported delay is for worst-case movement).  
 \* Exceeds LOS Standard

Table 10-C - Cumulative (2045) Plus Project with Recommended Improvements Intersection Levels of Service

Intersection	Jurisdiction	LOS Standard	No Project Without Improvements						Plus Project Without Improvements						Plus Project With Improvements								
			Control	A.M. Peak Hour			P.M. Peak Hour			Control	A.M. Peak Hour			P.M. Peak Hour			Control	A.M. Peak Hour			P.M. Peak Hour		
				Delay (sec.)	LOS		Delay (sec.)	LOS			Delay (sec.)	LOS		Delay (sec.)	LOS			Delay (sec.)	LOS		Delay (sec.)	LOS	
1 . Jacaranda Avenue/Bear Valley Road	City of Hesperia/City of Victorville	D	Signal	55.1	E	*	123.1	F	*	Signal	62.5	E	*	143.9	F	*	Signal	43.2	D		51.8	D	
2 . Mojave Fish Hatchery Road/Bear Valley Road	City of Hesperia/City of Victorville	D	Signal	89.0	F	*	106.8	F	*	Signal	92.1	F	*	111.9	F	*	Signal	38.4	D		43.0	D	
6 . Apple Valley Road/Bear Valley Road	Town of Apple Valley	C	Signal	61.3	E	*	77.9	E	*	Signal	66.8	E	*	85.2	F	*	Signal	60.8	E	*	75.0	E	*
10 . Kiowa Road/Bear Valley Road	Town of Apple Valley	C	Signal	53.5	D	*	53.8	D	*	Signal	55.8	E	*	55.9	E	*	Signal	49.7	D	*	52.3	D	*

Notes:  
 OWSC = One-Way Stop Control; LOS = Level of Service  
 Delay = Average control delay in seconds (For OWSC intersections, reported delay is for worst-case movement).  
 \* Exceeds LOS Standard



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## 11.0 TRAFFIC COLLISION ANALYSIS

A traffic collision analysis was conducted for the corridor of Bear Valley Road near Apple Valley Road. Traffic collision data was obtained from the State of California *Statewide Integrated Traffic Records System* (SWITRS) through the University of California, Berkeley *Transportation Injury Mapping System* (TIMS). It should be noted that the SWITRS currently provides collision data dated from December 2021 or earlier. For purposes of this analysis, traffic collision data between January 2015 and December 2021 were examined for this analysis.

According to the data provided by SWITRS, there have been a total of 64 crashes involving at least one vehicle within a 1,200-foot radius of the intersection of Apple Valley Road and Bear Valley Road. These 64 crashes are divided into 5 fatal crashes, 44 crashes that resulted in injury, and 15 unmapped collisions. Among these crashes are one crash involving a bicyclist and three crashes involving a pedestrian, one of which involves a fatality. The majority of these crashes occurred on Bear Valley Road near the intersections of Reata Road/Bear Valley Road and Apple Valley Road/Bear Valley Road.

Detailed collision data extracted from TIMS are included in Appendix E.

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# APPENDIX A

## SCOPING AGREEMENT



December 14, 2022

Richard Pedersen  
Deputy Town Engineer  
14955 Dale Evans Parkway  
Apple Valley, CA 92307

Subject: Apple Bear Commercial Project Traffic Impact Study Scoping Agreement (LSA Project No. WDN2201)

Dear Richard:

LSA is preparing a Traffic Impact Study (TIS) for the proposed Apple Bear Commercial Project (project) to be located on the southeast corner of Bear Valley Road and Apple Bear Road (future road) in the Town of Apple Valley (Town), San Bernardino County on Assessor Parcel Numbers (APNs) 0434-021-10, -34, and -37. The project site is currently vacant. Figure 1 (all figures, tables, and appendices attached) illustrates the regional and project location. The project consists of a 23,256 square-foot (sf) grocery store (Sprouts), a 3,546 sf fast-food restaurant with drive-through (Raising Canes), a 1,310 sf fast-food restaurant with drive-through, a 2,500 sf fast-food restaurant with drive-through (Pad 3), 3,750 sf of quick serve restaurants, and a 5,500 sf car wash with a 131-foot wash tunnel. The total proposed commercial square footage is approximately 39,862 square feet. The project site is designated as General Commercial in the Town's General Plan.

Access to the project will be provided via five driveways: two driveways on Apple Bear Road, one driveway on Bear Valley Road, and two driveways on Flying Feather Road. Apple Bear Road and Flying Feather Road will be constructed from Bear Valley Road in order to provide access to the site. Based on discussion with Town staff, the intersection of Flying Feather Road and Bear Valley Road will restrict left-turns in and out of Flying Feather Road. The project driveways on Apple Bear Road and Flying Feather Road will be full access driveways. The driveway on Bear Valley Road will be a right-in-right-out (RIRO) driveway. Figure 2 illustrates the conceptual site plan for the project.

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

#### **SCOPE OF WORK: LEVEL OF SERVICE ANALYSIS**

The Town recommends preparation of a TIS based on the *San Bernardino County Transportation Impact Study Guidelines* (dated July 2019). Therefore, the scope of work for the TIS for the project has been prepared based on the County's TIS guidelines. Pursuant to the County's TIS Guidelines, a TIS should have two components: 1) a Level of Service (LOS) Analysis for General Plan consistency requirements and 2) a Vehicle Miles Traveled (VMT) Analysis with an Active Transportation and Public Transit Analysis to meet the California Environmental Quality Act (CEQA) requirements. This section describes the scope of work for preparation of the LOS analysis for inclusion in the TIS. A separate discussion has been provided for preparation of the VMT analysis as part of the TIS.

## Study Intersections

Based on the TIS guidelines, the study area shall generally include all intersections at which the proposed project will add 50 or more peak hour trips. All study intersections will be analyzed during the a.m. and p.m. peak hours. The a.m. peak hour is defined as the one hour of highest traffic volumes occurring between 7:00 a.m. and 9:00 a.m. while the p.m. peak hour is defined as the one hour of highest traffic volumes occurring between 4:00 p.m. and 6:00 p.m. Intersection levels of service (LOS) will be calculated using the *Highway Capacity Manual 6* (HCM 6) analysis methodologies and using Synchro 11 software. As such, LSA proposes to include the following intersections in the study:

1. Jacaranda Avenue/Bear Valley Road (Victorville, Hesperia);
2. Mojave Fish Hatchery Road/Bear Valley Road (Victorville, Hesperia);
3. Jess Ranch Parkway/Bear Valley Road (Apple Valley);
4. Reata Road/Bear Valley Road (Apple Valley);
5. Apple Valley Road/Pimlico Road – Shopping Center Driveway (Apple Valley);
6. Apple Valley Road/Bear Valley Road (Apple Valley);
7. Westmont Drive – Apple Bear Road/Bear Valley Road (Apple Valley);
8. Flying Feather Road/Bear Valley Road (Apple Valley);
9. Deep Creek Road/Apple Valley Road (Apple Valley);
10. Kiowa Road/Bear Valley Road (Apple Valley);
11. Apple Bear Road/Project Driveway 1 (Apple Valley);
12. Apple Bear Road/Project Driveway 2 (Apple Valley);
13. Project Driveway 3/Bear Valley Road (Apple Valley);
14. Flying Feather Road/Project Driveway 4 (Apple Valley); and
15. Flying Feather Road/Project Driveway 5 (Apple Valley).

Figure 3 illustrates the study area intersections.

## Trip Generation

The trip generation for the proposed project was developed using rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (11<sup>th</sup> Edition) for Land Use 850 – “Supermarket,” Land Use 933- “Fast-Food Restaurant without Drive-Through Window” and Land Use 934 – “Fast-Food Restaurant with Drive-Through Window.” Since the ITE *Trip Generation Manual* does not provide trip generation rates for automated car washes, the trip generation for this facility was developed using the survey rates used in traffic studies for similar automated car wash studies. As such, the following two traffic studies were evaluated:

1. Arbor Car Wash Traffic Impact Analysis (City of Rancho Cucamonga) – using survey rates from Fast5 Xpress car wash in the City of Murrieta; and
2. Newport Pointe Project Traffic Impact Analysis (City of Menifee) – using survey rates from Victorville Speedwash facility located at 12147 Industrial Boulevard.

Since the Victorville Speedwash facility rates were higher, these rates have been used to estimate the trip generation for the automated car wash component of the project. Appendix A includes the trip generation rates for both facilities.

Table A summarizes the daily, a.m., and p.m. peak hour project trip generation. As shown in Table A, the project is anticipated to generate 8,865 gross daily trips, with 643 gross trips occurring during the a.m. peak hour and 739 gross trips occurring during the p.m. peak hour.

Supermarkets, fast-food restaurants, and automated car wash facilities will typically draw some trips from the traffic passing the site on an adjacent street or from traffic on other roadways within the vicinity. These trips are not “new” trips made for the sole purpose of visiting the site, but are trips made as an intermediate stop en route to a final destination. Trips from traffic passing the site on an adjacent street are referred to as “pass-by” trips and will only affect traffic at project driveways and on streets adjacent to the project.

Pass-by trip percentages for the supermarket, fast-food restaurants, and automated car wash were obtained from the ITE *Trip Generation Manual*. Total pass-by trips were subtracted from the gross external trips to obtain the net external trips for the project. After accounting for pass-by trips, the project is anticipated to generate 5,120 net daily trips, with 388 net trips occurring during the a.m. peak hour and 432 net trips occurring during the p.m. peak hour.

The distribution of project trips is based on the regional roadway network and the location of residential, employment and commercial centers in relation to the proposed project. Figure 4 illustrates the project trip distribution. The project net trip generation was applied to the trip distribution patterns to develop the project net trip assignment. The project net trip assignment is illustrated in Figure 5.

### Analysis Scenarios

The TIS will examine traffic operations in the following scenarios:

- Existing Conditions;
- Opening Year No Project Conditions;
- Opening Year Plus Project Conditions;
- Cumulative No Project Conditions; and
- Cumulative Plus Project Conditions.

The project’s opening year is anticipated to be Year 2024. According to the County’s TIS guidelines, the cumulative scenario needs to be consistent with the San Bernardino Transportation Analysis

Model (SBTAM) future year scenario, which is Year 2040. Based on discussion with Town staff, Town staff recommended analysis of Year 2045 conditions for purposes of this analysis.

### **Volume Development and Analysis Methodology**

Existing a.m. and p.m. peak hour traffic conditions and levels of service (LOS) will be assessed for the intersections identified for examination. Intersection LOS will be calculated using the appropriate HCM 6 analysis methodologies using Synchro 11 software.

Traffic volumes for opening year conditions will be developed by applying a per annum growth rate to existing traffic volumes and adding trips from approved and pending projects within the project vicinity. LSA will confirm with Town staff the appropriate growth rate to be used. Cumulative project information was obtained from the Town and the neighboring jurisdictions of Victorville, Hesperia, and San Bernardino County. Figure 6 illustrates the cumulative project locations. Table B summarizes the list of cumulative projects within the vicinity of the project. The resulting intersection LOS will be calculated using the previously discussed methodologies.

Traffic volumes for cumulative year without project conditions will be developed by using forecast traffic volumes obtained from SBTAM. The methodology to develop cumulative year without project traffic volumes at study area intersections will be consistent with the San Bernardino County Transportation Authority (SBCTA) procedures for post-processing of modeled traffic volumes. The resulting intersection LOS will be calculated using the previously discussed methodologies.

Opening year and cumulative plus project volumes will be developed by adding project traffic to the corresponding no project scenario traffic volumes. The resulting intersection LOS will be calculated using the previously discussed methodologies.

### **Analysis of Traffic Operations and Recommended Circulation Improvements**

Intersection LOS without the project will be compared to the intersection LOS with the project for each of the analysis scenarios to determine operational deficiencies. Furthermore, necessary improvements will be recommended to offset these deficiencies, if any. Improvements may include intersection turn lanes, signalization, and segment lane additions. The LOS with the proposed improvements will be calculated and summarized, along with a comparison of the LOS without improvements.

### **Signal Warrant Analysis**

A signal warrant analysis will be conducted at an unsignalized study intersection under opening year (if applicable) and cumulative year conditions. Peak hour approach volumes for the study intersections will be examined to determine whether signalization may be warranted per the criteria defined in the California supplement of the *Manual on Uniform Traffic Control Devices* (CA-MUTCD).

### **Fair Share Contributions**

LSA will evaluate whether the mitigation measures identified in the TIA are included in the Town's *Capital Improvement Plan* program or in the SBCTA Nexus Study Fee program. If it is determined that the improvement is not covered through either of these programs, then the project's fair share

contribution will be calculated based on the project traffic as a percentage of total growth from existing to cumulative conditions.

### **Site Access**

The TIS guidelines recommend analysis examining operations at the project driveways to identify potential safety concerns associated with the proposed project. As such, the analysis will examine intersection sight distance, driveway length, and corner clearance.

### **Project Driveway Right-Turn Lane Analysis**

The TIS will examine if the primary project driveways will need to provide right-turn lanes. The TIS will examine if a right-turn deceleration lane is required for access to the project site. The analysis will be conducted based on the methodology outlined in the Caltrans Highway Design Manual.

### **Project Design Feature – Bear Valley Road Raised Median**

Based on discussion with Town staff, the existing raised median on Bear Valley Road will need to be extended eastward. The raised median is currently built along Bear Valley Road, between Westmont Drive – Apple Bear Road and the Sonic Drive-In eastern driveway. The raised median shall extend eastward past the intersection of Flying Feather Road and Bear Valley Road. Therefore, traffic access at the intersection of Flying Feather Road and Bear Valley Road will be converted from a full access intersection to a right-in-right-out access only.

### **Traffic Collision Analysis**

Based on discussion with Town staff, a traffic collision analysis was requested for the corridor of Bear Valley Road within the proximity of the proposed project near Apple Valley Road. The analysis will use collision data acquired through the Transportation Injury Mapping System.

### **Evaluation of Transit, Bicycle and Pedestrian Facilities**

Per County's TIS guidelines, the TIS should include assessment of the project's impact on transit, bicycle, and pedestrian facilities adjacent to the project site. This qualitative assessment will examine the project's consistency with the Town's applicable goals and policies set forth in the Town's General Plan.

## **SCOPE OF WORK: CEQA TRANSPORTATION ASSESSMENT**

### **Project VMT Analysis**

Senate Bill 743 (SB 743) required changes be made to CEQA regulations introducing Vehicle Miles Traveled (VMT) as the new metric for determining project traffic impacts. The Town recommends evaluation of a project screening criteria for purposes of a VMT analysis based on the County's TIS guidelines. Therefore, the project's VMT screening evaluation will be based on the County's TIS Guidelines. The project has a total square footage less than the 50,000 sf. As pursuant to the County's VMT Analysis Guidelines, it is anticipated that the project may be screened out from a VMT analysis.

### Active Transportation and Public Transit Analysis

The TIS will evaluate potential project impacts on public transit, bicycle, and pedestrian facilities in the vicinity of the project. The analysis will determine whether the project conflicts with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decreases the performance or safety of such facilities.

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

Sincerely,

**LSA ASSOCIATES, INC.**



Ambarish Mukherjee, AICP, PE  
Principal

### ATTACHMENTS

Table A: Project Trip Generation  
Table B: Cumulative Projects  
Figure 1: Regional and Project Location  
Figure 2: Conceptual Site Plan  
Figure 3: Study Area Intersections  
Figure 4: Project Trip Distribution  
Figure 5: Project Trip Assignment  
Figure 6: Cumulative Project Locations  
Appendix A: Automated Car Wash Trip Generation Rates



**TABLES**

**Table A - Project Trip Generation**

Land Use	Units	A.M. Peak Hour			P.M. Peak Hour			Daily
		In	Out	Total	In	Out	Total	
<b>Major 1 - Grocery Store</b>	23.26 TSF							
Trips/Unit <sup>1</sup>		1.69	1.17	2.86	4.48	4.47	8.95	93.84
Trip Generation		39	27	66	104	104	208	2,182
Pass-By Trips <sup>2</sup>		0	0	0	(25)	(25)	(50)	(524)
Net Trip Generation		39	27	66	79	79	158	1,658
<b>Pad 2, Pad 3, and Shops 1 - Fast-Food with Drive-Through</b>	7.36 TSF							
Trips/Unit <sup>3</sup>		22.75	21.86	44.61	17.18	15.85	33.03	467.48
Trip Generation		167	161	328	126	117	243	3,439
Pass-By Trips <sup>4</sup>		(84)	(81)	(165)	(69)	(64)	(133)	(1,805)
Net Trip Generation		83	80	163	57	53	110	1,634
<b>Shops 1 - Fast-Food without Drive-Through</b>	3.75 TSF							
Trips/Unit <sup>5</sup>		25.04	18.14	43.18	16.61	16.60	33.21	450.49
Trip Generation		94	68	162	62	62	124	1,689
Pass-By Trips <sup>6</sup>		(47)	(34)	(81)	(34)	(34)	(68)	(887)
Net Trip Generation		47	34	81	28	28	56	802
<b>Pad 1 - Automated Car Wash</b>	131.00 LF							
Trips/Unit <sup>7</sup>		0.38	0.28	0.66	0.62	0.63	1.25	11.87
Trip Generation		50	37	87	81	83	164	1,555
Pass-by Trips <sup>8</sup>		(5)	(4)	(9)	(28)	(28)	(56)	(529)
Net Trip Generation		45	33	78	53	55	108	1,026
<b>Total Gross Trip Generation</b>		<b>350</b>	<b>293</b>	<b>643</b>	<b>373</b>	<b>366</b>	<b>739</b>	<b>8,865</b>
<b>Total Pass-By Trips</b>		<b>(136)</b>	<b>(119)</b>	<b>(255)</b>	<b>(156)</b>	<b>(151)</b>	<b>(307)</b>	<b>(3,745)</b>
<b>Total Net Trip Generation</b>		<b>214</b>	<b>174</b>	<b>388</b>	<b>217</b>	<b>215</b>	<b>432</b>	<b>5,120</b>

Note:

TSF = Thousand Square Feet; LF = Linear Feet

<sup>1</sup> Rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (11<sup>th</sup> Edition), Land Use 850 - "Supermarket", Setting/Location - "General Urban/Suburban."

<sup>2</sup> Pass-by rates based on Land Use 850 - "Supermarket" from ITE *Trip Generation Manual* (11<sup>th</sup> Edition). No a.m. and daily pass-by rates are available. The p.m. pass-by rate used is 24.00%. Since the daily pass-by rate was not available, the p.m. pass-by rate was applied as the daily rate.

<sup>3</sup> Rates based on Land Use 934 - "Fast-Food Restaurant with Drive-Through Window" from ITE *Trip Generation Manual* (11<sup>th</sup> Edition). Setting/Location - "General Urban/Suburban."

<sup>4</sup> Pass-by rates based on Land Use 934 - "Fast-Food Restaurant with Drive-Through Window" from ITE *Trip Generation Manual* (11<sup>th</sup> Edition). The a.m. pass-by rate used is 50%. The p.m. pass-by rate used is 55%. Since the daily pass-by rate was not available, the average of the a.m. and p.m. pass-by rates was applied as the daily rate.

<sup>5</sup> Rates based on Land Use 933 - "Fast-Food Restaurant without Drive-Through Window" from ITE *Trip Generation Manual* (11<sup>th</sup> Edition). Setting/Location - "General Urban/Suburban."

<sup>6</sup> Pass-by rates for Land Use 933 - "Fast-Food Restaurant without Drive-Through Window" are not available. Therefore, pass-by rates for Land Use 934 - "Fast-Food Restaurant with Drive-Through Window" was used. The a.m. pass-by rate used is 50%. The p.m. pass-by rate used is 55%. Since the daily pass-by rate was not available, the average of the a.m. and p.m. pass-by rates was applied as the daily rate.

<sup>7</sup> Trip generation rates from Linscott, Law & Greenspan, Engineers *Newport Pointe Traffic Impact Analysis Report*, April 2021. Rates based on traffic surveys from the Victorville Speedwash at 12147 Industrial Boulevard, Victorville, CA.

<sup>8</sup> Pass-by rates from Linscott, Law & Greenspan, Engineers *Newport Pointe Traffic Impact Analysis Report*, April 2021. Pass-by based on ITE *Trip Generation Handbook*, 3rd Edition.

Table B - Cumulative Projects

ID	Jurisdiction	Project Name/Reference	Address/Location	Project Description	Project Units/Area/Other
1	Victorville	PLAN20-00006	Southeast corner of Hesperia Road and Nisqualli Road.	A site plan and conditional use permit with an environmental exemption to allow for the development of a fueling station with accessory carwash and convenience store, a conditional use permit to allow for alcohol sales and a tentative parcel map to allow for the creation of two parcels from one vacant parcel located on the southeast corner of Hesperia Road and Nisqualli Road.	
2	Victorville	PLAN20-00010	17300 Silica Road	A conditional permit with an environmental exemption to allow for the temporary storage of truck trailers and trailer mounted shipping containers on a partially improved site located at the 17300 Silica Dr.	
3	Victorville	ADMN20-00057	12421 E Hesperia Road W #11	A minor conditional use permit with an environmental exemption to allow a social service organization for foster children to occupy suites #11-#15 within an existing building on property zoned C-1 neighborhood service commercial located at 12421 Hesperia Road.	
4	Victorville	PLAN20-00027	12454 Industrial Center Drive	A site plan and conditional use permit with an environmental exemption to allow for a new multi-tenant commercial concrete tilt-up building on a vacant and undeveloped 2.75 acre property zoned C-M located west of and abutting Industrial Center Drive approximately 250 Ft. north of Jasmine Street.	
5	Victorville	PLAN19-00023	APN 3091-271-38	A site plan with an environmental exemption to allow for the construction of an approximately 16,500 square foot two-story medical office building on property located south of and abutting Jasmine Street, east of Yuma Street and west of Apate Lane.	16.5 TSF
6	Hesperia	SPR21-00010	Southeast corner of Apatite Avenue and Outer Bear Valley Road	Consideration of Site Plan Review SPR21-00010 to construct a 3 building office/retail complex on 5 existing parcels totaling 3 acres within the C2 General Commercial zone located on the southeast corner of Apatite Avenue and Outer Bear Valley Road (Applicant: CJC Holdings, LLC; APN: 0415-021-01 thru 05).	
7	Hesperia	SPR20-00006	North side of Darwin Avenue, approximately 890' east of Santa Fe Avenue	Consideration of Site Plan Review SPR20-00006 to construct a 26,821 square foot industrial building on 2 gross acres within the General Manufacturing (I2) zone located on the north side of Darwin Avenue, approximately 890' east of Santa Fe Avenue (Applicant: MTH2 Engineering, Inc.; APN: 0415-251-08).	26.821 TSF industrial building
8	Hesperia	CUP22-00018	17147 Lemon Street	Consideration of Conditional Use Permit CUP22-00018 to allow for an expansion of an existing self-storage facility, consisting of the construction of three self-storage buildings totaling approximately 37,500 square feet with 106 exterior RV storage spaces on 5.4 acres within the General Industrial (GI) zone of the Main Street and Freeway Corridor Specific Plan located south of Lemon Street, approximately 300 feet east of C Avenue - 17147 Lemon Street (Applicant: Billy Phong; APN: 0410-011-32 & -33).	Self Storage building 37.5 TSF, 105 RV spaces
9	Hesperia	SPR21-00011	11099 G Avenue	Consideration of Site Plan Review SPR21-00011 to construct a 6,000 square foot industrial warehouse building on a 1.32-acre parcel within the I1 Limited Manufacturing zone located south of and adjacent to Ecology Auto Dismantling at 11099 G Avenue with a categorical exemption as an infill project (Applicant: Rodolfo Palacios; APN: 0415-231-06).	6 TSF industrial warehouse building

Table B - Cumulative Projects

ID	Jurisdiction	Project Name/Reference	Address/Location	Project Description	Project Units/Area/Other
10	Hesperia	SPR22-00001	East of G Avenue, approximately 180 feet north of E Avenue	Consideration of Site Plan Review SPR22-00001 to construct a pallet manufacturing storage facility on 1.24 gross acres within the Limited Manufacturing (I1) zone located east of "G" Avenue, approximately 180 feet north of "E" Avenue (Applicant: Luciano Perez Martinez ; APNs: 0415-231-02).	
11	Victorville	PLAN20-00020	17876 Bear Valey Road	A site plan and conditional use permit with an environmental exemption to allow for the development of a fueling station with an accessory convenience store and carwash, and a conditional use permit to allow for associated alcohol sales on vacant C-1 (Neighborhood Service) Zone property located at the northwest corner of Bear Valley Road and Tamarisk Road.	
12	Hesperia	SPR21-00015	South of Mesa Street, approximately 980 feet west of I Avenue	Consideration of Site Plan Review SPR21-00015 to construct a pallet repair and storage facility on 2.42 gross acres within the General Manufacturing (I2) zone located south of Mesa Street, approximately 980 feet west of "I" Avenue (Applicant: Yvetth Gasca; APNs: 0415-191-17).	
13	Hesperia	CUPR21-00003	South side of Bear Valley, approximately 600 feet east of Fish Hatchery Road	Consideration of Revised Conditional Use Permit CUPR21-00003 to modify a previously approved site plan (CUP18-00003) to add a 9,600 square foot retail building and a 3,400 square foot restaurant on 2.6 gross acres within the C2 zone located on the south side of Bear Valley, approximately 600 feet east of Fish Hatchery Road (Applicant: 18667 Hesperia LLC; APN: 0399-011-78).	9.6 TSF retail building, 3.4 TSF restaurant
14	Apple Valley	New Gas Station	Northwest corner of Yucca Loma and Apple Valley Road	New fuel station with a 4,999 sf convenience store located at northwest corner of Yucca Loma and Apple Valley Road.	4.999 TSF Convenience store; gas station with
15	Apple Valley	Grocery Store and Retail	North side of Bear Valley Road, approximately 1,070 feet from Apple Valley Road (APNs: 3087-171-15 & 16)	43,000 square foot grocery store and 6,995 square feet of retail businesses (total 49,995 square feet) on six acres located on the north side of Bear Valley Road, approximately 1,070 feet from Apple Valley Road (APNs: 3087-171-15 & 16).	43 TSF Grocery; 6.995 TSF Retail
16	Apple Valley	Residential Project	Northwest of Deep Creek Road and Bear Valley Road.	Approved Frontier Communities, a 137-home tract near Deep Creek and Bear Valley roads (APN: 3087-171-07).	137 SFR DU
17	San Bernardino County	PEXT-2021-00020	East of Deep Creek Road and Ocotillo Way	Tentative Tract Map 16569 is approved to subdivide 249 acres into 202 residential lots and six lettered lots and may be recorded and in compliance with the approved stamped tentative tract map, the following conditions of approval, all other required and approved reports and displays (e.g. elevations). The TTM approval incorporates the required Composite Development Plan, the Covenants Conditions and Restrictions (CC & R's) required of the TTM, the proposed environmental determination, and Environmental Impact Report (EIR). Project Number PH1180103B, APNs 0438-012-59, 0438-163-01, 02, 20, 31 and 32.	202 Single-family DU
18	Apple Valley	Residential Project	Northwest of Navajo Road and Sandia Road.	Approved 32-acre, 210-unit project at Navajo and Sandia roads (APN: 0434-063-02).	210 DU

**Notes:**

SFDU = Single-Family Dwelling Units; MFDU = Multi-Family Dwelling Units; TSF = Thousand Square Feet; RM = Rooms.

**FIGURES**

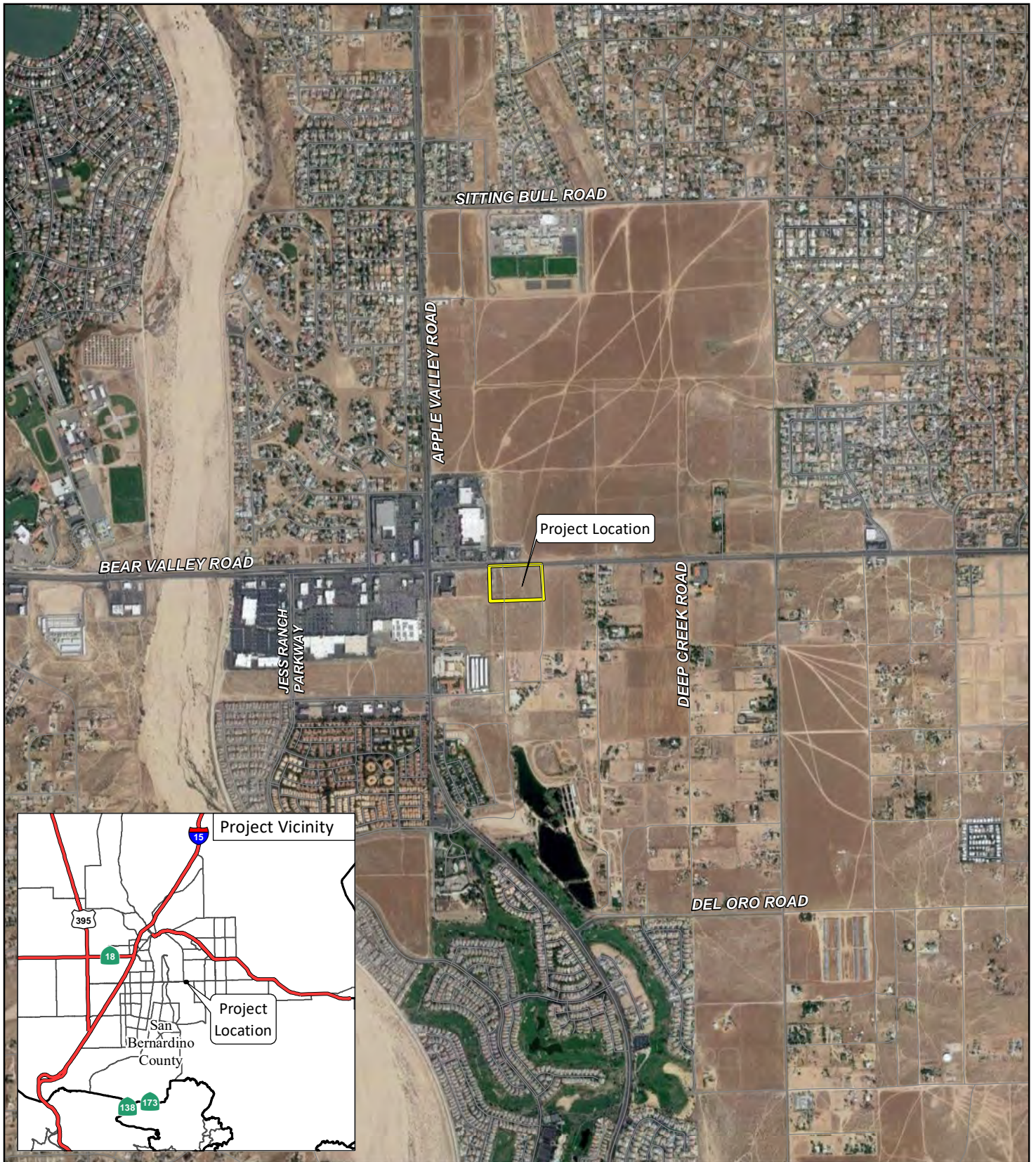
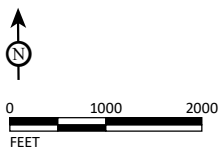


FIGURE 1

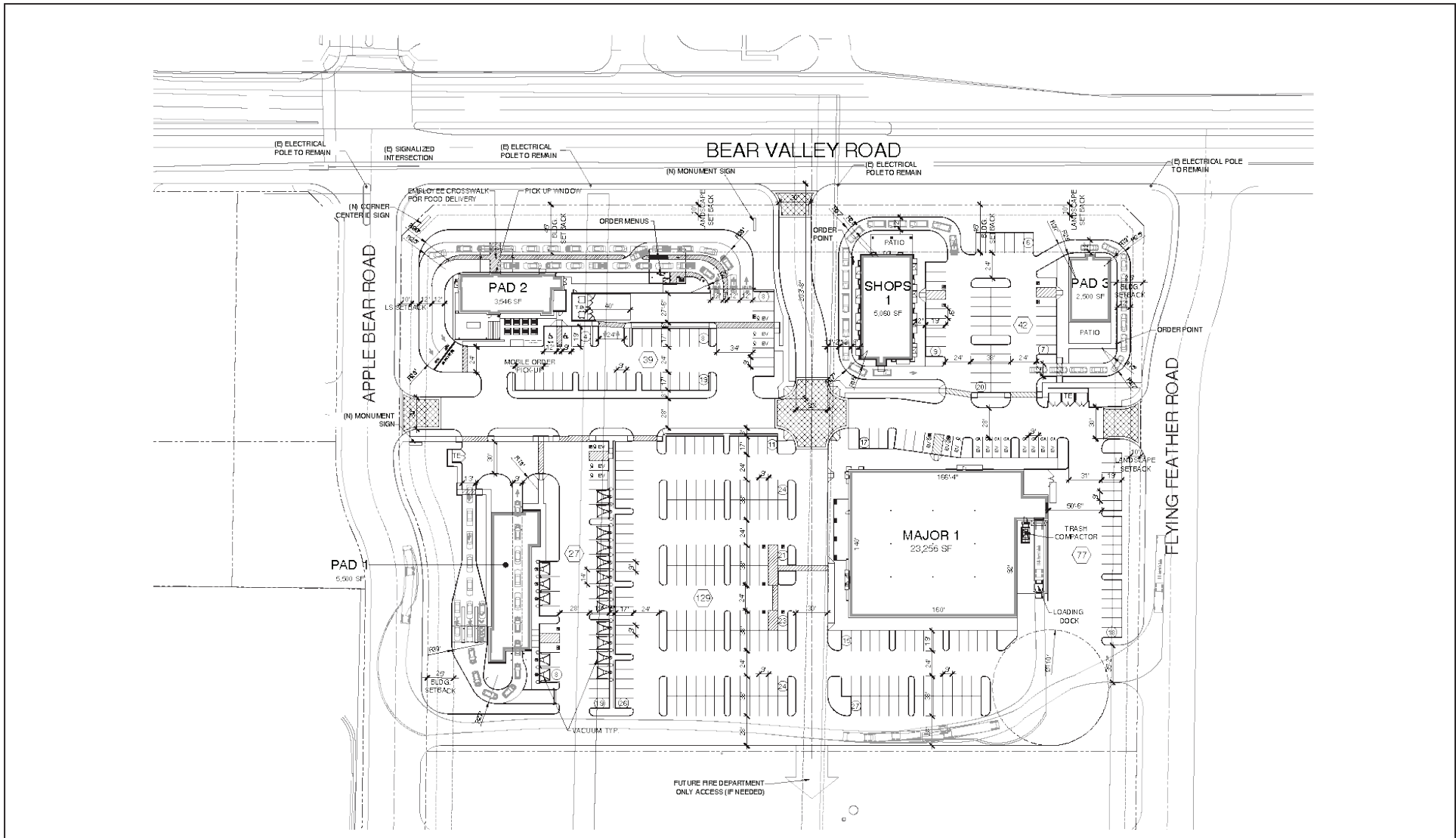
LSA



SOURCE: ESRI Streetmap, 2021; Google Earth, 2020.

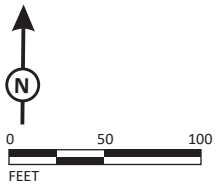
P:\WDN2201\_Apple Bear Commercial Project\Technical Studies\Traffic and VMT\Traffic\GIS\Reports\fig1\_Reg\_ProjLoc.mxd (9/13/2022)

Apple Bear Commercial  
Traffic Impact Study  
Regional and Project Location



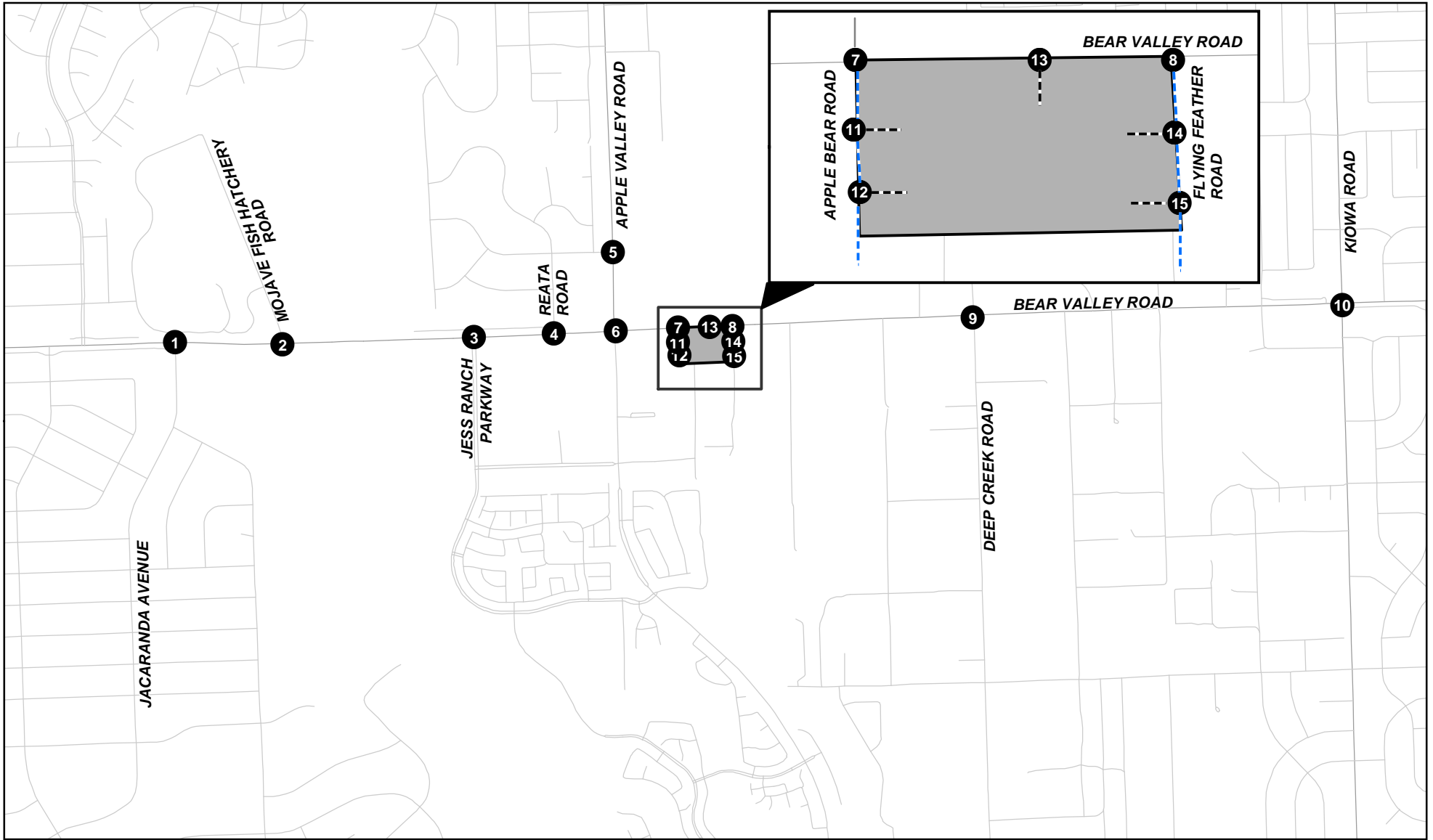
LSA

FIGURE 2



Apple Bear Commercial  
Traffic Impact Study  
Conceptual Site Plan

SOURCE: MCG Architecture, August 2022.  
P:\WDN2201\_Apple Bear Commercial Project\Technical Studies\Traffic and VMT\Traffic\Site Plan (10/21/2022)



LSA

LEGEND

- Project Location
- Study Area Intersections
- Project Driveway
- Future Road



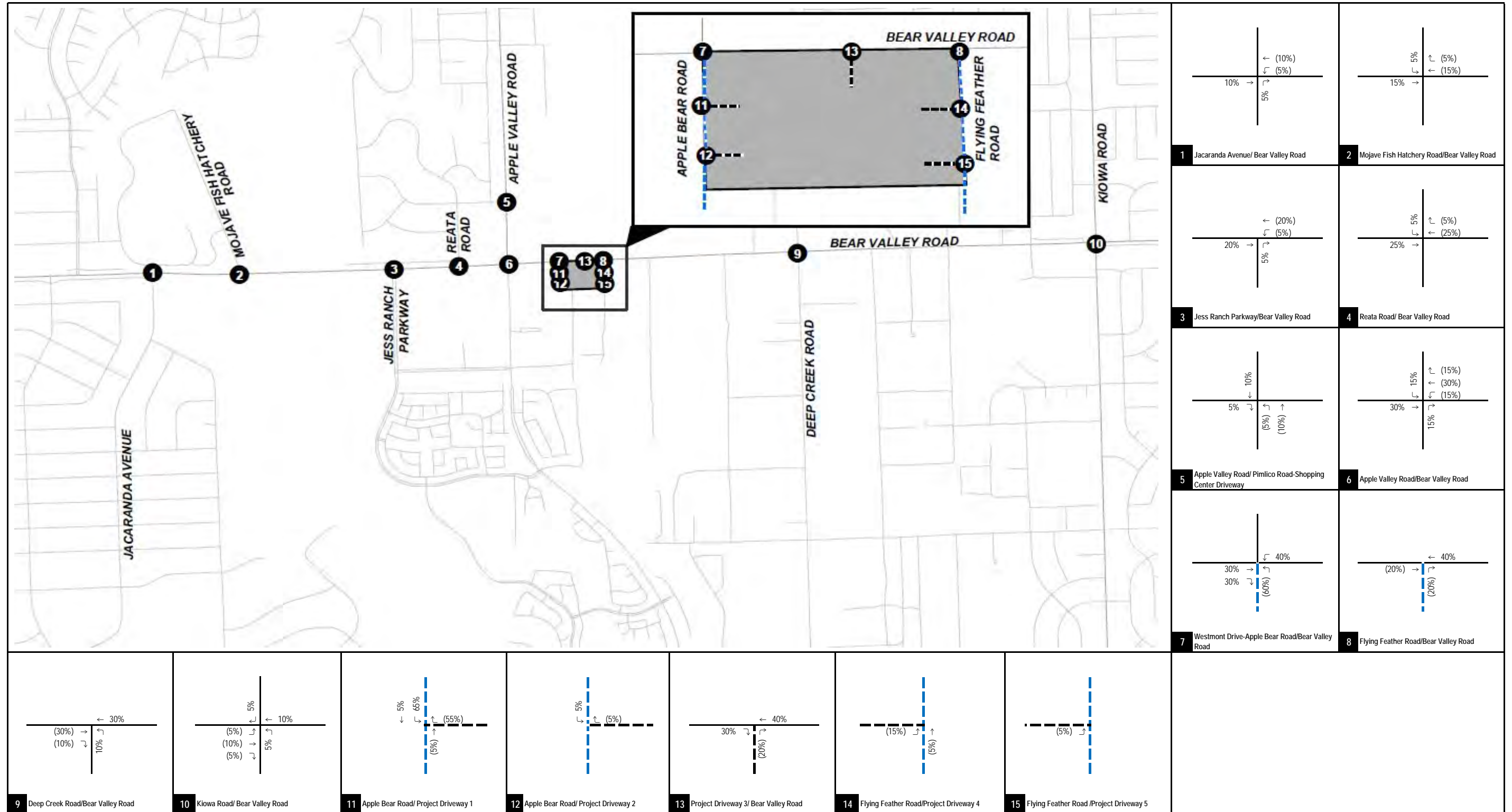
SOURCE: ESRI Streetmap, 2021.

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FIGURE 3

*Apple Bear Commercial  
Traffic Impact Study  
Study Area Intersections*





LSA

XX% (YY%)

Inbound (Outbound) Distribution

--- Project Driveway

--- Future Road

FIGURE 4

Apple Bear Commercial  
 Traffic Impact Study  
 Project Trip Distribution

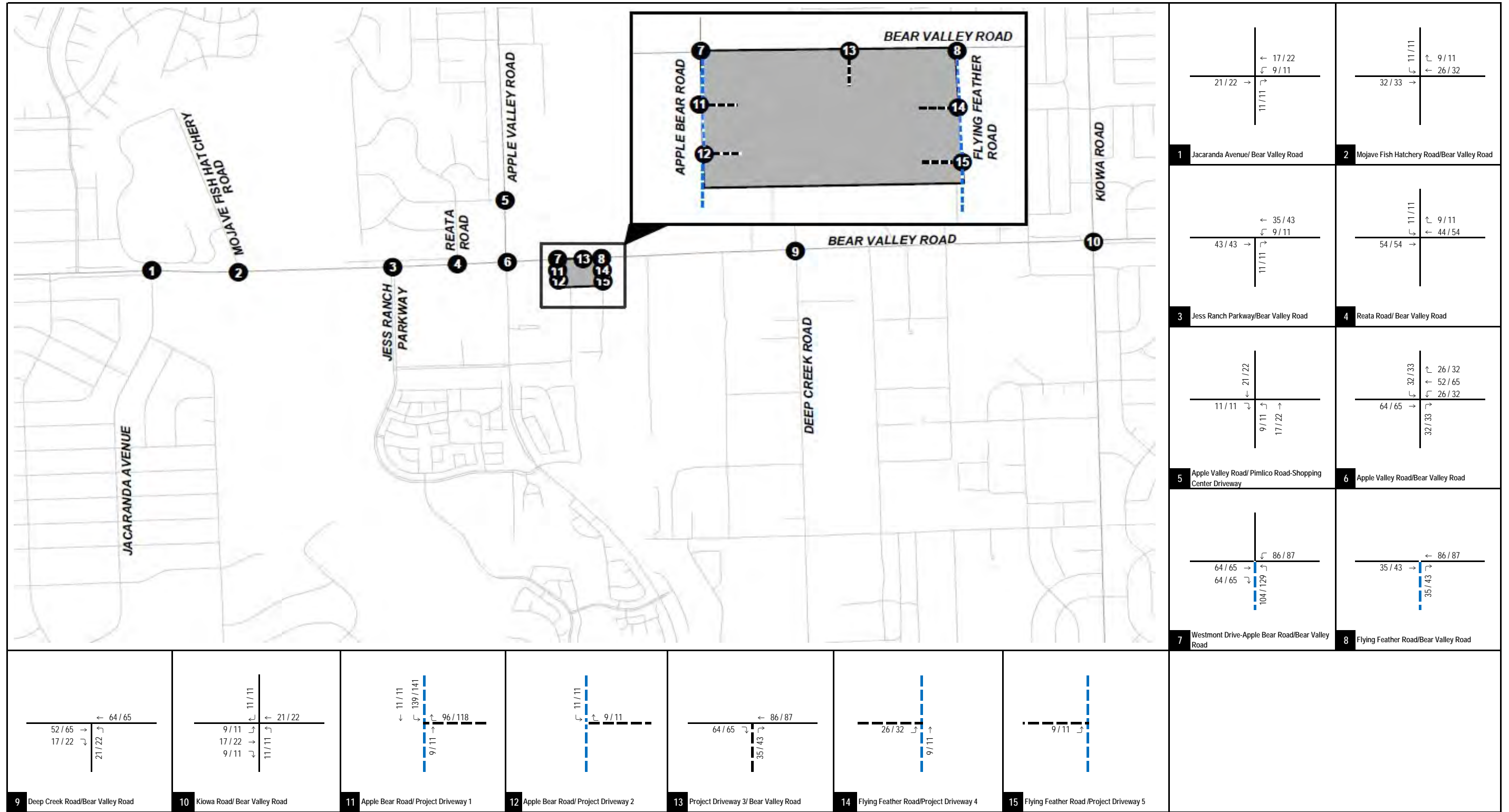


FIGURE 5

LSA

XXX / YYY

AM / PM Peak Hour Traffic Volumes

--- Project Driveway

--- Future Road

Apple Bear Commercial  
 Traffic Impact Study  
 Net Project Trip Assignment

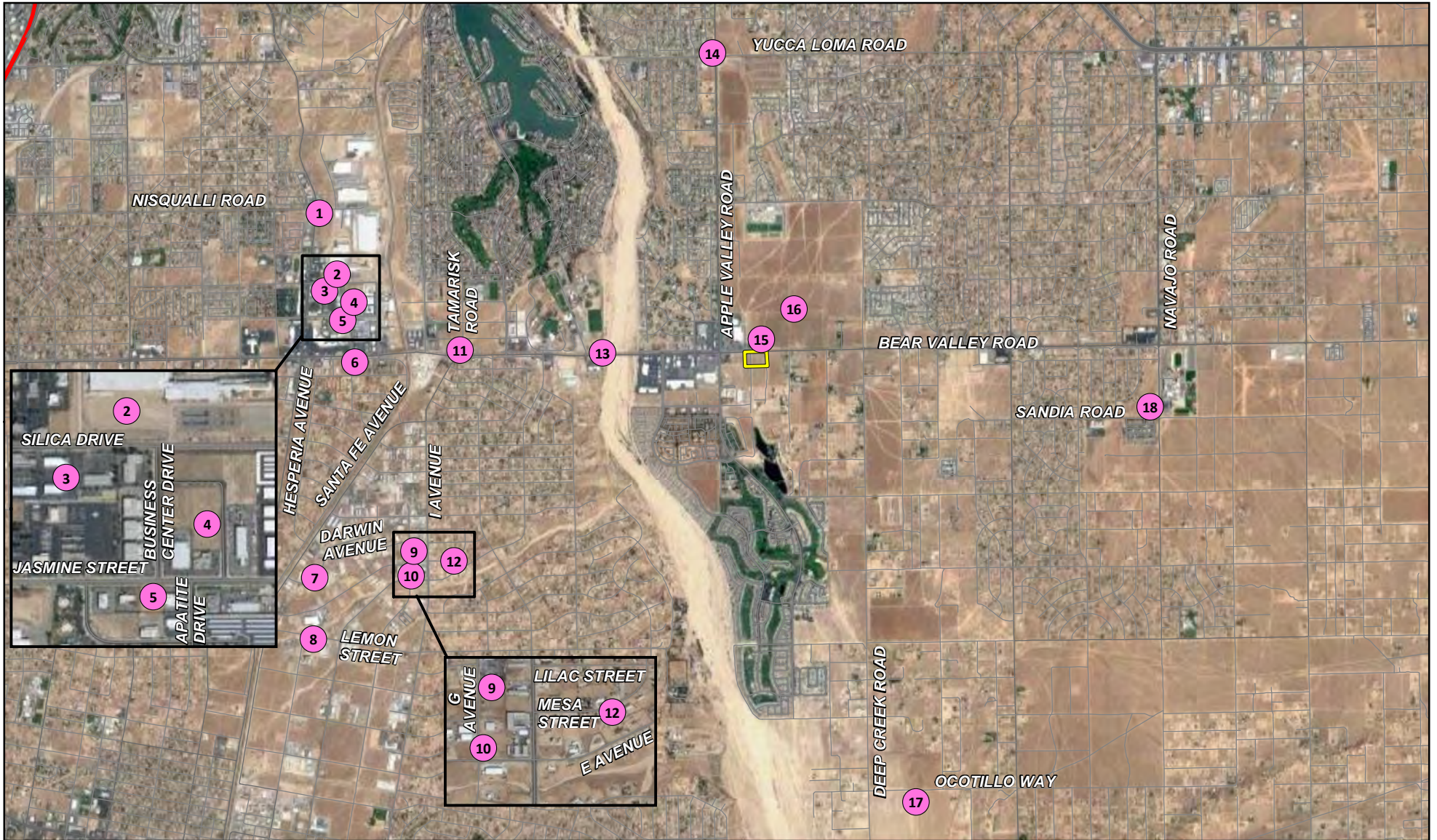


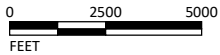


FIGURE 6

LSA

LEGEND

-  Project Site
-  Cumulative Project



SOURCE: Google Earth, 2021; ESRI Streetmap, 2021.

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Apple Bear Commercial  
Traffic Impact Study  
Cumulative Project Locations

**APPENDIX A**

**AUTOMATED CAR WASH TRIP GENERATION RATES**

**ARBOR CAR WASH  
TRAFFIC IMPACT ANALYSIS  
RANCHO CUCAMONGA, CALIFORNIA**

**SEPTEMBER 24, 2018**

**Prepared for:**

Mr. Alan Smith  
Southwest Design Group  
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**Prepared by:**



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**TRAMES SOLUTIONS INC.**

**(0301-0001-03)**

## 4.0 PROJECTED FUTURE TRAFFIC

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This section of the report quantifies the number of trips generated by the proposed project and other known developments in the area.

### A. Project Traffic

#### 1. Ambient Growth Rate

Some traffic volume increases on roadways can be attributed to vehicles originating outside of the study area. These types of trips either end up within the study area or pass-through onto an outside destination. Therefore, to account for these trips (termed “ambient growth”), a growth rate can be applied to existing traffic volumes.

A 2% ambient growth rate that has been used in this study to account for traffic not attributed to the project or other planned developments within the study area. The City of Rancho Cucamonga Transportation Department staff has previously reviewed and approved this rate.

#### 2. Project Trip Generation

Trip generation represents the amount of traffic which is attracted and produced by a development. The trip generation for the project is based upon the specific land use which has been planned for this development. For the purpose of this analysis, the following land use assumption is evaluated:

- An automated car wash facility with a 140 foot long tunnel

The amount of vehicular trips generated by a project is typically determined from the trip rates included in the ITE **Trip Generation** manual. The latest version (10<sup>th</sup> edition) only provides the PM peak hour rate for one observation. Therefore, due to the small data set collected by ITE for an automated car wash, empirical count data has been collected at a Fast 5 Xpress car wash in the City of Murrieta (Murrieta Hot Springs Road at Jackson Ave.) to determine the amount of peak hour and daily vehicles that occur at this facility. Trip generation rates for the proposed development are driven by the amount of cars that can be washed during the peak hour. It is our understanding that a higher number of cars can be washed as the length of the service tunnel is increased. Therefore, the peak hour and daily trip rates shown in Table 4-1 were based on tunnel length.

The daily and peak hour trip generations for the proposed project are shown on Table 4-2. The proposed development is projected to generate a total of approximately 710 new trip-ends per day with 37 new vehicle trips per hour during the AM peak hour and 66 new vehicle trips per hour during the PM peak hour. It should be noted that a pass by reduction (AM-37%, PM-35%) and a 5% internal trip

reduction was assumed. The pass-by reduction percentages were based on a survey conducted at the Lighting Express Car Wash (17111 Hawthorne Blvd., Lawndale, CA).

**TABLE 4-1  
PROJECT TRIP GENERATION RATES**

LAND USE	SOURCE	QUANTITY	PEAK HOUR TRIP RATES <sup>1</sup>						DAILY
			AM			PM			
			IN	OUT	TOTAL	IN	OUT	TOTAL	
Automated Car Wash	Empirical Data	140 Feet	0.25	0.21	0.46	0.38	0.41	0.79	8.45

<sup>1</sup> Source: Fast 5 Xpress car wash in the City of Murrieta (Murrieta Hot Springs Road at Jackson Ave.)

**TABLE 4-2  
PROJECT TRIP GENERATION SUMMARY**

LAND USE	QUANTITY	PEAK HOUR						DAILY
		AM			PM			
		IN	OUT	TOTAL	IN	OUT	TOTAL	
Arbor Car Wash	140 Feet	35	29	64	53	57	111	1,183
Pass-by Reduction (AM-37%:PM-35%) <sup>1</sup>		-13	-11	-24	-19	-20	-39	-414
Internal Trip Reduction (5%)		-2	-1	-3	-3	-3	-6	-59
<b>TOTAL PROJECT TRIPS</b>		<b>20</b>	<b>17</b>	<b>37</b>	<b>31</b>	<b>34</b>	<b>66</b>	<b>710</b>

<sup>1</sup> Pass-by reduction percentages were based on surveys at Lighting Express Car Wash, 17111 Hawthorne Blvd, Lawndale, CA

3. Project Trip Distribution and Assignment

Trip distribution represents the directional orientation of traffic to and from the project site. The project's trip distribution patterns are based on the proximity of the project to the proposed driveway locations, the surrounding trip attractors, and the regional freeway interchanges. The trip distribution pattern for the project is illustrated on Figure 4-A.

4. Other Trip Generation Factors

The project land use is comprised of primary, pass-by and internal traffic. Primary traffic refers to trips that are intending to go to the project as their primary destination. Pass-by traffic consists of vehicles that stop at the site on their way to a primary destination. Internal traffic consists of trips that are anticipated to occur between the future gas station and those that go to the project. A 5% reduction in traffic has been assumed for these trips.

TRAFFIC IMPACT ANALYSIS REPORT

NEWPORT POINTE

Menifee, California

April 28, 2021

(Update of the April 5, 2021 Report)

Prepared for:

Salim Development Group, LLC

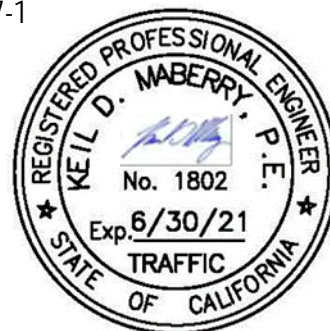
1307 W. 6<sup>th</sup> Street, Suite 202

Corona, CA 92882

LLG Ref. 2-18-3987-1



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## 5.0 PROJECT TRAFFIC CHARACTERISTICS

### 5.1 Project Trip Generation Forecast

Trip generation is expressed in vehicle trip ends, defined as one-way vehicular movements, either entering or exiting the generating land use. Generation equations and/or rates used in the traffic forecasting procedure are found in the 10<sup>th</sup> Edition of *Trip Generation*, published by the Institute of Transportation Engineers (ITE) [Washington D.C., 2017].

**Table 5-1** summarizes the trip generation rates used in forecasting the vehicular trips generated by the proposed Project. As shown in **Table 5-1**, the trip generation potential for the proposed Project was estimated using ITE Land Use Code 492: Health Fitness Club rates, ITE Land Use Code 565: Day Care Center rates, ITE Land Use Code 850: Supermarket rates, ITE Land Use Code 930: Fast Casual Restaurant rates, ITE Land Use Code 934: Fast-Food Restaurant with Drive-Thru Window rates, and Express Car Wash rates derived from traffic counts conducted on Friday, February 7, 2014 at the Victorville Speedwash located at 12147 Industrial Boulevard. **Appendix B** also contains the traffic count data for the Victorville Speedwash.

**Table 5-2** presents the daily and peak hour Project traffic volume forecast for a “typical” weekday. The bottom portion of **Table 5-2** indicates that the proposed Project is forecast to generate 5,518 daily trips, with 246 trips (141 inbound, 105 outbound) produced in the AM peak hour and 456 trips (240 inbound, 216 outbound) produced in the PM peak hour.

Please note that the aforementioned overall project trip generation includes adjustments for internal capture and for pass-by as recommended by ITE. The Project trip generation for the grocery store, fast-food restaurant, express car wash, and fast casual restaurant project components include adjustments for pass-by trips per the *Trip Generation Handbook, 3<sup>rd</sup> Edition*, published by ITE (2014), to account for trips that are already in the everyday traffic stream on the adjoining streets (i.e. Newport Road) and will stop as they pass by the Project site as a matter of convenience on their path to another destination. Per the *Trip Generation Handbook*, pass-by reduction factors for the express car wash land use are not provided, thus pass-by reduction factors for ITE Land Use 820: Shopping Center were utilized, which has a PM peak hour pass-by percentage of 34%. The daily and AM peak hour pass-by percentages for the express car wash land use were estimated to be 10%. The daily and AM peak hour pass-by percentages were estimated to be 10% for the express car wash land use. The *Trip Generation Handbook* recommends a PM peak hour pass-by percentage of 36% for the grocery store land use. The daily and AM peak hour pass-by percentages were estimated to be 10% for the grocery store land use. The *Trip Generation Handbook* recommends an AM peak hour pass-by percentage of 49% and a PM peak hour pass-by percentage of 50% for the fast-food restaurant land use. The daily pass-by percentage was estimated to be 25% for the fast-food restaurant land use. Given that the *Trip Generation Handbook, 3<sup>rd</sup> Edition* does not provide pass-by reduction factors for the fast casual restaurant land use, pass-by reduction factors for ITE Land Use 932: High-Turnover (Sit-Down) Restaurant were utilized, which has a PM peak hour pass-by percentage of 43%. The daily and AM peak hour pass-by percentages for the fast casual restaurant land use were estimated to be 10%.

The trip generation methodology and forecasts were approved by City of Menifee staff prior to proceeding with further analysis.

## 5.2 Project Trip Distribution and Assignment

The general, directional trip distribution pattern for the proposed Project is presented in *Figure 5-1*. Project traffic volumes both entering and exiting the site have been distributed and assigned to the adjacent street system based on the following considerations:

- the site's proximity to major traffic carriers (i.e. Newport Road, the I-215 Freeway, etc.),
- expected localized traffic flow patterns based on adjacent street channelization and presence of traffic signals,
- ingress/egress availability at the Project site, and
- input from City of Menifee staff.

The anticipated AM and PM peak hour Project volumes associated with the proposed Project are presented in *Figures 5-2* and *5-3*, respectively. In addition, *Figure 5-3* also presents the daily traffic volumes for the key study roadway segments. The traffic volume assignments presented in *Figures 5-2* and *5-3* reflect the trip distribution characteristics shown in *Figure 5-1* and the trip generation forecast presented in *Table 5-1*.

TABLE 5-1  
PROJECT TRIP GENERATION RATES<sup>8</sup>

ITE Land Use Code / Project Description	Daily 2-Way	AM Peak Hour			PM Peak Hour		
		Enter	Exit	Total	Enter	Exit	Total
<b><i>Project Trip Generation Factors:</i></b>							
▪ 492: Health Fitness Club (TE/TSF)	34.50 <sup>9</sup>	0.67	0.64	1.31	1.97	1.48	3.45
▪ 565: Day Care Center (TE/Student)	4.09	0.41	0.37	0.78	0.37	0.42	0.79
▪ 850: Supermarket (TE/TSF)	106.78	2.29	1.53	3.82	4.71	4.53	9.24
▪ 930: Fast Casual Restaurant (TE/TSF)	315.17	1.39	0.68	2.07	7.77	6.36	14.13
▪ 934: Fast-Food Restaurant with Drive-Thru Window (TE/TSF)	470.95	20.50	19.69	40.19	16.99	15.68	32.67
▪ Express Car Wash (TW/LFWT) <sup>10</sup>	11.87	0.38	0.28	0.66	0.62	0.63	1.25

**Note:**

- TE/Student = trip end per student
- TE/TSF = trip end per thousand square feet
- TE/LFWT = trip end per linear foot of wash tunnel

<sup>8</sup> Source: *Trip Generation, 10<sup>th</sup> Edition*, Institute of Transportation Engineers, (ITE) [Washington, D.C. (2017)].

<sup>9</sup> *Trip Generation, 10<sup>th</sup> Edition* does not include the daily trip generation rate for the health fitness club land use. As such, the daily trip rate is assumed to be 10 times the PM peak hour rate.

<sup>10</sup> *Trip Generation, 10<sup>th</sup> Edition* does not include trip generation rates for the express car wash land use. The trip rates are derived from traffic counts on Friday, February 7, 2014 at the Victorville Speedwash located at 12147 Industrial Boulevard. **Appendix B** contains the traffic count data for the Victorville Speedwash.

TABLE 5-2  
PROJECT TRIP GENERATION FORECAST<sup>11</sup>

ITE Land Use Code / Project Description	Daily 2-Way	AM Peak Hour			PM Peak Hour		
		Enter	Exit	Total	Enter	Exit	Total
<b><i>Project Trip Generation Forecast:</i></b>							
▪ Fast Casual Restaurants (10,370 SF)	3,268	14	7	21	81	66	147
<i>Internal Capture Reduction (Daily: 36%, AM: 48%, PM: 37%)<sup>12</sup></i>	<u>-1,172</u>	<u>-7</u>	<u>-3</u>	<u>-10</u>	<u>-25</u>	<u>-29</u>	<u>-54</u>
Subtotal	2,096	7	4	11	56	37	93
<i>Pass-By Reduction (Daily: 10%, AM: 10%, PM: 43%)<sup>13</sup></i>	<u>-210</u>	<u>-1</u>	<u>0</u>	<u>-1</u>	<u>-24</u>	<u>-16</u>	<u>-40</u>
Fast Casual Restaurants Total	1,886	6	4	10	32	21	53
▪ Grocery Store (18,041 SF)	1,926	41	28	69	85	82	167
<i>Internal Capture Reduction (Daily: 43%, AM: 28%, PM: 25%)<sup>12</sup></i>	<u>-821</u>	<u>-13</u>	<u>-6</u>	<u>-19</u>	<u>-24</u>	<u>-17</u>	<u>-41</u>
Subtotal	1,105	28	22	50	61	65	126
<i>Pass-By Reduction (Daily: 10%, AM: 10%, PM: 36%)<sup>13</sup></i>	<u>-111</u>	<u>-3</u>	<u>-2</u>	<u>-5</u>	<u>-22</u>	<u>-23</u>	<u>-45</u>
Grocery Store Total	994	25	20	45	39	42	81
▪ Fast-Food Restaurant with Drive-Through (800 SF)	377	16	16	32	14	12	26
<i>Internal Capture Reduction (Daily: 36%, AM: 47%, PM: 39%)<sup>12</sup></i>	<u>-135</u>	<u>-8</u>	<u>-7</u>	<u>-15</u>	<u>-5</u>	<u>-5</u>	<u>-10</u>
Subtotal	242	8	9	17	9	7	16
<i>Pass-By Reduction (Daily: 25%, AM: 49%, PM: 50%)<sup>13</sup></i>	<u>-61</u>	<u>-4</u>	<u>-4</u>	<u>-8</u>	<u>-5</u>	<u>-3</u>	<u>-8</u>
Grocery Store Total	181	4	5	9	4	4	8
▪ Day Care Center (160 Students)	654	66	59	125	59	67	126
<i>Internal Capture Reduction (Daily: 12%, AM: 24%, PM: 7%)<sup>12</sup></i>	<u>-81</u>	<u>-8</u>	<u>-22</u>	<u>-30</u>	<u>-2</u>	<u>-7</u>	<u>-9</u>
Day Care Center Total	573	58	37	95	57	60	117
▪ Express Car Wash (110 Linear Feet of Wash Tunnel)	1,306	41	31	72	68	70	138
<i>Internal Capture Reduction (Daily: 43%, AM: 28%, PM: 25%)<sup>12</sup></i>	<u>-556</u>	<u>-14</u>	<u>-6</u>	<u>-20</u>	<u>-20</u>	<u>-14</u>	<u>-34</u>
Subtotal	750	27	25	52	48	56	104
<i>Pass-By Reduction (Daily: 10%, AM: 10%, PM: 34%)<sup>13</sup></i>	<u>-75</u>	<u>-3</u>	<u>-2</u>	<u>-5</u>	<u>-16</u>	<u>-19</u>	<u>-35</u>
Express Car Wash Total	675	24	23	47	32	37	69
▪ Health Fitness Club (40,000 SF)	1,380	27	25	52	79	59	138
<i>Internal Capture Reduction (Daily: 12%, AM: 23%, PM: 7%)<sup>12</sup></i>	<u>-171</u>	<u>-3</u>	<u>-9</u>	<u>-12</u>	<u>-3</u>	<u>-7</u>	<u>-10</u>
Health Fitness Club Total	1,209	24	16	40	76	52	128
<b>Gross Project Trip Generation (No Reductions)</b>	<b>8,911</b>	<b>205</b>	<b>166</b>	<b>371</b>	<b>386</b>	<b>356</b>	<b>742</b>
<b>Net Driveway Trip Generation (Internal Capture Reduction Only)</b>	<b>5,975</b>	<b>152</b>	<b>113</b>	<b>265</b>	<b>307</b>	<b>277</b>	<b>584</b>
<b>Total Net Project Trip Generation (Int. Cap. &amp; Pass-By Reductions)</b>	<b>5,518</b>	<b>141</b>	<b>105</b>	<b>246</b>	<b>240</b>	<b>216</b>	<b>456</b>

<sup>11</sup> Source: *Trip Generation, 10<sup>th</sup> Edition*, Institute of Transportation Engineers, (ITE) [Washington, D.C. (2017)].

<sup>12</sup> Consistent with the *Trip Generation Handbook*, published by ITE (2014), Project trip generation was adjusted to account for internal capture between the retail, grocery store, restaurant, day care, car wash, gas station, and oil/lube service station components of the Project.

<sup>13</sup> Source: *Trip Generation Handbook, 3<sup>rd</sup> Edition*, published by ITE (2014). Pass-by trips are trips made as intermediate stops on the way from an origin to a primary trip destination. Pass-by trips are attracted from traffic passing the site on adjacent streets, which contain direct access to the generator.

---

## APPENDIX B

# TRAFFIC COUNT SHEETS AND SIGNAL TIMING SHEETS

City of Hesperia  
 N/S: Jacaranda Avenue  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 01\_HES\_Jac\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

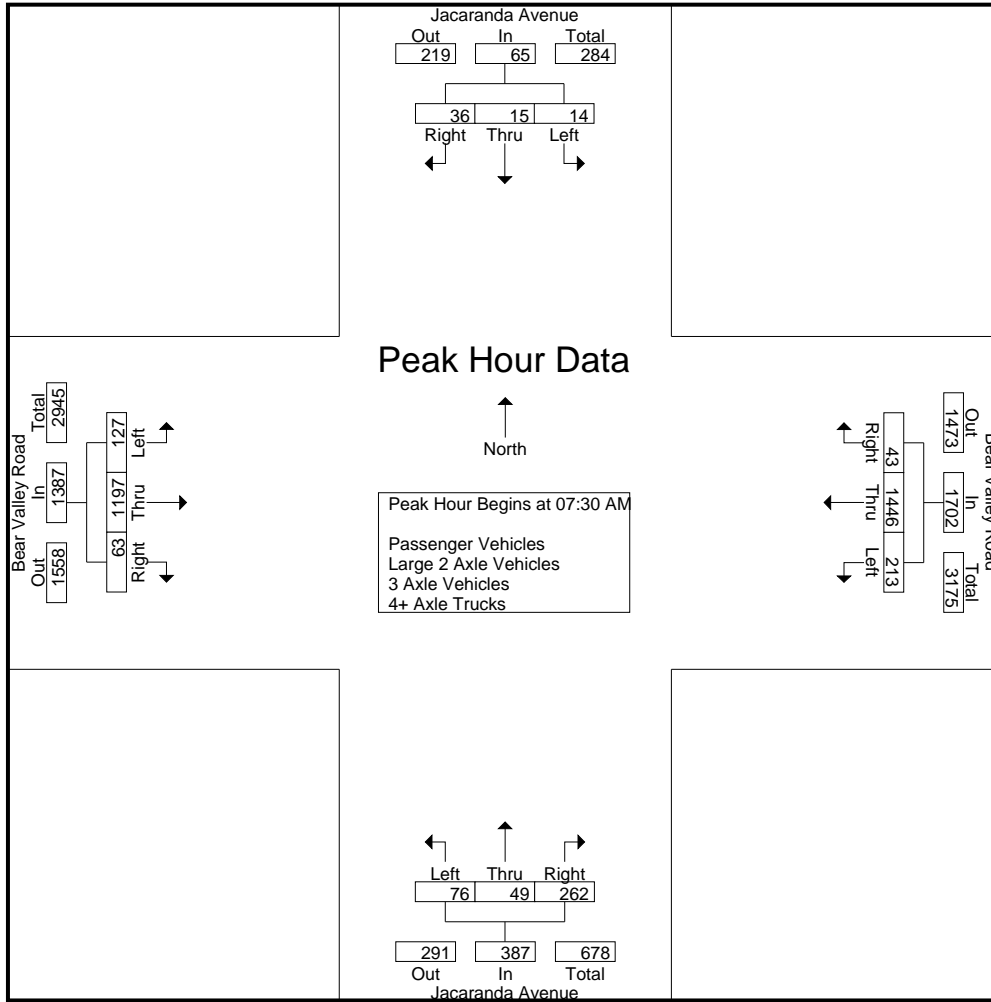
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Jacaranda Avenue Southbound				Bear Valley Road Westbound				Jacaranda Avenue Northbound				Bear Valley 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	25	297	2	324	16	0	33	49	7	190	9	206	579
07:15 AM	0	0	7	7	31	269	3	303	20	1	50	71	7	172	8	187	568
07:30 AM	0	2	6	8	33	365	5	403	22	11	68	101	16	319	5	340	852
07:45 AM	6	4	17	27	54	393	21	468	21	19	67	107	40	287	16	343	945
<b>Total</b>	<b>6</b>	<b>6</b>	<b>30</b>	<b>42</b>	<b>143</b>	<b>1324</b>	<b>31</b>	<b>1498</b>	<b>79</b>	<b>31</b>	<b>218</b>	<b>328</b>	<b>70</b>	<b>968</b>	<b>38</b>	<b>1076</b>	<b>2944</b>
08:00 AM	4	5	9	18	60	358	6	424	20	15	69	104	32	294	26	352	898
08:15 AM	4	4	4	12	66	330	11	407	13	4	58	75	39	297	16	352	846
08:30 AM	2	1	5	8	39	339	3	381	15	4	62	81	15	336	15	366	836
08:45 AM	2	0	3	5	42	344	4	390	22	4	62	88	15	333	12	360	843
<b>Total</b>	<b>12</b>	<b>10</b>	<b>21</b>	<b>43</b>	<b>207</b>	<b>1371</b>	<b>24</b>	<b>1602</b>	<b>70</b>	<b>27</b>	<b>251</b>	<b>348</b>	<b>101</b>	<b>1260</b>	<b>69</b>	<b>1430</b>	<b>3423</b>
<b>Grand Total</b>	<b>18</b>	<b>16</b>	<b>51</b>	<b>85</b>	<b>350</b>	<b>2695</b>	<b>55</b>	<b>3100</b>	<b>149</b>	<b>58</b>	<b>469</b>	<b>676</b>	<b>171</b>	<b>2228</b>	<b>107</b>	<b>2506</b>	<b>6367</b>
Apprch %	21.2	18.8	60		11.3	86.9	1.8		22	8.6	69.4		6.8	88.9	4.3		
Total %	0.3	0.3	0.8	1.3	5.5	42.3	0.9	48.7	2.3	0.9	7.4	10.6	2.7	35	1.7	39.4	
Passenger Vehicles	18	16	51	85	343	2563	55	2961	144	58	455	657	171	2099	106	2376	6079
% Passenger Vehicles	100	100	100	100	98	95.1	100	95.5	96.6	100	97	97.2	100	94.2	99.1	94.8	95.5
Large 2 Axle Vehicles	0	0	0	0	6	75	0	81	4	0	11	15	0	56	1	57	153
% Large 2 Axle Vehicles	0	0	0	0	1.7	2.8	0	2.6	2.7	0	2.3	2.2	0	2.5	0.9	2.3	2.4
3 Axle Vehicles	0	0	0	0	0	11	0	11	1	0	3	4	0	17	0	17	32
% 3 Axle Vehicles	0	0	0	0	0	0.4	0	0.4	0.7	0	0.6	0.6	0	0.8	0	0.7	0.5
4+ Axle Trucks	0	0	0	0	1	46	0	47	0	0	0	0	0	56	0	56	103
% 4+ Axle Trucks	0	0	0	0	0.3	1.7	0	1.5	0	0	0	0	0	2.5	0	2.2	1.6

Start Time	Jacaranda Avenue Southbound				Bear Valley Road Westbound				Jacaranda Avenue Northbound				Bear Valley 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	0	2	6	8	33	365	5	403	<b>22</b>	<b>11</b>	<b>68</b>	<b>101</b>	<b>16</b>	<b>319</b>	<b>5</b>	<b>340</b>	<b>852</b>
07:45 AM	<b>6</b>	<b>4</b>	<b>17</b>	<b>27</b>	<b>54</b>	<b>393</b>	<b>21</b>	<b>468</b>	<b>21</b>	<b>19</b>	<b>67</b>	<b>107</b>	<b>40</b>	<b>287</b>	<b>16</b>	<b>343</b>	<b>945</b>
08:00 AM	4	5	9	18	60	358	6	424	20	15	69	104	32	294	26	352	898
08:15 AM	4	4	4	12	<b>66</b>	330	11	407	13	4	58	75	39	297	16	352	846
Total Volume	14	15	36	65	213	1446	43	1702	76	49	262	387	127	1197	63	1387	3541
% App. Total	21.5	23.1	55.4		12.5	85	2.5		19.6	12.7	67.7		9.2	86.3	4.5		
PHF	.583	.750	.529	.602	.807	.920	.512	.909	.864	.645	.949	.904	.794	.938	.606	.985	.937

City of Hesperia  
 N/S: Jacaranda Avenue  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 01\_HES\_Jac\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 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				07:30 AM				07:30 AM				08:00 AM			
+0 mins.	0	2	6	8	33	365	5	403	22	11	68	101	32	294	26	352
+15 mins.	6	4	17	27	54	393	21	468	21	19	67	107	39	297	16	352
+30 mins.	4	5	9	18	60	358	6	424	20	15	69	104	15	336	15	366
+45 mins.	4	4	4	12	66	330	11	407	13	4	58	75	15	333	12	360
Total Volume	14	15	36	65	213	1446	43	1702	76	49	262	387	101	1260	69	1430
% App. Total	21.5	23.1	55.4		12.5	85	2.5		19.6	12.7	67.7		7.1	88.1	4.8	
PHF	.583	.750	.529	.602	.807	.920	.512	.909	.864	.645	.949	.904	.647	.938	.663	.977

City of Hesperia  
 N/S: Jacaranda Avenue  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 01\_HES\_Jac\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- Passenger Vehicles

Start Time	Jacaranda Avenue Southbound				Bear Valley Road Westbound				Jacaranda Avenue Northbound				Bear Valley 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	24	280	2	306	15	0	32	47	7	170	9	186	539
07:15 AM	0	0	7	7	31	252	3	286	20	1	46	67	7	156	8	171	531
07:30 AM	0	2	6	8	33	352	5	390	21	11	67	99	16	301	5	322	819
07:45 AM	6	4	17	27	53	381	21	455	20	19	67	106	40	279	16	335	923
Total	6	6	30	42	141	1265	31	1437	76	31	212	319	70	906	38	1014	2812
08:00 AM	4	5	9	18	59	335	6	400	20	15	69	104	32	276	26	334	856
08:15 AM	4	4	4	12	64	313	11	388	12	4	56	72	39	275	16	330	802
08:30 AM	2	1	5	8	37	321	3	361	14	4	58	76	15	323	14	352	797
08:45 AM	2	0	3	5	42	329	4	375	22	4	60	86	15	319	12	346	812
Total	12	10	21	43	202	1298	24	1524	68	27	243	338	101	1193	68	1362	3267
Grand Total	18	16	51	85	343	2563	55	2961	144	58	455	657	171	2099	106	2376	6079
Apprch %	21.2	18.8	60		11.6	86.6	1.9		21.9	8.8	69.3		7.2	88.3	4.5		
Total %	0.3	0.3	0.8	1.4	5.6	42.2	0.9	48.7	2.4	1	7.5	10.8	2.8	34.5	1.7	39.1	

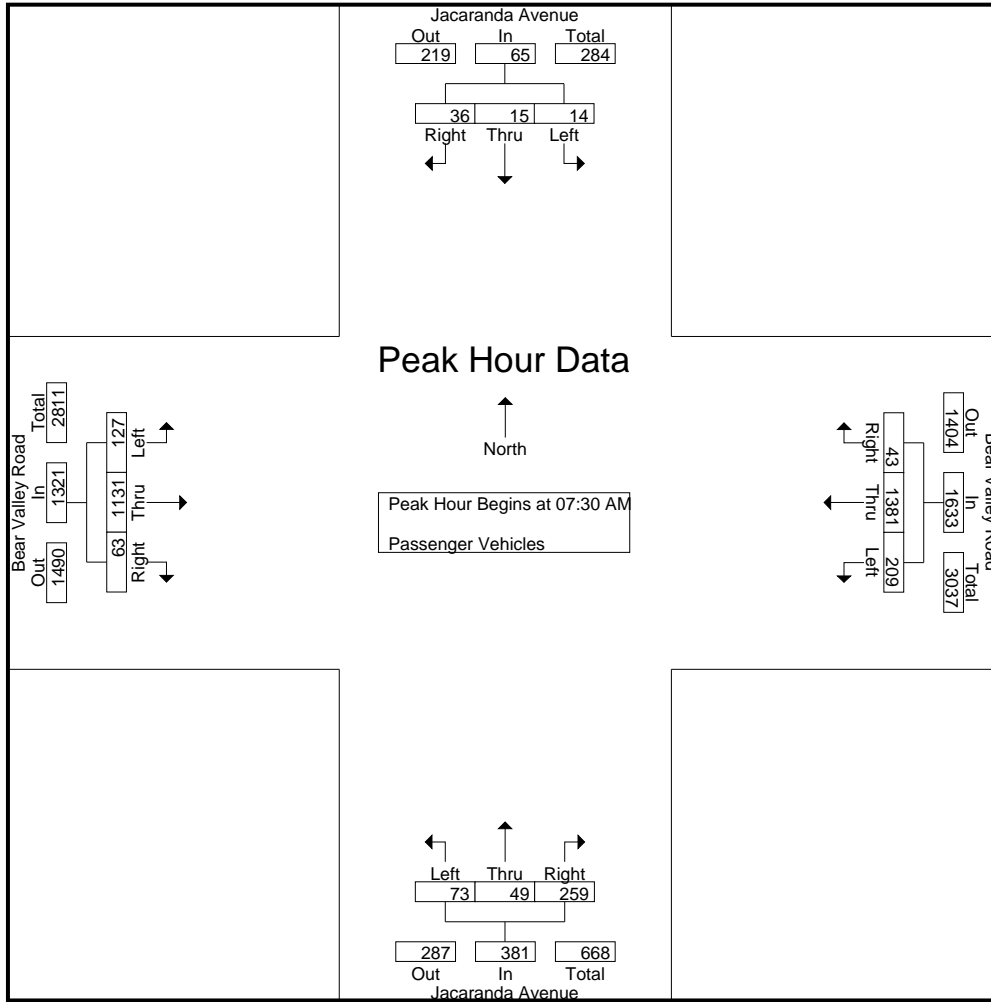
Start Time	Jacaranda Avenue Southbound				Bear Valley Road Westbound				Jacaranda Avenue Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:30 AM	0	2	6	8	33	352	5	390	21	11	67	99	16	<b>301</b>	5	322	819
07:45 AM	<b>6</b>	4	<b>17</b>	<b>27</b>	53	<b>381</b>	<b>21</b>	<b>455</b>	20	<b>19</b>	67	<b>106</b>	<b>40</b>	279	16	<b>335</b>	<b>923</b>
08:00 AM	4	<b>5</b>	9	18	59	335	6	400	20	15	<b>69</b>	104	32	276	<b>26</b>	334	856
08:15 AM	4	4	4	12	<b>64</b>	313	11	388	12	4	56	72	39	275	16	330	802
Total Volume	14	15	36	65	209	1381	43	1633	73	49	259	381	127	1131	63	1321	3400
% App. Total	21.5	23.1	55.4		12.8	84.6	2.6		19.2	12.9	68		9.6	85.6	4.8		
PHF	.583	.750	.529	.602	.816	.906	.512	.897	.869	.645	.938	.899	.794	.939	.606	.986	.921

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



City of Hesperia  
 N/S: Jacaranda Avenue  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 01\_HES\_Jac\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 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	2	6	8	33	352	5	390	21	11	67	99	16	301	5	322
+15 mins.	6	4	17	27	53	381	21	455	20	19	67	106	40	279	16	335
+30 mins.	4	5	9	18	59	335	6	400	20	15	69	104	32	276	26	334
+45 mins.	4	4	4	12	64	313	11	388	12	4	56	72	39	275	16	330
Total Volume	14	15	36	65	209	1381	43	1633	73	49	259	381	127	1131	63	1321
% App. Total	21.5	23.1	55.4		12.8	84.6	2.6		19.2	12.9	68		9.6	85.6	4.8	
PHF	.583	.750	.529	.602	.816	.906	.512	.897	.869	.645	.938	.899	.794	.939	.606	.986

City of Hesperia  
 N/S: Jacaranda Avenue  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 01\_HES\_Jac\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

Start Time	Jacaranda Avenue Southbound				Bear Valley Road Westbound				Jacaranda Avenue Northbound				Bear Valley 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	1	9	0	10	1	0	1	2	0	3	0	3	15
07:15 AM	0	0	0	0	0	10	0	10	0	0	3	3	0	10	0	10	23
07:30 AM	0	0	0	0	0	10	0	10	0	0	1	1	0	10	0	10	21
07:45 AM	0	0	0	0	1	8	0	9	1	0	0	1	0	4	0	4	14
Total	0	0	0	0	2	37	0	39	2	0	5	7	0	27	0	27	73
08:00 AM	0	0	0	0	1	9	0	10	0	0	0	0	0	8	0	8	18
08:15 AM	0	0	0	0	1	9	0	10	1	0	2	3	0	11	0	11	24
08:30 AM	0	0	0	0	2	13	0	15	1	0	2	3	0	4	1	5	23
08:45 AM	0	0	0	0	0	7	0	7	0	0	2	2	0	6	0	6	15
Total	0	0	0	0	4	38	0	42	2	0	6	8	0	29	1	30	80
Grand Total	0	0	0	0	6	75	0	81	4	0	11	15	0	56	1	57	153
Apprch %	0	0	0		7.4	92.6	0		26.7	0	73.3		0	98.2	1.8		
Total %	0	0	0		3.9	49	0	52.9	2.6	0	7.2	9.8	0	36.6	0.7	37.3	

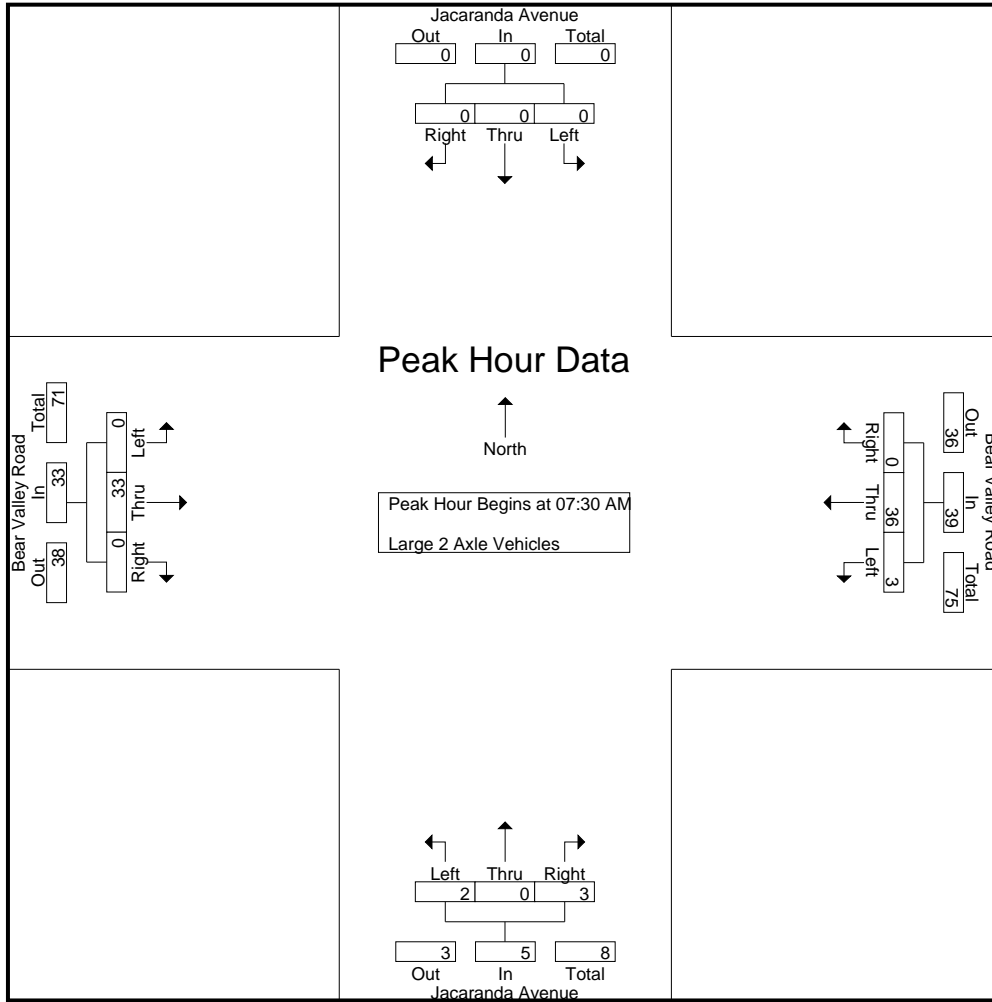
Start Time	Jacaranda Avenue Southbound				Bear Valley Road Westbound				Jacaranda Avenue Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:30 AM	0	0	0	0	0	<b>10</b>	0	<b>10</b>	0	0	1	1	0	10	0	10	21
07:45 AM	0	0	0	0	<b>1</b>	8	0	9	<b>1</b>	0	0	1	0	4	0	4	14
08:00 AM	0	0	0	0	1	9	0	10	0	0	0	0	0	8	0	8	18
08:15 AM	0	0	0	0	1	9	0	10	1	0	<b>2</b>	<b>3</b>	0	<b>11</b>	0	<b>11</b>	<b>24</b>
Total Volume	0	0	0	0	3	36	0	39	2	0	3	5	0	33	0	33	77
% App. Total	0	0	0		7.7	92.3	0		40	0	60		0	100	0		
PHF	.000	.000	.000	.000	.750	.900	.000	.975	.500	.000	.375	.417	.000	.750	.000	.750	.802

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

City of Hesperia  
 N/S: Jacaranda Avenue  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 01\_HES\_Jac\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 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	<b>10</b>	0	<b>10</b>	0	0	1	1	0	10	0	10
+15 mins.	0	0	0	0	<b>1</b>	8	0	9	<b>1</b>	0	0	1	0	4	0	4
+30 mins.	0	0	0	0	1	9	0	10	0	0	0	0	0	8	0	8
+45 mins.	0	0	0	0	1	9	0	10	1	0	<b>2</b>	<b>3</b>	0	<b>11</b>	0	<b>11</b>
Total Volume	0	0	0	0	3	36	0	39	2	0	3	5	0	33	0	33
% App. Total	0	0	0	0	7.7	92.3	0		40	0	60		0	100	0	
PHF	.000	.000	.000	.000	.750	.900	.000	.975	.500	.000	.375	.417	.000	.750	.000	.750

City of Hesperia  
 N/S: Jacaranda Avenue  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 01\_HES\_Jac\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- 3 Axle Vehicles

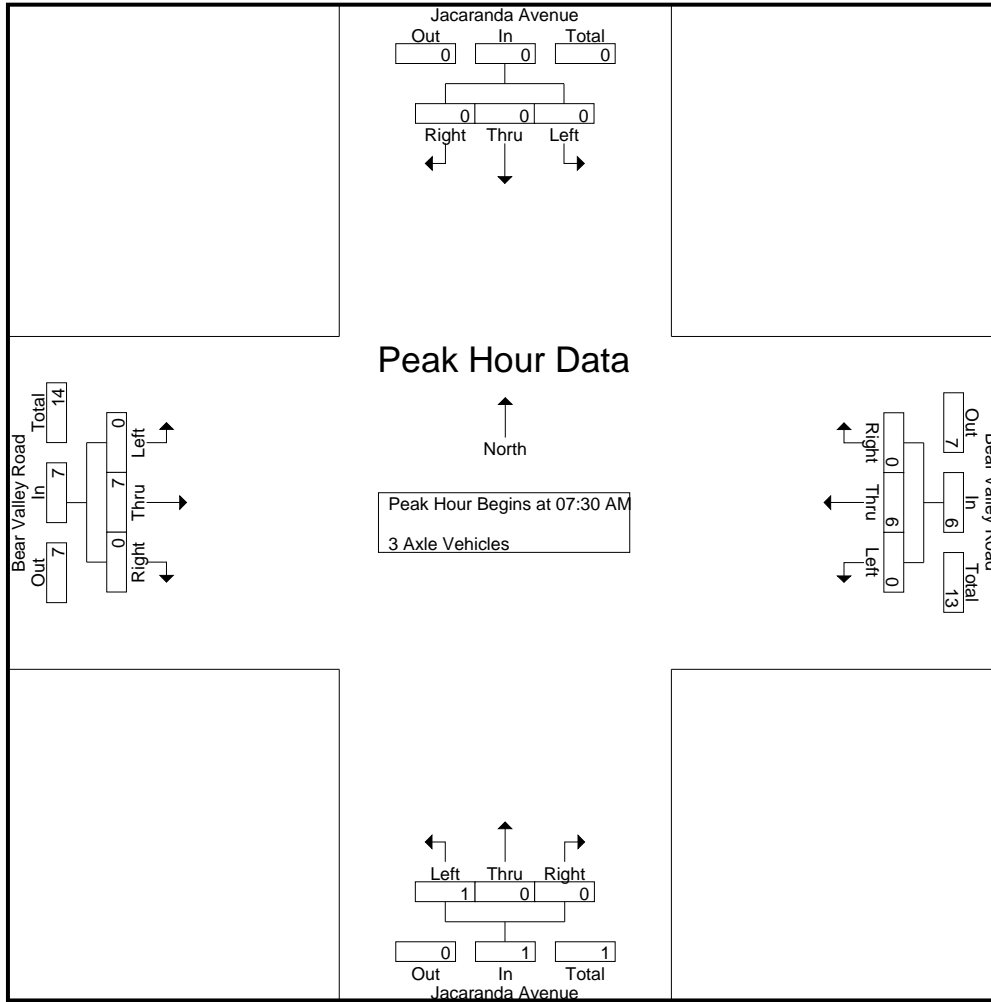
Start Time	Jacaranda Avenue Southbound				Bear Valley Road Westbound				Jacaranda Avenue Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	4	0	4	5
07:15 AM	0	0	0	0	0	1	0	1	0	0	1	1	0	3	0	3	5
07:30 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	1	2
07:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
Total	0	0	0	0	0	3	0	3	1	0	1	2	0	10	0	10	15
08:00 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2	5
08:15 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
08:30 AM	0	0	0	0	0	0	0	0	0	0	2	2	0	2	0	2	4
08:45 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	1	0	1	4
Total	0	0	0	0	0	8	0	8	0	0	2	2	0	7	0	7	17
Grand Total	0	0	0	0	0	11	0	11	1	0	3	4	0	17	0	17	32
Apprch %	0	0	0		0	100	0		25	0	75		0	100	0		
Total %	0	0	0		0	34.4	0	34.4	3.1	0	9.4	12.5	0	53.1	0	53.1	

Start Time	Jacaranda Avenue Southbound				Bear Valley Road Westbound				Jacaranda Avenue Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:30 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	1	2
07:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
08:00 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2	5
08:15 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
Total Volume	0	0	0	0	0	6	0	6	1	0	0	1	0	7	0	7	14
% App. Total	0	0	0		0	100	0		100	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.500	.000	.500	.250	.000	.000	.250	.000	.875	.000	.875	.700

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

City of Hesperia  
 N/S: Jacaranda Avenue  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 01\_HES\_Jac\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 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	1	0	0	0	1	0	1	0	1	0	1	0
+15 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	2	0	2	0	2	0
+30 mins.	0	0	0	0	0	3	0	3	0	0	0	0	0	0	2	0	2	0	2	0
+45 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	0	2	0	2	0	2	0
Total Volume	0	0	0	0	0	6	0	6	1	0	0	1	0	7	0	7	7	0	7	0
% App. Total	0	0	0	0	0	100	0	0	100	0	0	0	0	100	0	0	0	100	0	0
PHF	.000	.000	.000	.000	.000	.500	.000	.500	.250	.000	.000	.250	.000	.875	.000	.875	.875	.000	.875	.000

City of Hesperia  
 N/S: Jacaranda Avenue  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 01\_HES\_Jac\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- 4+ Axle Trucks

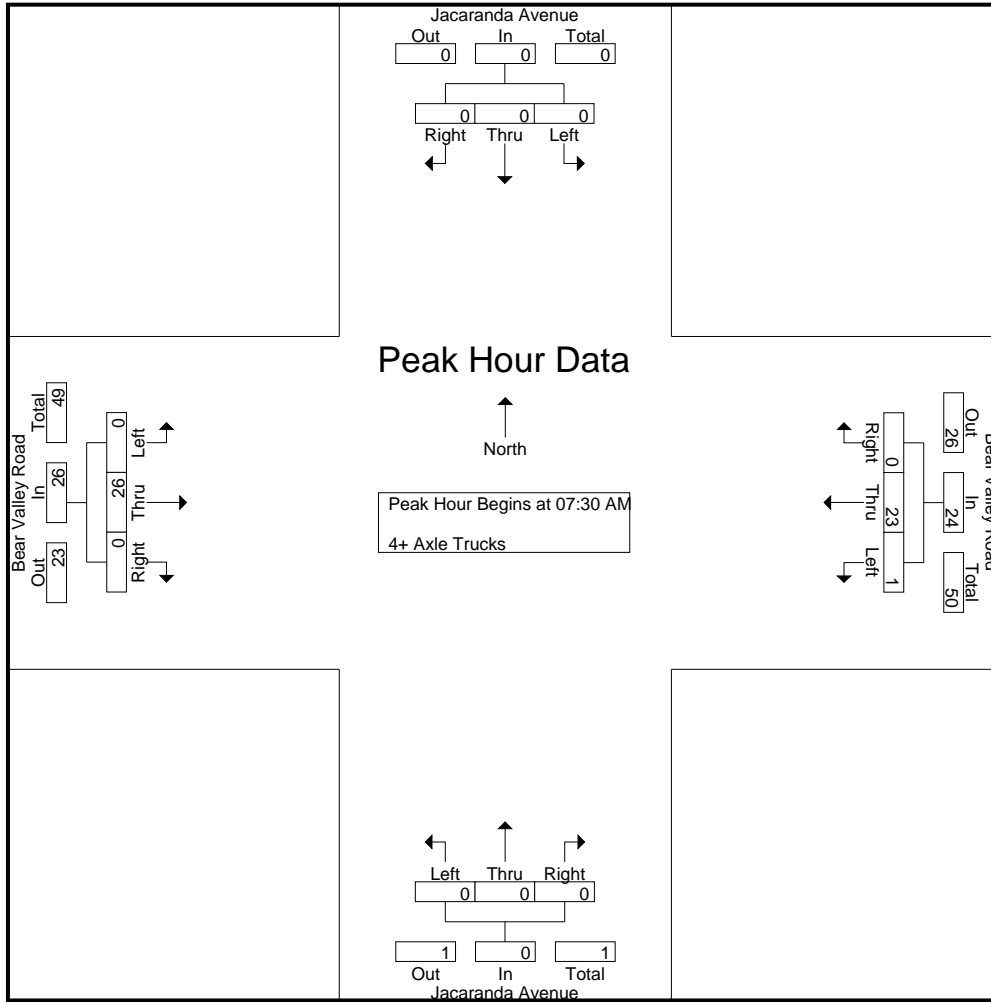
Start Time	Jacaranda Avenue Southbound				Bear Valley Road Westbound				Jacaranda Avenue Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	7	0	7	0	0	0	0	0	13	0	13	20
07:15 AM	0	0	0	0	0	6	0	6	0	0	0	0	0	3	0	3	9
07:30 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	7	0	7	10
07:45 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2	5
Total	0	0	0	0	0	19	0	19	0	0	0	0	0	25	0	25	44
08:00 AM	0	0	0	0	0	11	0	11	0	0	0	0	0	8	0	8	19
08:15 AM	0	0	0	0	1	6	0	7	0	0	0	0	0	9	0	9	16
08:30 AM	0	0	0	0	0	5	0	5	0	0	0	0	0	7	0	7	12
08:45 AM	0	0	0	0	0	5	0	5	0	0	0	0	0	7	0	7	12
Total	0	0	0	0	1	27	0	28	0	0	0	0	0	31	0	31	59
Grand Total	0	0	0	0	1	46	0	47	0	0	0	0	0	56	0	56	103
Apprch %	0	0	0		2.1	97.9	0		0	0	0		0	100	0		
Total %	0	0	0		1	44.7	0	45.6	0	0	0		0	54.4	0	54.4	

Start Time	Jacaranda Avenue Southbound				Bear Valley Road Westbound				Jacaranda Avenue Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:30 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	7	0	7	10
07:45 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2	5
08:00 AM	0	0	0	0	0	11	0	11	0	0	0	0	0	8	0	8	19
08:15 AM	0	0	0	0	1	6	0	7	0	0	0	0	0	9	0	9	16
Total Volume	0	0	0	0	1	23	0	24	0	0	0	0	0	26	0	26	50
% App. Total	0	0	0		4.2	95.8	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.250	.523	.000	.545	.000	.000	.000	.000	.000	.722	.000	.722	.658

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

City of Hesperia  
 N/S: Jacaranda Avenue  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 01\_HES\_Jac\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 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	3	0	3	0	0	0	0	0	7	0	7
+15 mins.	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2
+30 mins.	0	0	0	0	0	<b>11</b>	0	<b>11</b>	0	0	0	0	0	8	0	8
+45 mins.	0	0	0	0	1	6	0	7	0	0	0	0	0	<b>9</b>	0	<b>9</b>
Total Volume	0	0	0	0	1	23	0	24	0	0	0	0	0	26	0	26
% App. Total	0	0	0	0	4.2	95.8	0		0	0	0	0	0	100	0	
PHF	.000	.000	.000	.000	.250	.523	.000	.545	.000	.000	.000	.000	.000	.722	.000	.722

City of Hesperia  
 N/S: Jacaranda Avenue  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 01\_HES\_Jac\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

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

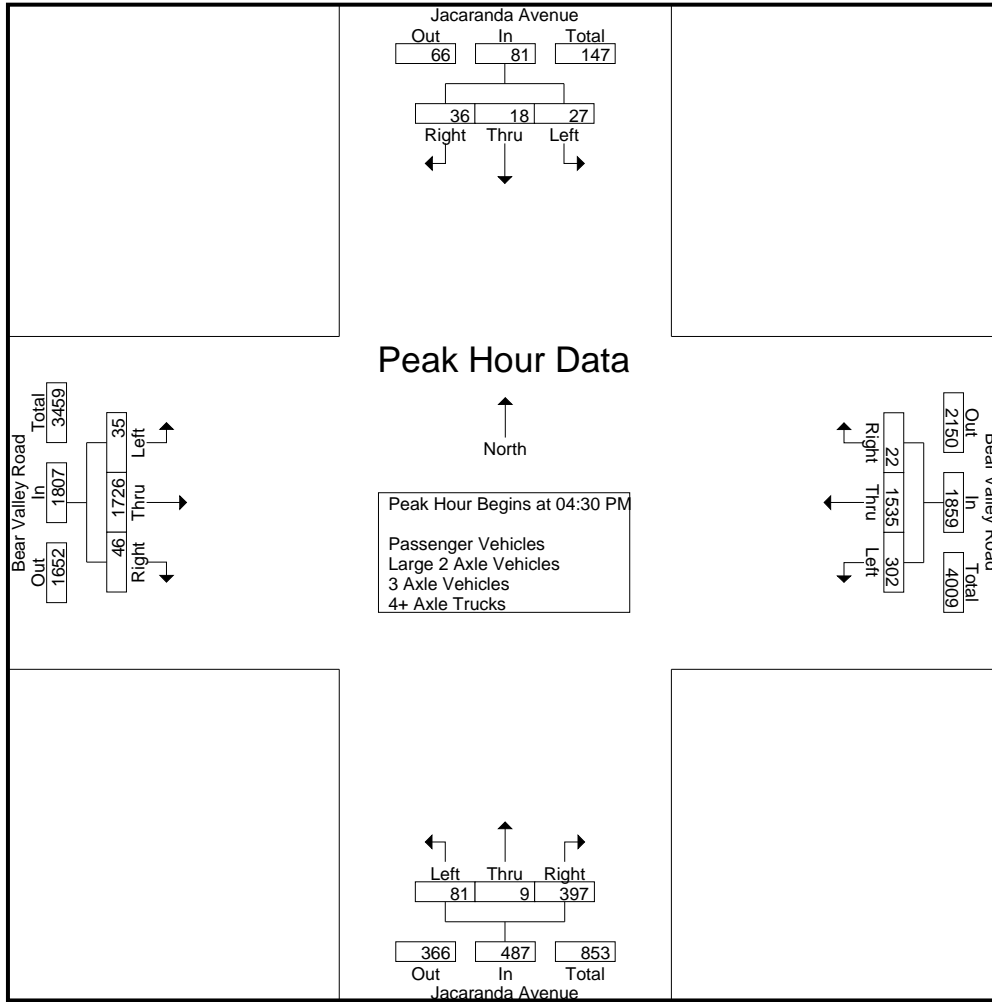
Start Time	Jacaranda Avenue Southbound				Bear Valley Road Westbound				Jacaranda Avenue Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	2	5	10	17	66	394	5	465	26	3	100	129	8	455	14	477	1088
04:15 PM	3	6	10	19	68	348	5	421	14	3	100	117	9	429	19	457	1014
04:30 PM	8	3	6	17	78	400	6	484	22	1	95	118	5	441	11	457	1076
04:45 PM	7	3	10	20	79	376	4	459	12	0	87	99	12	431	12	455	1033
Total	20	17	36	73	291	1518	20	1829	74	7	382	463	34	1756	56	1846	4211
05:00 PM	8	6	8	22	70	393	3	466	22	3	112	137	5	431	16	452	1077
05:15 PM	4	6	12	22	75	366	9	450	25	5	103	133	13	423	7	443	1048
05:30 PM	7	3	6	16	69	389	17	475	14	12	80	106	16	360	15	391	988
05:45 PM	6	5	10	21	64	322	8	394	16	8	77	101	10	442	15	467	983
Total	25	20	36	81	278	1470	37	1785	77	28	372	477	44	1656	53	1753	4096
Grand Total	45	37	72	154	569	2988	57	3614	151	35	754	940	78	3412	109	3599	8307
Apprch %	29.2	24	46.8		15.7	82.7	1.6		16.1	3.7	80.2		2.2	94.8	3		
Total %	0.5	0.4	0.9	1.9	6.8	36	0.7	43.5	1.8	0.4	9.1	11.3	0.9	41.1	1.3	43.3	
Passenger Vehicles	45	37	72	154	563	2913	57	3533	150	35	748	933	78	3349	105	3532	8152
% Passenger Vehicles	100	100	100	100	98.9	97.5	100	97.8	99.3	100	99.2	99.3	100	98.2	96.3	98.1	98.1
Large 2 Axle Vehicles	0	0	0	0	4	48	0	52	1	0	5	6	0	36	3	39	97
% Large 2 Axle Vehicles	0	0	0	0	0.7	1.6	0	1.4	0.7	0	0.7	0.6	0	1.1	2.8	1.1	1.2
3 Axle Vehicles	0	0	0	0	2	3	0	5	0	0	0	0	0	6	1	7	12
% 3 Axle Vehicles	0	0	0	0	0.4	0.1	0	0.1	0	0	0	0	0	0.2	0.9	0.2	0.1
4+ Axle Trucks	0	0	0	0	0	24	0	24	0	0	1	1	0	21	0	21	46
% 4+ Axle Trucks	0	0	0	0	0	0.8	0	0.7	0	0	0.1	0.1	0	0.6	0	0.6	0.6

Start Time	Jacaranda Avenue Southbound				Bear Valley Road Westbound				Jacaranda Avenue Northbound				Bear Valley 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	8	3	6	17	78	<b>400</b>	6	<b>484</b>	22	1	95	118	5	<b>441</b>	11	<b>457</b>	1076
04:45 PM	7	3	10	20	<b>79</b>	376	4	459	12	0	87	99	12	431	12	455	1033
05:00 PM	8	<b>6</b>	8	<b>22</b>	70	393	3	466	22	3	<b>112</b>	<b>137</b>	5	431	<b>16</b>	452	<b>1077</b>
05:15 PM	4	6	<b>12</b>	22	75	366	<b>9</b>	450	<b>25</b>	<b>5</b>	103	133	<b>13</b>	423	7	443	1048
Total Volume	27	18	36	81	302	1535	22	1859	81	9	397	487	35	1726	46	1807	4234
% App. Total	33.3	22.2	44.4		16.2	82.6	1.2		16.6	1.8	81.5		1.9	95.5	2.5		
PHF	.844	.750	.750	.920	.956	.959	.611	.960	.810	.450	.886	.889	.673	.978	.719	.989	.983



City of Hesperia  
 N/S: Jacaranda Avenue  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 01\_HES\_Jac\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 2



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

	04:30 PM				04:30 PM				04:30 PM				04:00 PM			
+0 mins.	8	3	6	17	78	400	6	484	22	1	95	118	8	455	14	477
+15 mins.	7	3	10	20	79	376	4	459	12	0	87	99	9	429	19	457
+30 mins.	8	6	8	22	70	393	3	466	22	3	112	137	5	441	11	457
+45 mins.	4	6	12	22	75	366	9	450	25	5	103	133	12	431	12	455
Total Volume	27	18	36	81	302	1535	22	1859	81	9	397	487	34	1756	56	1846
% App. Total	33.3	22.2	44.4		16.2	82.6	1.2		16.6	1.8	81.5		1.8	95.1	3	
PHF	.844	.750	.750	.920	.956	.959	.611	.960	.810	.450	.886	.889	.708	.965	.737	.968

City of Hesperia  
 N/S: Jacaranda Avenue  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 01\_HES\_Jac\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- Passenger Vehicles

Start Time	Jacaranda Avenue Southbound				Bear Valley Road Westbound				Jacaranda Avenue Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	2	5	10	17	64	382	5	451	26	3	98	127	8	442	13	463	1058
04:15 PM	3	6	10	19	67	337	5	409	14	3	99	116	9	420	17	446	990
04:30 PM	8	3	6	17	77	385	6	468	21	1	95	117	5	431	11	447	1049
04:45 PM	7	3	10	20	79	367	4	450	12	0	87	99	12	421	12	445	1014
Total	20	17	36	73	287	1471	20	1778	73	7	379	459	34	1714	53	1801	4111
05:00 PM	8	6	8	22	69	386	3	458	22	3	111	136	5	427	16	448	1064
05:15 PM	4	6	12	22	75	356	9	440	25	5	103	133	13	418	7	438	1033
05:30 PM	7	3	6	16	68	385	17	470	14	12	80	106	16	357	14	387	979
05:45 PM	6	5	10	21	64	315	8	387	16	8	75	99	10	433	15	458	965
Total	25	20	36	81	276	1442	37	1755	77	28	369	474	44	1635	52	1731	4041
Grand Total	45	37	72	154	563	2913	57	3533	150	35	748	933	78	3349	105	3532	8152
Apprch %	29.2	24	46.8		15.9	82.5	1.6		16.1	3.8	80.2		2.2	94.8	3		
Total %	0.6	0.5	0.9	1.9	6.9	35.7	0.7	43.3	1.8	0.4	9.2	11.4	1	41.1	1.3	43.3	

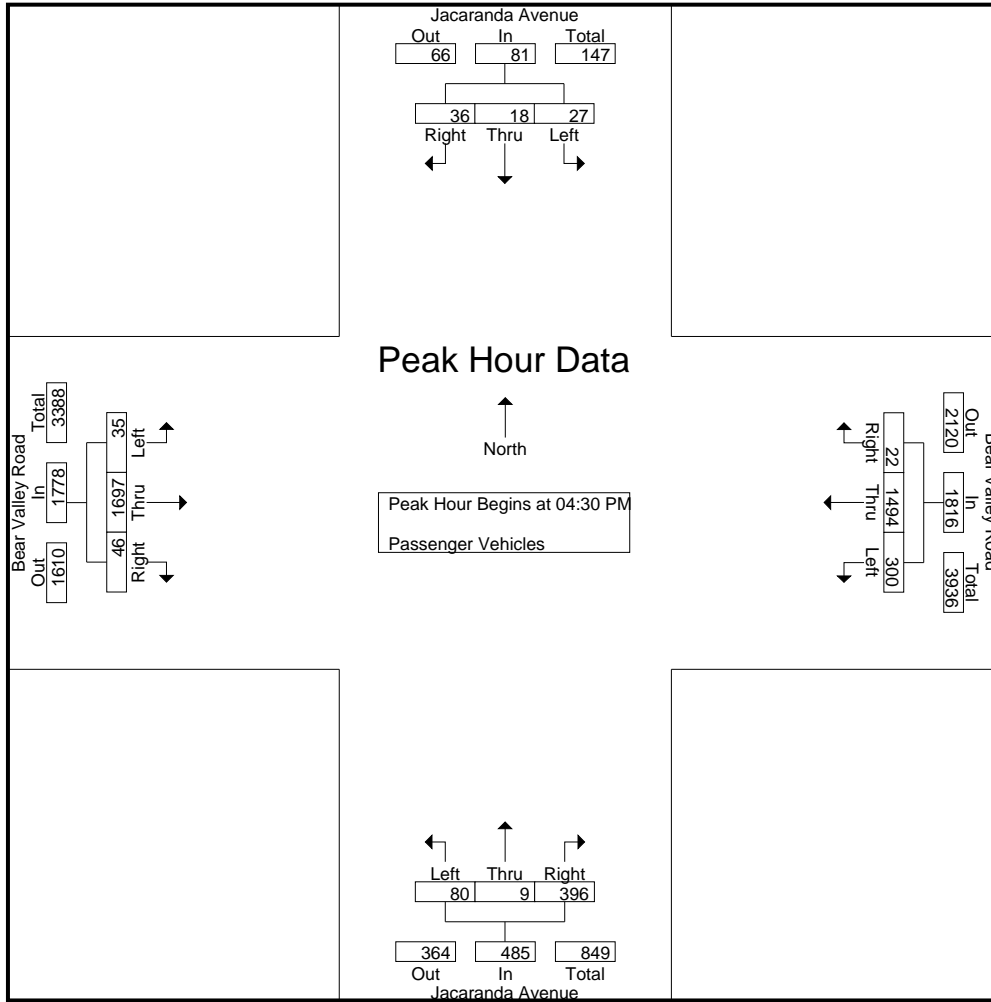
Start Time	Jacaranda Avenue Southbound				Bear Valley Road Westbound				Jacaranda Avenue Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:30 PM	8	3	6	17	77	385	6	468	21	1	95	117	5	431	11	447	1049
04:45 PM	7	3	10	20	79	367	4	450	12	0	87	99	12	421	12	445	1014
05:00 PM	8	6	8	22	69	386	3	458	22	3	111	136	5	427	16	448	1064
05:15 PM	4	6	12	22	75	356	9	440	25	5	103	133	13	418	7	438	1033
Total Volume	27	18	36	81	300	1494	22	1816	80	9	396	485	35	1697	46	1778	4160
% App. Total	33.3	22.2	44.4		16.5	82.3	1.2		16.5	1.9	81.6		2	95.4	2.6		
PHF	.844	.750	.750	.920	.949	.968	.611	.970	.800	.450	.892	.892	.673	.984	.719	.992	.977

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

City of Hesperia  
 N/S: Jacaranda Avenue  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 01\_HES\_Jac\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 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.	8	3	6	17	77	385	6	468	21	1	95	117	5	431	11	447
+15 mins.	7	3	10	20	79	367	4	450	12	0	87	99	12	421	12	445
+30 mins.	8	6	8	22	69	386	3	458	22	3	111	136	5	427	16	448
+45 mins.	4	6	12	22	75	356	9	440	25	5	103	133	13	418	7	438
Total Volume	27	18	36	81	300	1494	22	1816	80	9	396	485	35	1697	46	1778
% App. Total	33.3	22.2	44.4		16.5	82.3	1.2		16.5	1.9	81.6		2	95.4	2.6	
PHF	.844	.750	.750	.920	.949	.968	.611	.970	.800	.450	.892	.892	.673	.984	.719	.992

City of Hesperia  
 N/S: Jacaranda Avenue  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 01\_HES\_Jac\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

Start Time	Jacaranda Avenue Southbound				Bear Valley Road Westbound				Jacaranda Avenue Northbound				Bear Valley 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	2	6	0	8	0	0	1	1	0	9	0	9	18
04:15 PM	0	0	0	0	0	8	0	8	0	0	1	1	0	6	2	8	17
04:30 PM	0	0	0	0	1	8	0	9	1	0	0	1	0	5	0	5	15
04:45 PM	0	0	0	0	0	4	0	4	0	0	0	0	0	3	0	3	7
Total	0	0	0	0	3	26	0	29	1	0	2	3	0	23	2	25	57
05:00 PM	0	0	0	0	1	5	0	6	0	0	1	1	0	4	0	4	11
05:15 PM	0	0	0	0	0	10	0	10	0	0	0	0	0	1	0	1	11
05:30 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	1	3	5
05:45 PM	0	0	0	0	0	5	0	5	0	0	2	2	0	6	0	6	13
Total	0	0	0	0	1	22	0	23	0	0	3	3	0	13	1	14	40
Grand Total	0	0	0	0	4	48	0	52	1	0	5	6	0	36	3	39	97
Apprch %	0	0	0		7.7	92.3	0		16.7	0	83.3		0	92.3	7.7		
Total %	0	0	0		4.1	49.5	0	53.6	1	0	5.2	6.2	0	37.1	3.1	40.2	

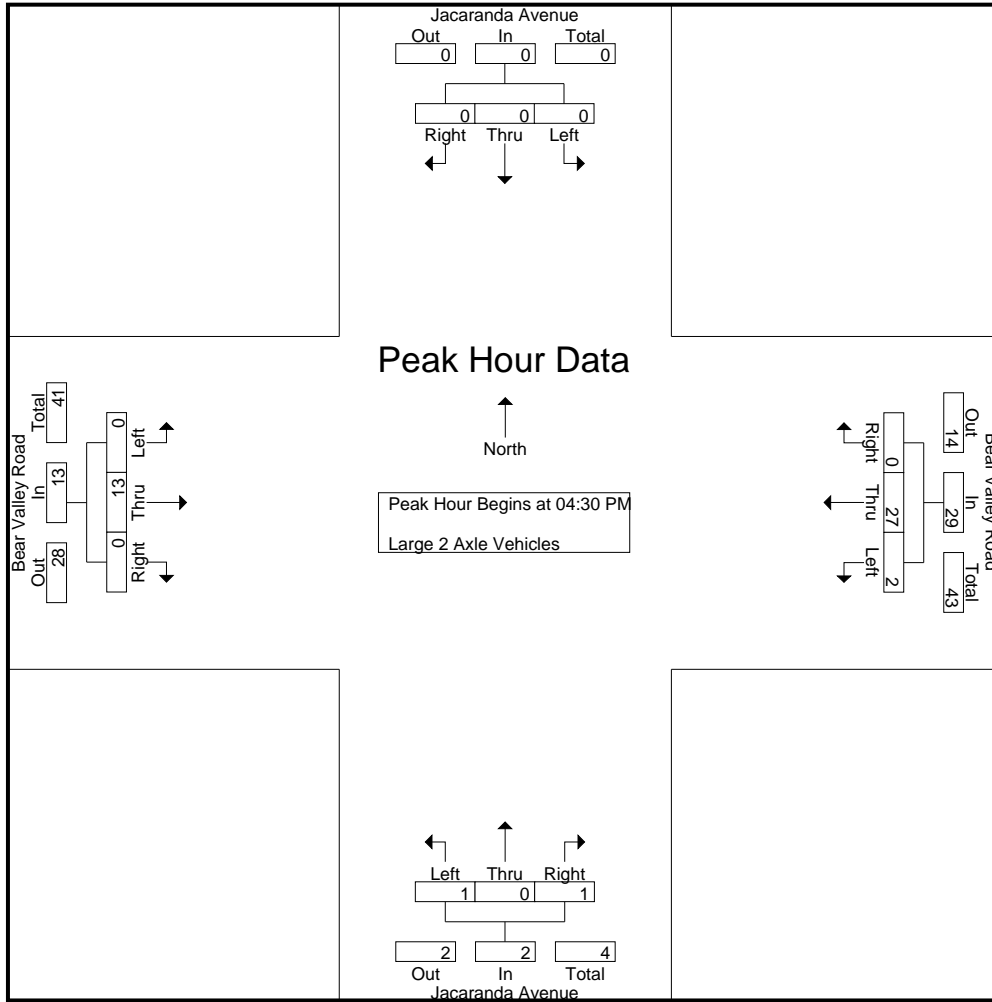
Start Time	Jacaranda Avenue Southbound				Bear Valley Road Westbound				Jacaranda Avenue Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:30 PM	0	0	0	0	1	8	0	9	1	0	0	1	0	5	0	5	15
04:45 PM	0	0	0	0	0	4	0	4	0	0	0	0	0	3	0	3	7
05:00 PM	0	0	0	0	1	5	0	6	0	0	1	1	0	4	0	4	11
05:15 PM	0	0	0	0	0	10	0	10	0	0	0	0	0	1	0	1	11
Total Volume	0	0	0	0	2	27	0	29	1	0	1	2	0	13	0	13	44
% App. Total	0	0	0		6.9	93.1	0		50	0	50		0	100	0		
PHF	.000	.000	.000	.000	.500	.675	.000	.725	.250	.000	.250	.500	.000	.650	.000	.650	.733

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

City of Hesperia  
 N/S: Jacaranda Avenue  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 01\_HES\_Jac\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 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	1	8	0	9	1	0	0	1	0	5	0	5
+15 mins.	0	0	0	0	0	4	0	4	0	0	0	0	0	3	0	3
+30 mins.	0	0	0	0	1	5	0	6	0	0	1	1	0	4	0	4
+45 mins.	0	0	0	0	0	10	0	10	0	0	0	0	0	1	0	1
Total Volume	0	0	0	0	2	27	0	29	1	0	1	2	0	13	0	13
% App. Total	0	0	0	0	6.9	93.1	0	100	50	0	50	100	0	100	0	100
PHF	.000	.000	.000	.000	.500	.675	.000	.725	.250	.000	.250	.500	.000	.650	.000	.650

City of Hesperia  
 N/S: Jacaranda Avenue  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 01\_HES\_Jac\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- 3 Axle Vehicles

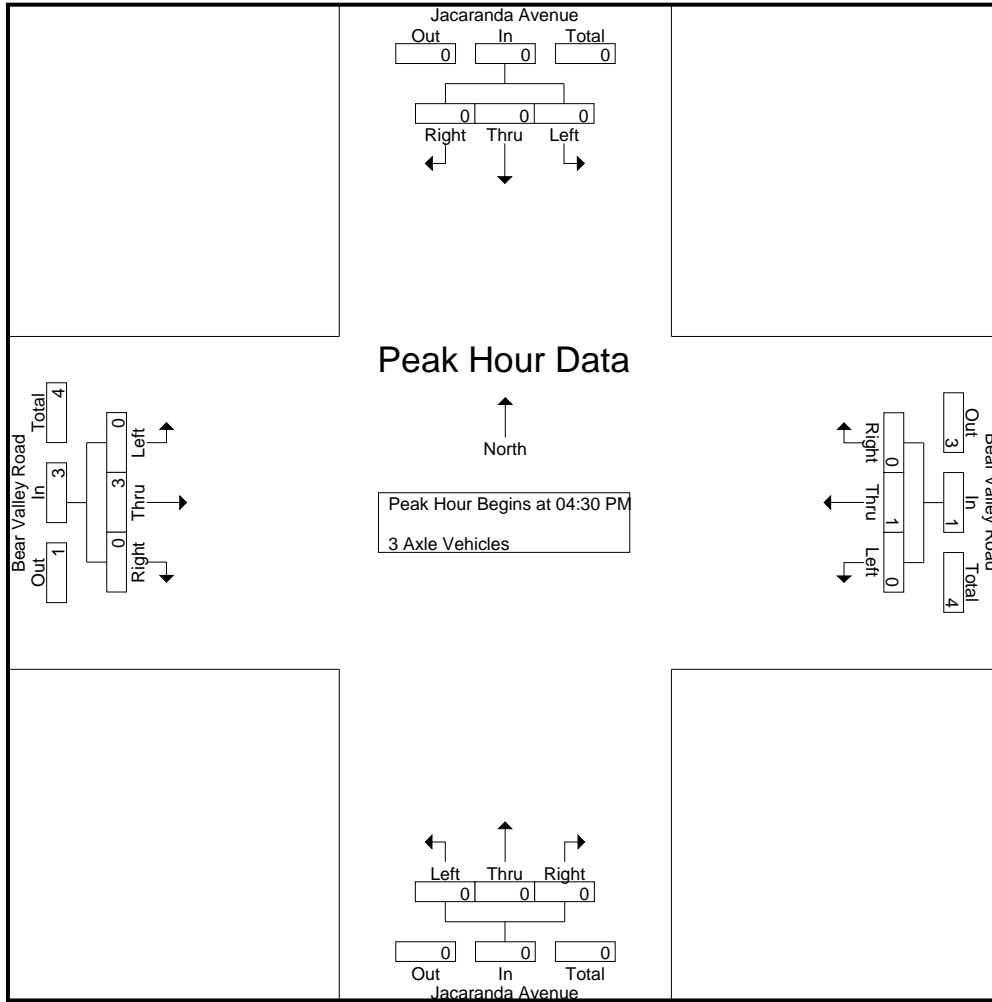
Start Time	Jacaranda Avenue Southbound				Bear Valley Road Westbound				Jacaranda Avenue Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	1	2	4
04:15 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	1	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
Total	0	0	0	0	1	3	0	4	0	0	0	0	0	5	1	6	10
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	1	2
Grand Total	0	0	0	0	2	3	0	5	0	0	0	0	0	6	1	7	12
Apprch %	0	0	0		40	60	0		0	0	0		0	85.7	14.3		
Total %	0	0	0		16.7	25	0	41.7	0	0	0		0	50	8.3	58.3	

Start Time	Jacaranda Avenue Southbound				Bear Valley Road Westbound				Jacaranda Avenue Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3	4
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.000	.375	.000	.375	.500

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

City of Hesperia  
 N/S: Jacaranda Avenue  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 01\_HES\_Jac\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 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	2	0	2
+15 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1
+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	1	0	1	0	0	0	0	0	3	0	3
% App. Total	0	0	0	0	0	100	0	0	0	0	0	0	0	100	0	0
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.000	.375	.000	.375

City of Hesperia  
 N/S: Jacaranda Avenue  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 01\_HES\_Jac\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- 4+ Axle Trucks

Start Time	Jacaranda Avenue Southbound				Bear Valley Road Westbound				Jacaranda Avenue Northbound				Bear Valley 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	4	0	4	0	0	1	1	0	3	0	3	8
04:15 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2	5
04:30 PM	0	0	0	0	0	7	0	7	0	0	0	0	0	3	0	3	10
04:45 PM	0	0	0	0	0	4	0	4	0	0	0	0	0	6	0	6	10
Total	0	0	0	0	0	18	0	18	0	0	1	1	0	14	0	14	33
05:00 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4	4
05:30 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
05:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
Total	0	0	0	0	0	6	0	6	0	0	0	0	0	7	0	7	13
Grand Total	0	0	0	0	0	24	0	24	0	0	1	1	0	21	0	21	46
Apprch %	0	0	0		0	100	0		0	0	100		0	100	0		
Total %	0	0	0		0	52.2	0	52.2	0	0	2.2	2.2	0	45.7	0	45.7	

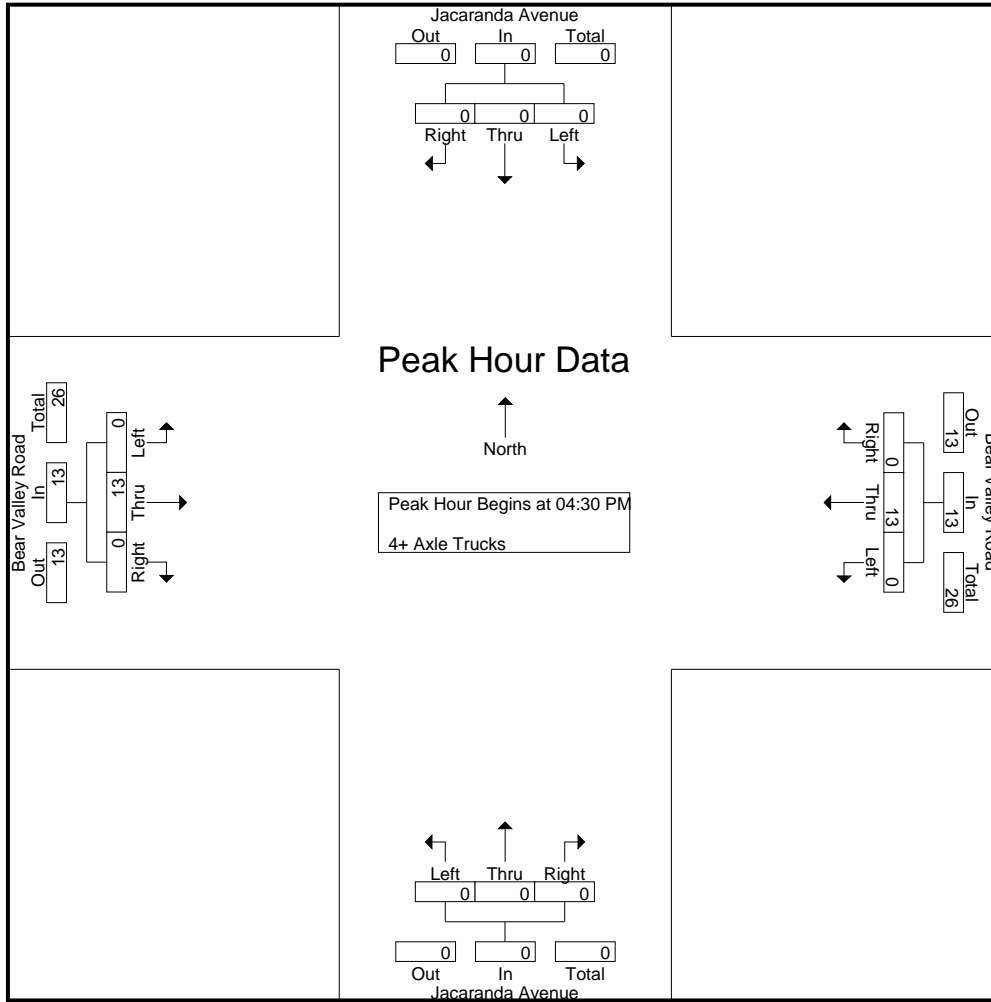
Start Time	Jacaranda Avenue Southbound				Bear Valley Road Westbound				Jacaranda Avenue Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:30 PM	0	0	0	0	0	7	0	7	0	0	0	0	0	3	0	3	10
04:45 PM	0	0	0	0	0	4	0	4	0	0	0	0	0	6	0	6	10
05:00 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4	4
Total Volume	0	0	0	0	0	13	0	13	0	0	0	0	0	13	0	13	26
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.464	.000	.464	.000	.000	.000	.000	.000	.542	.000	.542	.650

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



City of Hesperia  
 N/S: Jacaranda Avenue  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 01\_HES\_Jac\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 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	<b>7</b>	0	<b>7</b>	0	0	0	0	0	<b>3</b>	0	<b>3</b>
+15 mins.	0	0	0	0	0	4	0	4	0	0	0	0	0	<b>6</b>	0	<b>6</b>
+30 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4
Total Volume	0	0	0	0	0	13	0	13	0	0	0	0	0	13	0	13
% App. Total	0	0	0	0	0	100	0	100	0	0	0	0	0	100	0	100
PHF	.000	.000	.000	.000	.000	.464	.000	.464	.000	.000	.000	.000	.000	.542	.000	.542

Location: Hesperia  
 N/S: Jacaranda Avenue  
 E/W: Bear Valley Road



Date: 11/17/2022  
 Day: Thursday

**PEDESTRIANS**

	North Leg Jacaranda Avenue	East Leg Bear Valley Road	South Leg Jacaranda Avenue	West Leg Bear Valley Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	1	0	0	1	2
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
<b>TOTAL VOLUMES:</b>	1	0	0	1	2

	North Leg Jacaranda Avenue	East Leg Bear Valley Road	South Leg Jacaranda Avenue	West Leg Bear Valley Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	4	4
4:15 PM	1	0	0	0	1
4:30 PM	2	0	0	0	2
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	1	1
<b>TOTAL VOLUMES:</b>	3	0	0	5	8

Location: Hesperia  
 N/S: Jacaranda Avenue  
 E/W: Bear Valley Road



Date: 11/17/2022  
 Day: Thursday

BICYCLES

	Southbound Jacaranda Avenue			Westbound Bear Valley Road			Northbound Jacaranda Avenue			Eastbound Bear Valley Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

	Southbound Jacaranda Avenue			Westbound Bear Valley Road			Northbound Jacaranda Avenue			Eastbound Bear Valley Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

City of Hesperia  
 N/S: Mojave Fish Hatchery Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 02\_HES\_MFH\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

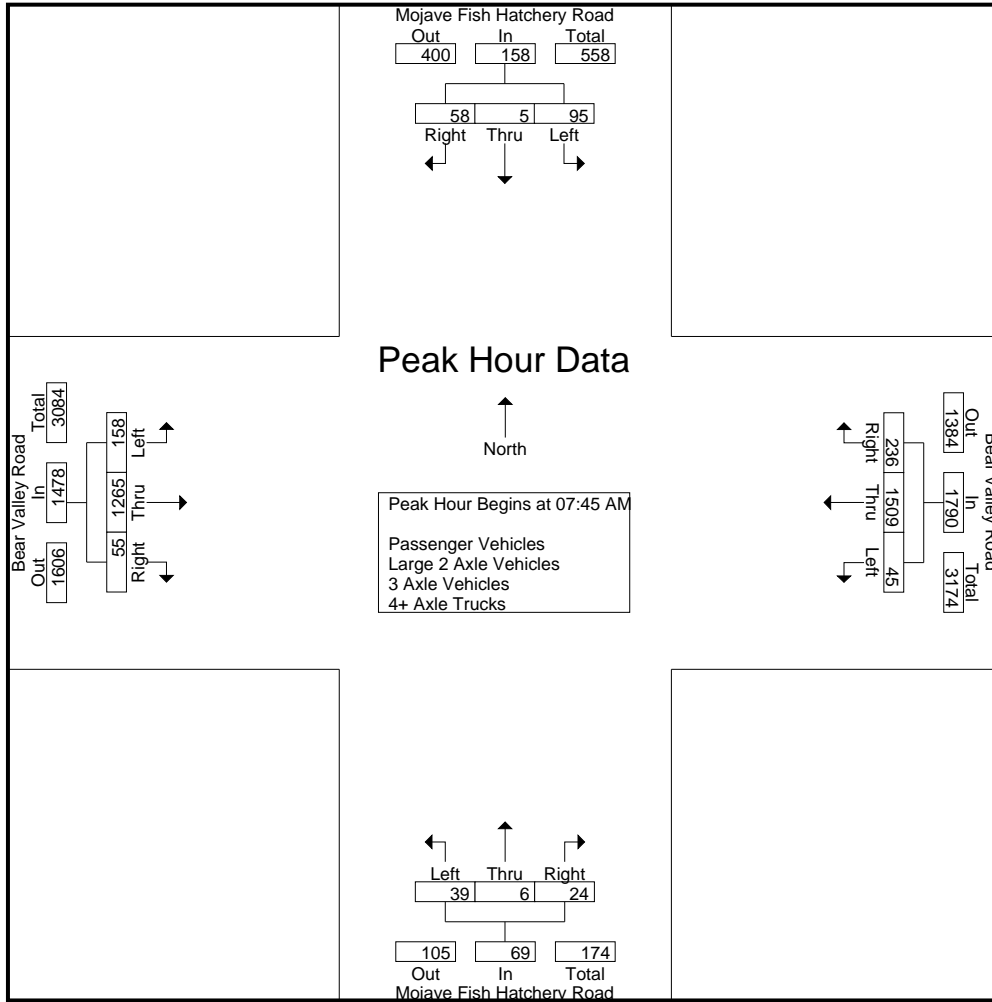
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Mojave Fish Hatchery Road Southbound				Bear Valley Road Westbound				Mojave Fish Hatchery Road Northbound				Bear Valley 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	2	0	4	6	11	314	8	333	9	1	2	12	21	188	10	219	570
07:15 AM	1	0	6	7	8	291	14	313	6	0	4	10	10	214	5	229	559
07:30 AM	5	0	8	13	11	399	33	443	7	0	6	13	11	336	12	359	828
07:45 AM	12	0	9	21	16	417	55	488	15	1	2	18	34	314	11	359	886
Total	20	0	27	47	46	1421	110	1577	37	2	14	53	76	1052	38	1166	2843
08:00 AM	17	0	12	29	6	388	53	447	8	2	2	12	38	311	15	364	852
08:15 AM	26	2	18	46	8	374	73	455	8	2	8	18	40	306	9	355	874
08:30 AM	40	3	19	62	15	330	55	400	8	1	12	21	46	334	20	400	883
08:45 AM	29	7	23	59	21	350	38	409	5	1	6	12	33	346	16	395	875
Total	112	12	72	196	50	1442	219	1711	29	6	28	63	157	1297	60	1514	3484
Grand Total	132	12	99	243	96	2863	329	3288	66	8	42	116	233	2349	98	2680	6327
Apprch %	54.3	4.9	40.7		2.9	87.1	10		56.9	6.9	36.2		8.7	87.6	3.7		
Total %	2.1	0.2	1.6	3.8	1.5	45.3	5.2	52	1	0.1	0.7	1.8	3.7	37.1	1.5	42.4	
Passenger Vehicles	125	12	88	225	96	2750	326	3172	64	8	42	114	228	2217	97	2542	6053
% Passenger Vehicles	94.7	100	88.9	92.6	100	96.1	99.1	96.5	97	100	100	98.3	97.9	94.4	99	94.9	95.7
Large 2 Axle Vehicles	5	0	11	16	0	56	1	57	2	0	0	2	4	59	1	64	139
% Large 2 Axle Vehicles	3.8	0	11.1	6.6	0	2	0.3	1.7	3	0	0	1.7	1.7	2.5	1	2.4	2.2
3 Axle Vehicles	0	0	0	0	0	11	0	11	0	0	0	0	1	21	0	22	33
% 3 Axle Vehicles	0	0	0	0	0	0.4	0	0.3	0	0	0	0	0.4	0.9	0	0.8	0.5
4+ Axle Trucks	2	0	0	2	0	46	2	48	0	0	0	0	0	52	0	52	102
% 4+ Axle Trucks	1.5	0	0	0.8	0	1.6	0.6	1.5	0	0	0	0	0	2.2	0	1.9	1.6

Start Time	Mojave Fish Hatchery Road Southbound				Bear Valley Road Westbound				Mojave Fish Hatchery Road Northbound				Bear Valley 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 07:45 AM																	
07:45 AM	12	0	9	21	<b>16</b>	<b>417</b>	55	<b>488</b>	<b>15</b>	1	2	18	34	314	11	359	<b>886</b>
08:00 AM	17	0	12	29	6	388	53	447	8	2	2	12	38	311	15	364	852
08:15 AM	26	2	18	46	8	374	73	455	8	2	8	18	40	306	9	355	874
08:30 AM	<b>40</b>	<b>3</b>	<b>19</b>	<b>62</b>	15	330	55	400	8	1	<b>12</b>	<b>21</b>	<b>46</b>	<b>334</b>	<b>20</b>	<b>400</b>	883
Total Volume	95	5	58	158	45	1509	236	1790	39	6	24	69	158	1265	55	1478	3495
% App. Total	60.1	3.2	36.7		2.5	84.3	13.2		56.5	8.7	34.8		10.7	85.6	3.7		
PHF	.594	.417	.763	.637	.703	.905	.808	.917	.650	.750	.500	.821	.859	.947	.688	.924	.986

City of Hesperia  
 N/S: Mojave Fish Hatchery Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 02\_HES\_MFH\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
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Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	08:00 AM				07:30 AM				07:45 AM				08:00 AM			
+0 mins.	17	0	12	29	11	399	33	443	15	1	2	18	38	311	15	364
+15 mins.	26	2	18	46	<b>16</b>	<b>417</b>	55	<b>488</b>	8	<b>2</b>	2	12	40	306	9	355
+30 mins.	<b>40</b>	3	19	<b>62</b>	6	388	53	447	8	2	8	18	<b>46</b>	334	<b>20</b>	<b>400</b>
+45 mins.	29	<b>7</b>	<b>23</b>	59	8	374	<b>73</b>	455	8	1	<b>12</b>	<b>21</b>	33	<b>346</b>	16	395
Total Volume	112	12	72	196	41	1578	214	1833	39	6	24	69	157	1297	60	1514
% App. Total	57.1	6.1	36.7		2.2	86.1	11.7		56.5	8.7	34.8		10.4	85.7	4	
PHF	.700	.429	.783	.790	.641	.946	.733	.939	.650	.750	.500	.821	.853	.937	.750	.946

City of Hesperia  
 N/S: Mojave Fish Hatchery Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 02\_HES\_MFH\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- Passenger Vehicles

Start Time	Mojave Fish Hatchery Road Southbound				Bear Valley Road Westbound				Mojave Fish Hatchery Road Northbound				Bear Valley 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	2	0	3	5	11	298	8	317	9	1	2	12	20	165	10	195	529
07:15 AM	1	0	5	6	8	277	13	298	5	0	4	9	10	197	5	212	525
07:30 AM	3	0	5	8	11	390	33	434	7	0	6	13	11	318	11	340	795
07:45 AM	11	0	6	17	16	408	55	479	14	1	2	17	34	308	11	353	866
Total	17	0	19	36	46	1373	109	1528	35	2	14	51	75	988	37	1100	2715
08:00 AM	16	0	12	28	6	370	52	428	8	2	2	12	36	297	15	348	816
08:15 AM	26	2	17	45	8	355	73	436	8	2	8	18	40	284	9	333	832
08:30 AM	38	3	18	59	15	317	54	386	8	1	12	21	45	318	20	383	849
08:45 AM	28	7	22	57	21	335	38	394	5	1	6	12	32	330	16	378	841
Total	108	12	69	189	50	1377	217	1644	29	6	28	63	153	1229	60	1442	3338
Grand Total	125	12	88	225	96	2750	326	3172	64	8	42	114	228	2217	97	2542	6053
Apprch %	55.6	5.3	39.1		3	86.7	10.3		56.1	7	36.8		9	87.2	3.8		
Total %	2.1	0.2	1.5	3.7	1.6	45.4	5.4	52.4	1.1	0.1	0.7	1.9	3.8	36.6	1.6	42	

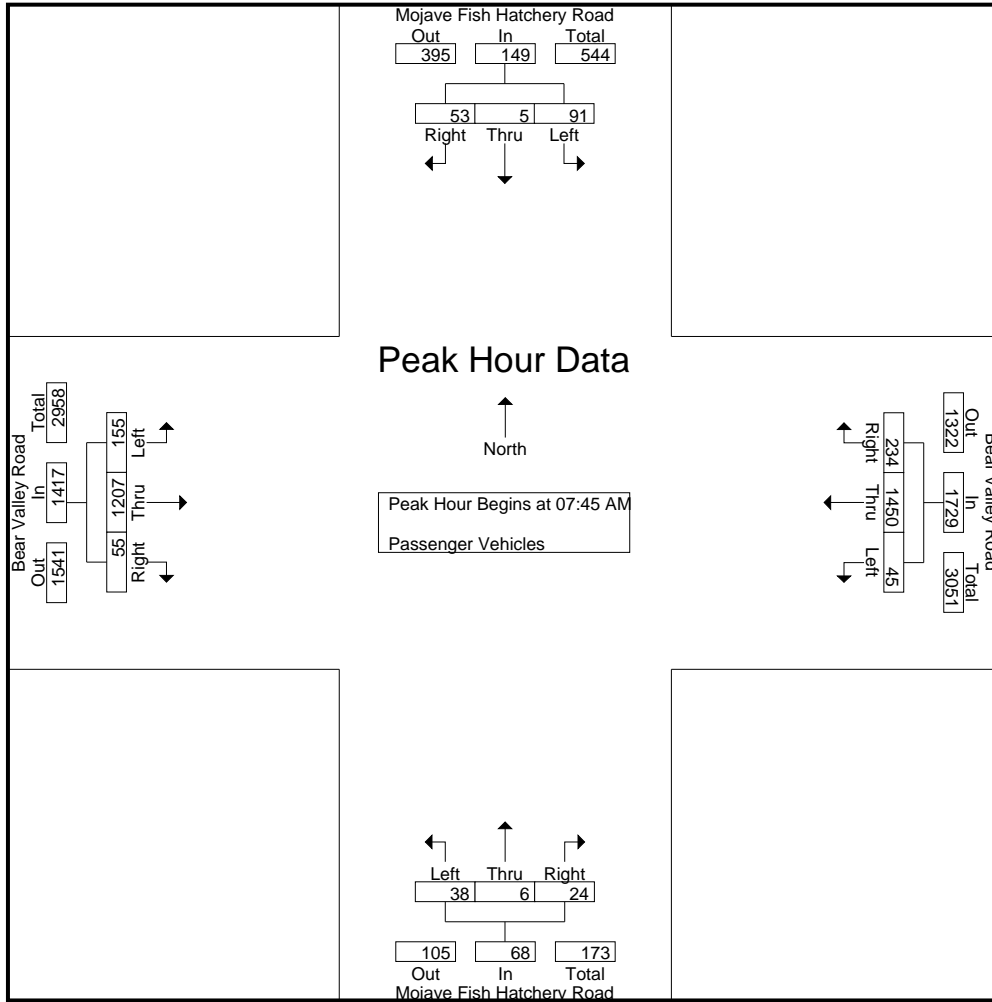
Start Time	Mojave Fish Hatchery Road Southbound				Bear Valley Road Westbound				Mojave Fish Hatchery Road Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:45 AM	11	0	6	17	<b>16</b>	<b>408</b>	55	<b>479</b>	<b>14</b>	1	2	17	34	308	11	353	<b>866</b>
08:00 AM	16	0	12	28	6	370	52	428	8	2	2	12	36	297	15	348	816
08:15 AM	26	2	17	45	8	355	<b>73</b>	436	8	2	8	18	40	284	9	333	832
08:30 AM	<b>38</b>	<b>3</b>	<b>18</b>	<b>59</b>	15	317	54	386	8	1	<b>12</b>	<b>21</b>	<b>45</b>	<b>318</b>	<b>20</b>	<b>383</b>	849
Total Volume	91	5	53	149	45	1450	234	1729	38	6	24	68	155	1207	55	1417	3363
% App. Total	61.1	3.4	35.6		2.6	83.9	13.5		55.9	8.8	35.3		10.9	85.2	3.9		
PHF	.599	.417	.736	.631	.703	.888	.801	.902	.679	.750	.500	.810	.861	.949	.688	.925	.971

Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:45 AM

City of Hesperia  
 N/S: Mojave Fish Hatchery Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 02\_HES\_MFH\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
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Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:45 AM				07:45 AM			
+0 mins.	11	0	6	17	<b>16</b>	<b>408</b>	55	<b>479</b>	<b>14</b>	1	2	17	34	308	11	353
+15 mins.	16	0	12	28	6	370	52	428	8	<b>2</b>	2	12	36	297	15	348
+30 mins.	26	2	17	45	8	355	<b>73</b>	436	8	2	8	18	40	284	9	333
+45 mins.	<b>38</b>	<b>3</b>	<b>18</b>	<b>59</b>	15	317	54	386	8	1	<b>12</b>	<b>21</b>	<b>45</b>	<b>318</b>	<b>20</b>	<b>383</b>
Total Volume	91	5	53	149	45	1450	234	1729	38	6	24	68	155	1207	55	1417
% App. Total	61.1	3.4	35.6		2.6	83.9	13.5		55.9	8.8	35.3		10.9	85.2	3.9	
PHF	.599	.417	.736	.631	.703	.888	.801	.902	.679	.750	.500	.810	.861	.949	.688	.925

City of Hesperia  
 N/S: Mojave Fish Hatchery Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 02\_HES\_MFH\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

Start Time	Mojave Fish Hatchery Road Southbound				Bear Valley Road Westbound				Mojave Fish Hatchery Road Northbound				Bear Valley 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	1	1	0	8	0	8	0	0	0	0	1	5	0	6	15
07:15 AM	0	0	1	1	0	7	0	7	1	0	0	1	0	12	0	12	21
07:30 AM	2	0	3	5	0	5	0	5	0	0	0	0	0	9	1	10	20
07:45 AM	0	0	3	3	0	6	0	6	1	0	0	1	0	3	0	3	13
<b>Total</b>	<b>2</b>	<b>0</b>	<b>8</b>	<b>10</b>	<b>0</b>	<b>26</b>	<b>0</b>	<b>26</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>29</b>	<b>1</b>	<b>31</b>	<b>69</b>
08:00 AM	1	0	0	1	0	4	1	5	0	0	0	0	2	5	0	7	13
08:15 AM	0	0	1	1	0	9	0	9	0	0	0	0	0	11	0	11	21
08:30 AM	2	0	1	3	0	9	0	9	0	0	0	0	0	7	0	7	19
08:45 AM	0	0	1	1	0	8	0	8	0	0	0	0	1	7	0	8	17
<b>Total</b>	<b>3</b>	<b>0</b>	<b>3</b>	<b>6</b>	<b>0</b>	<b>30</b>	<b>1</b>	<b>31</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>30</b>	<b>0</b>	<b>33</b>	<b>70</b>
<b>Grand Total</b>	<b>5</b>	<b>0</b>	<b>11</b>	<b>16</b>	<b>0</b>	<b>56</b>	<b>1</b>	<b>57</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>4</b>	<b>59</b>	<b>1</b>	<b>64</b>	<b>139</b>
Apprch %	31.2	0	68.8		0	98.2	1.8		100	0	0		6.2	92.2	1.6		
Total %	3.6	0	7.9	11.5	0	40.3	0.7	41	1.4	0	0	1.4	2.9	42.4	0.7	46	

Start Time	Mojave Fish Hatchery Road Southbound				Bear Valley Road Westbound				Mojave Fish Hatchery Road Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:45 AM	0	0	3	3	0	6	0	6	1	0	0	1	0	3	0	3	13
08:00 AM	1	0	0	1	0	4	1	5	0	0	0	0	2	5	0	7	13
08:15 AM	0	0	1	1	0	9	0	9	0	0	0	0	0	11	0	11	21
08:30 AM	2	0	1	3	0	9	0	9	0	0	0	0	0	7	0	7	19
<b>Total Volume</b>	<b>3</b>	<b>0</b>	<b>5</b>	<b>8</b>	<b>0</b>	<b>28</b>	<b>1</b>	<b>29</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>26</b>	<b>0</b>	<b>28</b>	<b>66</b>
% App. Total	37.5	0	62.5		0	96.6	3.4		100	0	0		7.1	92.9	0		
PHF	.375	.000	.417	.667	.000	.778	.250	.806	.250	.000	.000	.250	.250	.591	.000	.636	.786

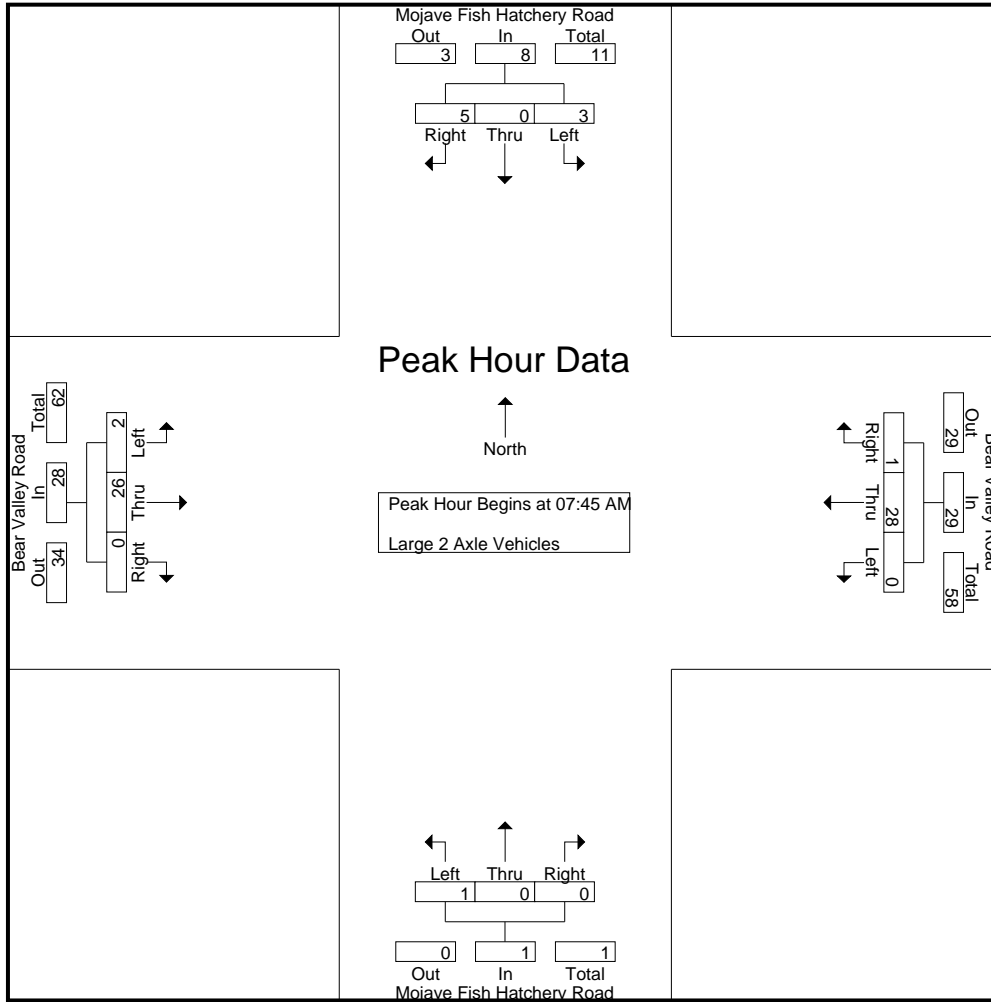
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:45 AM



City of Hesperia  
 N/S: Mojave Fish Hatchery Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 02\_HES\_MFH\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 2



Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:45 AM				07:45 AM			
+0 mins.	0	0	3	3	0	6	0	6	1	0	0	1	0	3	0	3
+15 mins.	1	0	0	1	0	4	1	5	0	0	0	0	2	5	0	7
+30 mins.	0	0	1	1	0	9	0	9	0	0	0	0	0	11	0	11
+45 mins.	2	0	1	3	0	9	0	9	0	0	0	0	0	7	0	7
Total Volume	3	0	5	8	0	28	1	29	1	0	0	1	2	26	0	28
% App. Total	37.5	0	62.5		0	96.6	3.4		100	0	0		7.1	92.9	0	
PHF	.375	.000	.417	.667	.000	.778	.250	.806	.250	.000	.000	.250	.250	.591	.000	.636

City of Hesperia  
 N/S: Mojave Fish Hatchery Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 02\_HES\_MFH\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
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Groups Printed- 3 Axle Vehicles

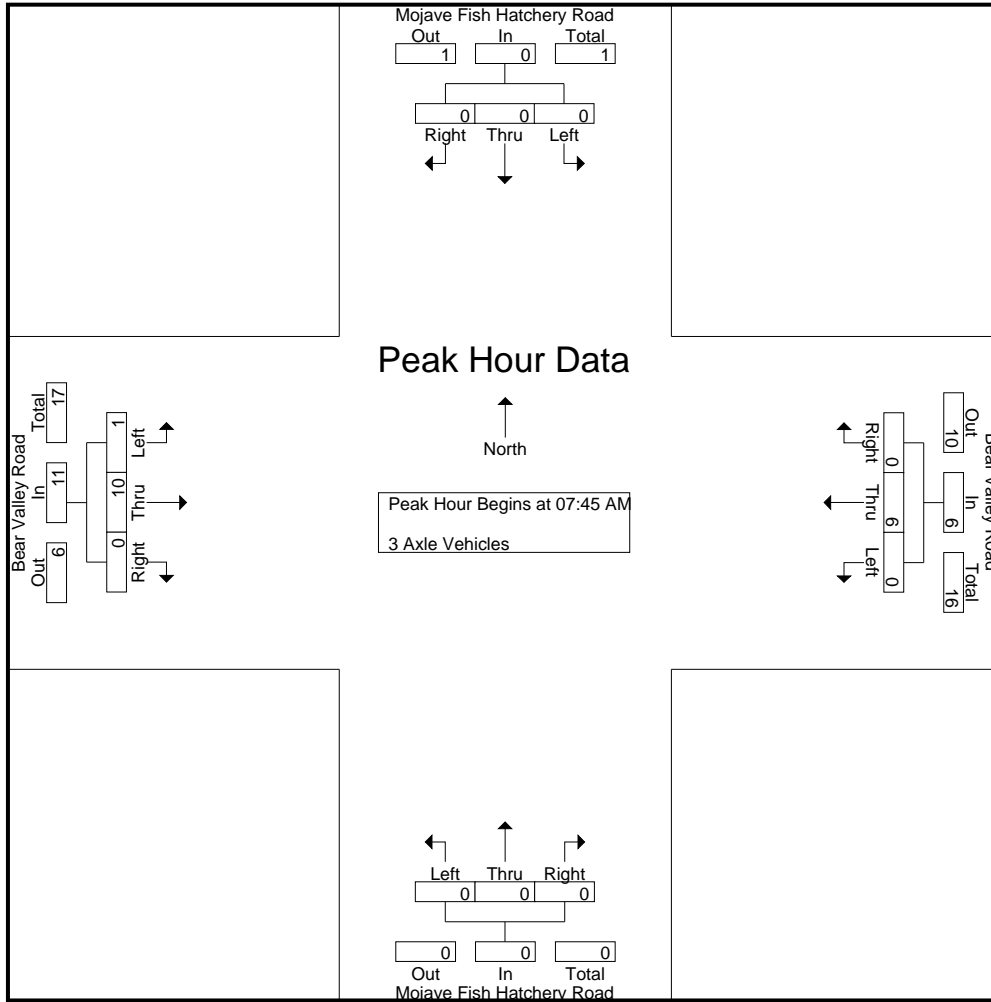
Start Time	Mojave Fish Hatchery Road Southbound				Bear Valley Road Westbound				Mojave Fish Hatchery Road Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	4	0	4	5
07:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3	4
07:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3	4
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
Total	0	0	0	0	0	3	0	3	0	0	0	0	0	12	0	12	15
08:00 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	3	0	3	6
08:15 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
08:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	1	4	0	5	6
08:45 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
Total	0	0	0	0	0	8	0	8	0	0	0	0	1	9	0	10	18
Grand Total	0	0	0	0	0	11	0	11	0	0	0	0	1	21	0	22	33
Apprch %	0	0	0		0	100	0		0	0	0		4.5	95.5	0		
Total %	0	0	0		0	33.3	0	33.3	0	0	0		3	63.6	0	66.7	

Start Time	Mojave Fish Hatchery Road Southbound				Bear Valley Road Westbound				Mojave Fish Hatchery Road Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
08:00 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	3	0	3	6
08:15 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
08:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	1	4	0	5	6
Total Volume	0	0	0	0	0	6	0	6	0	0	0	0	1	10	0	11	17
% App. Total	0	0	0		0	100	0		0	0	0		9.1	90.9	0		
PHF	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000	.250	.625	.000	.550	.708

Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 07:45 AM

City of Hesperia  
 N/S: Mojave Fish Hatchery Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 02\_HES\_MFH\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
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Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:45 AM				07:45 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
+15 mins.	0	0	0	0	0	3	0	3	0	0	0	0	0	3	0	3
+30 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1
+45 mins.	0	0	0	0	0	1	0	1	0	0	0	0	1	4	0	5
Total Volume	0	0	0	0	0	6	0	6	0	0	0	0	1	10	0	11
% App. Total	0	0	0	0	0	100	0	0	0	0	0	0	9.1	90.9	0	0
PHF	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000	.250	.625	.000	.550

City of Hesperia  
 N/S: Mojave Fish Hatchery Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 02\_HES\_MFH\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
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Groups Printed- 4+ Axle Trucks

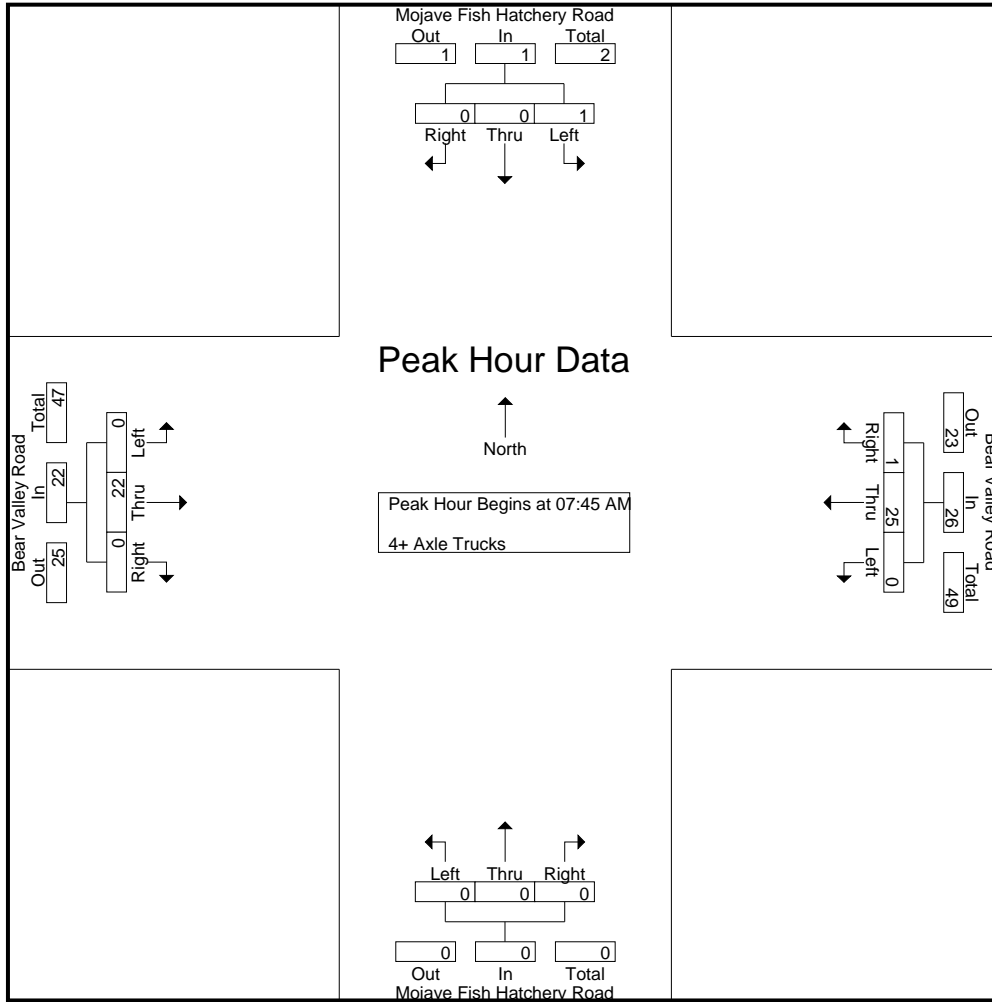
Start Time	Mojave Fish Hatchery Road Southbound				Bear Valley Road Westbound				Mojave Fish Hatchery Road Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	7	0	7	0	0	0	0	0	14	0	14	21
07:15 AM	0	0	0	0	0	6	1	7	0	0	0	0	0	2	0	2	9
07:30 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	6	0	6	9
07:45 AM	1	0	0	1	0	3	0	3	0	0	0	0	0	1	0	1	5
Total	1	0	0	1	0	19	1	20	0	0	0	0	0	23	0	23	44
08:00 AM	0	0	0	0	0	11	0	11	0	0	0	0	0	6	0	6	17
08:15 AM	0	0	0	0	0	8	0	8	0	0	0	0	0	10	0	10	18
08:30 AM	0	0	0	0	0	3	1	4	0	0	0	0	0	5	0	5	9
08:45 AM	1	0	0	1	0	5	0	5	0	0	0	0	0	8	0	8	14
Total	1	0	0	1	0	27	1	28	0	0	0	0	0	29	0	29	58
Grand Total	2	0	0	2	0	46	2	48	0	0	0	0	0	52	0	52	102
Apprch %	100	0	0		0	95.8	4.2		0	0	0		0	100	0		
Total %	2	0	0	2	0	45.1	2	47.1	0	0	0	0	0	51	0	51	

Start Time	Mojave Fish Hatchery Road Southbound				Bear Valley Road Westbound				Mojave Fish Hatchery Road Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:45 AM	1	0	0	1	0	3	0	3	0	0	0	0	0	1	0	1	5
08:00 AM	0	0	0	0	0	11	0	11	0	0	0	0	0	6	0	6	17
08:15 AM	0	0	0	0	0	8	0	8	0	0	0	0	0	10	0	10	18
08:30 AM	0	0	0	0	0	3	1	4	0	0	0	0	0	5	0	5	9
Total Volume	1	0	0	1	0	25	1	26	0	0	0	0	0	22	0	22	49
% App. Total	100	0	0		0	96.2	3.8		0	0	0		0	100	0		
PHF	.250	.000	.000	.250	.000	.568	.250	.591	.000	.000	.000	.000	.000	.550	.000	.550	.681

Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 07:45 AM

City of Hesperia  
 N/S: Mojave Fish Hatchery Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 02\_HES\_MFH\_BV AM  
 Site Code : 221022  
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Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:45 AM				07:45 AM			
+0 mins.	1	0	0	1	0	3	0	3	0	0	0	0	0	1	0	1
+15 mins.	0	0	0	0	0	11	0	11	0	0	0	0	0	6	0	6
+30 mins.	0	0	0	0	0	8	0	8	0	0	0	0	0	10	0	10
+45 mins.	0	0	0	0	0	3	1	4	0	0	0	0	0	5	0	5
Total Volume	1	0	0	1	0	25	1	26	0	0	0	0	0	22	0	22
% App. Total	100	0	0	0	0	96.2	3.8	0	0	0	0	0	0	100	0	0
PHF	.250	.000	.000	.250	.000	.568	.250	.591	.000	.000	.000	.000	.000	.550	.000	.550

City of Hesperia  
 N/S: Mojave Fish Hatchery Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 02\_HES\_MFH\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

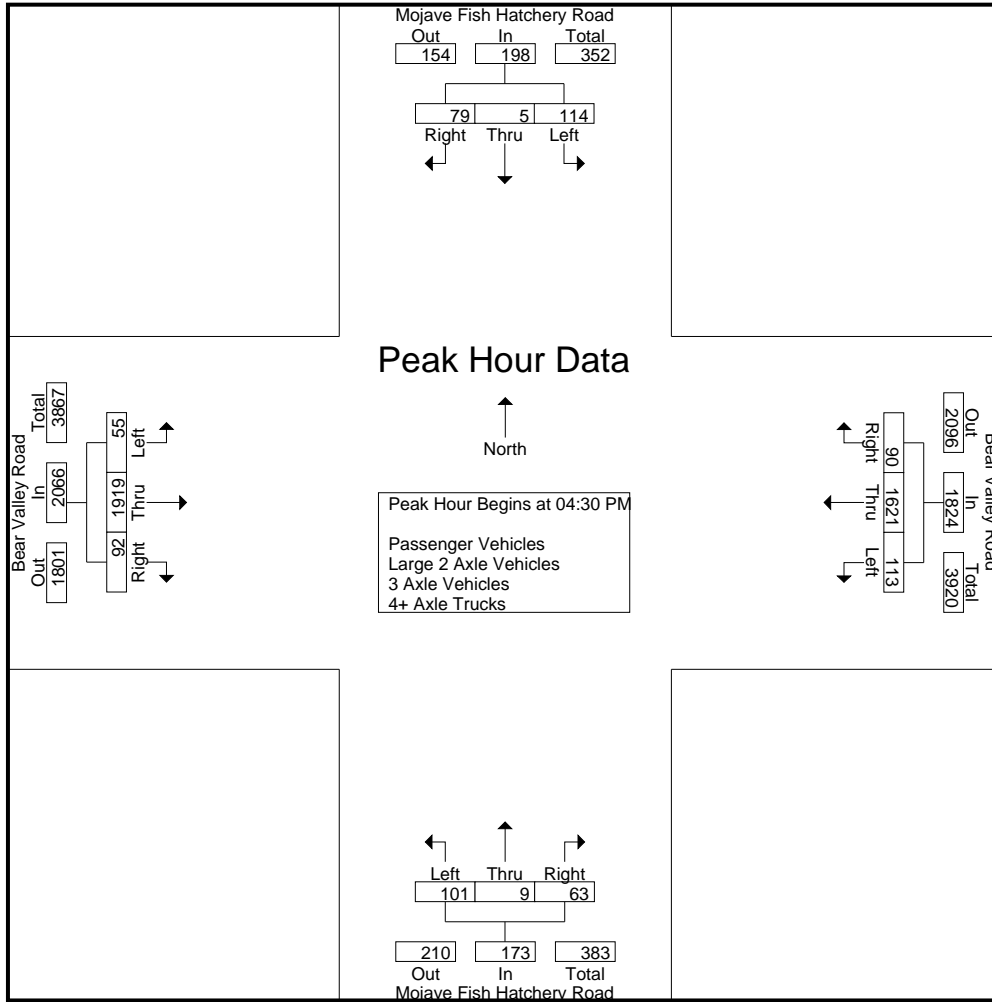
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Mojave Fish Hatchery Road Southbound				Bear Valley Road Westbound				Mojave Fish Hatchery Road Northbound				Bear Valley 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	22	3	22	47	23	388	11	422	32	0	24	56	9	490	28	527	1052
04:15 PM	9	2	11	22	25	400	9	434	27	1	26	54	10	471	38	519	1029
04:30 PM	32	2	18	52	29	426	19	474	23	3	17	43	12	478	22	512	1081
04:45 PM	14	0	10	24	29	410	22	461	36	3	19	58	12	496	19	527	1070
<b>Total</b>	<b>77</b>	<b>7</b>	<b>61</b>	<b>145</b>	<b>106</b>	<b>1624</b>	<b>61</b>	<b>1791</b>	<b>118</b>	<b>7</b>	<b>86</b>	<b>211</b>	<b>43</b>	<b>1935</b>	<b>107</b>	<b>2085</b>	<b>4232</b>
05:00 PM	38	2	26	66	26	395	20	441	21	1	14	36	5	499	25	529	1072
05:15 PM	30	1	25	56	29	390	29	448	21	2	13	36	26	446	26	498	1038
05:30 PM	10	2	33	45	22	393	14	429	18	4	22	44	17	445	23	485	1003
05:45 PM	8	2	11	21	20	338	20	378	22	2	16	40	20	457	22	499	938
<b>Total</b>	<b>86</b>	<b>7</b>	<b>95</b>	<b>188</b>	<b>97</b>	<b>1516</b>	<b>83</b>	<b>1696</b>	<b>82</b>	<b>9</b>	<b>65</b>	<b>156</b>	<b>68</b>	<b>1847</b>	<b>96</b>	<b>2011</b>	<b>4051</b>
<b>Grand Total</b>	<b>163</b>	<b>14</b>	<b>156</b>	<b>333</b>	<b>203</b>	<b>3140</b>	<b>144</b>	<b>3487</b>	<b>200</b>	<b>16</b>	<b>151</b>	<b>367</b>	<b>111</b>	<b>3782</b>	<b>203</b>	<b>4096</b>	<b>8283</b>
Apprch %	48.9	4.2	46.8		5.8	90	4.1		54.5	4.4	41.1		2.7	92.3	5		
Total %	2	0.2	1.9	4	2.5	37.9	1.7	42.1	2.4	0.2	1.8	4.4	1.3	45.7	2.5	49.5	
Passenger Vehicles	159	14	146	319	200	3077	144	3421	200	16	150	366	110	3727	201	4038	8144
% Passenger Vehicles	97.5	100	93.6	95.8	98.5	98	100	98.1	100	100	99.3	99.7	99.1	98.5	99	98.6	98.3
Large 2 Axle Vehicles	4	0	9	13	3	37	0	40	0	0	1	1	0	32	1	33	87
% Large 2 Axle Vehicles	2.5	0	5.8	3.9	1.5	1.2	0	1.1	0	0	0.7	0.3	0	0.8	0.5	0.8	1.1
3 Axle Vehicles	0	0	0	0	0	3	0	3	0	0	0	0	0	3	1	4	7
% 3 Axle Vehicles	0	0	0	0	0	0.1	0	0.1	0	0	0	0	0	0.1	0.5	0.1	0.1
4+ Axle Trucks	0	0	1	1	0	23	0	23	0	0	0	0	1	20	0	21	45
% 4+ Axle Trucks	0	0	0.6	0.3	0	0.7	0	0.7	0	0	0	0	0.9	0.5	0	0.5	0.5

Start Time	Mojave Fish Hatchery Road Southbound				Bear Valley Road Westbound				Mojave Fish Hatchery Road Northbound				Bear Valley 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	32	<b>2</b>	18	52	<b>29</b>	<b>426</b>	19	<b>474</b>	23	<b>3</b>	17	43	12	478	22	512	<b>1081</b>
04:45 PM	14	0	10	24	29	410	22	461	<b>36</b>	3	<b>19</b>	<b>58</b>	12	496	19	527	1070
05:00 PM	<b>38</b>	2	<b>26</b>	<b>66</b>	26	395	20	441	21	1	14	36	5	<b>499</b>	25	<b>529</b>	1072
05:15 PM	30	1	25	56	29	390	<b>29</b>	448	21	2	13	36	<b>26</b>	446	<b>26</b>	498	1038
Total Volume	114	5	79	198	113	1621	90	1824	101	9	63	173	55	1919	92	2066	4261
% App. Total	57.6	2.5	39.9		6.2	88.9	4.9		58.4	5.2	36.4		2.7	92.9	4.5		
PHF	.750	.625	.760	.750	.974	.951	.776	.962	.701	.750	.829	.746	.529	.961	.885	.976	.985

City of Hesperia  
 N/S: Mojave Fish Hatchery Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 02\_HES\_MFH\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
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Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:00 PM				04:15 PM			
+0 mins.	32	2	18	52	<b>29</b>	<b>426</b>	19	<b>474</b>	32	0	24	56	10	471	<b>38</b>	519
+15 mins.	14	0	10	24	29	410	22	461	27	1	<b>26</b>	54	<b>12</b>	478	22	512
+30 mins.	<b>38</b>	2	<b>26</b>	<b>66</b>	26	395	20	441	23	<b>3</b>	17	43	12	496	19	527
+45 mins.	30	1	25	56	29	390	<b>29</b>	448	<b>36</b>	3	19	<b>58</b>	5	<b>499</b>	25	<b>529</b>
Total Volume	114	5	79	198	113	1621	90	1824	118	7	86	211	39	1944	104	2087
% App. Total	57.6	2.5	39.9		6.2	88.9	4.9		55.9	3.3	40.8		1.9	93.1	5	
PHF	.750	.625	.760	.750	.974	.951	.776	.962	.819	.583	.827	.909	.813	.974	.684	.986

City of Hesperia  
 N/S: Mojave Fish Hatchery Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 02\_HES\_MFH\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- Passenger Vehicles

Start Time	Mojave Fish Hatchery Road Southbound				Bear Valley Road Westbound				Mojave Fish Hatchery Road Northbound				Bear Valley 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	22	3	19	44	23	377	11	411	32	0	24	56	8	481	28	517	1028
04:15 PM	9	2	10	21	25	388	9	422	27	1	26	54	10	465	37	512	1009
04:30 PM	30	2	16	48	29	412	19	460	23	3	16	42	12	467	21	500	1050
04:45 PM	14	0	9	23	28	405	22	455	36	3	19	58	12	488	19	519	1055
Total	75	7	54	136	105	1582	61	1748	118	7	85	210	42	1901	105	2048	4142
05:00 PM	38	2	26	66	26	388	20	434	21	1	14	36	5	491	25	521	1057
05:15 PM	30	1	24	55	27	381	29	437	21	2	13	36	26	441	26	493	1021
05:30 PM	8	2	32	42	22	390	14	426	18	4	22	44	17	443	23	483	995
05:45 PM	8	2	10	20	20	336	20	376	22	2	16	40	20	451	22	493	929
Total	84	7	92	183	95	1495	83	1673	82	9	65	156	68	1826	96	1990	4002
Grand Total	159	14	146	319	200	3077	144	3421	200	16	150	366	110	3727	201	4038	8144
Apprch %	49.8	4.4	45.8		5.8	89.9	4.2		54.6	4.4	41		2.7	92.3	5		
Total %	2	0.2	1.8	3.9	2.5	37.8	1.8	42	2.5	0.2	1.8	4.5	1.4	45.8	2.5	49.6	

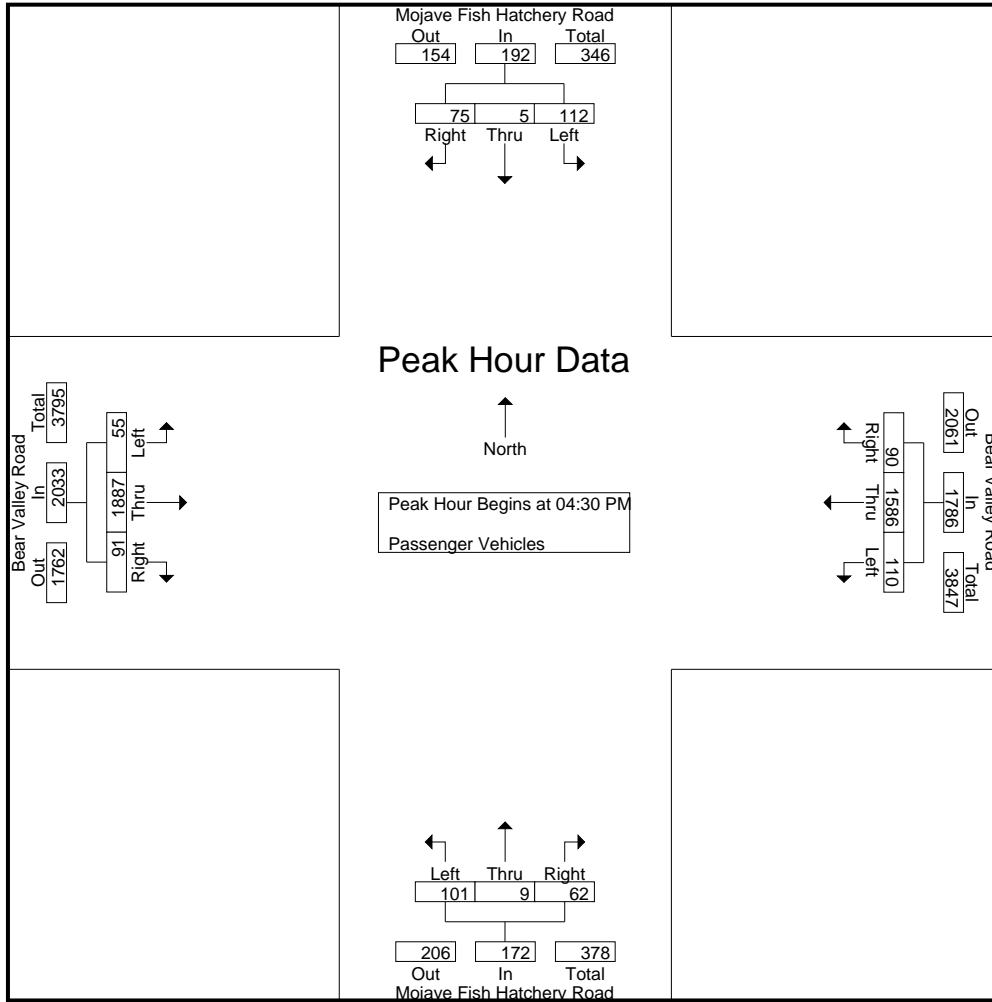
Start Time	Mojave Fish Hatchery Road Southbound				Bear Valley Road Westbound				Mojave Fish Hatchery Road Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:30 PM	30	<b>2</b>	16	48	<b>29</b>	<b>412</b>	19	<b>460</b>	23	<b>3</b>	16	42	12	467	21	500	1050
04:45 PM	14	0	9	23	28	405	22	455	<b>36</b>	3	<b>19</b>	<b>58</b>	12	488	19	519	1055
05:00 PM	<b>38</b>	2	<b>26</b>	<b>66</b>	26	388	20	434	21	1	14	36	5	<b>491</b>	25	<b>521</b>	<b>1057</b>
05:15 PM	30	1	24	55	27	381	<b>29</b>	437	21	2	13	36	<b>26</b>	441	<b>26</b>	493	1021
Total Volume	112	5	75	192	110	1586	90	1786	101	9	62	172	55	1887	91	2033	4183
% App. Total	58.3	2.6	39.1		6.2	88.8	5		58.7	5.2	36		2.7	92.8	4.5		
PHF	.737	.625	.721	.727	.948	.962	.776	.971	.701	.750	.816	.741	.529	.961	.875	.976	.989

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



City of Hesperia  
 N/S: Mojave Fish Hatchery Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 02\_HES\_MFH\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 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.	30	2	16	48	<b>29</b>	<b>412</b>	19	<b>460</b>	23	3	16	42	12	467	21	500
+15 mins.	14	0	9	23	28	405	22	455	<b>36</b>	3	<b>19</b>	<b>58</b>	12	488	19	519
+30 mins.	<b>38</b>	2	<b>26</b>	<b>66</b>	26	388	20	434	21	1	14	36	5	<b>491</b>	25	<b>521</b>
+45 mins.	30	1	24	55	27	381	<b>29</b>	437	21	2	13	36	<b>26</b>	441	<b>26</b>	493
Total Volume	112	5	75	192	110	1586	90	1786	101	9	62	172	55	1887	91	2033
% App. Total	58.3	2.6	39.1		6.2	88.8	5		58.7	5.2	36		2.7	92.8	4.5	
PHF	.737	.625	.721	.727	.948	.962	.776	.971	.701	.750	.816	.741	.529	.961	.875	.976

City of Hesperia  
 N/S: Mojave Fish Hatchery Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 02\_HES\_MFH\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

Start Time	Mojave Fish Hatchery Road Southbound				Bear Valley Road Westbound				Mojave Fish Hatchery Road Northbound				Bear Valley 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	3	3	0	5	0	5	0	0	0	0	0	6	0	6	14
04:15 PM	0	0	0	0	0	8	0	8	0	0	0	0	0	4	1	5	13
04:30 PM	2	0	2	4	0	7	0	7	0	0	1	1	0	7	0	7	19
04:45 PM	0	0	1	1	1	2	0	3	0	0	0	0	0	2	0	2	6
<b>Total</b>	<b>2</b>	<b>0</b>	<b>6</b>	<b>8</b>	<b>1</b>	<b>22</b>	<b>0</b>	<b>23</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>19</b>	<b>1</b>	<b>20</b>	<b>52</b>
05:00 PM	0	0	0	0	0	5	0	5	0	0	0	0	0	6	0	6	11
05:15 PM	0	0	1	1	2	8	0	10	0	0	0	0	0	1	0	1	12
05:30 PM	2	0	1	3	0	1	0	1	0	0	0	0	0	1	0	1	5
05:45 PM	0	0	1	1	0	1	0	1	0	0	0	0	0	5	0	5	7
<b>Total</b>	<b>2</b>	<b>0</b>	<b>3</b>	<b>5</b>	<b>2</b>	<b>15</b>	<b>0</b>	<b>17</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>13</b>	<b>0</b>	<b>13</b>	<b>35</b>
<b>Grand Total</b>	<b>4</b>	<b>0</b>	<b>9</b>	<b>13</b>	<b>3</b>	<b>37</b>	<b>0</b>	<b>40</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>32</b>	<b>1</b>	<b>33</b>	<b>87</b>
Apprch %	30.8	0	69.2		7.5	92.5	0		0	0	100		0	97	3		
Total %	4.6	0	10.3	14.9	3.4	42.5	0	46	0	0	1.1	1.1	0	36.8	1.1	37.9	

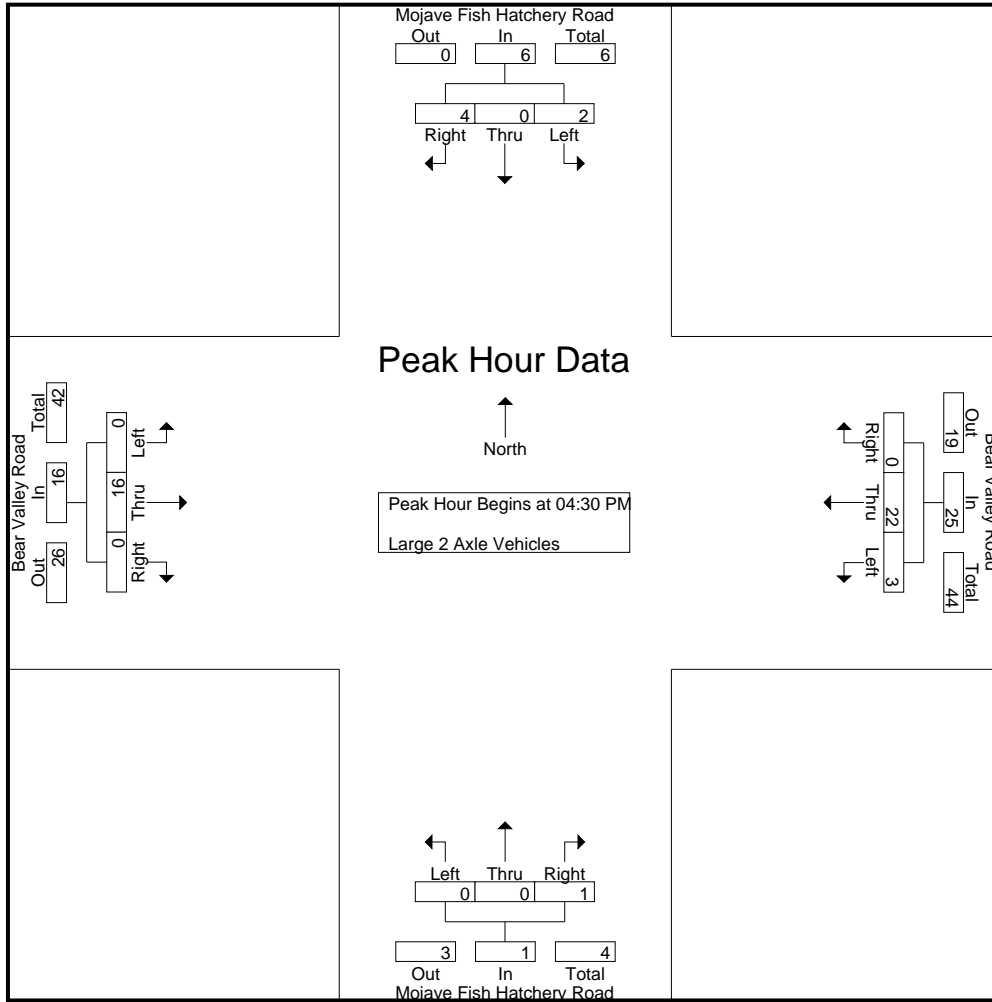
Start Time	Mojave Fish Hatchery Road Southbound				Bear Valley Road Westbound				Mojave Fish Hatchery Road Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:30 PM	2	0	2	4	0	7	0	7	0	0	1	1	0	7	0	7	19
04:45 PM	0	0	1	1	1	2	0	3	0	0	0	0	0	2	0	2	6
05:00 PM	0	0	0	0	0	5	0	5	0	0	0	0	0	6	0	6	11
05:15 PM	0	0	1	1	2	8	0	10	0	0	0	0	0	1	0	1	12
<b>Total Volume</b>	<b>2</b>	<b>0</b>	<b>4</b>	<b>6</b>	<b>3</b>	<b>22</b>	<b>0</b>	<b>25</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>16</b>	<b>0</b>	<b>16</b>	<b>48</b>
% App. Total	33.3	0	66.7		12	88	0		0	0	100		0	100	0		
PHF	.250	.000	.500	.375	.375	.688	.000	.625	.000	.000	.250	.250	.000	.571	.000	.571	.632

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

City of Hesperia  
 N/S: Mojave Fish Hatchery Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 02\_HES\_MFH\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 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.	2	0	2	4	0	7	0	7	0	0	1	1	0	7	0	7
+15 mins.	0	0	1	1	1	2	0	3	0	0	0	0	0	2	0	2
+30 mins.	0	0	0	0	0	5	0	5	0	0	0	0	0	6	0	6
+45 mins.	0	0	1	1	2	8	0	10	0	0	0	0	0	1	0	1
Total Volume	2	0	4	6	3	22	0	25	0	0	1	1	0	16	0	16
% App. Total	33.3	0	66.7		12	88	0		0	0	100		0	100	0	
PHF	.250	.000	.500	.375	.375	.688	.000	.625	.000	.000	.250	.250	.000	.571	.000	.571

City of Hesperia  
 N/S: Mojave Fish Hatchery Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 02\_HES\_MFH\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- 3 Axle Vehicles

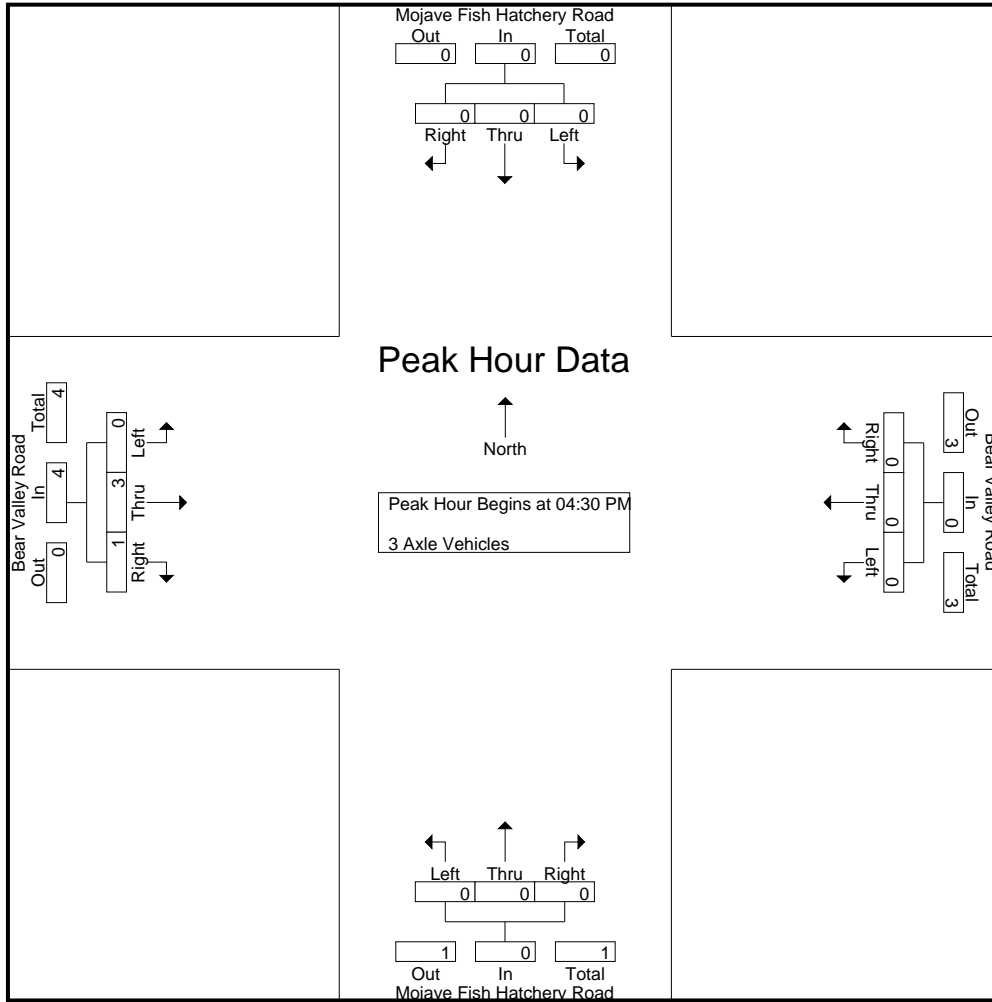
Start Time	Mojave Fish Hatchery Road Southbound				Bear Valley Road Westbound				Mojave Fish Hatchery Road Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
04:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	2
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>3</b>	<b>6</b>
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	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
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>1</b>
<b>Grand Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>1</b>	<b>4</b>	<b>7</b>
Apprch %	0	0	0		0	100	0		0	0	0		0	75	25		
Total %	0	0	0		0	42.9	0	42.9	0	0	0		0	42.9	14.3	57.1	

Start Time	Mojave Fish Hatchery Road Southbound				Bear Valley Road Westbound				Mojave Fish Hatchery Road Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	2
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
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
<b>Total Volume</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>1</b>	<b>4</b>	<b>4</b>
% App. Total	0	0	0		0	0	0		0	0	0		0	75	25		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.750	.250	.500	.500

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

City of Hesperia  
 N/S: Mojave Fish Hatchery Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 02\_HES\_MFH\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 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	1	1	2
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
+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	3	1	4
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	0	75	25	4
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.750	.250	.500

City of Hesperia  
 N/S: Mojave Fish Hatchery Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 02\_HES\_MFH\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- 4+ Axle Trucks

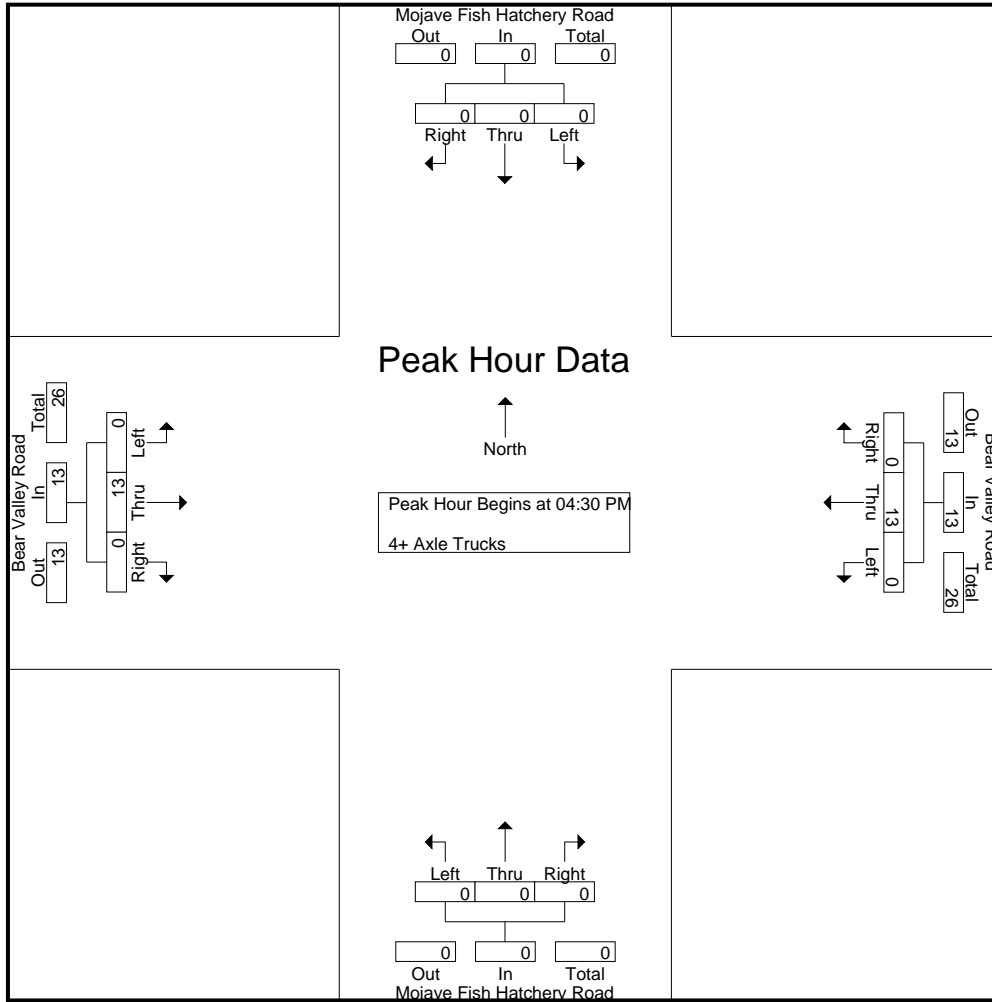
Start Time	Mojave Fish Hatchery Road Southbound				Bear Valley Road Westbound				Mojave Fish Hatchery Road Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	4	0	4	0	0	0	0	1	3	0	4	8
04:15 PM	0	0	1	1	0	3	0	3	0	0	0	0	0	2	0	2	6
04:30 PM	0	0	0	0	0	7	0	7	0	0	0	0	0	3	0	3	10
04:45 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	5	0	5	8
<b>Total</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>17</b>	<b>0</b>	<b>17</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>13</b>	<b>0</b>	<b>14</b>	<b>32</b>
05:00 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
05:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	4	0	4	5
05:30 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
05:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>7</b>	<b>13</b>
<b>Grand Total</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>23</b>	<b>0</b>	<b>23</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>20</b>	<b>0</b>	<b>21</b>	<b>45</b>
Apprch %	0	0	100		0	100	0		0	0	0		4.8	95.2	0		
Total %	0	0	2.2	2.2	0	51.1	0	51.1	0	0	0	0	2.2	44.4	0	46.7	

Start Time	Mojave Fish Hatchery Road Southbound				Bear Valley Road Westbound				Mojave Fish Hatchery Road Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:30 PM	0	0	0	0	0	7	0	7	0	0	0	0	0	3	0	3	10
04:45 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	5	0	5	8
05:00 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
05:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	4	0	4	5
<b>Total Volume</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>13</b>	<b>0</b>	<b>13</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>13</b>	<b>0</b>	<b>13</b>	<b>26</b>
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.464	.000	.464	.000	.000	.000	.000	.000	.650	.000	.650	.650

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

City of Hesperia  
 N/S: Mojave Fish Hatchery Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 02\_HES\_MFH\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 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	<b>7</b>	0	<b>7</b>	0	0	0	0	0	3	0	<b>3</b>
+15 mins.	0	0	0	0	0	3	0	3	0	0	0	0	0	<b>5</b>	0	<b>5</b>
+30 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1
+45 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	4	0	4
Total Volume	0	0	0	0	0	13	0	13	0	0	0	0	0	13	0	13
% App. Total	0	0	0	0	0	100	0	0	0	0	0	0	0	100	0	0
PHF	.000	.000	.000	.000	.000	.464	.000	.464	.000	.000	.000	.000	.000	.650	.000	.650

Location: Hesperia  
 N/S: Mojave Fish Hatchery Rd  
 E/W: Bear Valley Road



Date: 11/17/2022  
 Day: Thursday

**PEDESTRIANS**

	North Leg Mojave Fish Hatchery Rd Pedestrians	East Leg Bear Valley Road Pedestrians	South Leg Mojave Fish Hatchery Rd Pedestrians	West Leg Bear Valley Road Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
<b>TOTAL VOLUMES:</b>	0	0	0	0	0

	North Leg Mojave Fish Hatchery Rd Pedestrians	East Leg Bear Valley Road Pedestrians	South Leg Mojave Fish Hatchery Rd Pedestrians	West Leg Bear Valley Road Pedestrians	
4:00 PM	0	1	0	0	1
4:15 PM	1	3	0	0	4
4:30 PM	4	3	0	0	7
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	1	0	0	1
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
<b>TOTAL VOLUMES:</b>	5	8	0	0	13



Location: Hesperia  
 N/S: Mojave Fish Hatchery Rd  
 E/W: Bear Valley Road



Date: 11/17/2022  
 Day: Thursday

BICYCLES

	Southbound Mojave Fish Hatchery Rd			Westbound Bear Valley Road			Northbound Mojave Fish Hatchery Rd			Eastbound Bear Valley Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

	Southbound Mojave Fish Hatchery Rd			Westbound Bear Valley Road			Northbound Mojave Fish Hatchery Rd			Eastbound Bear Valley Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

City of Apple Valley  
 N/S: Jess Ranch Parkway  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 03\_APV\_Jess\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

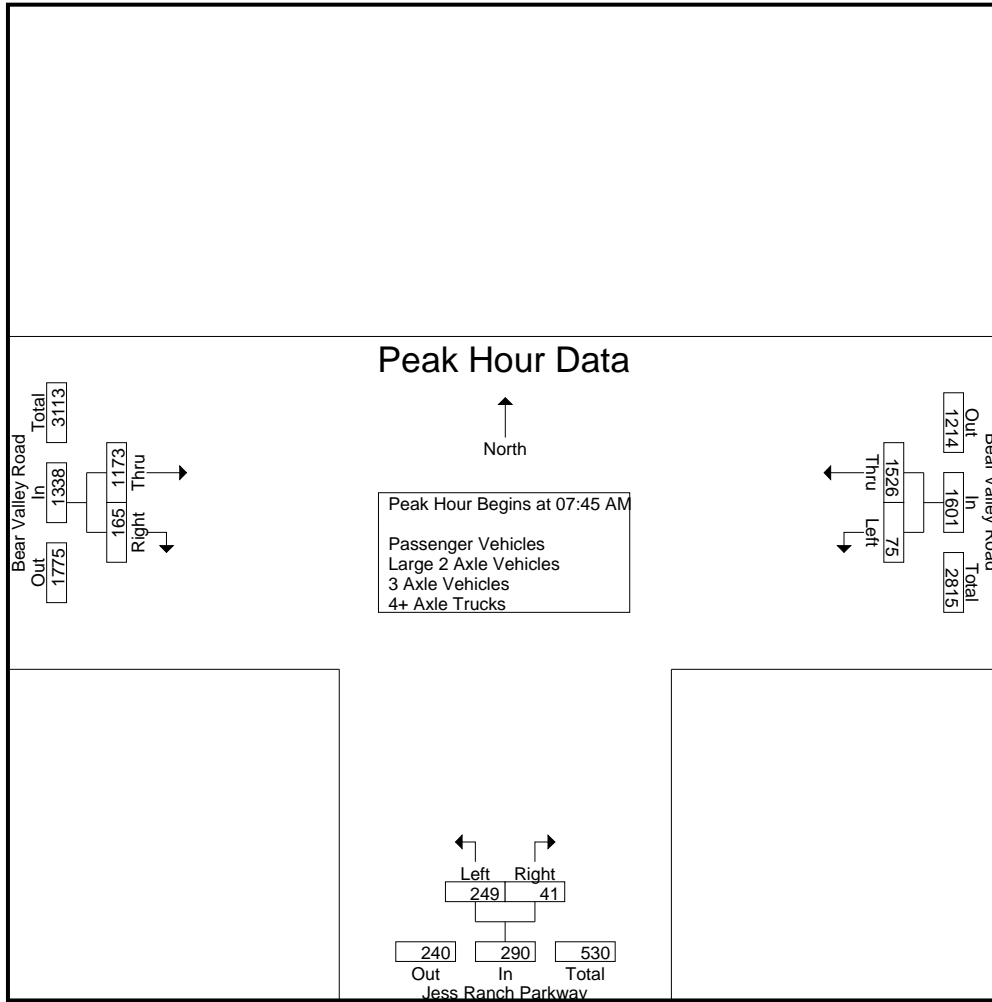
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Bear Valley Road Westbound			Jess Ranch Parkway Northbound			Bear Valley Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	10	281	291	42	11	53	173	15	188	532
07:15 AM	7	293	300	50	4	54	209	14	223	577
07:30 AM	10	367	377	52	6	58	297	31	328	763
07:45 AM	19	445	464	49	5	54	298	34	332	850
Total	46	1386	1432	193	26	219	977	94	1071	2722
08:00 AM	12	381	393	67	13	80	268	56	324	797
08:15 AM	18	376	394	60	12	72	288	42	330	796
08:30 AM	26	324	350	73	11	84	319	33	352	786
08:45 AM	31	347	378	62	15	77	312	58	370	825
Total	87	1428	1515	262	51	313	1187	189	1376	3204
Grand Total	133	2814	2947	455	77	532	2164	283	2447	5926
Apprch %	4.5	95.5		85.5	14.5		88.4	11.6		
Total %	2.2	47.5	49.7	7.7	1.3	9	36.5	4.8	41.3	
Passenger Vehicles	133	2699	2832	446	77	523	2020	274	2294	5649
% Passenger Vehicles	100	95.9	96.1	98	100	98.3	93.3	96.8	93.7	95.3
Large 2 Axle Vehicles	0	60	60	7	0	7	71	8	79	146
% Large 2 Axle Vehicles	0	2.1	2	1.5	0	1.3	3.3	2.8	3.2	2.5
3 Axle Vehicles	0	13	13	0	0	0	17	1	18	31
% 3 Axle Vehicles	0	0.5	0.4	0	0	0	0.8	0.4	0.7	0.5
4+ Axle Trucks	0	42	42	2	0	2	56	0	56	100
% 4+ Axle Trucks	0	1.5	1.4	0.4	0	0.4	2.6	0	2.3	1.7

Start Time	Bear Valley Road Westbound			Jess Ranch Parkway Northbound			Bear Valley Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	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 07:45 AM										
07:45 AM	19	<b>445</b>	<b>464</b>	49	5	54	298	34	332	<b>850</b>
08:00 AM	12	381	393	67	<b>13</b>	80	268	<b>56</b>	324	797
08:15 AM	18	376	394	60	12	72	288	42	330	796
08:30 AM	<b>26</b>	324	350	<b>73</b>	11	<b>84</b>	<b>319</b>	33	<b>352</b>	786
Total Volume	75	1526	1601	249	41	290	1173	165	1338	3229
% App. Total	4.7	95.3		85.9	14.1		87.7	12.3		
PHF	.721	.857	.863	.853	.788	.863	.919	.737	.950	.950

City of Apple Valley  
 N/S: Jess Ranch Parkway  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 03\_APV\_Jess\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
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Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:30 AM			08:00 AM			08:00 AM		
+0 mins.	10	367	377	67	13	80	268	56	324
+15 mins.	19	445	464	60	12	72	288	42	330
+30 mins.	12	381	393	73	11	84	319	33	352
+45 mins.	18	376	394	62	15	77	312	58	370
Total Volume	59	1569	1628	262	51	313	1187	189	1376
% App. Total	3.6	96.4		83.7	16.3		86.3	13.7	
PHF	.776	.881	.877	.897	.850	.932	.930	.815	.930

City of Apple Valley  
 N/S: Jess Ranch Parkway  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 03\_APV\_Jess\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- Passenger Vehicles

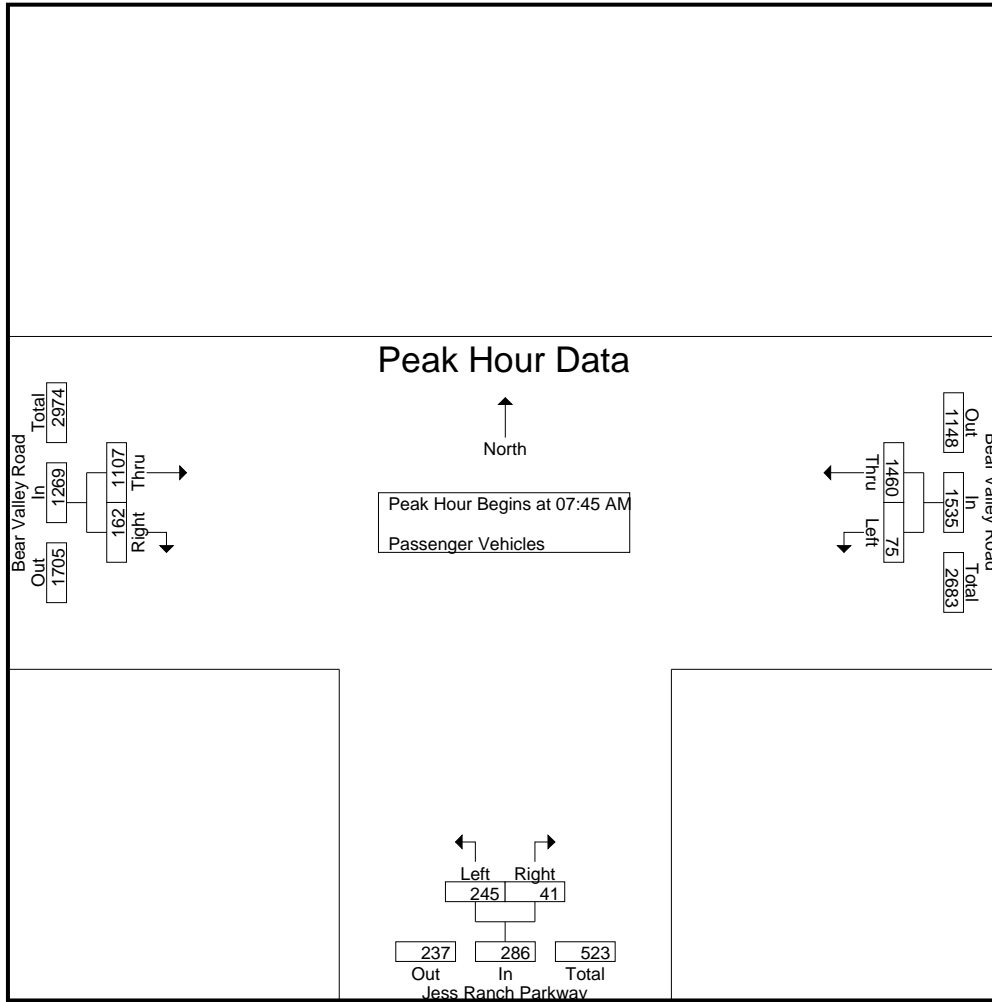
Start Time	Bear Valley Road Westbound			Jess Ranch Parkway Northbound			Bear Valley Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	10	264	274	41	11	52	150	15	165	491
07:15 AM	7	281	288	47	4	51	191	12	203	542
07:30 AM	10	357	367	52	6	58	280	27	307	732
07:45 AM	19	432	451	48	5	53	290	33	323	827
Total	46	1334	1380	188	26	214	911	87	998	2592
08:00 AM	12	362	374	65	13	78	249	55	304	756
08:15 AM	18	360	378	59	12	71	266	42	308	757
08:30 AM	26	306	332	73	11	84	302	32	334	750
08:45 AM	31	337	368	61	15	76	292	58	350	794
Total	87	1365	1452	258	51	309	1109	187	1296	3057
Grand Total	133	2699	2832	446	77	523	2020	274	2294	5649
Apprch %	4.7	95.3		85.3	14.7		88.1	11.9		
Total %	2.4	47.8	50.1	7.9	1.4	9.3	35.8	4.9	40.6	

Start Time	Bear Valley Road Westbound			Jess Ranch Parkway Northbound			Bear Valley Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:45 AM	19	<b>432</b>	<b>451</b>	48	5	53	290	33	323	<b>827</b>
08:00 AM	12	362	374	65	13	78	249	55	304	756
08:15 AM	18	360	378	59	12	71	266	42	308	757
08:30 AM	<b>26</b>	306	332	<b>73</b>	11	<b>84</b>	<b>302</b>	32	<b>334</b>	750
Total Volume	75	1460	1535	245	41	286	1107	162	1269	3090
% App. Total	4.9	95.1		85.7	14.3		87.2	12.8		
PHF	.721	.845	.851	.839	.788	.851	.916	.736	.950	.934

Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 07:45 AM

City of Apple Valley  
 N/S: Jess Ranch Parkway  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 03\_APV\_Jess\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
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Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:45 AM			07:45 AM			07:45 AM		
+0 mins.	19	<b>432</b>	<b>451</b>	48	5	53	290	33	323
+15 mins.	12	362	374	65	<b>13</b>	78	249	<b>55</b>	304
+30 mins.	18	360	378	59	12	71	266	42	308
+45 mins.	<b>26</b>	306	332	<b>73</b>	11	<b>84</b>	<b>302</b>	32	<b>334</b>
Total Volume	75	1460	1535	245	41	286	1107	162	1269
% App. Total	4.9	95.1		85.7	14.3		87.2	12.8	
PHF	.721	.845	.851	.839	.788	.851	.916	.736	.950

City of Apple Valley  
 N/S: Jess Ranch Parkway  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 03\_APV\_Jess\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

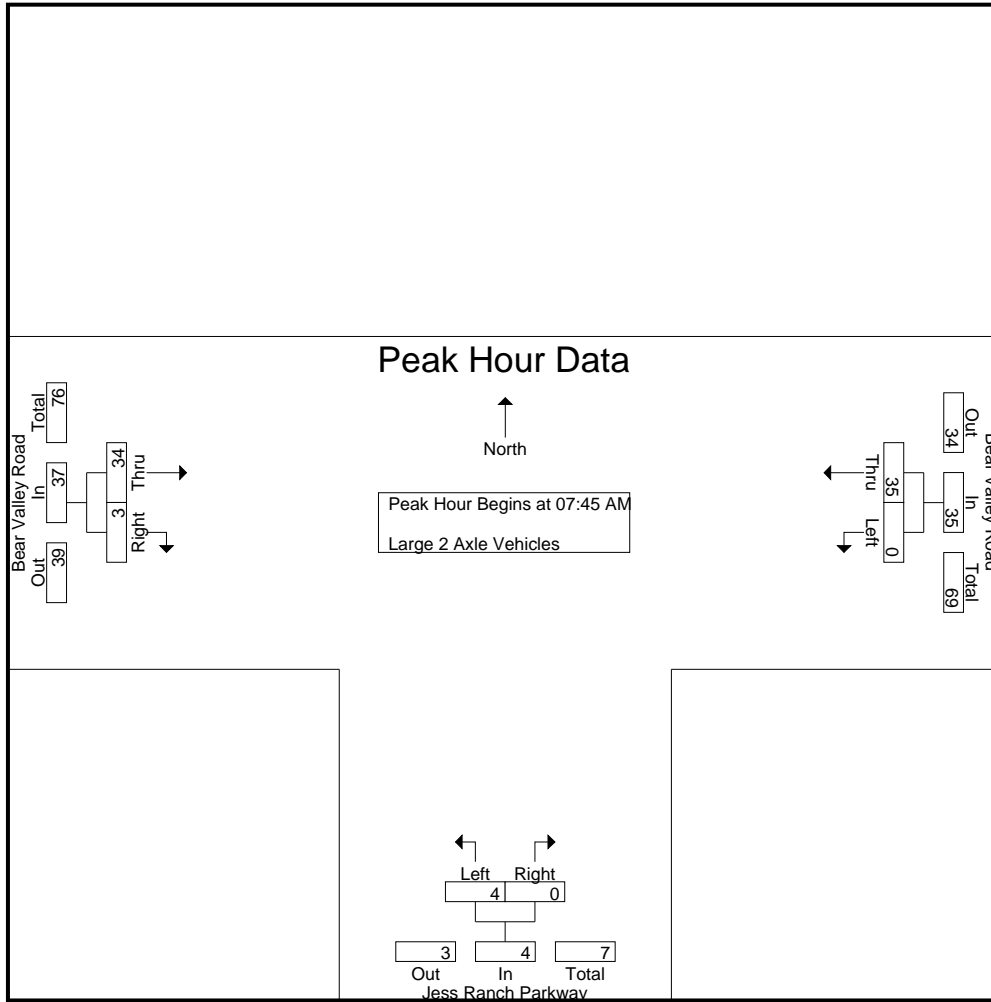
Start Time	Bear Valley Road Westbound			Jess Ranch Parkway Northbound			Bear Valley Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	0	9	9	0	0	0	5	0	5	14
07:15 AM	0	4	4	2	0	2	13	1	14	20
07:30 AM	0	6	6	0	0	0	7	4	11	17
07:45 AM	0	8	8	1	0	1	4	1	5	14
Total	0	27	27	3	0	3	29	6	35	65
08:00 AM	0	7	7	2	0	2	10	1	11	20
08:15 AM	0	8	8	1	0	1	12	0	12	21
08:30 AM	0	12	12	0	0	0	8	1	9	21
08:45 AM	0	6	6	1	0	1	12	0	12	19
Total	0	33	33	4	0	4	42	2	44	81
Grand Total	0	60	60	7	0	7	71	8	79	146
Apprch %	0	100		100	0		89.9	10.1		
Total %	0	41.1	41.1	4.8	0	4.8	48.6	5.5	54.1	

Start Time	Bear Valley Road Westbound			Jess Ranch Parkway Northbound			Bear Valley Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:45 AM	0	8	8	1	0	1	4	1	5	14
08:00 AM	0	7	7	2	0	2	10	1	11	20
08:15 AM	0	8	8	1	0	1	12	0	12	21
08:30 AM	0	12	12	0	0	0	8	1	9	21
Total Volume	0	35	35	4	0	4	34	3	37	76
% App. Total	0	100		100	0		91.9	8.1		
PHF	.000	.729	.729	.500	.000	.500	.708	.750	.771	.905

Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 07:45 AM

City of Apple Valley  
 N/S: Jess Ranch Parkway  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 03\_APV\_Jess\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 2



Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:45 AM			07:45 AM			07:45 AM		
+0 mins.	0	8	8	1	0	1	4	1	5
+15 mins.	0	7	7	2	0	2	10	1	11
+30 mins.	0	8	8	1	0	1	12	0	12
+45 mins.	0	12	12	0	0	0	8	1	9
Total Volume	0	35	35	4	0	4	34	3	37
% App. Total	0	100		100	0		91.9	8.1	
PHF	.000	.729	.729	.500	.000	.500	.708	.750	.771

City of Apple Valley  
 N/S: Jess Ranch Parkway  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 03\_APV\_Jess\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- 3 Axle Vehicles

Start Time	Bear Valley Road Westbound			Jess Ranch Parkway Northbound			Bear Valley Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	0	2	2	0	0	0	3	0	3	5
07:15 AM	0	1	1	0	0	0	1	1	2	3
07:30 AM	0	1	1	0	0	0	3	0	3	4
07:45 AM	0	0	0	0	0	0	2	0	2	2
Total	0	4	4	0	0	0	9	1	10	14
08:00 AM	0	3	3	0	0	0	2	0	2	5
08:15 AM	0	2	2	0	0	0	1	0	1	3
08:30 AM	0	1	1	0	0	0	4	0	4	5
08:45 AM	0	3	3	0	0	0	1	0	1	4
Total	0	9	9	0	0	0	8	0	8	17
Grand Total	0	13	13	0	0	0	17	1	18	31
Apprch %	0	100		0	0		94.4	5.6		
Total %	0	41.9	41.9	0	0	0	54.8	3.2	58.1	

Start Time	Bear Valley Road Westbound			Jess Ranch Parkway Northbound			Bear Valley Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:45 AM	0	0	0	0	0	0	2	0	2	2
08:00 AM	0	3	3	0	0	0	2	0	2	5
08:15 AM	0	2	2	0	0	0	1	0	1	3
08:30 AM	0	1	1	0	0	0	4	0	4	5
Total Volume	0	6	6	0	0	0	9	0	9	15
% App. Total	0	100		0	0		100	0		
PHF	.000	.500	.500	.000	.000	.000	.563	.000	.563	.750

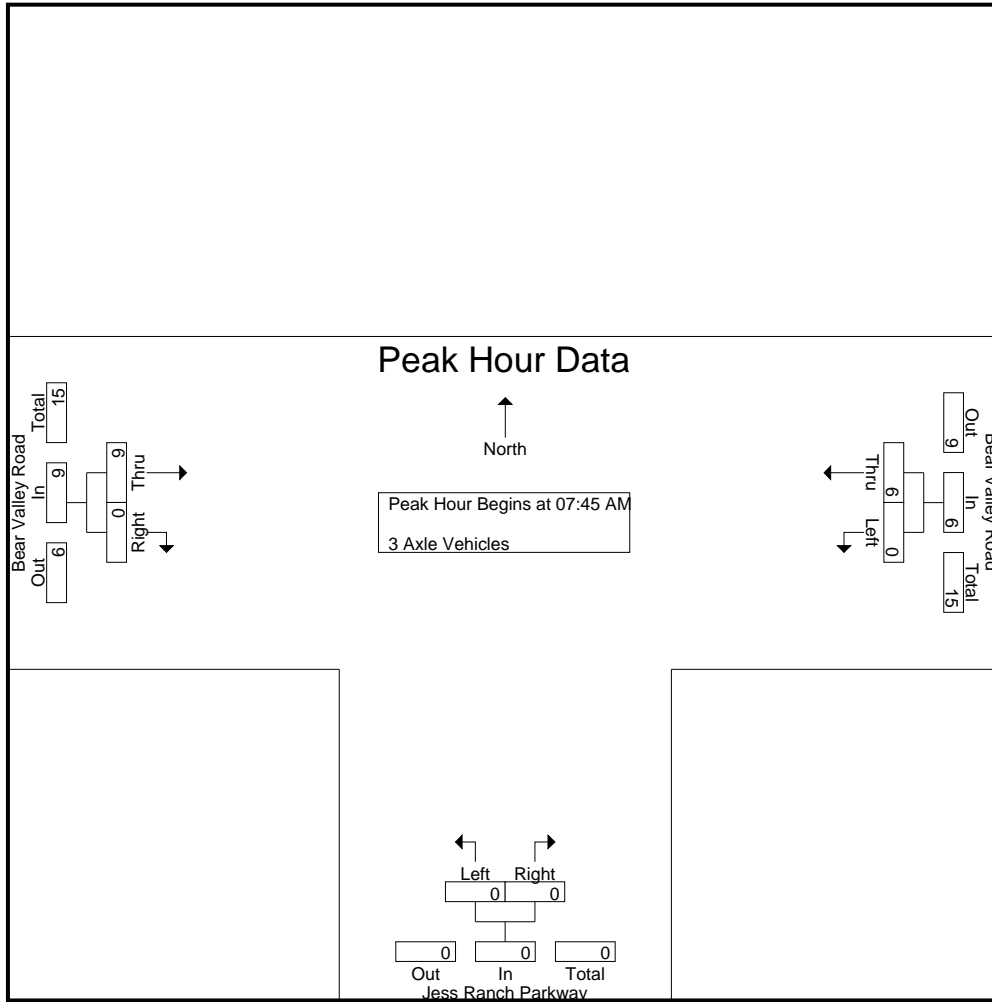
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:45 AM



City of Apple Valley  
 N/S: Jess Ranch Parkway  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 03\_APV\_Jess\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
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Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:45 AM			07:45 AM			07:45 AM		
+0 mins.	0	0	0	0	0	0	2	0	2
+15 mins.	0	3	3	0	0	0	2	0	2
+30 mins.	0	2	2	0	0	0	1	0	1
+45 mins.	0	1	1	0	0	0	4	0	4
Total Volume	0	6	6	0	0	0	9	0	9
% App. Total	0	100		0	0		100	0	
PHF	.000	.500	.500	.000	.000	.000	.563	.000	.563

City of Apple Valley  
 N/S: Jess Ranch Parkway  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 03\_APV\_Jess\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- 4+ Axle Trucks

Start Time	Bear Valley Road Westbound			Jess Ranch Parkway Northbound			Bear Valley Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	0	6	6	1	0	1	15	0	15	22
07:15 AM	0	7	7	1	0	1	4	0	4	12
07:30 AM	0	3	3	0	0	0	7	0	7	10
07:45 AM	0	5	5	0	0	0	2	0	2	7
Total	0	21	21	2	0	2	28	0	28	51
08:00 AM	0	9	9	0	0	0	7	0	7	16
08:15 AM	0	6	6	0	0	0	9	0	9	15
08:30 AM	0	5	5	0	0	0	5	0	5	10
08:45 AM	0	1	1	0	0	0	7	0	7	8
Total	0	21	21	0	0	0	28	0	28	49
Grand Total	0	42	42	2	0	2	56	0	56	100
Apprch %	0	100		100	0		100	0		
Total %	0	42	42	2	0	2	56	0	56	

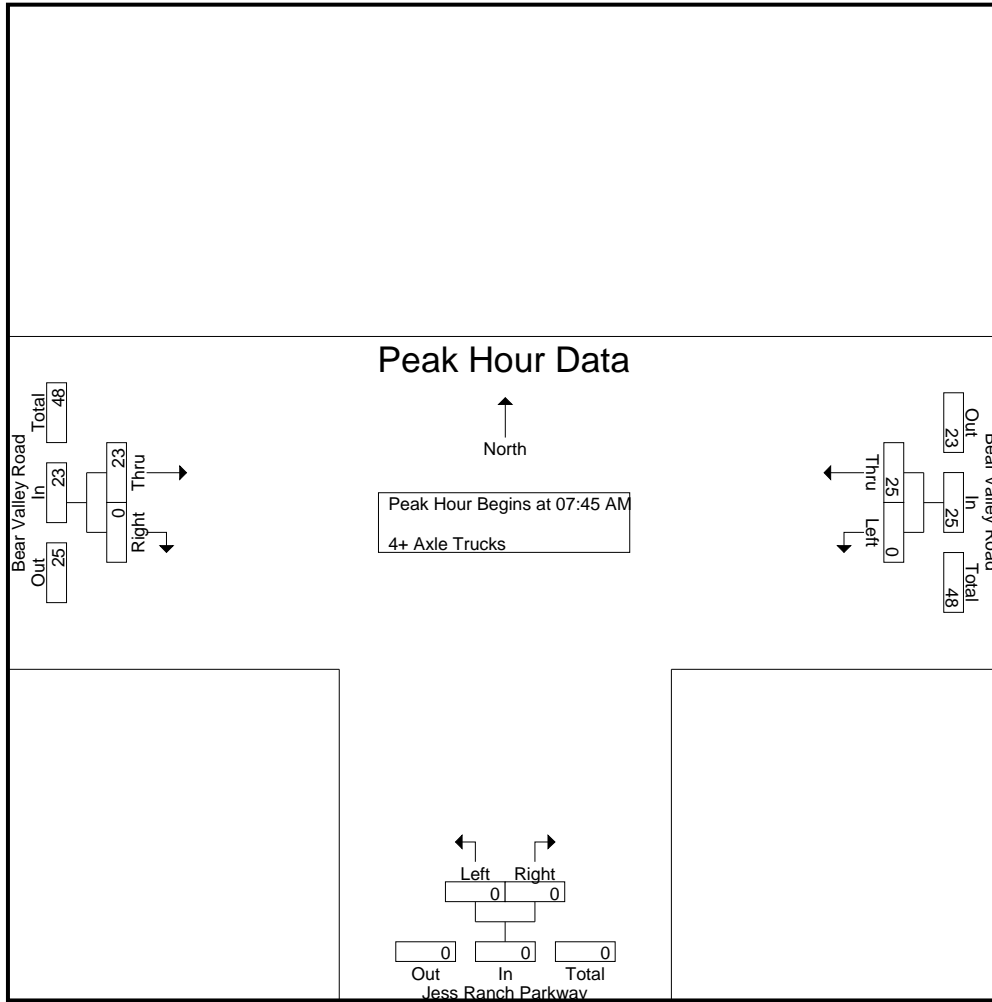
Start Time	Bear Valley Road Westbound			Jess Ranch Parkway Northbound			Bear Valley Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:45 AM	0	5	5	0	0	0	2	0	2	7
08:00 AM	0	9	9	0	0	0	7	0	7	16
08:15 AM	0	6	6	0	0	0	9	0	9	15
08:30 AM	0	5	5	0	0	0	5	0	5	10
Total Volume	0	25	25	0	0	0	23	0	23	48
% App. Total	0	100		0	0		100	0		
PHF	.000	.694	.694	.000	.000	.000	.639	.000	.639	.750

Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:45 AM

City of Apple Valley  
 N/S: Jess Ranch Parkway  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 03\_APV\_Jess\_BV AM  
 Site Code : 221022  
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Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:45 AM			07:45 AM			07:45 AM		
+0 mins.	0	5	5	0	0	0	2	0	2
+15 mins.	0	9	9	0	0	0	7	0	7
+30 mins.	0	6	6	0	0	0	9	0	9
+45 mins.	0	5	5	0	0	0	5	0	5
Total Volume	0	25	25	0	0	0	23	0	23
% App. Total	0	100		0	0		100	0	
PHF	.000	.694	.694	.000	.000	.000	.639	.000	.639

City of Apple Valley  
 N/S: Jess Ranch Parkway  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 03\_APV\_Jess\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

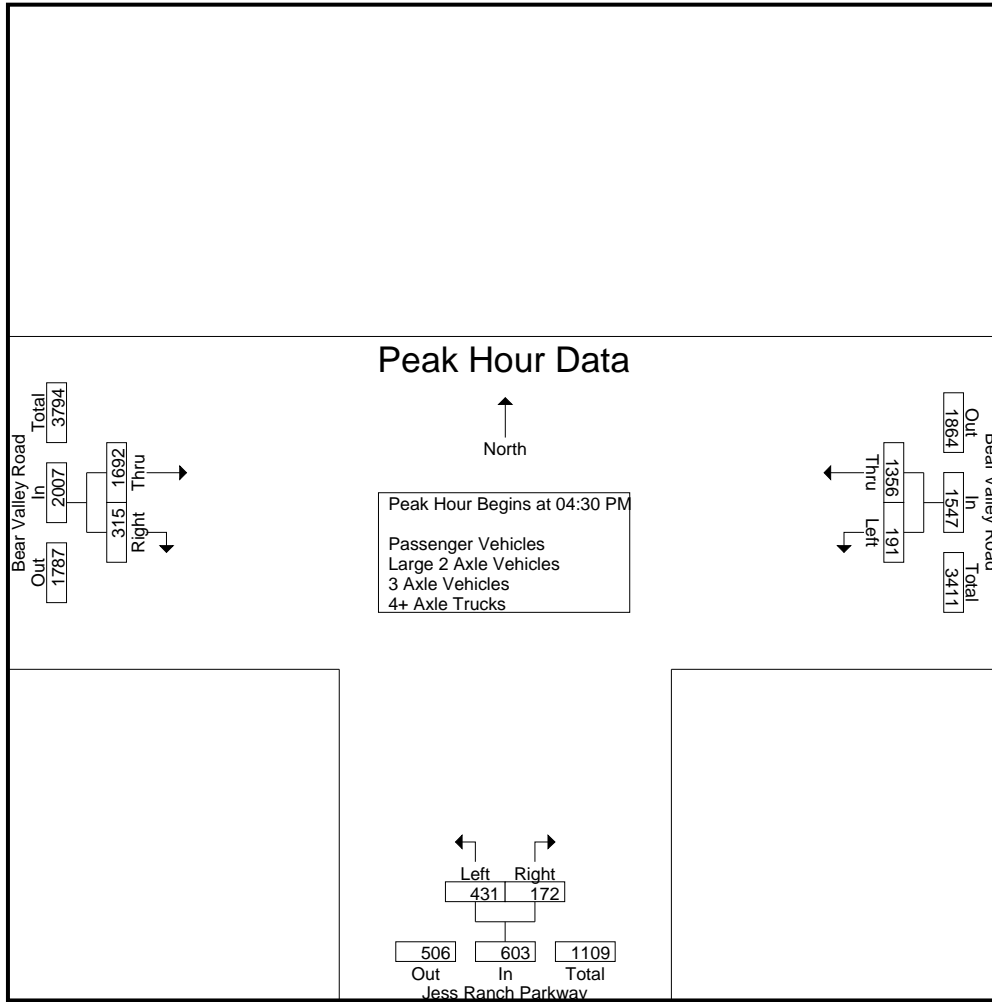
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Bear Valley Road Westbound			Jess Ranch Parkway Northbound			Bear Valley Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	38	332	370	87	50	137	437	78	515	1022
04:15 PM	39	338	377	82	30	112	427	84	511	1000
04:30 PM	49	361	410	101	42	143	402	76	478	1031
04:45 PM	42	329	371	97	44	141	428	77	505	1017
Total	168	1360	1528	367	166	533	1694	315	2009	4070
05:00 PM	57	316	373	126	38	164	421	82	503	1040
05:15 PM	43	350	393	107	48	155	441	80	521	1069
05:30 PM	48	331	379	97	40	137	376	89	465	981
05:45 PM	31	271	302	107	44	151	394	64	458	911
Total	179	1268	1447	437	170	607	1632	315	1947	4001
Grand Total	347	2628	2975	804	336	1140	3326	630	3956	8071
Apprch %	11.7	88.3		70.5	29.5		84.1	15.9		
Total %	4.3	32.6	36.9	10	4.2	14.1	41.2	7.8	49	
Passenger Vehicles	347	2563	2910	799	334	1133	3262	626	3888	7931
% Passenger Vehicles	100	97.5	97.8	99.4	99.4	99.4	98.1	99.4	98.3	98.3
Large 2 Axle Vehicles	0	41	41	4	2	6	41	4	45	92
% Large 2 Axle Vehicles	0	1.6	1.4	0.5	0.6	0.5	1.2	0.6	1.1	1.1
3 Axle Vehicles	0	3	3	0	0	0	3	0	3	6
% 3 Axle Vehicles	0	0.1	0.1	0	0	0	0.1	0	0.1	0.1
4+ Axle Trucks	0	21	21	1	0	1	20	0	20	42
% 4+ Axle Trucks	0	0.8	0.7	0.1	0	0.1	0.6	0	0.5	0.5

Start Time	Bear Valley Road Westbound			Jess Ranch Parkway Northbound			Bear Valley Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	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	49	<b>361</b>	<b>410</b>	101	42	143	402	76	478	1031
04:45 PM	42	329	371	97	44	141	428	77	505	1017
05:00 PM	<b>57</b>	316	373	<b>126</b>	38	<b>164</b>	421	<b>82</b>	503	1040
05:15 PM	43	350	393	107	<b>48</b>	155	<b>441</b>	80	<b>521</b>	<b>1069</b>
Total Volume	191	1356	1547	431	172	603	1692	315	2007	4157
% App. Total	12.3	87.7		71.5	28.5		84.3	15.7		
PHF	.838	.939	.943	.855	.896	.919	.959	.960	.963	.972

City of Apple Valley  
 N/S: Jess Ranch Parkway  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 03\_APV\_Jess\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
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Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	04:30 PM			05:00 PM			04:00 PM		
+0 mins.	49	<b>361</b>	<b>410</b>	<b>126</b>	38	<b>164</b>	<b>437</b>	78	<b>515</b>
+15 mins.	42	329	371	107	<b>48</b>	155	427	<b>84</b>	511
+30 mins.	<b>57</b>	316	373	97	40	137	402	76	478
+45 mins.	43	350	393	107	44	151	428	77	505
Total Volume	191	1356	1547	437	170	607	1694	315	2009
% App. Total	12.3	87.7		72	28		84.3	15.7	
PHF	.838	.939	.943	.867	.885	.925	.969	.938	.975

City of Apple Valley  
 N/S: Jess Ranch Parkway  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 03\_APV\_Jess\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- Passenger Vehicles

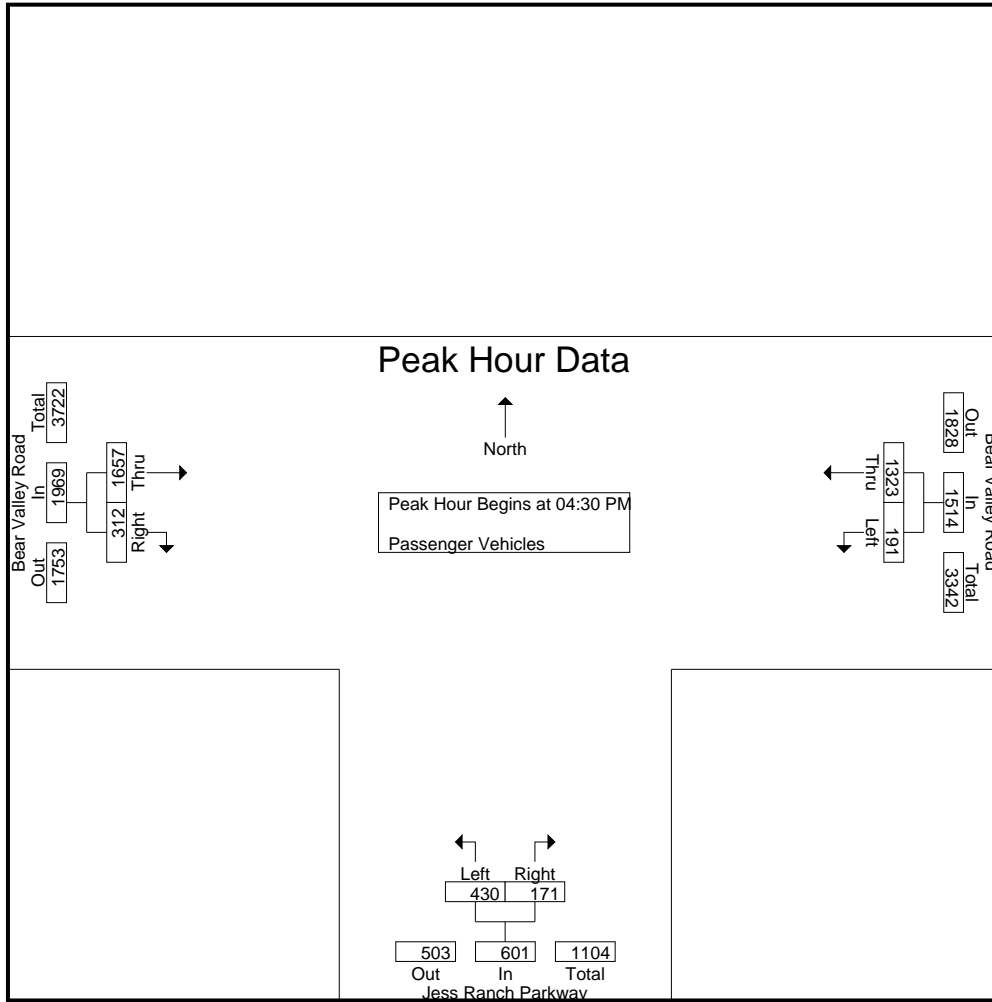
Start Time	Bear Valley Road Westbound			Jess Ranch Parkway Northbound			Bear Valley Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	38	322	360	87	50	137	426	78	504	1001
04:15 PM	39	324	363	78	29	107	421	84	505	975
04:30 PM	49	353	402	101	42	143	390	75	465	1010
04:45 PM	42	322	364	97	44	141	419	76	495	1000
Total	168	1321	1489	363	165	528	1656	313	1969	3986
05:00 PM	57	309	366	126	38	164	415	81	496	1026
05:15 PM	43	339	382	106	47	153	433	80	513	1048
05:30 PM	48	327	375	97	40	137	371	88	459	971
05:45 PM	31	267	298	107	44	151	387	64	451	900
Total	179	1242	1421	436	169	605	1606	313	1919	3945
Grand Total	347	2563	2910	799	334	1133	3262	626	3888	7931
Apprch %	11.9	88.1		70.5	29.5		83.9	16.1		
Total %	4.4	32.3	36.7	10.1	4.2	14.3	41.1	7.9	49	

Start Time	Bear Valley Road Westbound			Jess Ranch Parkway Northbound			Bear Valley Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:30 PM	49	<b>353</b>	<b>402</b>	101	42	143	390	75	465	1010
04:45 PM	42	322	364	97	44	141	419	76	495	1000
05:00 PM	<b>57</b>	309	366	<b>126</b>	38	<b>164</b>	415	<b>81</b>	496	1026
05:15 PM	43	339	382	106	<b>47</b>	153	<b>433</b>	80	<b>513</b>	<b>1048</b>
Total Volume	191	1323	1514	430	171	601	1657	312	1969	4084
% App. Total	12.6	87.4		71.5	28.5		84.2	15.8		
PHF	.838	.937	.942	.853	.910	.916	.957	.963	.960	.974

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

City of Apple Valley  
 N/S: Jess Ranch Parkway  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 03\_APV\_Jess\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
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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		
+0 mins.	49	<b>353</b>	<b>402</b>	101	42	143	390	75	465
+15 mins.	42	322	364	97	44	141	419	76	495
+30 mins.	<b>57</b>	309	366	<b>126</b>	38	<b>164</b>	415	<b>81</b>	496
+45 mins.	43	339	382	106	<b>47</b>	153	<b>433</b>	80	<b>513</b>
Total Volume	191	1323	1514	430	171	601	1657	312	1969
% App. Total	12.6	87.4		71.5	28.5		84.2	15.8	
PHF	.838	.937	.942	.853	.910	.916	.957	.963	.960

City of Apple Valley  
 N/S: Jess Ranch Parkway  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 03\_APV\_Jess\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

Start Time	Bear Valley Road Westbound			Jess Ranch Parkway Northbound			Bear Valley Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	0	5	5	0	0	0	8	0	8	13
04:15 PM	0	9	9	3	1	4	5	0	5	18
04:30 PM	0	2	2	0	0	0	7	1	8	10
04:45 PM	0	5	5	0	0	0	4	1	5	10
Total	0	21	21	3	1	4	24	2	26	51
05:00 PM	0	5	5	0	0	0	3	1	4	9
05:15 PM	0	9	9	1	1	2	4	0	4	15
05:30 PM	0	3	3	0	0	0	4	1	5	8
05:45 PM	0	3	3	0	0	0	6	0	6	9
Total	0	20	20	1	1	2	17	2	19	41
Grand Total	0	41	41	4	2	6	41	4	45	92
Apprch %	0	100		66.7	33.3		91.1	8.9		
Total %	0	44.6	44.6	4.3	2.2	6.5	44.6	4.3	48.9	

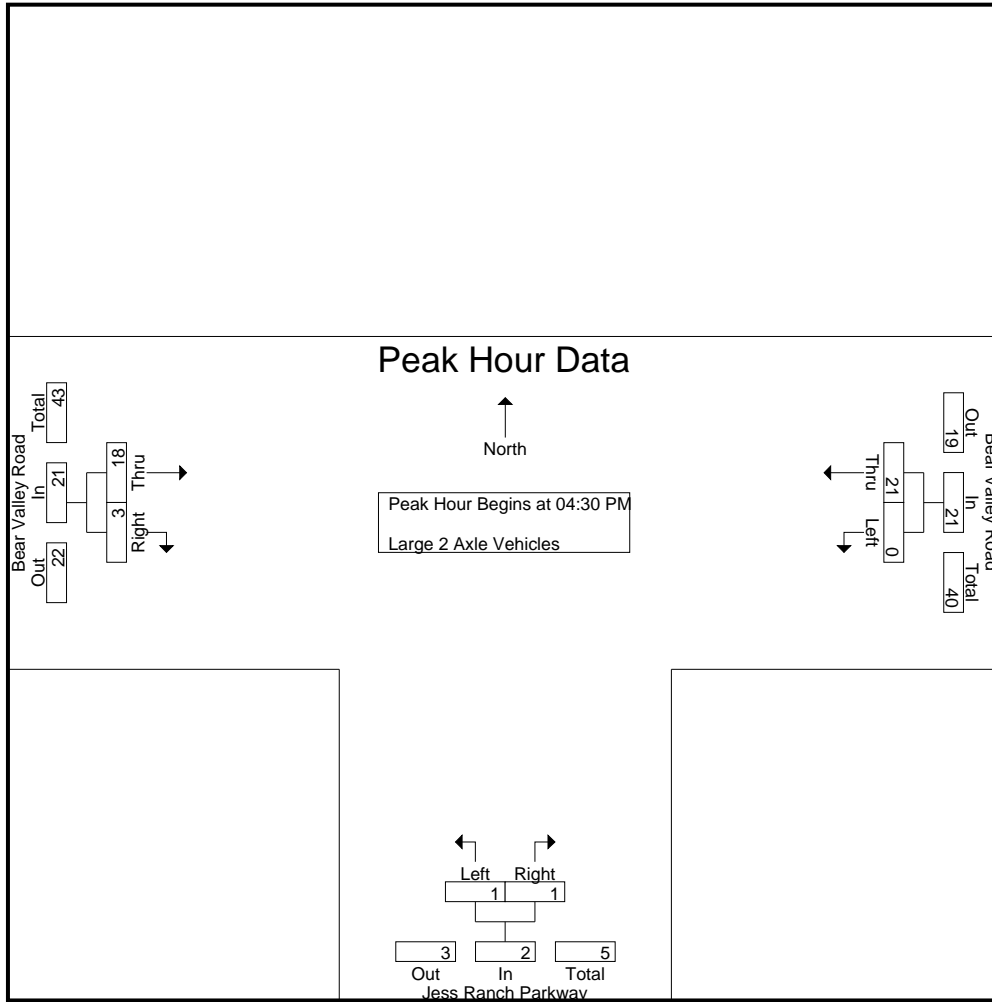
Start Time	Bear Valley Road Westbound			Jess Ranch Parkway Northbound			Bear Valley Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:30 PM	0	2	2	0	0	0	7	1	8	10
04:45 PM	0	5	5	0	0	0	4	1	5	10
05:00 PM	0	5	5	0	0	0	3	1	4	9
05:15 PM	0	9	9	1	1	2	4	0	4	15
Total Volume	0	21	21	1	1	2	18	3	21	44
% App. Total	0	100		50	50		85.7	14.3		
PHF	.000	.583	.583	.250	.250	.250	.643	.750	.656	.733

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



City of Apple Valley  
 N/S: Jess Ranch Parkway  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 03\_APV\_Jess\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 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		
+0 mins.	0	2	2	0	0	0	7	1	8
+15 mins.	0	5	5	0	0	0	4	1	5
+30 mins.	0	5	5	0	0	0	3	1	4
+45 mins.	0	9	9	1	1	2	4	0	4
Total Volume	0	21	21	1	1	2	18	3	21
% App. Total	0	100		50	50		85.7	14.3	
PHF	.000	.583	.583	.250	.250	.250	.643	.750	.656

City of Apple Valley  
 N/S: Jess Ranch Parkway  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 03\_APV\_Jess\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- 3 Axle Vehicles

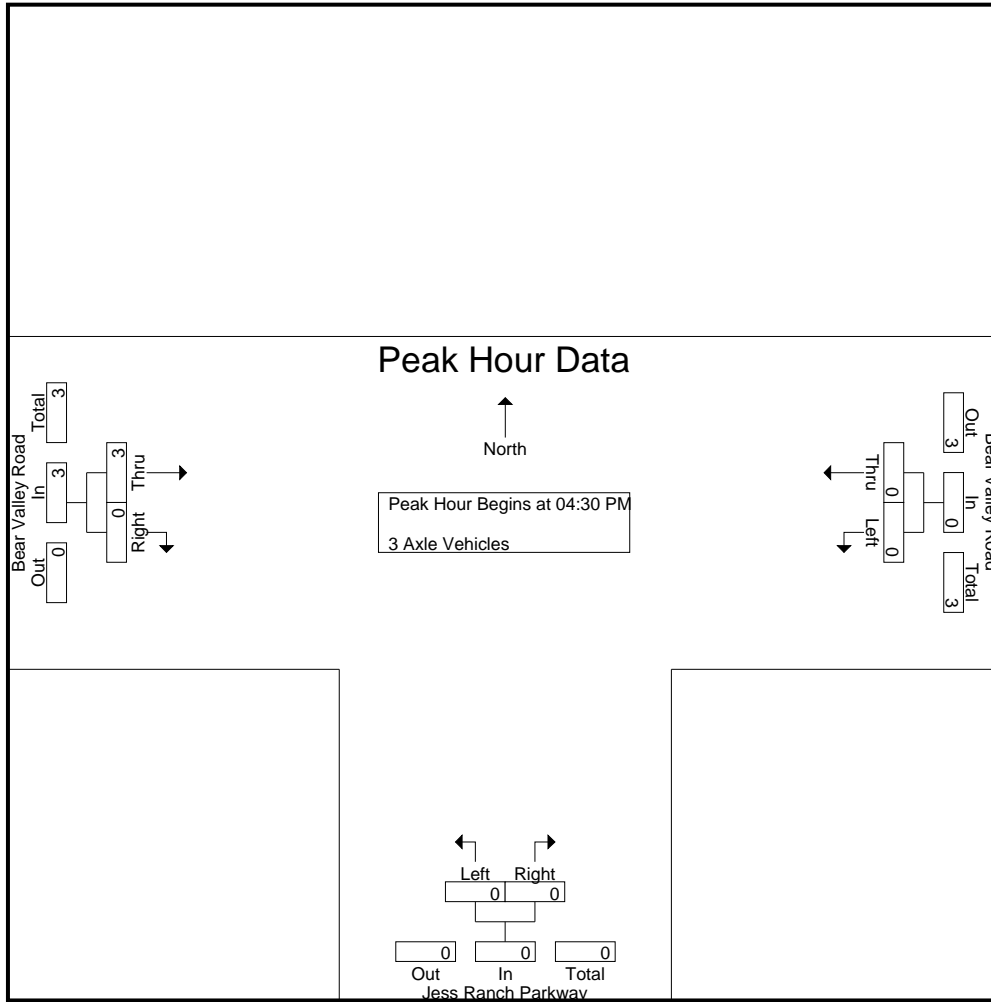
Start Time	Bear Valley Road Westbound			Jess Ranch Parkway Northbound			Bear Valley Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	0	1	1	0	0	0	0	0	0	1
04:15 PM	0	2	2	0	0	0	0	0	0	2
04:30 PM	0	0	0	0	0	0	1	0	1	1
04:45 PM	0	0	0	0	0	0	1	0	1	1
Total	0	3	3	0	0	0	2	0	2	5
05:00 PM	0	0	0	0	0	0	1	0	1	1
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	1	0	1	1
Grand Total	0	3	3	0	0	0	3	0	3	6
Apprch %	0	100		0	0		100	0		
Total %	0	50	50	0	0	0	50	0	50	

Start Time	Bear Valley Road Westbound			Jess Ranch Parkway Northbound			Bear Valley Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:30 PM	0	0	0	0	0	0	1	0	1	1
04:45 PM	0	0	0	0	0	0	1	0	1	1
05:00 PM	0	0	0	0	0	0	1	0	1	1
05:15 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	3	0	3	3
% App. Total	0	0		0	0		100	0		
PHF	.000	.000	.000	.000	.000	.000	.750	.000	.750	.750

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

City of Apple Valley  
 N/S: Jess Ranch Parkway  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 03\_APV\_Jess\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 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		
+0 mins.	0	0	0	0	0	0	1	0	1
+15 mins.	0	0	0	0	0	0	1	0	1
+30 mins.	0	0	0	0	0	0	1	0	1
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	3	0	3
% App. Total	0	0	0	0	0	0	100	0	0
PHF	.000	.000	.000	.000	.000	.000	.750	.000	.750

City of Apple Valley  
 N/S: Jess Ranch Parkway  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 03\_APV\_Jess\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- 4+ Axle Trucks

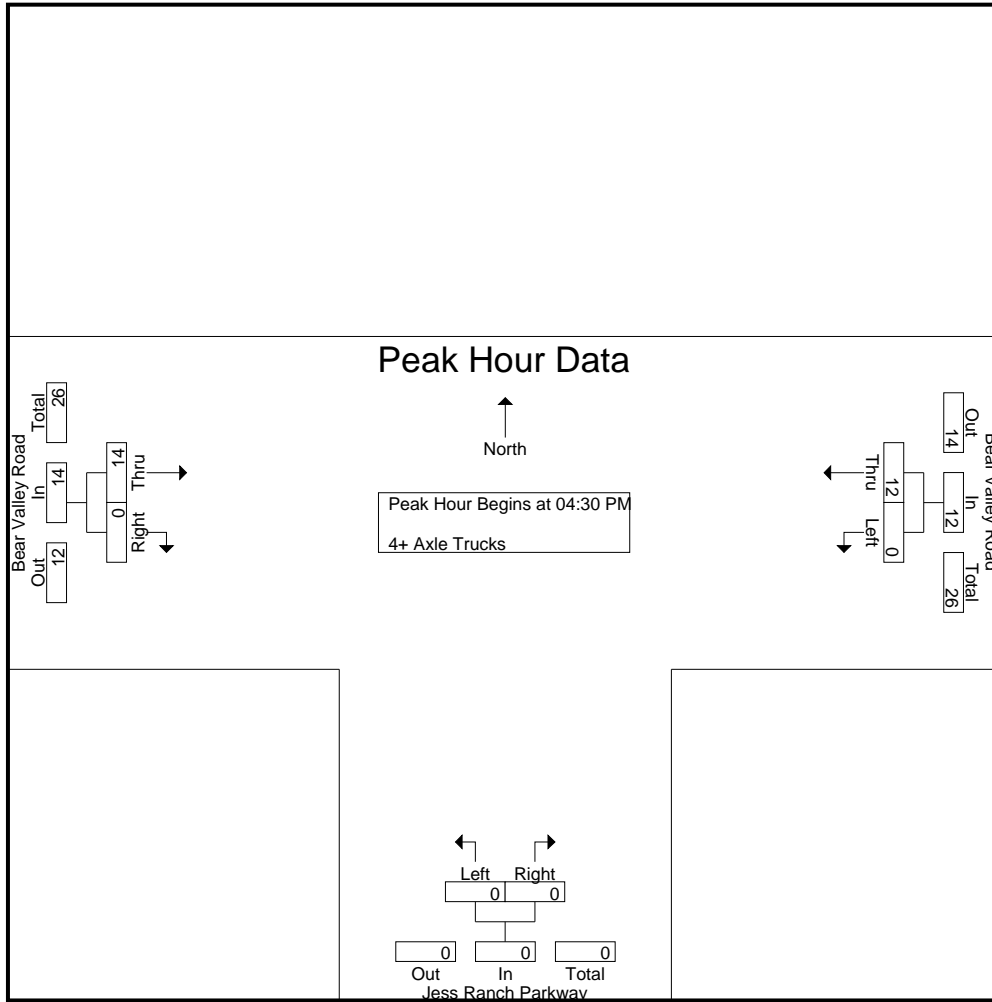
Start Time	Bear Valley Road Westbound			Jess Ranch Parkway Northbound			Bear Valley Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	0	4	4	0	0	0	3	0	3	7
04:15 PM	0	3	3	1	0	1	1	0	1	5
04:30 PM	0	6	6	0	0	0	4	0	4	10
04:45 PM	0	2	2	0	0	0	4	0	4	6
Total	0	15	15	1	0	1	12	0	12	28
05:00 PM	0	2	2	0	0	0	2	0	2	4
05:15 PM	0	2	2	0	0	0	4	0	4	6
05:30 PM	0	1	1	0	0	0	1	0	1	2
05:45 PM	0	1	1	0	0	0	1	0	1	2
Total	0	6	6	0	0	0	8	0	8	14
Grand Total	0	21	21	1	0	1	20	0	20	42
Apprch %	0	100		100	0		100	0		
Total %	0	50	50	2.4	0	2.4	47.6	0	47.6	

Start Time	Bear Valley Road Westbound			Jess Ranch Parkway Northbound			Bear Valley Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:30 PM	0	6	6	0	0	0	4	0	4	10
04:45 PM	0	2	2	0	0	0	4	0	4	6
05:00 PM	0	2	2	0	0	0	2	0	2	4
05:15 PM	0	2	2	0	0	0	4	0	4	6
Total Volume	0	12	12	0	0	0	14	0	14	26
% App. Total	0	100		0	0		100	0		
PHF	.000	.500	.500	.000	.000	.000	.875	.000	.875	.650

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

City of Apple Valley  
 N/S: Jess Ranch Parkway  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 03\_APV\_Jess\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 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		
+0 mins.	0	6	6	0	0	0	4	0	4
+15 mins.	0	2	2	0	0	0	4	0	4
+30 mins.	0	2	2	0	0	0	2	0	2
+45 mins.	0	2	2	0	0	0	4	0	4
Total Volume	0	12	12	0	0	0	14	0	14
% App. Total	0	100		0	0		100	0	
PHF	.000	.500	.500	.000	.000	.000	.875	.000	.875

Location: Apple Valley  
 N/S: Jess Ranch Parkway  
 E/W: Bear Valley Road



Date: 11/17/2022  
 Day: Thursday

**PEDESTRIANS**

	North Leg Jess Ranch Parkway Pedestrians	East Leg Bear Valley Road Pedestrians	South Leg Jess Ranch Parkway Pedestrians	West Leg Bear Valley Road Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	1	0	1
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
<b>TOTAL VOLUMES:</b>	0	0	1	0	1

	North Leg Jess Ranch Parkway Pedestrians	East Leg Bear Valley Road Pedestrians	South Leg Jess Ranch Parkway Pedestrians	West Leg Bear Valley Road Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	4	0	4
4:30 PM	0	1	0	0	1
4:45 PM	0	1	1	0	2
5:00 PM	0	0	3	0	3
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
<b>TOTAL VOLUMES:</b>	0	2	8	0	10

Location: Apple Valley  
 N/S: Jess Ranch Parkway  
 E/W: Bear Valley Road



Date: 11/17/2022  
 Day: Thursday

BICYCLES

	Southbound Jess Ranch Parkway			Westbound Bear Valley Road			Northbound Jess Ranch Parkway			Eastbound Bear Valley Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

	Southbound Jess Ranch Parkway			Westbound Bear Valley Road			Northbound Jess Ranch Parkway			Eastbound Bear Valley Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	1	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	1	1	2

City of Apple Valley  
 N/S: Reata Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 04\_APV\_Reata\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

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

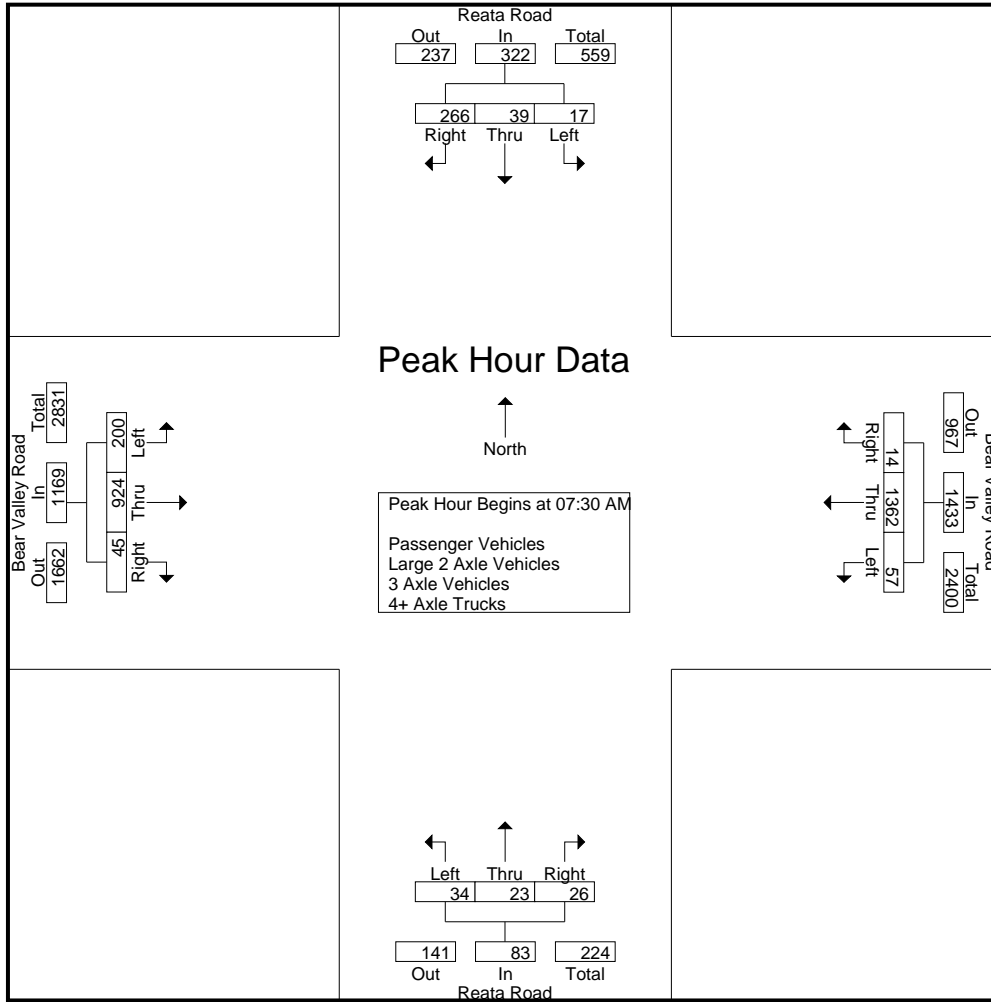
Start Time	Reata Road Southbound				Bear Valley Road Westbound				Reata Road Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	6	4	34	44	5	261	8	274	2	2	5	9	45	157	3	205	532
07:15 AM	5	4	38	47	11	243	3	257	7	4	0	11	44	167	2	213	528
07:30 AM	7	8	66	81	10	336	2	348	2	6	8	16	43	249	7	299	744
07:45 AM	1	8	69	78	11	399	6	416	5	6	3	14	49	235	11	295	803
<b>Total</b>	<b>19</b>	<b>24</b>	<b>207</b>	<b>250</b>	<b>37</b>	<b>1239</b>	<b>19</b>	<b>1295</b>	<b>16</b>	<b>18</b>	<b>16</b>	<b>50</b>	<b>181</b>	<b>808</b>	<b>23</b>	<b>1012</b>	<b>2607</b>
08:00 AM	6	11	66	83	27	300	4	331	9	3	9	21	49	212	9	270	705
08:15 AM	3	12	65	80	9	327	2	338	18	8	6	32	59	228	18	305	755
08:30 AM	4	13	63	80	16	292	5	313	19	14	4	37	64	227	17	308	738
08:45 AM	3	11	68	82	24	285	7	316	12	7	12	31	77	223	27	327	756
<b>Total</b>	<b>16</b>	<b>47</b>	<b>262</b>	<b>325</b>	<b>76</b>	<b>1204</b>	<b>18</b>	<b>1298</b>	<b>58</b>	<b>32</b>	<b>31</b>	<b>121</b>	<b>249</b>	<b>890</b>	<b>71</b>	<b>1210</b>	<b>2954</b>
<b>Grand Total</b>	<b>35</b>	<b>71</b>	<b>469</b>	<b>575</b>	<b>113</b>	<b>2443</b>	<b>37</b>	<b>2593</b>	<b>74</b>	<b>50</b>	<b>47</b>	<b>171</b>	<b>430</b>	<b>1698</b>	<b>94</b>	<b>2222</b>	<b>5561</b>
Apprch %	6.1	12.3	81.6		4.4	94.2	1.4		43.3	29.2	27.5		19.4	76.4	4.2		
Total %	0.6	1.3	8.4	10.3	2	43.9	0.7	46.6	1.3	0.9	0.8	3.1	7.7	30.5	1.7	40	
Passenger Vehicles	33	71	466	570	112	2329	36	2477	73	49	43	165	425	1568	93	2086	5298
% Passenger Vehicles	94.3	100	99.4	99.1	99.1	95.3	97.3	95.5	98.6	98	91.5	96.5	98.8	92.3	98.9	93.9	95.3
Large 2 Axle Vehicles	1	0	1	2	0	57	1	58	1	0	3	4	2	57	1	60	124
% Large 2 Axle Vehicles	2.9	0	0.2	0.3	0	2.3	2.7	2.2	1.4	0	6.4	2.3	0.5	3.4	1.1	2.7	2.2
3 Axle Vehicles	0	0	1	1	0	11	0	11	0	1	1	2	1	18	0	19	33
% 3 Axle Vehicles	0	0	0.2	0.2	0	0.5	0	0.4	0	2	2.1	1.2	0.2	1.1	0	0.9	0.6
4+ Axle Trucks	1	0	1	2	1	46	0	47	0	0	0	0	2	55	0	57	106
% 4+ Axle Trucks	2.9	0	0.2	0.3	0.9	1.9	0	1.8	0	0	0	0	0.5	3.2	0	2.6	1.9

Start Time	Reata Road Southbound				Bear Valley Road Westbound				Reata Road Northbound				Bear Valley 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	7	8	66	81	10	336	2	348	2	6	8	16	43	<b>249</b>	7	299	744
07:45 AM	1	8	<b>69</b>	78	11	<b>399</b>	<b>6</b>	<b>416</b>	5	6	3	14	49	235	11	295	<b>803</b>
08:00 AM	6	11	66	<b>83</b>	<b>27</b>	300	4	331	9	3	<b>9</b>	21	49	212	9	270	705
08:15 AM	3	<b>12</b>	65	80	9	327	2	338	<b>18</b>	<b>8</b>	6	<b>32</b>	<b>59</b>	228	<b>18</b>	<b>305</b>	755
Total Volume	17	39	266	322	57	1362	14	1433	34	23	26	83	200	924	45	1169	3007
% App. Total	5.3	12.1	82.6		4	95	1		41	27.7	31.3		17.1	79	3.8		
PHF	.607	.813	.964	.970	.528	.853	.583	.861	.472	.719	.722	.648	.847	.928	.625	.958	.936



City of Apple Valley  
 N/S: Reata Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 04\_APV\_Reata\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 2



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

	08:00 AM				07:30 AM				08:00 AM				08:00 AM			
+0 mins.	6	11	66	83	10	336	2	348	9	3	9	21	49	212	9	270
+15 mins.	3	12	65	80	11	399	6	416	18	8	6	32	59	228	18	305
+30 mins.	4	13	63	80	27	300	4	331	19	14	4	37	64	227	17	308
+45 mins.	3	11	68	82	9	327	2	338	12	7	12	31	77	223	27	327
Total Volume	16	47	262	325	57	1362	14	1433	58	32	31	121	249	890	71	1210
% App. Total	4.9	14.5	80.6		4	95	1		47.9	26.4	25.6		20.6	73.6	5.9	
PHF	.667	.904	.963	.979	.528	.853	.583	.861	.763	.571	.646	.818	.808	.976	.657	.925

City of Apple Valley  
 N/S: Reata Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 04\_APV\_Reata\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- Passenger Vehicles

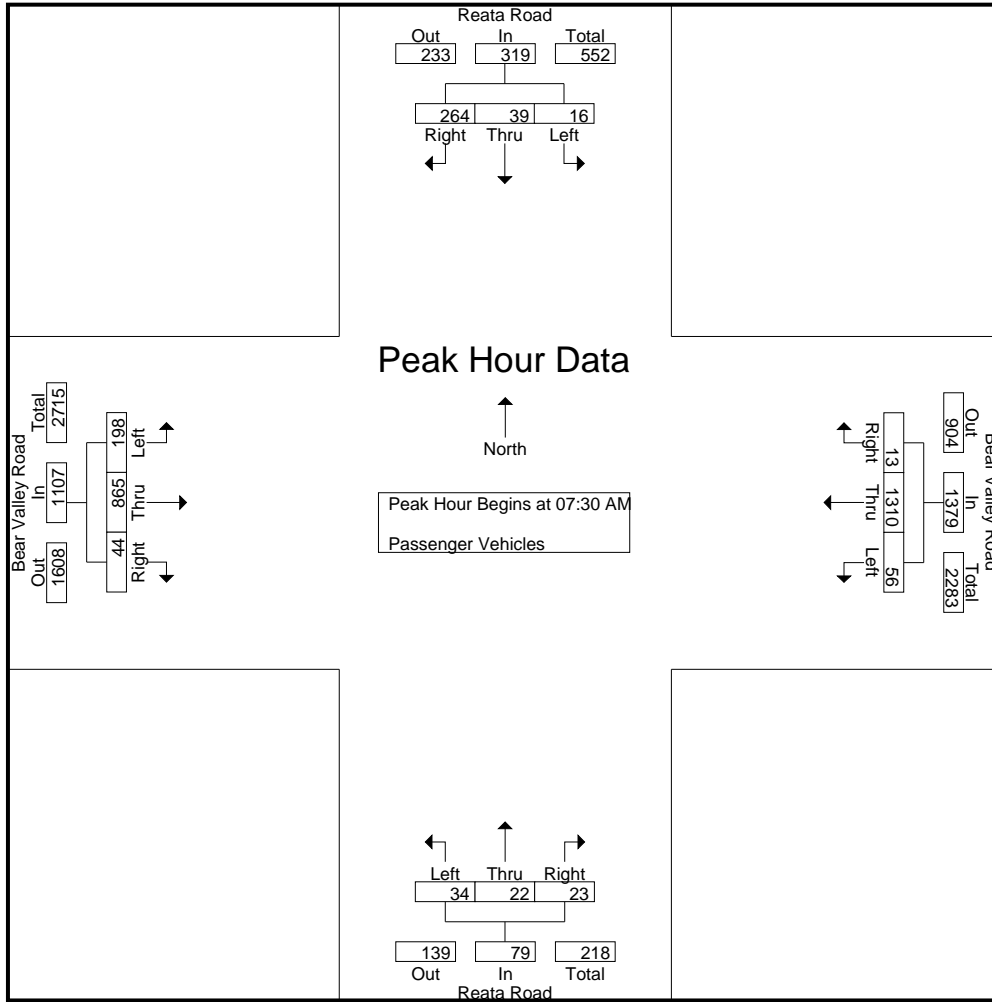
Start Time	Reata Road Southbound				Bear Valley Road Westbound				Reata Road Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	6	4	33	43	5	246	8	259	2	2	5	9	45	132	3	180	491
07:15 AM	4	4	38	46	11	229	3	243	7	4	0	11	42	152	2	196	496
07:30 AM	7	8	65	80	9	328	1	338	2	5	6	13	43	233	7	283	714
07:45 AM	0	8	69	77	11	385	6	402	5	6	3	14	49	227	11	287	780
Total	17	24	205	246	36	1188	18	1242	16	17	14	47	179	744	23	946	2481
08:00 AM	6	11	65	82	27	285	4	316	9	3	8	20	49	198	8	255	673
08:15 AM	3	12	65	80	9	312	2	323	18	8	6	32	57	207	18	282	717
08:30 AM	4	13	63	80	16	275	5	296	18	14	3	35	63	213	17	293	704
08:45 AM	3	11	68	82	24	269	7	300	12	7	12	31	77	206	27	310	723
Total	16	47	261	324	76	1141	18	1235	57	32	29	118	246	824	70	1140	2817
Grand Total	33	71	466	570	112	2329	36	2477	73	49	43	165	425	1568	93	2086	5298
Apprch %	5.8	12.5	81.8		4.5	94	1.5		44.2	29.7	26.1		20.4	75.2	4.5		
Total %	0.6	1.3	8.8	10.8	2.1	44	0.7	46.8	1.4	0.9	0.8	3.1	8	29.6	1.8	39.4	

Start Time	Reata Road Southbound				Bear Valley Road Westbound				Reata Road Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:30 AM	7	8	65	80	9	328	1	338	2	5	6	13	43	<b>233</b>	7	283	714
07:45 AM	0	8	<b>69</b>	77	11	<b>385</b>	<b>6</b>	<b>402</b>	5	6	3	14	49	227	11	<b>287</b>	<b>780</b>
08:00 AM	6	11	65	<b>82</b>	<b>27</b>	285	4	316	9	3	<b>8</b>	20	49	198	8	255	673
08:15 AM	3	<b>12</b>	65	80	9	312	2	323	<b>18</b>	<b>8</b>	6	<b>32</b>	<b>57</b>	207	<b>18</b>	282	717
Total Volume	16	39	264	319	56	1310	13	1379	34	22	23	79	198	865	44	1107	2884
% App. Total	5	12.2	82.8		4.1	95	0.9		43	27.8	29.1		17.9	78.1	4		
PHF	.571	.813	.957	.973	.519	.851	.542	.858	.472	.688	.719	.617	.868	.928	.611	.964	.924

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

City of Apple Valley  
 N/S: Reata Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 04\_APV\_Reata\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 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.	7	8	65	80	9	328	1	338	2	5	6	13	43	<b>233</b>	7	283
+15 mins.	0	8	<b>69</b>	77	11	<b>385</b>	<b>6</b>	<b>402</b>	5	6	3	14	49	227	11	<b>287</b>
+30 mins.	6	11	65	<b>82</b>	<b>27</b>	285	4	316	9	3	<b>8</b>	20	49	198	8	255
+45 mins.	3	<b>12</b>	65	80	9	312	2	323	<b>18</b>	<b>8</b>	6	<b>32</b>	<b>57</b>	207	<b>18</b>	282
Total Volume	16	39	264	319	56	1310	13	1379	34	22	23	79	198	865	44	1107
% App. Total	5	12.2	82.8		4.1	95	0.9		43	27.8	29.1		17.9	78.1	4	
PHF	.571	.813	.957	.973	.519	.851	.542	.858	.472	.688	.719	.617	.868	.928	.611	.964

City of Apple Valley  
 N/S: Reata Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 04\_APV\_Reata\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

Start Time	Reata Road Southbound				Bear Valley Road Westbound				Reata Road Northbound				Bear Valley 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	9	0	9	0	0	0	0	0	6	0	6	15
07:15 AM	1	0	0	1	0	7	0	7	0	0	0	0	1	11	0	12	20
07:30 AM	0	0	1	1	0	4	1	5	0	0	1	1	0	7	0	7	14
07:45 AM	0	0	0	0	0	6	0	6	0	0	0	0	0	3	0	3	9
Total	1	0	1	2	0	26	1	27	0	0	1	1	1	27	0	28	58
08:00 AM	0	0	0	0	0	4	0	4	0	0	1	1	0	6	1	7	12
08:15 AM	0	0	0	0	0	8	0	8	0	0	0	0	1	11	0	12	20
08:30 AM	0	0	0	0	0	12	0	12	1	0	1	2	0	6	0	6	20
08:45 AM	0	0	0	0	0	7	0	7	0	0	0	0	0	7	0	7	14
Total	0	0	0	0	0	31	0	31	1	0	2	3	1	30	1	32	66
Grand Total	1	0	1	2	0	57	1	58	1	0	3	4	2	57	1	60	124
Apprch %	50	0	50		0	98.3	1.7		25	0	75		3.3	95	1.7		
Total %	0.8	0	0.8	1.6	0	46	0.8	46.8	0.8	0	2.4	3.2	1.6	46	0.8	48.4	

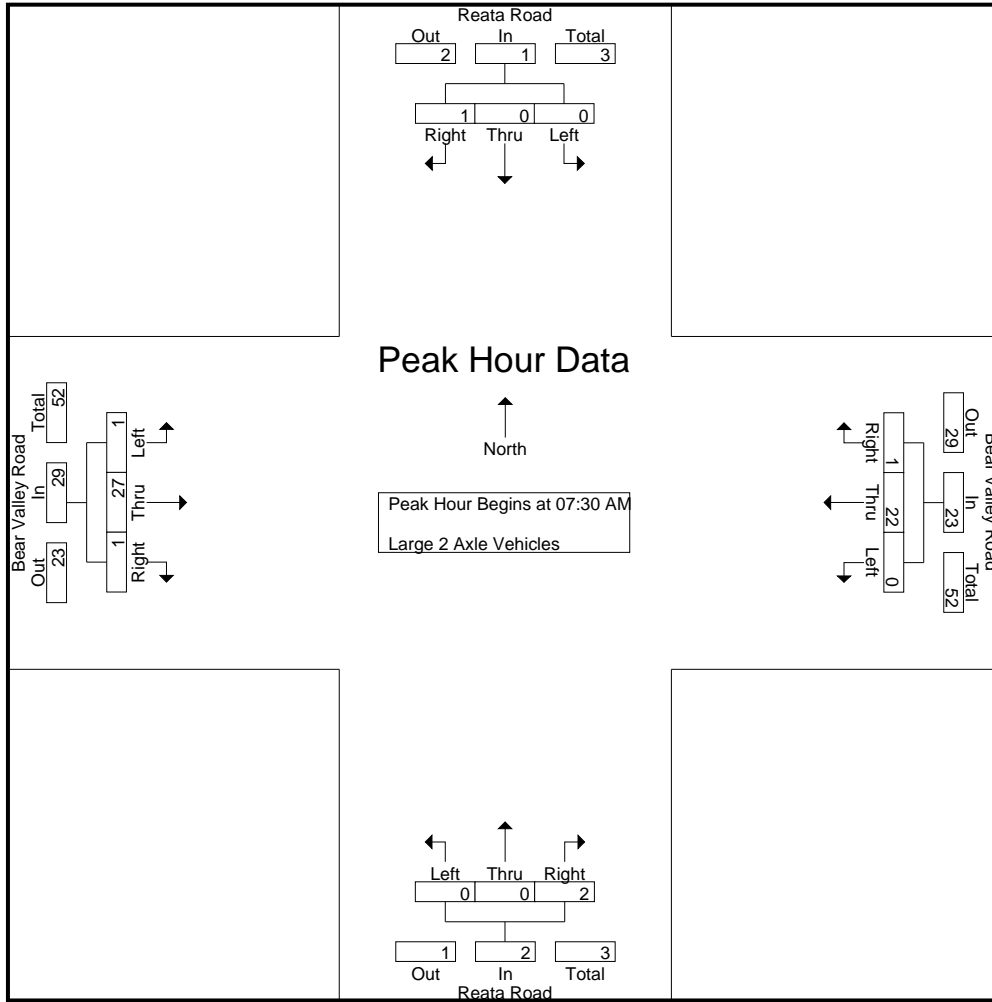
Start Time	Reata Road Southbound				Bear Valley Road Westbound				Reata Road Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:30 AM	0	0	1	1	0	4	1	5	0	0	1	1	0	7	0	7	14
07:45 AM	0	0	0	0	0	6	0	6	0	0	0	0	0	3	0	3	9
08:00 AM	0	0	0	0	0	4	0	4	0	0	1	1	0	6	1	7	12
08:15 AM	0	0	0	0	0	8	0	8	0	0	0	0	1	11	0	12	20
Total Volume	0	0	1	1	0	22	1	23	0	0	2	2	1	27	1	29	55
% App. Total	0	0	100		0	95.7	4.3		0	0	100		3.4	93.1	3.4		
PHF	.000	.000	.250	.250	.000	.688	.250	.719	.000	.000	.500	.500	.250	.614	.250	.604	.688

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

City of Apple Valley  
 N/S: Reata Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 04\_APV\_Reata\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 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	1	1	0	4	1	5	0	0	1	1	0	7	0	7
+15 mins.	0	0	0	0	0	6	0	6	0	0	0	0	0	3	0	3
+30 mins.	0	0	0	0	0	4	0	4	0	0	1	1	0	6	1	7
+45 mins.	0	0	0	0	0	8	0	8	0	0	0	0	1	11	0	12
Total Volume	0	0	1	1	0	22	1	23	0	0	2	2	1	27	1	29
% App. Total	0	0	100		0	95.7	4.3		0	0	100		3.4	93.1	3.4	
PHF	.000	.000	.250	.250	.000	.688	.250	.719	.000	.000	.500	.500	.250	.614	.250	.604

City of Apple Valley  
 N/S: Reata Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 04\_APV\_Reata\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- 3 Axle Vehicles

Start Time	Reata Road Southbound				Bear Valley Road Westbound				Reata Road Northbound				Bear Valley 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	1	0	1	0	0	0	0	0	4	0	4	5
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
07:30 AM	0	0	0	0	0	1	0	1	0	1	1	2	0	3	0	3	6
07:45 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
Total	0	0	0	0	0	4	0	4	0	1	1	2	0	11	0	11	17
08:00 AM	0	0	1	1	0	1	0	1	0	0	0	0	0	2	0	2	4
08:15 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
08:30 AM	0	0	0	0	0	2	0	2	0	0	0	0	1	3	0	4	6
08:45 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
Total	0	0	1	1	0	7	0	7	0	0	0	0	1	7	0	8	16
Grand Total	0	0	1	1	0	11	0	11	0	1	1	2	1	18	0	19	33
Apprch %	0	0	100		0	100	0		0	50	50		5.3	94.7	0		
Total %	0	0	3	3	0	33.3	0	33.3	0	3	3	6.1	3	54.5	0	57.6	

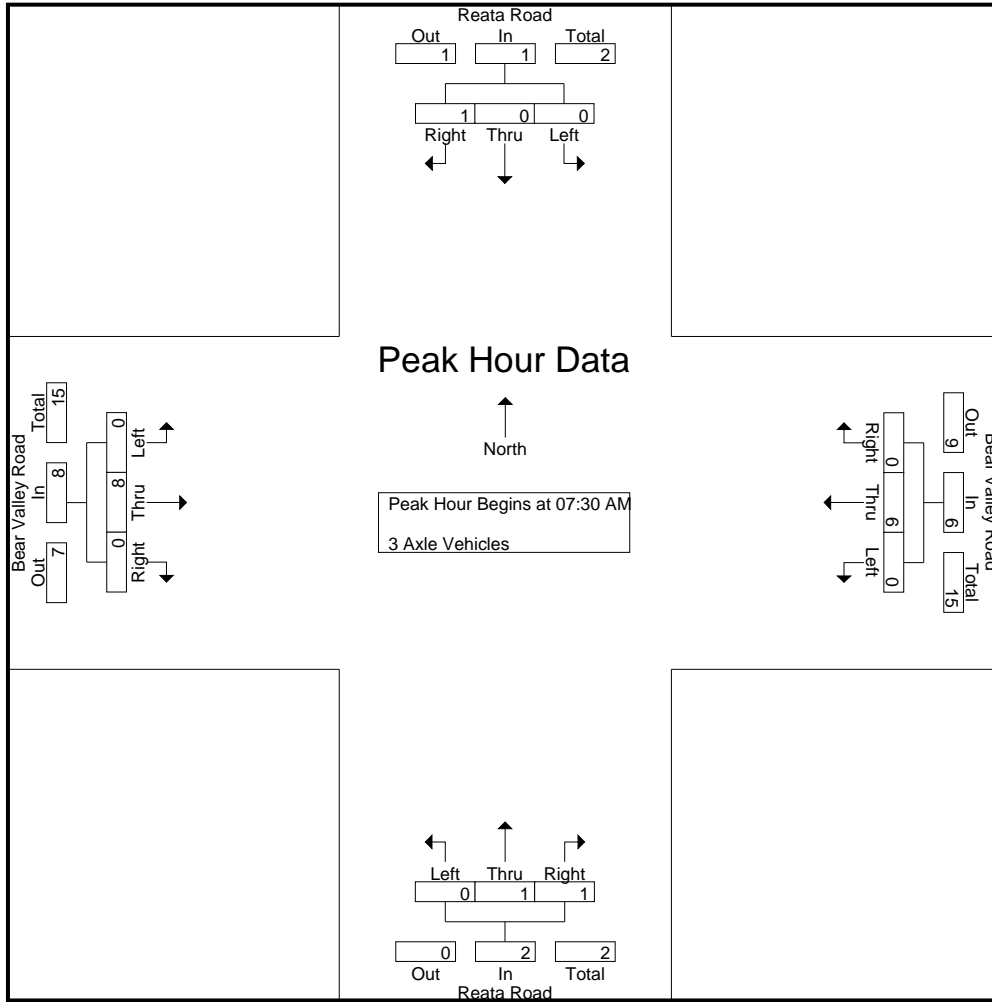
Start Time	Reata Road Southbound				Bear Valley Road Westbound				Reata Road Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:30 AM	0	0	0	0	0	1	0	1	0	1	1	2	0	3	0	3	6
07:45 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
08:00 AM	0	0	1	1	0	1	0	1	0	0	0	0	0	2	0	2	4
08:15 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
Total Volume	0	0	1	1	0	6	0	6	0	1	1	2	0	8	0	8	17
% App. Total	0	0	100		0	100	0		0	50	50		0	100	0		
PHF	.000	.000	.250	.250	.000	.750	.000	.750	.000	.250	.250	.250	.000	.667	.000	.667	.708

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

City of Apple Valley  
 N/S: Reata Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 04\_APV\_Reata\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 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	1	0	1	0	1	1	2	0	3	0	3
+15 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2
+30 mins.	0	0	1	1	0	1	0	1	0	0	0	0	0	2	0	2
+45 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1
Total Volume	0	0	1	1	0	6	0	6	0	1	1	2	0	8	0	8
% App. Total	0	0	100		0	100	0		0	50	50		0	100	0	
PHF	.000	.000	.250	.250	.000	.750	.000	.750	.000	.250	.250	.250	.000	.667	.000	.667

City of Apple Valley  
 N/S: Reata Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 04\_APV\_Reata\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- 4+ Axle Trucks

Start Time	Reata Road Southbound				Bear Valley Road Westbound				Reata Road Northbound				Bear Valley 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	1	1	0	5	0	5	0	0	0	0	0	15	0	15	21
07:15 AM	0	0	0	0	0	7	0	7	0	0	0	0	1	2	0	3	10
07:30 AM	0	0	0	0	1	3	0	4	0	0	0	0	0	6	0	6	10
07:45 AM	1	0	0	1	0	6	0	6	0	0	0	0	0	3	0	3	10
Total	1	0	1	2	1	21	0	22	0	0	0	0	1	26	0	27	51
08:00 AM	0	0	0	0	0	10	0	10	0	0	0	0	0	6	0	6	16
08:15 AM	0	0	0	0	0	5	0	5	0	0	0	0	1	9	0	10	15
08:30 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	5	0	5	8
08:45 AM	0	0	0	0	0	7	0	7	0	0	0	0	0	9	0	9	16
Total	0	0	0	0	0	25	0	25	0	0	0	0	1	29	0	30	55
Grand Total	1	0	1	2	1	46	0	47	0	0	0	0	2	55	0	57	106
Apprch %	50	0	50		2.1	97.9	0		0	0	0		3.5	96.5	0		
Total %	0.9	0	0.9	1.9	0.9	43.4	0	44.3	0	0	0	0	1.9	51.9	0	53.8	

Start Time	Reata Road Southbound				Bear Valley Road Westbound				Reata Road Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:30 AM	0	0	0	0	1	3	0	4	0	0	0	0	0	6	0	6	10
07:45 AM	1	0	0	1	0	6	0	6	0	0	0	0	0	3	0	3	10
08:00 AM	0	0	0	0	0	10	0	10	0	0	0	0	0	6	0	6	16
08:15 AM	0	0	0	0	0	5	0	5	0	0	0	0	1	9	0	10	15
Total Volume	1	0	0	1	1	24	0	25	0	0	0	0	1	24	0	25	51
% App. Total	100	0	0		4	96	0		0	0	0		4	96	0		
PHF	.250	.000	.000	.250	.250	.600	.000	.625	.000	.000	.000	.000	.250	.667	.000	.625	.797

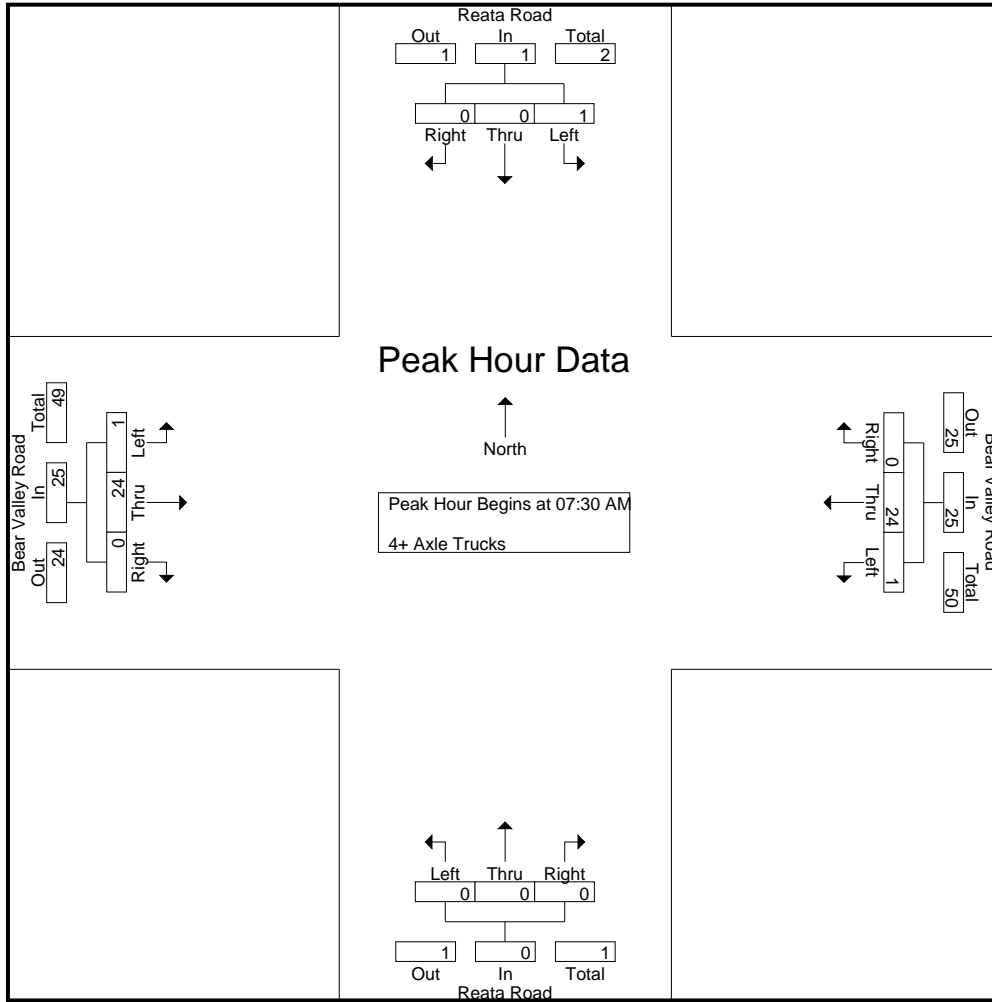
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:30 AM



City of Apple Valley  
 N/S: Reata Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 04\_APV\_Reata\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 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	1	3	0	4	0	0	0	0	0	6	0	6
+15 mins.	1	0	0	1	0	6	0	6	0	0	0	0	0	3	0	3
+30 mins.	0	0	0	0	0	10	0	10	0	0	0	0	0	6	0	6
+45 mins.	0	0	0	0	0	5	0	5	0	0	0	0	1	9	0	10
Total Volume	1	0	0	1	1	24	0	25	0	0	0	0	1	24	0	25
% App. Total	100	0	0		4	96	0		0	0	0		4	96	0	
PHF	.250	.000	.000	.250	.250	.600	.000	.625	.000	.000	.000	.000	.250	.667	.000	.625

City of Apple Valley  
 N/S: Reata Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 04\_APV\_Reata\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

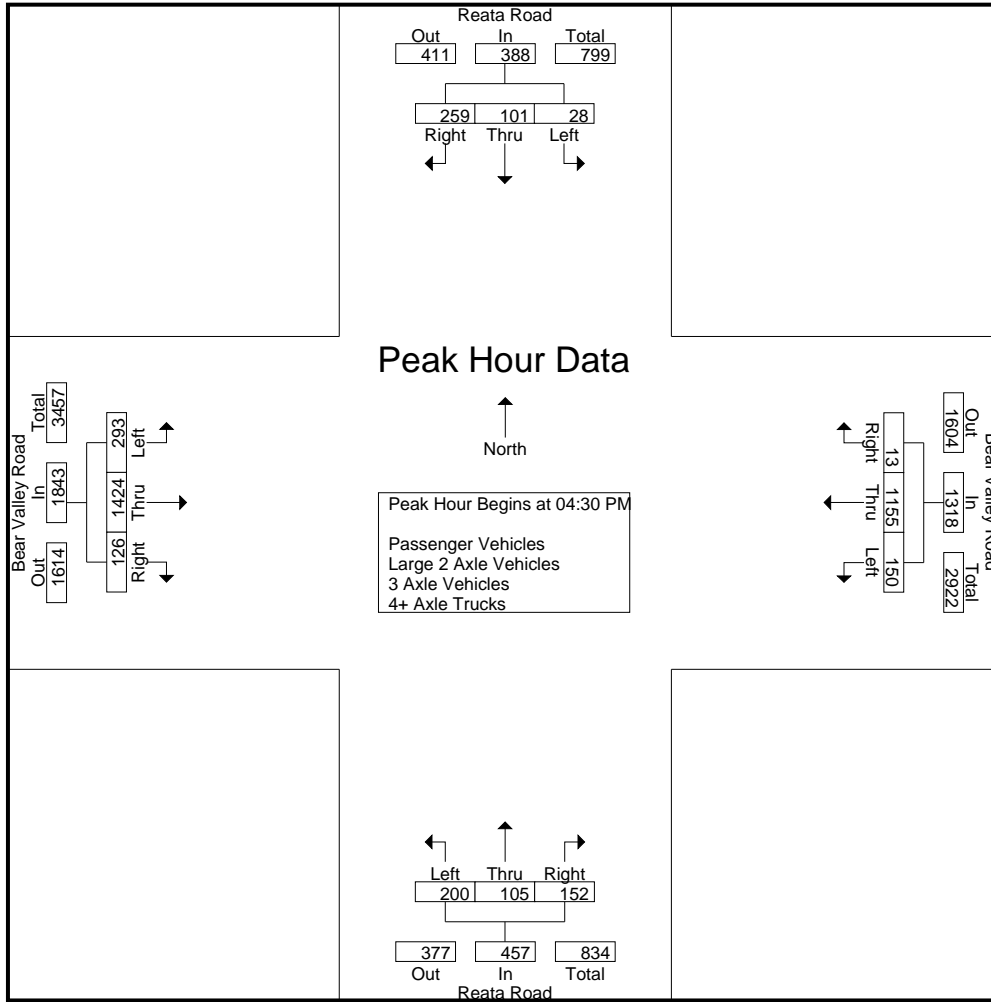
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Reata Road Southbound				Bear Valley Road Westbound				Reata Road Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	5	19	68	92	47	248	5	300	53	26	38	117	89	338	33	460	969
04:15 PM	5	20	83	108	39	251	3	293	43	23	44	110	75	336	31	442	953
04:30 PM	10	27	82	119	27	304	2	333	40	23	46	109	70	349	33	452	1013
04:45 PM	4	29	53	86	39	292	5	336	50	20	41	111	72	359	41	472	1005
<b>Total</b>	<b>24</b>	<b>95</b>	<b>286</b>	<b>405</b>	<b>152</b>	<b>1095</b>	<b>15</b>	<b>1262</b>	<b>186</b>	<b>92</b>	<b>169</b>	<b>447</b>	<b>306</b>	<b>1382</b>	<b>138</b>	<b>1826</b>	<b>3940</b>
05:00 PM	9	28	64	101	50	246	4	300	65	30	40	135	73	324	25	422	958
05:15 PM	5	17	60	82	34	313	2	349	45	32	25	102	78	392	27	497	1030
05:30 PM	5	18	62	85	29	247	6	282	59	25	38	122	57	295	41	393	882
05:45 PM	5	13	51	69	38	217	6	261	51	13	33	97	71	326	39	436	863
<b>Total</b>	<b>24</b>	<b>76</b>	<b>237</b>	<b>337</b>	<b>151</b>	<b>1023</b>	<b>18</b>	<b>1192</b>	<b>220</b>	<b>100</b>	<b>136</b>	<b>456</b>	<b>279</b>	<b>1337</b>	<b>132</b>	<b>1748</b>	<b>3733</b>
<b>Grand Total</b>	<b>48</b>	<b>171</b>	<b>523</b>	<b>742</b>	<b>303</b>	<b>2118</b>	<b>33</b>	<b>2454</b>	<b>406</b>	<b>192</b>	<b>305</b>	<b>903</b>	<b>585</b>	<b>2719</b>	<b>270</b>	<b>3574</b>	<b>7673</b>
Apprch %	6.5	23	70.5		12.3	86.3	1.3		45	21.3	33.8		16.4	76.1	7.6		
Total %	0.6	2.2	6.8	9.7	3.9	27.6	0.4	32	5.3	2.5	4	11.8	7.6	35.4	3.5	46.6	
Passenger Vehicles	48	170	519	737	302	2051	32	2385	405	192	305	902	585	2659	269	3513	7537
% Passenger Vehicles	100	99.4	99.2	99.3	99.7	96.8	97	97.2	99.8	100	100	99.9	100	97.8	99.6	98.3	98.2
Large 2 Axle Vehicles	0	1	4	5	1	41	1	43	1	0	0	1	0	37	1	38	87
% Large 2 Axle Vehicles	0	0.6	0.8	0.7	0.3	1.9	3	1.8	0.2	0	0	0.1	0	1.4	0.4	1.1	1.1
3 Axle Vehicles	0	0	0	0	0	4	0	4	0	0	0	0	0	2	0	2	6
% 3 Axle Vehicles	0	0	0	0	0	0.2	0	0.2	0	0	0	0	0	0.1	0	0.1	0.1
4+ Axle Trucks	0	0	0	0	0	22	0	22	0	0	0	0	0	21	0	21	43
% 4+ Axle Trucks	0	0	0	0	0	1	0	0.9	0	0	0	0	0	0.8	0	0.6	0.6

Start Time	Reata Road Southbound				Bear Valley Road Westbound				Reata Road Northbound				Bear Valley 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	<b>10</b>	27	<b>82</b>	<b>119</b>	27	304	2	333	40	23	<b>46</b>	109	70	349	33	452	1013
04:45 PM	4	<b>29</b>	53	86	39	292	<b>5</b>	336	50	20	41	111	72	359	<b>41</b>	472	1005
05:00 PM	9	28	64	101	<b>50</b>	246	4	300	<b>65</b>	30	40	<b>135</b>	73	324	25	422	958
05:15 PM	5	17	60	82	34	<b>313</b>	2	<b>349</b>	45	<b>32</b>	25	102	<b>78</b>	<b>392</b>	27	<b>497</b>	<b>1030</b>
Total Volume	28	101	259	388	150	1155	13	1318	200	105	152	457	293	1424	126	1843	4006
% App. Total	7.2	26	66.8		11.4	87.6	1		43.8	23	33.3		15.9	77.3	6.8		
PHF	.700	.871	.790	.815	.750	.923	.650	.944	.769	.820	.826	.846	.939	.908	.768	.927	.972

City of Apple Valley  
 N/S: Reata Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 04\_APV\_Reata\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 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				04:30 PM				04:45 PM				04:30 PM			
+0 mins.	5	20	<b>83</b>	108	27	304	2	333	50	20	<b>41</b>	111	70	349	33	452
+15 mins.	<b>10</b>	27	82	<b>119</b>	39	292	<b>5</b>	336	<b>65</b>	30	40	<b>135</b>	72	359	<b>41</b>	472
+30 mins.	4	<b>29</b>	53	86	<b>50</b>	246	4	300	45	<b>32</b>	25	102	73	324	25	422
+45 mins.	9	28	64	101	34	<b>313</b>	2	<b>349</b>	59	25	38	122	<b>78</b>	<b>392</b>	27	<b>497</b>
Total Volume	28	104	282	414	150	1155	13	1318	219	107	144	470	293	1424	126	1843
% App. Total	6.8	25.1	68.1		11.4	87.6	1		46.6	22.8	30.6		15.9	77.3	6.8	
PHF	.700	.897	.849	.870	.750	.923	.650	.944	.842	.836	.878	.870	.939	.908	.768	.927

City of Apple Valley  
 N/S: Reata Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 04\_APV\_Reata\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- Passenger Vehicles

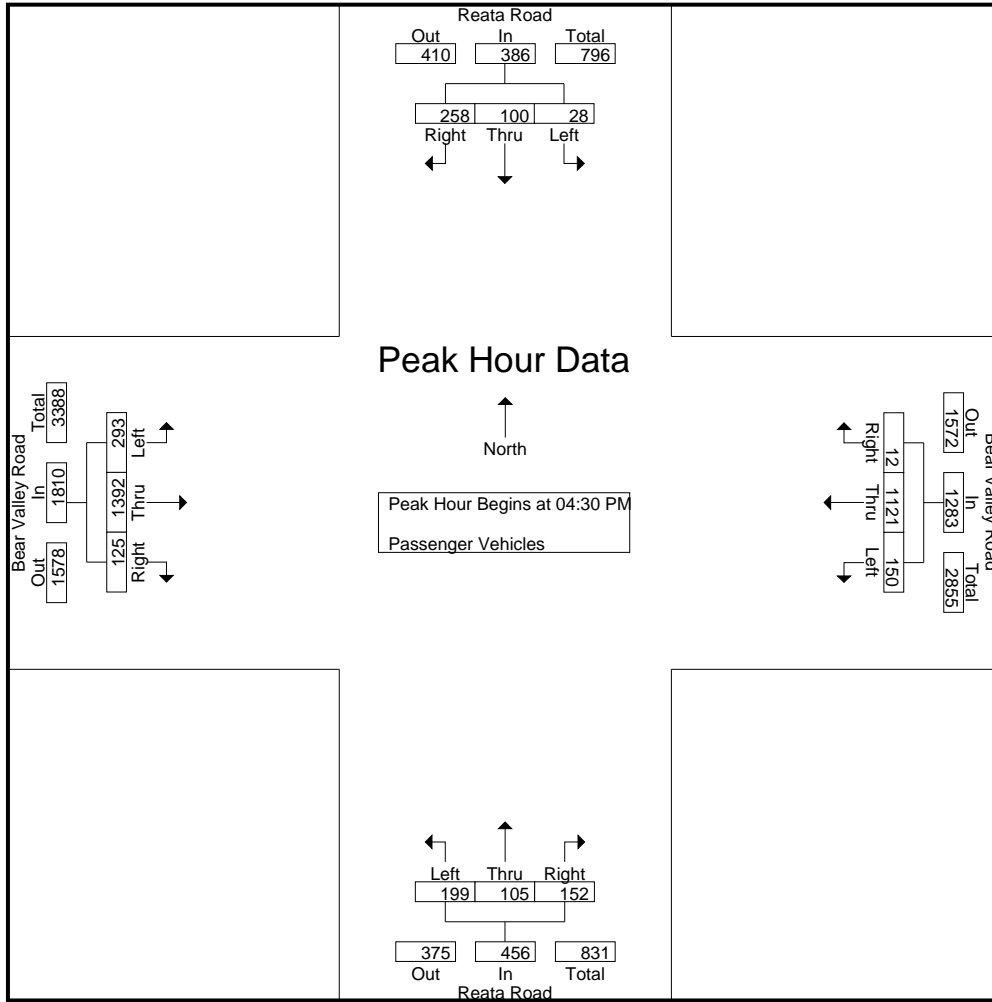
Start Time	Reata Road Southbound				Bear Valley Road Westbound				Reata Road Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	5	19	68	92	46	239	5	290	53	26	38	117	89	328	33	450	949
04:15 PM	5	20	80	105	39	239	3	281	43	23	44	110	75	329	31	435	931
04:30 PM	10	27	82	119	27	293	2	322	40	23	46	109	70	335	33	438	988
04:45 PM	4	28	52	84	39	287	4	330	50	20	41	111	72	351	41	464	989
Total	24	94	282	400	151	1058	14	1223	186	92	169	447	306	1343	138	1787	3857
05:00 PM	9	28	64	101	50	239	4	293	64	30	40	134	73	321	24	418	946
05:15 PM	5	17	60	82	34	302	2	338	45	32	25	102	78	385	27	490	1012
05:30 PM	5	18	62	85	29	239	6	274	59	25	38	122	57	291	41	389	870
05:45 PM	5	13	51	69	38	213	6	257	51	13	33	97	71	319	39	429	852
Total	24	76	237	337	151	993	18	1162	219	100	136	455	279	1316	131	1726	3680
Grand Total	48	170	519	737	302	2051	32	2385	405	192	305	902	585	2659	269	3513	7537
Apprch %	6.5	23.1	70.4		12.7	86	1.3		44.9	21.3	33.8		16.7	75.7	7.7		
Total %	0.6	2.3	6.9	9.8	4	27.2	0.4	31.6	5.4	2.5	4	12	7.8	35.3	3.6	46.6	

Start Time	Reata Road Southbound				Bear Valley Road Westbound				Reata Road Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:30 PM	<b>10</b>	27	<b>82</b>	<b>119</b>	27	293	2	322	40	23	<b>46</b>	109	70	335	33	438	988
04:45 PM	4	<b>28</b>	52	84	39	287	<b>4</b>	330	50	20	41	111	72	351	<b>41</b>	464	989
05:00 PM	9	28	64	101	<b>50</b>	239	4	293	<b>64</b>	30	40	<b>134</b>	73	321	24	418	946
05:15 PM	5	17	60	82	34	<b>302</b>	2	<b>338</b>	45	<b>32</b>	25	102	<b>78</b>	<b>385</b>	27	<b>490</b>	<b>1012</b>
Total Volume	28	100	258	386	150	1121	12	1283	199	105	152	456	293	1392	125	1810	3935
% App. Total	7.3	25.9	66.8		11.7	87.4	0.9		43.6	23	33.3		16.2	76.9	6.9		
PHF	.700	.893	.787	.811	.750	.928	.750	.949	.777	.820	.826	.851	.939	.904	.762	.923	.972

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

City of Apple Valley  
 N/S: Reata Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 04\_APV\_Reata\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 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.	10	27	82	119	27	293	2	322	40	23	46	109	70	335	33	438
+15 mins.	4	28	52	84	39	287	4	330	50	20	41	111	72	351	41	464
+30 mins.	9	28	64	101	50	239	4	293	64	30	40	134	73	321	24	418
+45 mins.	5	17	60	82	34	302	2	338	45	32	25	102	78	385	27	490
Total Volume	28	100	258	386	150	1121	12	1283	199	105	152	456	293	1392	125	1810
% App. Total	7.3	25.9	66.8		11.7	87.4	0.9		43.6	23	33.3		16.2	76.9	6.9	
PHF	.700	.893	.787	.811	.750	.928	.750	.949	.777	.820	.826	.851	.939	.904	.762	.923

City of Apple Valley  
 N/S: Reata Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 04\_APV\_Reata\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

Start Time	Reata Road Southbound				Bear Valley Road Westbound				Reata Road Northbound				Bear Valley 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	1	4	0	5	0	0	0	0	0	7	0	7	12
04:15 PM	0	0	3	3	0	6	0	6	0	0	0	0	0	7	0	7	16
04:30 PM	0	0	0	0	0	5	0	5	0	0	0	0	0	8	0	8	13
04:45 PM	0	1	1	2	0	3	1	4	0	0	0	0	0	3	0	3	9
Total	0	1	4	5	1	18	1	20	0	0	0	0	0	25	0	25	50
05:00 PM	0	0	0	0	0	4	0	4	1	0	0	1	0	1	1	2	7
05:15 PM	0	0	0	0	0	9	0	9	0	0	0	0	0	3	0	3	12
05:30 PM	0	0	0	0	0	6	0	6	0	0	0	0	0	3	0	3	9
05:45 PM	0	0	0	0	0	4	0	4	0	0	0	0	0	5	0	5	9
Total	0	0	0	0	0	23	0	23	1	0	0	1	0	12	1	13	37
Grand Total	0	1	4	5	1	41	1	43	1	0	0	1	0	37	1	38	87
Apprch %	0	20	80		2.3	95.3	2.3		100	0	0		0	97.4	2.6		
Total %	0	1.1	4.6	5.7	1.1	47.1	1.1	49.4	1.1	0	0	1.1	0	42.5	1.1	43.7	

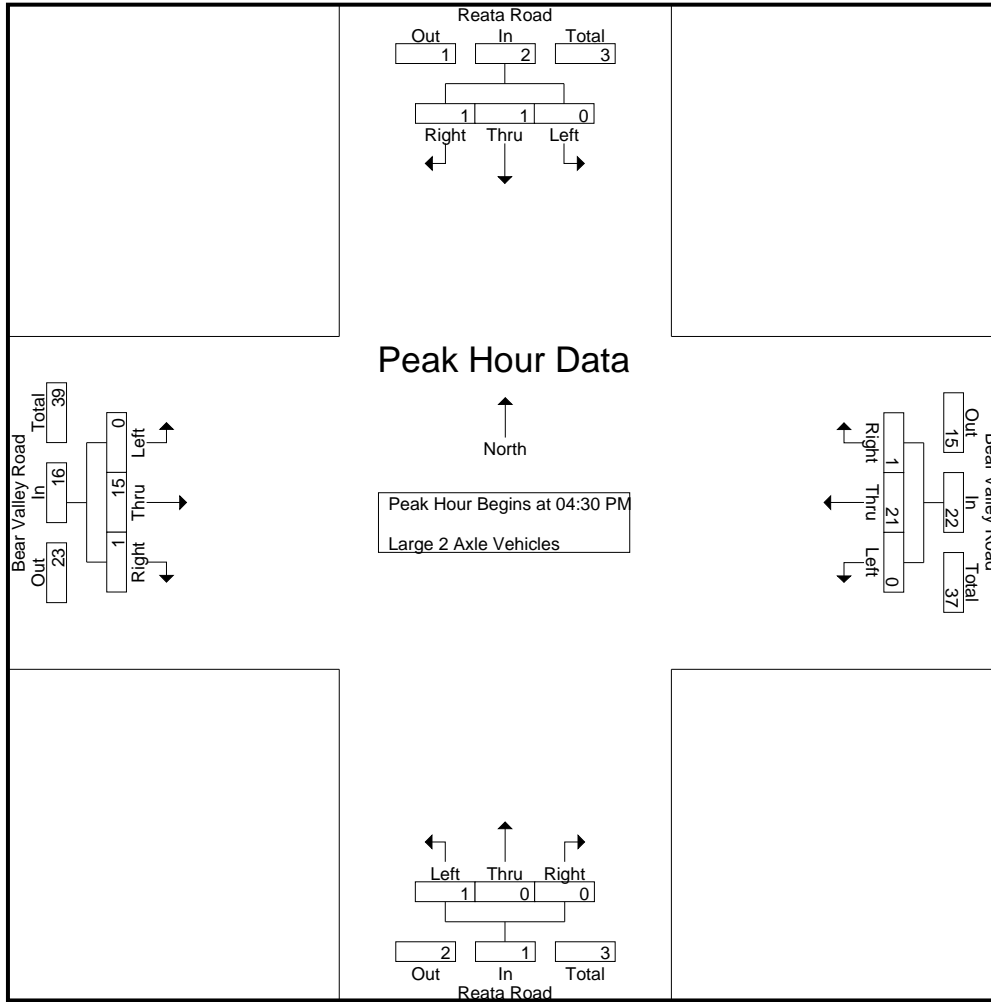
Start Time	Reata Road Southbound				Bear Valley Road Westbound				Reata Road Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:30 PM	0	0	0	0	0	5	0	5	0	0	0	0	0	8	0	8	13
04:45 PM	0	1	1	2	0	3	1	4	0	0	0	0	0	3	0	3	9
05:00 PM	0	0	0	0	0	4	0	4	1	0	0	1	0	1	1	2	7
05:15 PM	0	0	0	0	0	9	0	9	0	0	0	0	0	3	0	3	12
Total Volume	0	1	1	2	0	21	1	22	1	0	0	1	0	15	1	16	41
% App. Total	0	50	50		0	95.5	4.5		100	0	0		0	93.8	6.2		
PHF	.000	.250	.250	.250	.000	.583	.250	.611	.250	.000	.000	.250	.000	.469	.250	.500	.788

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

City of Apple Valley  
 N/S: Reata Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 04\_APV\_Reata\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 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	5	0	5	0	0	0	0	0	8	0	8
+15 mins.	0	1	1	2	0	3	1	4	0	0	0	0	0	3	0	3
+30 mins.	0	0	0	0	0	4	0	4	1	0	0	1	0	1	1	2
+45 mins.	0	0	0	0	0	9	0	9	0	0	0	0	0	3	0	3
Total Volume	0	1	1	2	0	21	1	22	1	0	0	1	0	15	1	16
% App. Total	0	50	50		0	95.5	4.5		100	0	0		0	93.8	6.2	
PHF	.000	.250	.250	.250	.000	.583	.250	.611	.250	.000	.000	.250	.000	.469	.250	.500

City of Apple Valley  
 N/S: Reata Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 04\_APV\_Reata\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- 3 Axle Vehicles

Start Time	Reata Road Southbound				Bear Valley Road Westbound				Reata Road Northbound				Bear Valley 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	2	0	2	0	0	0	0	0	0	0	0	2
04:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2	5
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	1	0	1	0	0	0	0	0	0	0	0	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Grand Total	0	0	0	0	0	4	0	4	0	0	0	0	0	2	0	2	6
Apprch %	0	0	0		0	100	0		0	0	0		0	100	0		
Total %	0	0	0		0	66.7	0	66.7	0	0	0		0	33.3	0	33.3	

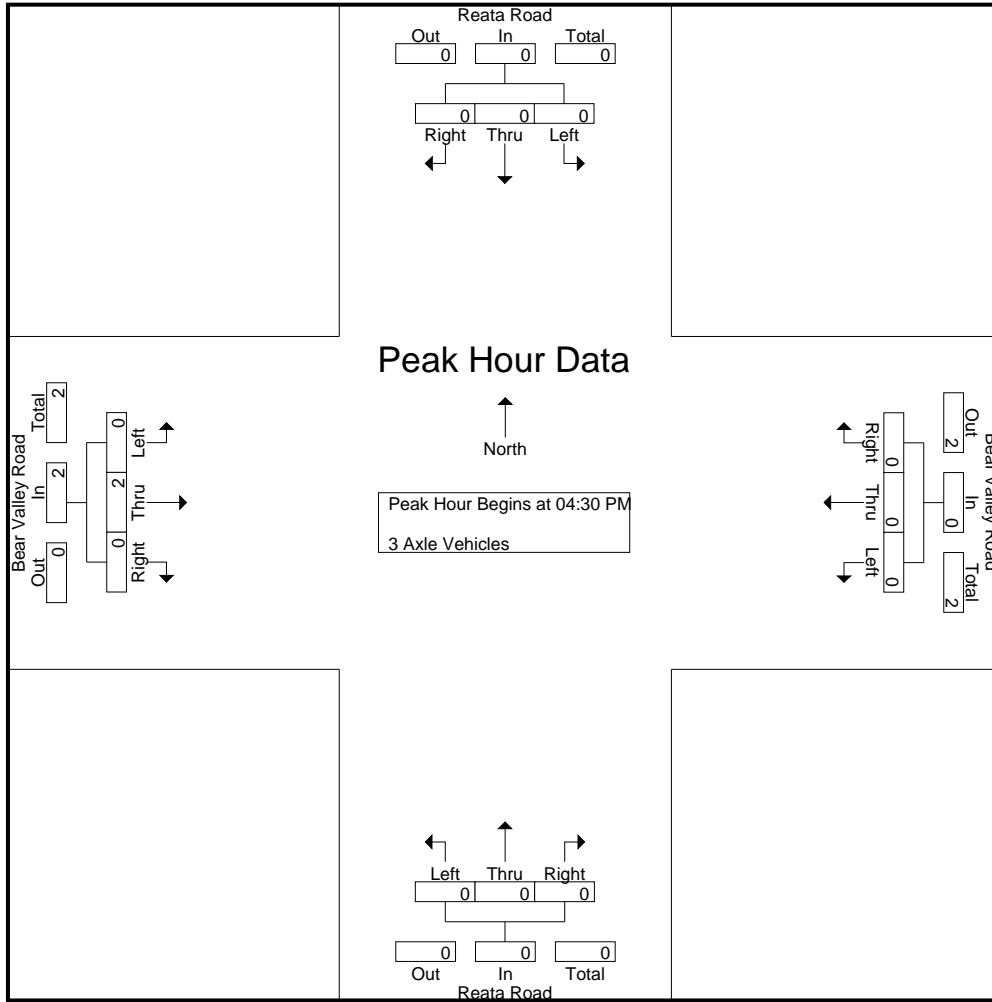
Start Time	Reata Road Southbound				Bear Valley Road Westbound				Reata Road Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
% App. Total	0	0	0		0	0	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.500	.000	.500	.500

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



City of Apple Valley  
 N/S: Reata Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 04\_APV\_Reata\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 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	1	0	1
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
+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	2	0	2
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.500	.000	.500

City of Apple Valley  
 N/S: Reata Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 04\_APV\_Reata\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

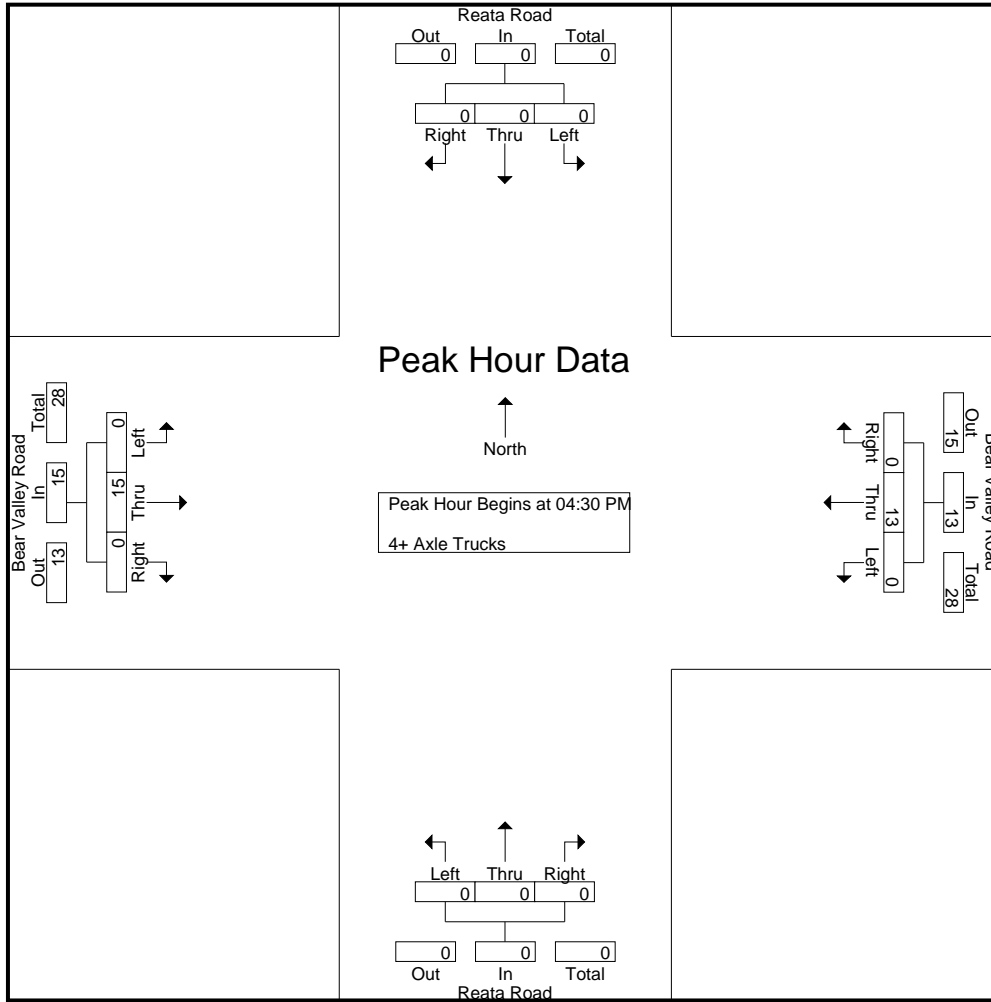
Groups Printed- 4+ Axle Trucks

Start Time	Reata Road Southbound				Bear Valley Road Westbound				Reata Road Northbound				Bear Valley 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	3	0	3	0	0	0	0	0	3	0	3	6
04:15 PM	0	0	0	0	0	5	0	5	0	0	0	0	0	0	0	0	5
04:30 PM	0	0	0	0	0	6	0	6	0	0	0	0	0	5	0	5	11
04:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	4	0	4	6
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>16</b>	<b>0</b>	<b>16</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>12</b>	<b>0</b>	<b>12</b>	<b>28</b>
05:00 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2	5
05:15 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	4	0	4	6
05:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>9</b>	<b>0</b>	<b>9</b>	<b>15</b>
<b>Grand Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>22</b>	<b>0</b>	<b>22</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>21</b>	<b>0</b>	<b>21</b>	<b>43</b>
Apprch %	0	0	0	0	0	100	0	0	0	0	0	0	0	100	0	0	
Total %	0	0	0	0	0	51.2	0	51.2	0	0	0	0	0	48.8	0	48.8	

Start Time	Reata Road Southbound				Bear Valley Road Westbound				Reata Road Northbound				Bear Valley 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	<b>6</b>	0	<b>6</b>	0	0	0	0	0	<b>5</b>	0	<b>5</b>	<b>11</b>
04:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	4	0	4	6
05:00 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2	5
05:15 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	4	0	4	6
Total Volume	0	0	0	0	0	13	0	13	0	0	0	0	0	15	0	15	28
% App. Total	0	0	0	0	0	100	0	0	0	0	0	0	0	100	0	0	
PHF	.000	.000	.000	.000	.000	.542	.000	.542	.000	.000	.000	.000	.000	.750	.000	.750	.636

City of Apple Valley  
 N/S: Reata Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 04\_APV\_Reata\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 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	<b>6</b>	0	<b>6</b>	0	0	0	0	0	<b>5</b>	0	<b>5</b>
+15 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	4	0	4
+30 mins.	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2
+45 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	4	0	4
Total Volume	0	0	0	0	0	13	0	13	0	0	0	0	0	15	0	15
% App. Total	0	0	0	0	0	100	0	100	0	0	0	0	0	100	0	100
PHF	.000	.000	.000	.000	.000	.542	.000	.542	.000	.000	.000	.000	.000	.750	.000	.750

Location: Apple Valley  
 N/S: Reata Road  
 E/W: Bear Valley Road



Date: 11/17/2022  
 Day: Thursday

**PEDESTRIANS**

	North Leg Reata Road	East Leg Bear Valley Road	South Leg Reata Road	West Leg Bear Valley Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	1	0	1	0	2
7:45 AM	0	0	0	0	0
8:00 AM	0	1	0	0	1
8:15 AM	0	0	0	0	0
8:30 AM	3	1	0	0	4
8:45 AM	0	1	0	0	1
<b>TOTAL VOLUMES:</b>	4	3	1	0	8

	North Leg Reata Road	East Leg Bear Valley Road	South Leg Reata Road	West Leg Bear Valley Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	1	1	0	1	3
4:15 PM	1	0	0	0	1
4:30 PM	0	0	0	0	0
4:45 PM	2	0	0	1	3
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	1	0	0	1
<b>TOTAL VOLUMES:</b>	4	2	0	2	8

Location: Apple Valley  
 N/S: Reata Road  
 E/W: Bear Valley Road



Date: 11/17/2022  
 Day: Thursday

BICYCLES

	Southbound Reata Road			Westbound Bear Valley Road			Northbound Reata Road			Eastbound Bear Valley Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	0	0	0	0	0	0	0	0	0	1

	Southbound Reata Road			Westbound Bear Valley Road			Northbound Reata Road			Eastbound Bear Valley Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	1	0	0	1

City of Apple Valley  
 N/S: Apple Valley Road  
 E/W: Pimlico Road  
 Weather: Clear

File Name : 05\_APV\_AV\_Pim AM  
 Site Code : 221022  
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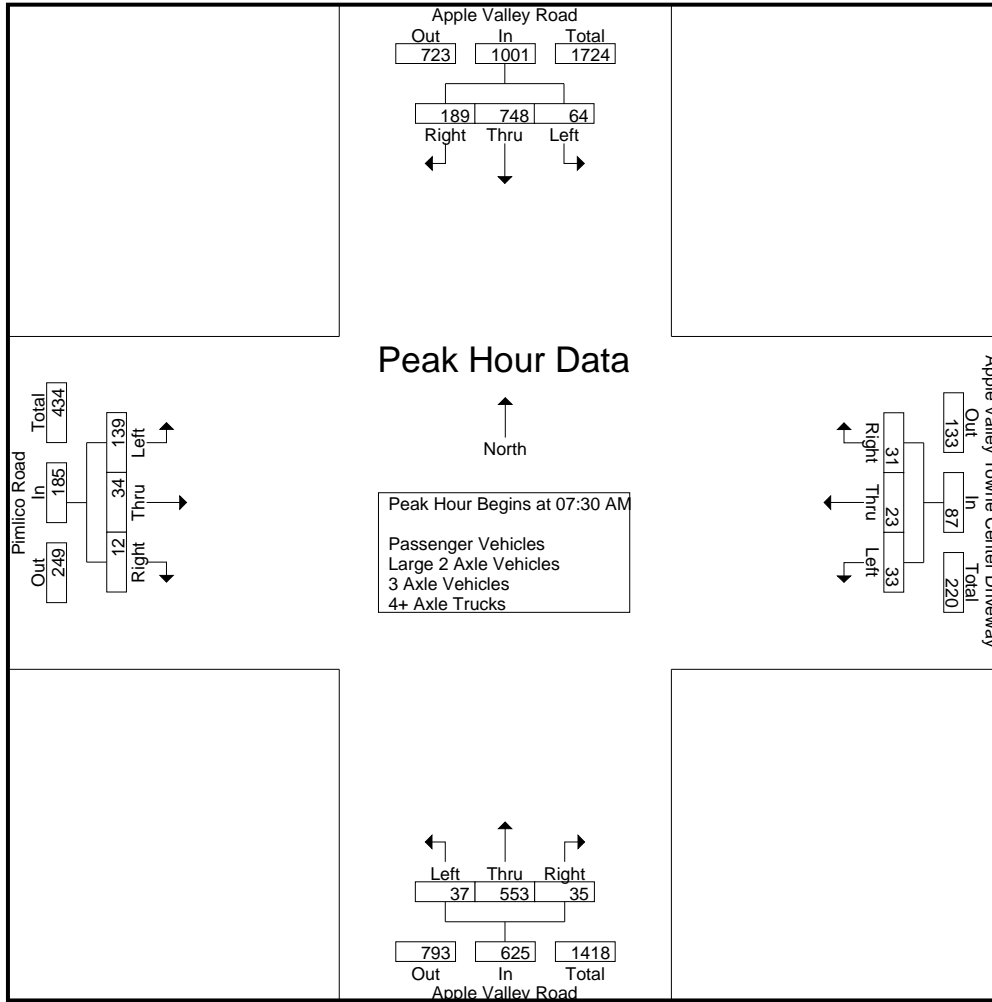
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Apple Valley Road Southbound				Apple Valley Towne Center Driveway Westbound				Apple Valley Road Northbound				Pimlico 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	7	94	19	120	3	1	5	9	6	78	5	89	35	5	2	42	260
07:15 AM	9	102	30	141	9	2	4	15	5	91	7	103	32	6	7	45	304
07:30 AM	14	163	36	213	6	5	9	20	10	159	6	175	36	10	1	47	455
07:45 AM	16	191	46	253	8	10	5	23	9	163	10	182	36	5	4	45	503
Total	46	550	131	727	26	18	23	67	30	491	28	549	139	26	14	179	1522
08:00 AM	22	200	48	270	5	7	9	21	9	103	13	125	29	5	3	37	453
08:15 AM	12	194	59	265	14	1	8	23	9	128	6	143	38	14	4	56	487
08:30 AM	12	140	52	204	12	15	12	39	12	124	11	147	48	6	9	63	453
08:45 AM	22	173	47	242	8	5	11	24	17	109	9	135	38	7	11	56	457
Total	68	707	206	981	39	28	40	107	47	464	39	550	153	32	27	212	1850
Grand Total	114	1257	337	1708	65	46	63	174	77	955	67	1099	292	58	41	391	3372
Apprch %	6.7	73.6	19.7		37.4	26.4	36.2		7	86.9	6.1		74.7	14.8	10.5		
Total %	3.4	37.3	10	50.7	1.9	1.4	1.9	5.2	2.3	28.3	2	32.6	8.7	1.7	1.2	11.6	
Passenger Vehicles	114	1225	335	1674	64	44	63	171	73	916	67	1056	283	56	35	374	3275
% Passenger Vehicles	100	97.5	99.4	98	98.5	95.7	100	98.3	94.8	95.9	100	96.1	96.9	96.6	85.4	95.7	97.1
Large 2 Axle Vehicles	0	21	2	23	1	1	0	2	4	19	0	23	6	2	3	11	59
% Large 2 Axle Vehicles	0	1.7	0.6	1.3	1.5	2.2	0	1.1	5.2	2	0	2.1	2.1	3.4	7.3	2.8	1.7
3 Axle Vehicles	0	3	0	3	0	0	0	0	0	5	0	5	0	0	2	2	10
% 3 Axle Vehicles	0	0.2	0	0.2	0	0	0	0	0	0.5	0	0.5	0	0	4.9	0.5	0.3
4+ Axle Trucks	0	8	0	8	0	1	0	1	0	15	0	15	3	0	1	4	28
% 4+ Axle Trucks	0	0.6	0	0.5	0	2.2	0	0.6	0	1.6	0	1.4	1	0	2.4	1	0.8

Start Time	Apple Valley Road Southbound				Apple Valley Towne Center Driveway Westbound				Apple Valley Road Northbound				Pimlico 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	163	36	213	6	5	9	20	10	159	6	175	36	10	1	47	455
07:45 AM	16	191	46	253	8	10	5	23	9	163	10	182	36	5	4	45	503
08:00 AM	22	200	48	270	5	7	9	21	9	103	13	125	29	5	3	37	453
08:15 AM	12	194	59	265	14	1	8	23	9	128	6	143	38	14	4	56	487
Total Volume	64	748	189	1001	33	23	31	87	37	553	35	625	139	34	12	185	1898
% App. Total	6.4	74.7	18.9		37.9	26.4	35.6		5.9	88.5	5.6		75.1	18.4	6.5		
PHF	.727	.935	.801	.927	.589	.575	.861	.946	.925	.848	.673	.859	.914	.607	.750	.826	.943

City of Apple Valley  
 N/S: Apple Valley Road  
 E/W: Pimlico Road  
 Weather: Clear

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

	07:30 AM				08:00 AM				07:30 AM				08:00 AM			
+0 mins.	14	163	36	213	5	7	9	21	<b>10</b>	159	6	175	29	5	3	37
+15 mins.	16	191	46	253	<b>14</b>	1	8	23	9	<b>163</b>	10	<b>182</b>	38	<b>14</b>	4	56
+30 mins.	<b>22</b>	<b>200</b>	48	<b>270</b>	12	<b>15</b>	<b>12</b>	<b>39</b>	9	103	<b>13</b>	125	<b>48</b>	6	9	<b>63</b>
+45 mins.	12	194	<b>59</b>	265	8	5	11	24	9	128	6	143	38	7	<b>11</b>	56
Total Volume	64	748	189	1001	39	28	40	107	37	553	35	625	153	32	27	212
% App. Total	6.4	74.7	18.9		36.4	26.2	37.4		5.9	88.5	5.6		72.2	15.1	12.7	
PHF	.727	.935	.801	.927	.696	.467	.833	.686	.925	.848	.673	.859	.797	.571	.614	.841

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Groups Printed- Passenger Vehicles

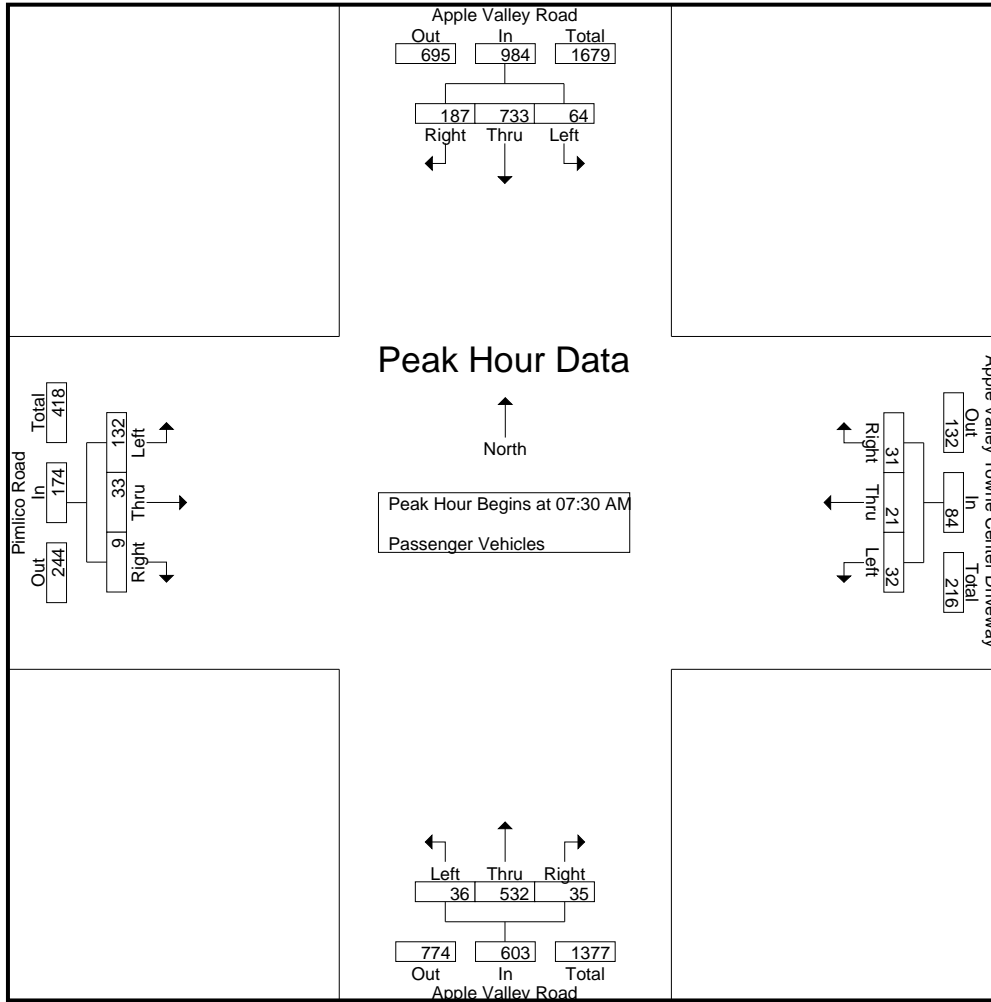
Start Time	Apple Valley Road Southbound				Apple Valley Towne Center Driveway Westbound				Apple Valley Road Northbound				Pimlico Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	7	90	19	116	3	1	5	9	5	71	5	81	34	5	2	41	247
07:15 AM	9	98	30	137	9	2	4	15	4	86	7	97	32	6	6	44	293
07:30 AM	14	159	36	209	6	5	9	20	9	152	6	167	35	9	1	45	441
07:45 AM	16	188	46	250	7	9	5	21	9	159	10	178	32	5	3	40	489
Total	46	535	131	712	25	17	23	65	27	468	28	523	133	25	12	170	1470
08:00 AM	22	196	48	266	5	6	9	20	9	97	13	119	28	5	3	36	441
08:15 AM	12	190	57	259	14	1	8	23	9	124	6	139	37	14	2	53	474
08:30 AM	12	137	52	201	12	15	12	39	11	119	11	141	48	6	7	61	442
08:45 AM	22	167	47	236	8	5	11	24	17	108	9	134	37	6	11	54	448
Total	68	690	204	962	39	27	40	106	46	448	39	533	150	31	23	204	1805
Grand Total	114	1225	335	1674	64	44	63	171	73	916	67	1056	283	56	35	374	3275
Apprch %	6.8	73.2	20		37.4	25.7	36.8		6.9	86.7	6.3		75.7	15	9.4		
Total %	3.5	37.4	10.2	51.1	2	1.3	1.9	5.2	2.2	28	2	32.2	8.6	1.7	1.1	11.4	

Start Time	Apple Valley Road Southbound				Apple Valley Towne Center Driveway Westbound				Apple Valley Road Northbound				Pimlico 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	159	36	209	6	5	<b>9</b>	20	<b>9</b>	152	6	167	35	9	1	45	441
07:45 AM	16	188	46	250	7	<b>9</b>	5	21	9	<b>159</b>	10	<b>178</b>	32	5	<b>3</b>	40	<b>489</b>
08:00 AM	<b>22</b>	<b>196</b>	48	<b>266</b>	5	6	9	20	9	97	<b>13</b>	119	28	5	3	36	441
08:15 AM	12	190	<b>57</b>	259	<b>14</b>	1	8	<b>23</b>	9	124	6	139	<b>37</b>	<b>14</b>	2	<b>53</b>	474
Total Volume	64	733	187	984	32	21	31	84	36	532	35	603	132	33	9	174	1845
% App. Total	6.5	74.5	19		38.1	25	36.9		6	88.2	5.8		75.9	19	5.2		
PHF	.727	.935	.820	.925	.571	.583	.861	.913	1.00	.836	.673	.847	.892	.589	.750	.821	.943



City of Apple Valley  
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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.	14	159	36	209	6	5	9	20	9	152	6	167	35	9	1	45
+15 mins.	16	188	46	250	7	9	5	21	9	159	10	178	32	5	3	40
+30 mins.	22	196	48	266	5	6	9	20	9	97	13	119	28	5	3	36
+45 mins.	12	190	57	259	14	1	8	23	9	124	6	139	37	14	2	53
Total Volume	64	733	187	984	32	21	31	84	36	532	35	603	132	33	9	174
% App. Total	6.5	74.5	19		38.1	25	36.9		6	88.2	5.8		75.9	19	5.2	
PHF	.727	.935	.820	.925	.571	.583	.861	.913	1.000	.836	.673	.847	.892	.589	.750	.821

City of Apple Valley  
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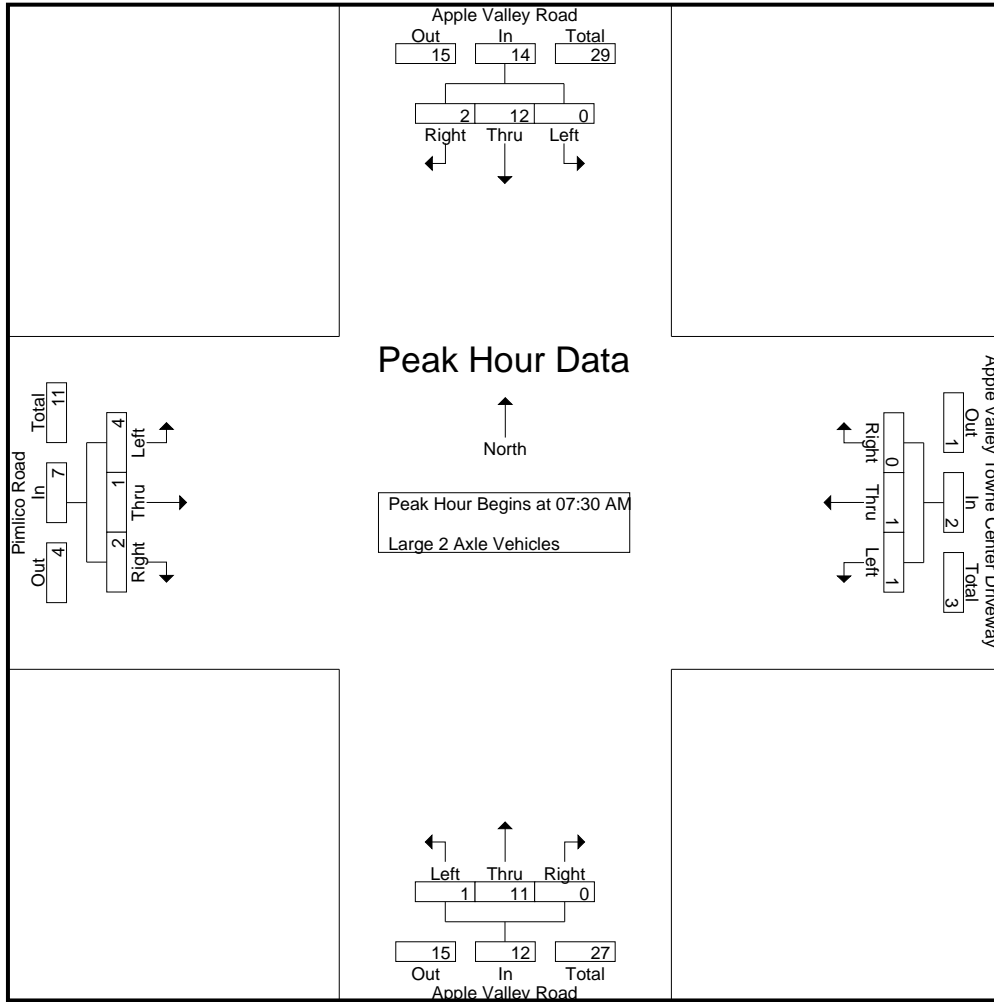
Groups Printed- Large 2 Axle Vehicles

Start Time	Apple Valley Road Southbound				Apple Valley Towne Center Driveway Westbound				Apple Valley Road Northbound				Pimlico 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	3	0	4	1	0	0	1	8
07:15 AM	0	1	0	1	0	0	0	0	1	1	0	2	0	0	1	1	4
07:30 AM	0	3	0	3	0	0	0	0	1	4	0	5	0	1	0	1	9
07:45 AM	0	3	0	3	1	0	0	1	0	2	0	2	3	0	0	3	9
Total	0	10	0	10	1	0	0	1	3	10	0	13	4	1	1	6	30
08:00 AM	0	3	0	3	0	1	0	1	0	4	0	4	0	0	0	0	8
08:15 AM	0	3	2	5	0	0	0	0	0	1	0	1	1	0	2	3	9
08:30 AM	0	2	0	2	0	0	0	0	1	3	0	4	0	0	0	0	6
08:45 AM	0	3	0	3	0	0	0	0	0	1	0	1	1	1	0	2	6
Total	0	11	2	13	0	1	0	1	1	9	0	10	2	1	2	5	29
Grand Total	0	21	2	23	1	1	0	2	4	19	0	23	6	2	3	11	59
Apprch %	0	91.3	8.7		50	50	0		17.4	82.6	0		54.5	18.2	27.3		
Total %	0	35.6	3.4	39	1.7	1.7	0	3.4	6.8	32.2	0	39	10.2	3.4	5.1	18.6	

Start Time	Apple Valley Road Southbound				Apple Valley Towne Center Driveway Westbound				Apple Valley Road Northbound				Pimlico 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	3	0	3	0	0	0	0	1	4	0	5	0	1	0	1	9
07:45 AM	0	3	0	3	1	0	0	1	0	2	0	2	3	0	0	3	9
08:00 AM	0	3	0	3	0	1	0	1	0	4	0	4	0	0	0	0	8
08:15 AM	0	3	2	5	0	0	0	0	0	1	0	1	1	0	2	3	9
Total Volume	0	12	2	14	1	1	0	2	1	11	0	12	4	1	2	7	35
% App. Total	0	85.7	14.3		50	50	0		8.3	91.7	0		57.1	14.3	28.6		
PHF	.000	1.00	.250	.700	.250	.250	.000	.500	.250	.688	.000	.600	.333	.250	.250	.583	.972

City of Apple Valley  
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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	3	0	3	0	0	0	0	1	4	0	5	0	1	0	1
+15 mins.	0	3	0	3	1	0	0	1	0	2	0	2	3	0	0	3
+30 mins.	0	3	0	3	0	1	0	1	0	4	0	4	0	0	0	0
+45 mins.	0	3	2	5	0	0	0	0	0	1	0	1	1	0	2	3
Total Volume	0	12	2	14	1	1	0	2	1	11	0	12	4	1	2	7
% App. Total	0	85.7	14.3		50	50	0		8.3	91.7	0		57.1	14.3	28.6	
PHF	.000	1.000	.250	.700	.250	.250	.000	.500	.250	.688	.000	.600	.333	.250	.250	.583

City of Apple Valley  
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 Weather: Clear

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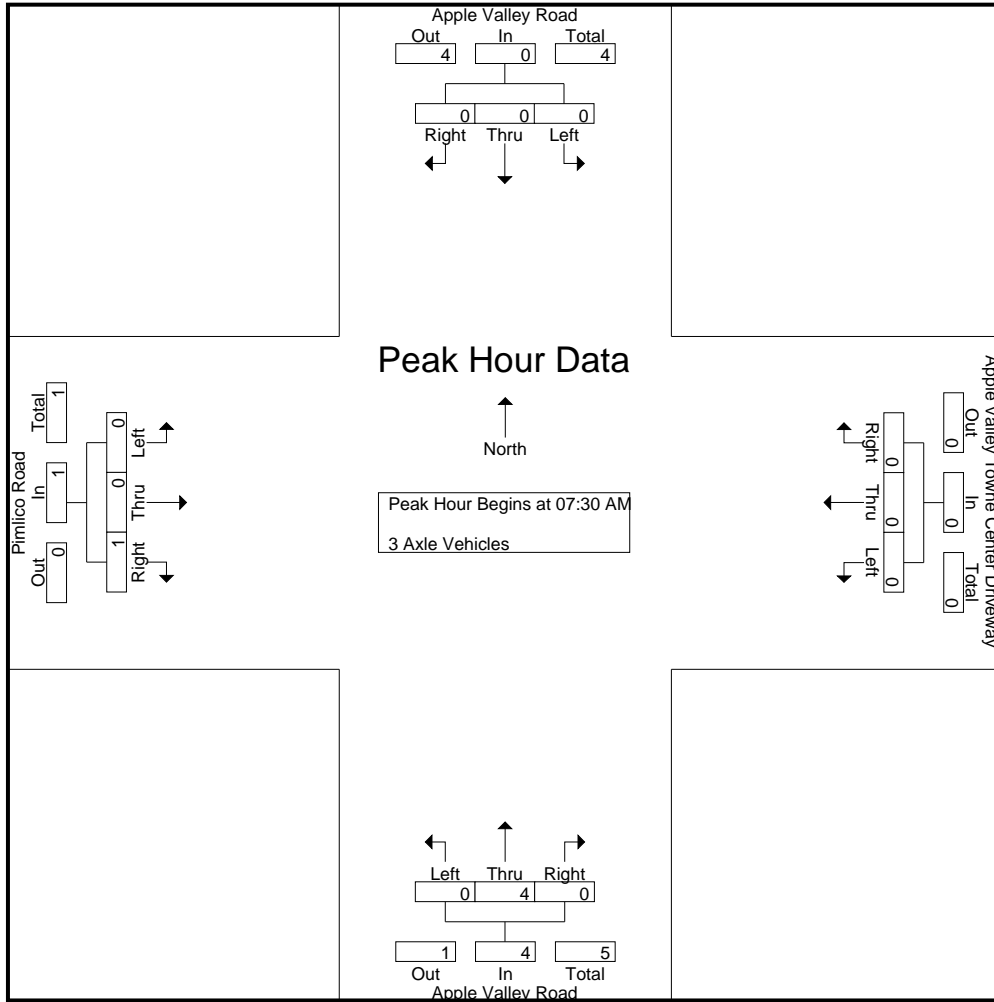
Groups Printed- 3 Axle Vehicles

Start Time	Apple Valley Road Southbound				Apple Valley Towne Center Driveway Westbound				Apple Valley Road Northbound				Pimlico 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	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:30 AM	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	3
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Total	0	1	0	1	0	0	0	0	0	3	0	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	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	1	1	2
08:45 AM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	0	2	0	2	0	0	0	0	0	2	0	2	0	0	1	1	5
Grand Total	0	3	0	3	0	0	0	0	0	5	0	5	0	0	2	2	10
Apprch %	0	100	0		0	0	0		0	100	0		0	0	100		
Total %	0	30	0	30	0	0	0	0	0	50	0	50	0	0	20	20	

Start Time	Apple Valley Road Southbound				Apple Valley Towne Center Driveway Westbound				Apple Valley Road Northbound				Pimlico 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	3	0	3	0	0	0	0	3
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
08:00 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	4	0	4	0	0	1	1	5
% App. Total	0	0	0		0	0	0		0	100	0		0	0	100		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.333	.000	.333	.000	.000	.250	.250	.417

City of Apple Valley  
 N/S: Apple Valley Road  
 E/W: Pimlico Road  
 Weather: Clear

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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	3	0	3	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
+30 mins.	0	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0	0	4	0	4	0	0	1	1
% App. Total	0	0	0	0	0	0	0	0	0	100	0	0	0	0	100	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.333	.000	.333	.000	.000	.250	.250

City of Apple Valley  
 N/S: Apple Valley Road  
 E/W: Pimlico Road  
 Weather: Clear

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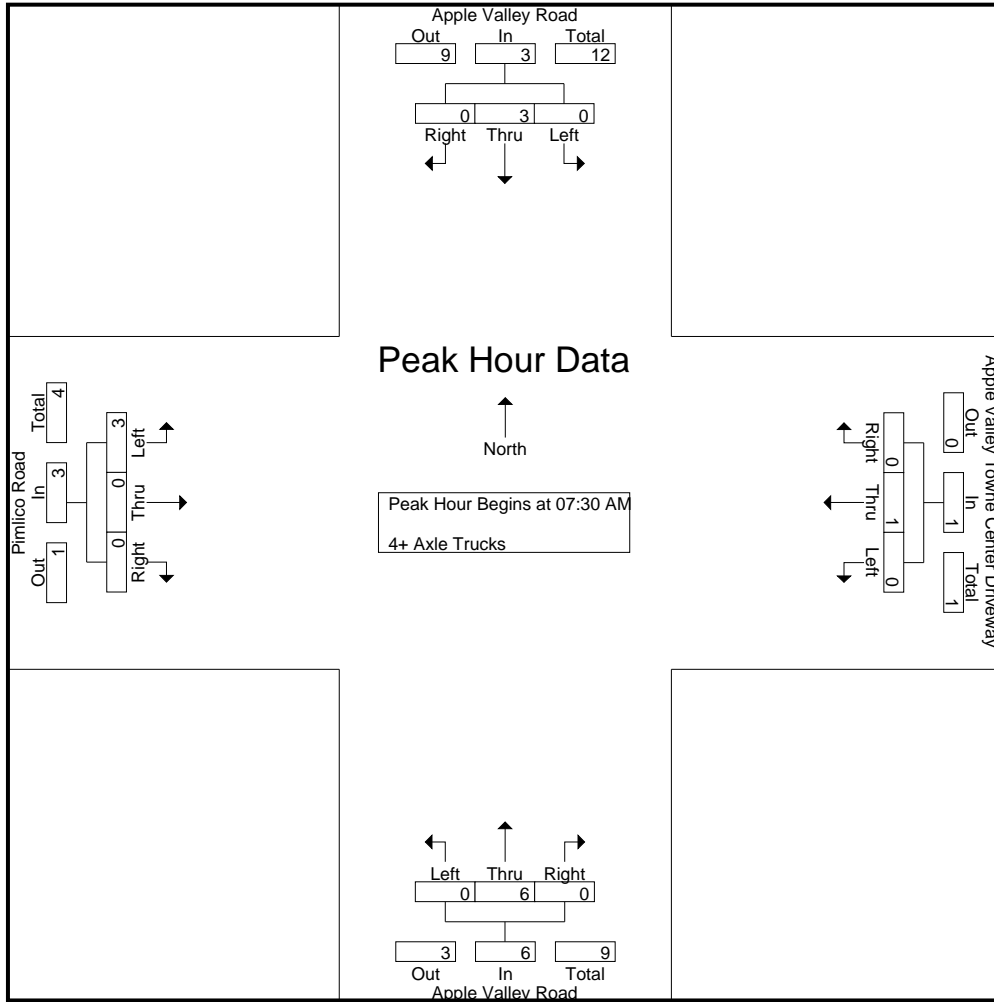
Groups Printed- 4+ Axle Trucks

Start Time	Apple Valley Road Southbound				Apple Valley Towne Center Driveway Westbound				Apple Valley Road Northbound				Pimlico 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	4	0	4	0	0	0	0	0	5
07:15 AM	0	2	0	2	0	0	0	0	0	4	0	4	0	0	0	0	0	6
07:30 AM	0	1	0	1	0	0	0	0	0	0	0	0	1	0	0	0	1	2
07:45 AM	0	0	0	0	0	1	0	1	0	2	0	2	1	0	0	0	1	4
Total	0	4	0	4	0	1	0	1	0	10	0	10	2	0	0	2	2	17
08:00 AM	0	1	0	1	0	0	0	0	0	1	0	1	1	0	0	0	1	3
08:15 AM	0	1	0	1	0	0	0	0	0	3	0	3	0	0	0	0	0	4
08:30 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	1	0	1	3
08:45 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	4	0	4	0	0	0	0	0	5	0	5	1	0	1	2	2	11
Grand Total	0	8	0	8	0	1	0	1	0	15	0	15	3	0	1	4	4	28
Apprch %	0	100	0		0	100	0		0	100	0		75	0	25			
Total %	0	28.6	0	28.6	0	3.6	0	3.6	0	53.6	0	53.6	10.7	0	3.6	14.3		

Start Time	Apple Valley Road Southbound				Apple Valley Towne Center Driveway Westbound				Apple Valley Road Northbound				Pimlico 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	0	0	1	0	0	0	1	2
07:45 AM	0	0	0	0	0	1	0	1	0	2	0	2	1	0	0	0	1	4
08:00 AM	0	1	0	1	0	0	0	0	0	1	0	1	1	0	0	0	1	3
08:15 AM	0	1	0	1	0	0	0	0	0	3	0	3	0	0	0	0	0	4
Total Volume	0	3	0	3	0	1	0	1	0	6	0	6	3	0	0	0	3	13
% App. Total	0	100	0		0	100	0		0	100	0		100	0	0			
PHF	.000	.750	.000	.750	.000	.250	.000	.250	.000	.500	.000	.500	.750	.000	.000	.750	.813	

City of Apple Valley  
 N/S: Apple Valley Road  
 E/W: Pimlico Road  
 Weather: Clear

File Name : 05\_APV\_AV\_Pim AM  
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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	0	0	0	1	0	0	1
+15 mins.	0	0	0	0	0	1	0	1	0	2	0	2	1	0	0	1
+30 mins.	0	1	0	1	0	0	0	0	0	1	0	1	1	0	0	1
+45 mins.	0	1	0	1	0	0	0	0	0	3	0	3	0	0	0	0
Total Volume	0	3	0	3	0	1	0	1	0	6	0	6	3	0	0	3
% App. Total	0	100	0	0	0	100	0	0	0	100	0	0	100	0	0	0
PHF	.000	.750	.000	.750	.000	.250	.000	.250	.000	.500	.000	.500	.750	.000	.000	.750

City of Apple Valley  
 N/S: Apple Valley Road  
 E/W: Pimlico Road  
 Weather: Clear

File Name : 05\_APV\_AV\_Pim PM  
 Site Code : 221022  
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Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

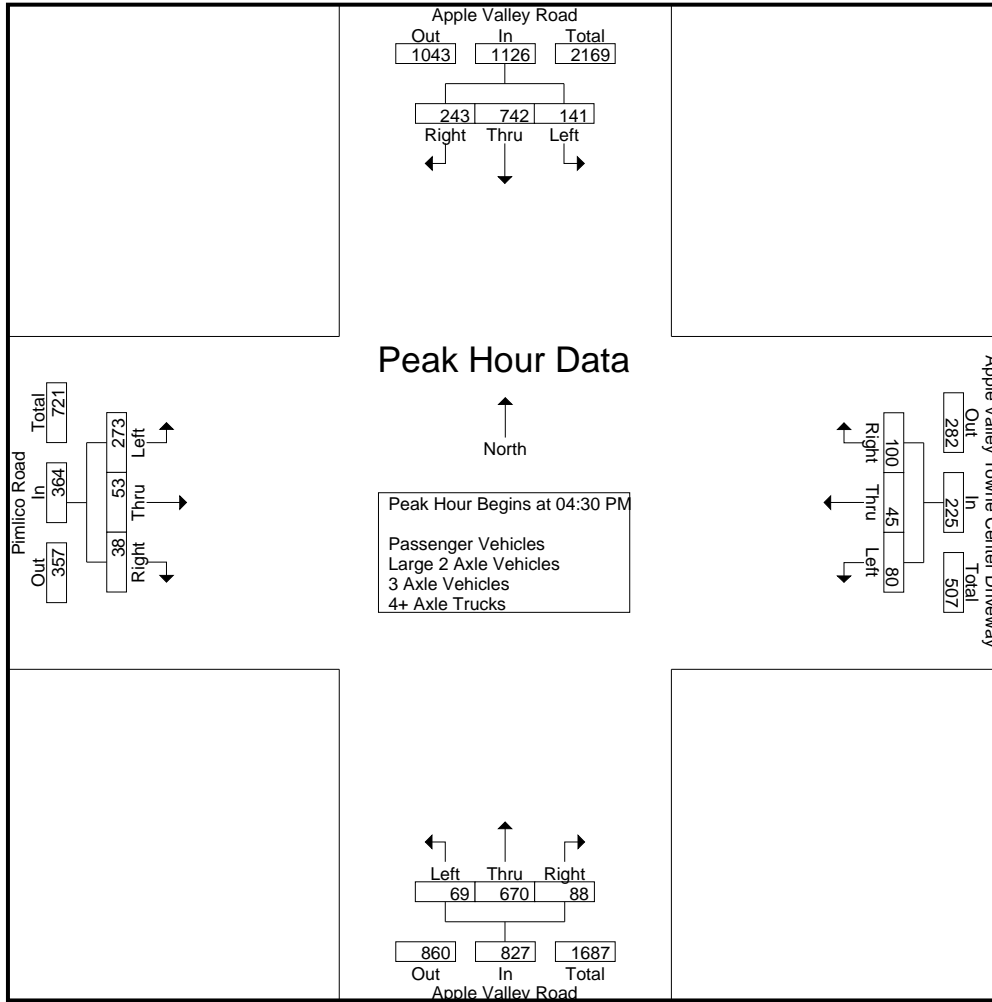
Start Time	Apple Valley Road Southbound				Apple Valley Towne Center Driveway Westbound				Apple Valley Road Northbound				Pimlico Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	42	186	50	278	19	21	27	67	24	151	20	195	58	16	4	78	618
04:15 PM	36	202	58	296	25	14	27	66	19	133	22	174	69	16	6	91	627
04:30 PM	34	183	69	286	25	10	25	60	16	166	19	201	66	16	7	89	636
04:45 PM	34	196	53	283	24	13	29	66	11	152	23	186	60	9	12	81	616
Total	146	767	230	1143	93	58	108	259	70	602	84	756	253	57	29	339	2497
05:00 PM	39	188	66	293	20	10	17	47	19	164	23	206	68	17	13	98	644
05:15 PM	34	175	55	264	11	12	29	52	23	188	23	234	79	11	6	96	646
05:30 PM	34	149	49	232	24	12	20	56	16	124	16	156	65	10	6	81	525
05:45 PM	30	156	41	227	13	10	28	51	19	134	20	173	57	9	13	79	530
Total	137	668	211	1016	68	44	94	206	77	610	82	769	269	47	38	354	2345
Grand Total	283	1435	441	2159	161	102	202	465	147	1212	166	1525	522	104	67	693	4842
Apprch %	13.1	66.5	20.4		34.6	21.9	43.4		9.6	79.5	10.9		75.3	15	9.7		
Total %	5.8	29.6	9.1	44.6	3.3	2.1	4.2	9.6	3	25	3.4	31.5	10.8	2.1	1.4	14.3	
Passenger Vehicles	282	1415	435	2132	159	101	202	462	145	1201	164	1510	517	103	66	686	4790
% Passenger Vehicles	99.6	98.6	98.6	98.7	98.8	99	100	99.4	98.6	99.1	98.8	99	99	99	98.5	99	98.9
Large 2 Axle Vehicles	0	14	6	20	2	1	0	3	2	9	2	13	4	1	1	6	42
% Large 2 Axle Vehicles	0	1	1.4	0.9	1.2	1	0	0.6	1.4	0.7	1.2	0.9	0.8	1	1.5	0.9	0.9
3 Axle Vehicles	1	1	0	2	0	0	0	0	0	1	0	1	1	0	0	1	4
% 3 Axle Vehicles	0.4	0.1	0	0.1	0	0	0	0	0	0.1	0	0.1	0.2	0	0	0.1	0.1
4+ Axle Trucks	0	5	0	5	0	0	0	0	0	1	0	1	0	0	0	0	6
% 4+ Axle Trucks	0	0.3	0	0.2	0	0	0	0	0	0.1	0	0.1	0	0	0	0	0.1

Start Time	Apple Valley Road Southbound				Apple Valley Towne Center Driveway Westbound				Apple Valley Road Northbound				Pimlico 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	34	183	<b>69</b>	286	<b>25</b>	10	25	60	16	166	19	201	66	16	7	89	636
04:45 PM	34	<b>196</b>	53	283	24	<b>13</b>	<b>29</b>	<b>66</b>	11	152	<b>23</b>	186	60	9	12	81	616
05:00 PM	<b>39</b>	188	66	<b>293</b>	20	10	17	47	19	164	23	206	68	<b>17</b>	<b>13</b>	<b>98</b>	644
05:15 PM	34	175	55	264	11	12	29	52	<b>23</b>	<b>188</b>	23	<b>234</b>	<b>79</b>	11	6	96	<b>646</b>
Total Volume	141	742	243	1126	80	45	100	225	69	670	88	827	273	53	38	364	2542
% App. Total	12.5	65.9	21.6		35.6	20	44.4		8.3	81	10.6		75	14.6	10.4		
PHF	.904	.946	.880	.961	.800	.865	.862	.852	.750	.891	.957	.884	.864	.779	.731	.929	.984



City of Apple Valley  
 N/S: Apple Valley Road  
 E/W: Pimlico Road  
 Weather: Clear

File Name : 05\_APV\_AV\_Pim PM  
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Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	04:15 PM				04:00 PM				04:30 PM				04:30 PM			
+0 mins.	36	<b>202</b>	58	<b>296</b>	19	<b>21</b>	27	<b>67</b>	16	166	19	201	66	16	7	89
+15 mins.	34	183	<b>69</b>	286	<b>25</b>	14	27	66	11	152	<b>23</b>	186	60	9	12	81
+30 mins.	34	196	53	283	25	10	25	60	19	164	23	206	68	<b>17</b>	<b>13</b>	<b>98</b>
+45 mins.	<b>39</b>	188	66	293	24	13	<b>29</b>	66	<b>23</b>	<b>188</b>	23	<b>234</b>	<b>79</b>	11	6	96
Total Volume	143	769	246	1158	93	58	108	259	69	670	88	827	273	53	38	364
% App. Total	12.3	66.4	21.2		35.9	22.4	41.7		8.3	81	10.6		75	14.6	10.4	
PHF	.917	.952	.891	.978	.930	.690	.931	.966	.750	.891	.957	.884	.864	.779	.731	.929

City of Apple Valley  
 N/S: Apple Valley Road  
 E/W: Pimlico Road  
 Weather: Clear

File Name : 05\_APV\_AV\_Pim PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
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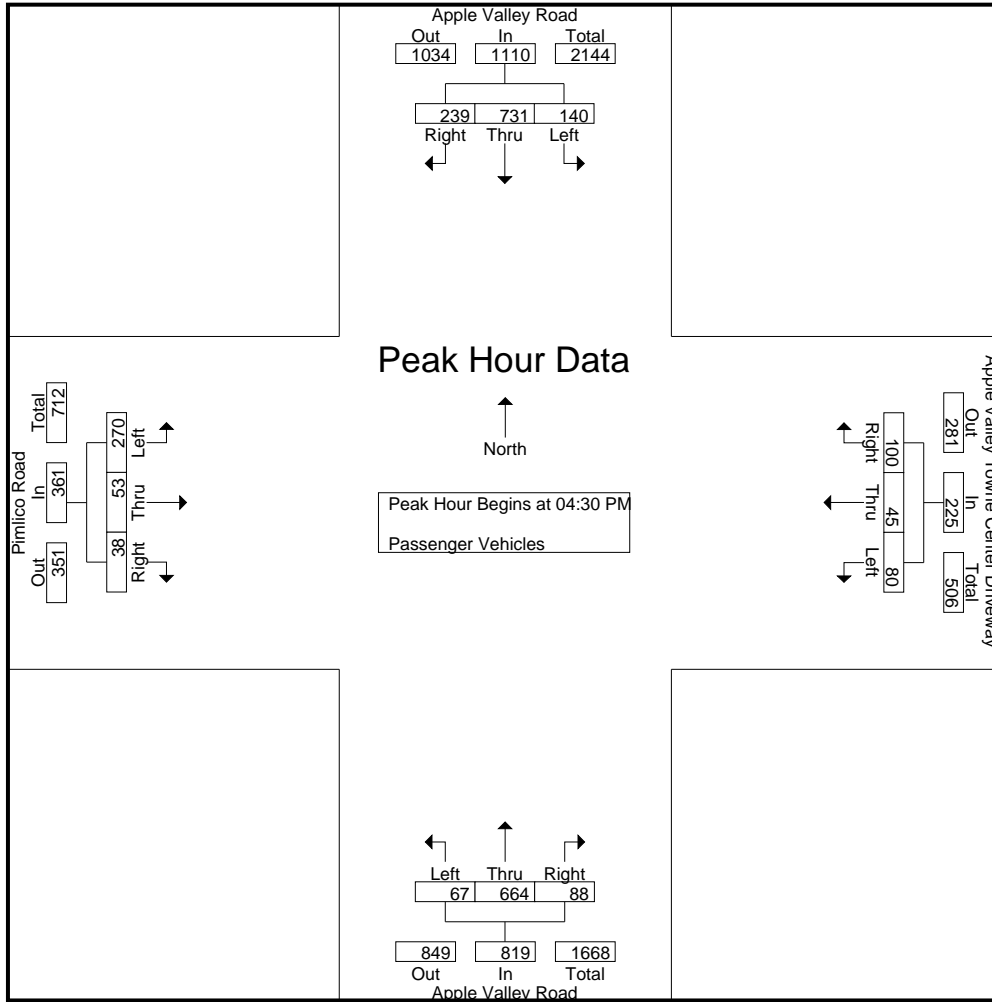
Groups Printed- Passenger Vehicles

Start Time	Apple Valley Road Southbound				Apple Valley Towne Center Driveway Westbound				Apple Valley Road Northbound				Pimlico 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	50	274	18	21	27	66	24	149	18	191	56	15	4	75	606
04:15 PM	36	199	56	291	24	13	27	64	19	133	22	174	69	16	6	91	620
04:30 PM	34	181	69	284	25	10	25	60	16	164	19	199	65	16	7	88	631
04:45 PM	34	193	51	278	24	13	29	66	11	150	23	184	60	9	12	81	609
Total	146	755	226	1127	91	57	108	256	70	596	82	748	250	56	29	335	2466
05:00 PM	38	186	66	290	20	10	17	47	18	163	23	204	68	17	13	98	639
05:15 PM	34	171	53	258	11	12	29	52	22	187	23	232	77	11	6	94	636
05:30 PM	34	147	49	230	24	12	20	56	16	122	16	154	65	10	6	81	521
05:45 PM	30	156	41	227	13	10	28	51	19	133	20	172	57	9	12	78	528
Total	136	660	209	1005	68	44	94	206	75	605	82	762	267	47	37	351	2324
Grand Total	282	1415	435	2132	159	101	202	462	145	1201	164	1510	517	103	66	686	4790
Apprch %	13.2	66.4	20.4		34.4	21.9	43.7		9.6	79.5	10.9		75.4	15	9.6		
Total %	5.9	29.5	9.1	44.5	3.3	2.1	4.2	9.6	3	25.1	3.4	31.5	10.8	2.2	1.4	14.3	

Start Time	Apple Valley Road Southbound				Apple Valley Towne Center Driveway Westbound				Apple Valley Road Northbound				Pimlico 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	34	181	<b>69</b>	284	<b>25</b>	10	25	60	16	164	19	199	65	16	7	88	631
04:45 PM	34	<b>193</b>	51	278	24	<b>13</b>	<b>29</b>	<b>66</b>	11	150	<b>23</b>	184	60	9	12	81	609
05:00 PM	<b>38</b>	186	66	<b>290</b>	20	10	17	47	18	163	23	204	68	<b>17</b>	<b>13</b>	<b>98</b>	<b>639</b>
05:15 PM	34	171	53	258	11	12	29	52	<b>22</b>	<b>187</b>	23	<b>232</b>	<b>77</b>	11	6	94	636
Total Volume	140	731	239	1110	80	45	100	225	67	664	88	819	270	53	38	361	2515
% App. Total	12.6	65.9	21.5		35.6	20	44.4		8.2	81.1	10.7		74.8	14.7	10.5		
PHF	.921	.947	.866	.957	.800	.865	.862	.852	.761	.888	.957	.883	.877	.779	.731	.921	.984

City of Apple Valley  
 N/S: Apple Valley Road  
 E/W: Pimlico Road  
 Weather: Clear

File Name : 05\_APV\_AV\_Pim PM  
 Site Code : 221022  
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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.	34	181	<b>69</b>	284	<b>25</b>	10	25	60	16	164	19	199	65	16	7	88
+15 mins.	34	<b>193</b>	51	278	24	<b>13</b>	<b>29</b>	<b>66</b>	11	150	<b>23</b>	184	60	9	12	81
+30 mins.	<b>38</b>	186	66	<b>290</b>	20	10	17	47	18	163	23	204	68	<b>17</b>	<b>13</b>	<b>98</b>
+45 mins.	34	171	53	258	11	12	29	52	<b>22</b>	<b>187</b>	23	<b>232</b>	<b>77</b>	11	6	94
Total Volume	140	731	239	1110	80	45	100	225	67	664	88	819	270	53	38	361
% App. Total	12.6	65.9	21.5		35.6	20	44.4		8.2	81.1	10.7		74.8	14.7	10.5	
PHF	.921	.947	.866	.957	.800	.865	.862	.852	.761	.888	.957	.883	.877	.779	.731	.921

City of Apple Valley  
 N/S: Apple Valley Road  
 E/W: Pimlico Road  
 Weather: Clear

File Name : 05\_APV\_AV\_Pim PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
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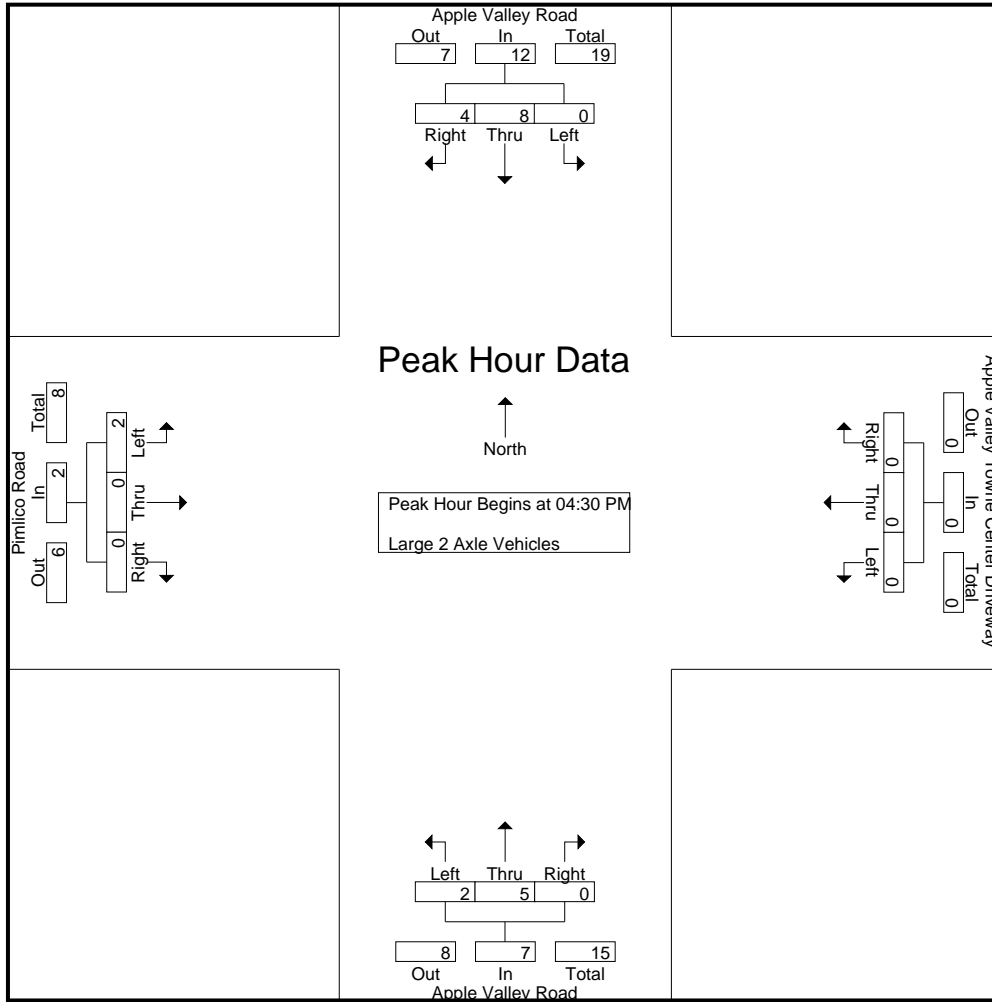
Groups Printed- Large 2 Axle Vehicles

Start Time	Apple Valley Road Southbound				Apple Valley Towne Center Driveway Westbound				Apple Valley Road Northbound				Pimlico 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	2	0	2	1	0	0	1	0	1	2	3	2	1	0	3	9
04:15 PM	0	3	2	5	1	1	0	2	0	0	0	0	0	0	0	0	7
04:30 PM	0	2	0	2	0	0	0	0	0	2	0	2	1	0	0	1	5
04:45 PM	0	2	2	4	0	0	0	0	0	2	0	2	0	0	0	0	6
<b>Total</b>	<b>0</b>	<b>9</b>	<b>4</b>	<b>13</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>5</b>	<b>2</b>	<b>7</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>4</b>	<b>27</b>
05:00 PM	0	0	0	0	0	0	0	0	1	1	0	2	0	0	0	0	2
05:15 PM	0	4	2	6	0	0	0	0	1	0	0	1	1	0	0	1	8
05:30 PM	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
05:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	1	2
<b>Total</b>	<b>0</b>	<b>5</b>	<b>2</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>4</b>	<b>0</b>	<b>6</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>15</b>
<b>Grand Total</b>	<b>0</b>	<b>14</b>	<b>6</b>	<b>20</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>2</b>	<b>9</b>	<b>2</b>	<b>13</b>	<b>4</b>	<b>1</b>	<b>1</b>	<b>6</b>	<b>42</b>
Apprch %	0	70	30		66.7	33.3	0		15.4	69.2	15.4		66.7	16.7	16.7		
Total %	0	33.3	14.3	47.6	4.8	2.4	0	7.1	4.8	21.4	4.8	31	9.5	2.4	2.4	14.3	

Start Time	Apple Valley Road Southbound				Apple Valley Towne Center Driveway Westbound				Apple Valley Road Northbound				Pimlico 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	2	0	2	0	0	0	0	0	2	0	2	1	0	0	1	5
04:45 PM	0	2	2	4	0	0	0	0	0	2	0	2	0	0	0	0	6
05:00 PM	0	0	0	0	0	0	0	0	1	1	0	2	0	0	0	0	2
05:15 PM	0	4	2	6	0	0	0	0	1	0	0	1	1	0	0	1	8
<b>Total Volume</b>	<b>0</b>	<b>8</b>	<b>4</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>5</b>	<b>0</b>	<b>7</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>21</b>
% App. Total	0	66.7	33.3		0	0	0		28.6	71.4	0		100	0	0		
PHF	.000	.500	.500	.500	.000	.000	.000	.000	.500	.625	.000	.875	.500	.000	.000	.500	.656

City of Apple Valley  
 N/S: Apple Valley Road  
 E/W: Pimlico Road  
 Weather: Clear

File Name : 05\_APV\_AV\_Pim PM  
 Site Code : 221022  
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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	2	0	2	0	0	0	0	0	2	0	2	1	0	0	1
+15 mins.	0	2	2	4	0	0	0	0	0	2	0	2	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	1	1	0	2	0	0	0	0
+45 mins.	0	4	2	6	0	0	0	0	1	0	0	1	1	0	0	1
Total Volume	0	8	4	12	0	0	0	0	2	5	0	7	2	0	0	2
% App. Total	0	66.7	33.3		0	0	0		28.6	71.4	0		100	0	0	
PHF	.000	.500	.500	.500	.000	.000	.000	.000	.500	.625	.000	.875	.500	.000	.000	.500

City of Apple Valley  
 N/S: Apple Valley Road  
 E/W: Pimlico Road  
 Weather: Clear

File Name : 05\_APV\_AV\_Pim PM  
 Site Code : 221022  
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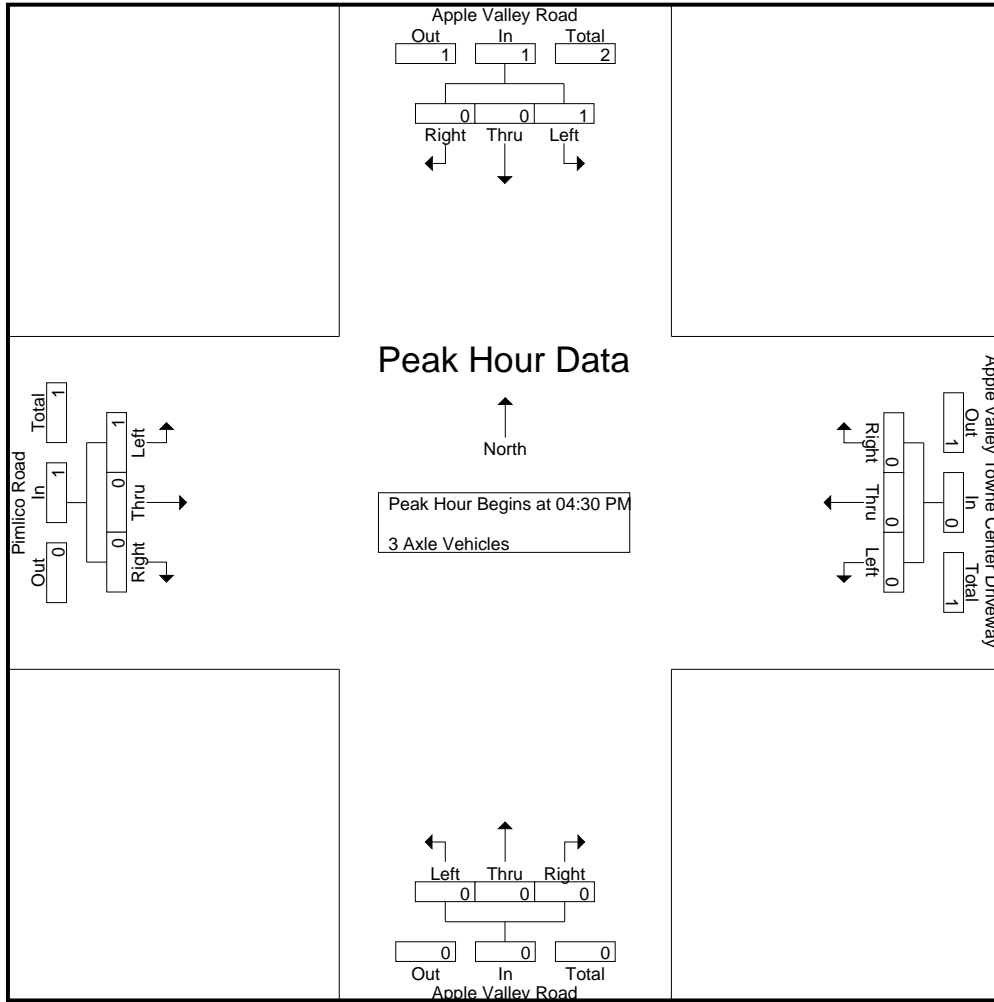
Groups Printed- 3 Axle Vehicles

Start Time	Apple Valley Road Southbound				Apple Valley Towne Center Driveway Westbound				Apple Valley Road Northbound				Pimlico 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	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	1	0	1	0	0	0	0	1
05:00 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
05:30 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	1	0	2	0	0	0	0	0	0	0	0	1	0	0	1	3
Grand Total	1	1	0	2	0	0	0	0	0	1	0	1	1	0	0	1	4
Apprch %	50	50	0		0	0	0		0	100	0		100	0	0		
Total %	25	25	0	50	0	0	0	0	0	25	0	25	25	0	0	25	

Start Time	Apple Valley Road Southbound				Apple Valley Towne Center Driveway Westbound				Apple Valley Road Northbound				Pimlico 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	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Total Volume	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	2
% App. Total	100	0	0		0	0	0		0	0	0		100	0	0		
PHF	.250	.000	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.000	.250	.500

City of Apple Valley  
 N/S: Apple Valley Road  
 E/W: Pimlico Road  
 Weather: Clear

File Name : 05\_APV\_AV\_Pim PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
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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.	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Total Volume	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1
% App. Total	100	0	0	100	0	0	0	0	0	0	0	0	100	0	0	100
PHF	.250	.000	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.000	.250

City of Apple Valley  
 N/S: Apple Valley Road  
 E/W: Pimlico Road  
 Weather: Clear

File Name : 05\_APV\_AV\_Pim PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- 4+ Axle Trucks

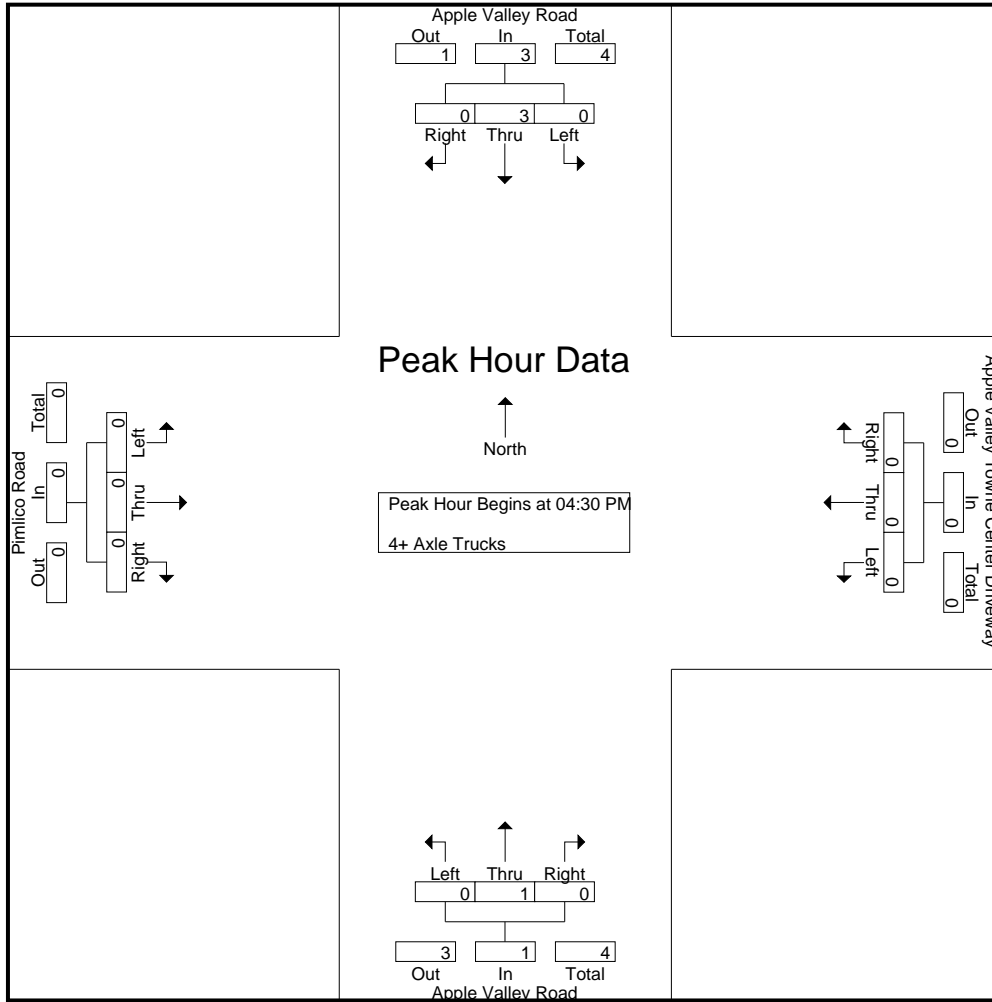
Start Time	Apple Valley Road Southbound				Apple Valley Towne Center Driveway Westbound				Apple Valley Road Northbound				Pimlico Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
05:00 PM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
05:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	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	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
Grand Total	0	5	0	5	0	0	0	0	0	1	0	1	0	0	0	0	6
Apprch %	0	100	0		0	0	0		0	100	0		0	0	0		
Total %	0	83.3	0	83.3	0	0	0	0	0	16.7	0	16.7	0	0	0	0	

Start Time	Apple Valley Road Southbound				Apple Valley Towne Center Driveway Westbound				Apple Valley Road Northbound				Pimlico 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	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:00 PM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
05:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total Volume	0	3	0	3	0	0	0	0	0	1	0	1	0	0	0	0	4
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.375	.000	.375	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.500



City of Apple Valley  
 N/S: Apple Valley Road  
 E/W: Pimlico Road  
 Weather: Clear

File Name : 05\_APV\_AV\_Pim PM  
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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	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
Total Volume	0	3	0	3	0	0	0	0	0	1	0	1	0	0	0	0
% App. Total	0	100	0	0	0	0	0	0	0	100	0	0	0	0	0	0
PHF	.000	.375	.000	.375	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000

Location: Apple Valley  
 N/S: Apple Valley Road  
 E/W: Pimlico Road



Date: 11/17/2022  
 Day: Thursday

**PEDESTRIANS**

	North Leg Apple Valley Road	East Leg AV Towne Center DW	South Leg Apple Valley Road	West Leg Pimlico Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	1	0	0	1
<b>TOTAL VOLUMES:</b>	0	1	0	0	1

	North Leg Apple Valley Road	East Leg AV Towne Center DW	South Leg Apple Valley Road	West Leg Pimlico Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	1	1	0	0	2
4:45 PM	0	0	0	1	1
5:00 PM	0	0	0	1	1
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
<b>TOTAL VOLUMES:</b>	1	1	0	2	4

Location: Apple Valley  
 N/S: Apple Valley Road  
 E/W: Pimlico Road



Date: 11/17/2022  
 Day: Thursday

BICYCLES

	Southbound Apple Valley Road			Westbound AV Towne Center DW			Northbound Apple Valley Road			Eastbound Pimlico Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	1	0	0	0	0	1

	Southbound Apple Valley Road			Westbound AV Towne Center DW			Northbound Apple Valley Road			Eastbound Pimlico Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

City of Apple Valley  
 N/S: Apple Valley Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 06\_APV\_AV\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

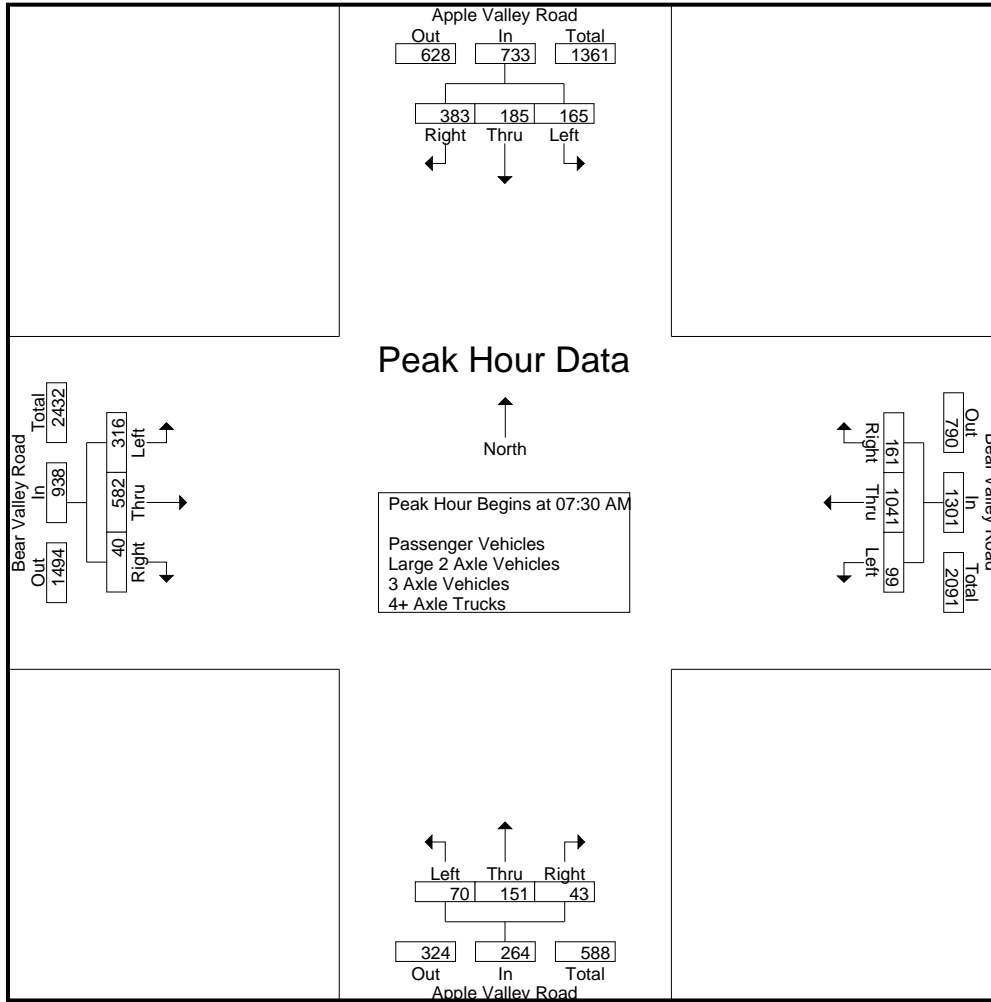
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Apple Valley Road Southbound				Bear Valley Road Westbound				Apple Valley Road Northbound				Bear Valley 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	23	19	55	97	8	205	39	252	18	18	8	44	40	103	8	151	544
07:15 AM	35	24	58	117	7	202	38	247	13	23	5	41	43	119	8	170	575
07:30 AM	40	33	91	164	10	250	48	308	16	39	12	67	90	157	6	253	792
07:45 AM	30	48	101	179	34	305	55	394	13	41	5	59	85	150	11	246	878
<b>Total</b>	<b>128</b>	<b>124</b>	<b>305</b>	<b>557</b>	<b>59</b>	<b>962</b>	<b>180</b>	<b>1201</b>	<b>60</b>	<b>121</b>	<b>30</b>	<b>211</b>	<b>258</b>	<b>529</b>	<b>33</b>	<b>820</b>	<b>2789</b>
08:00 AM	46	57	101	204	26	236	34	296	22	44	15	81	49	148	12	209	790
08:15 AM	49	47	90	186	29	250	24	303	19	27	11	57	92	127	11	230	776
08:30 AM	51	44	80	175	28	216	24	268	21	63	13	97	69	128	16	213	753
08:45 AM	41	56	80	177	37	233	32	302	20	41	22	83	73	146	18	237	799
<b>Total</b>	<b>187</b>	<b>204</b>	<b>351</b>	<b>742</b>	<b>120</b>	<b>935</b>	<b>114</b>	<b>1169</b>	<b>82</b>	<b>175</b>	<b>61</b>	<b>318</b>	<b>283</b>	<b>549</b>	<b>57</b>	<b>889</b>	<b>3118</b>
<b>Grand Total</b>	<b>315</b>	<b>328</b>	<b>656</b>	<b>1299</b>	<b>179</b>	<b>1897</b>	<b>294</b>	<b>2370</b>	<b>142</b>	<b>296</b>	<b>91</b>	<b>529</b>	<b>541</b>	<b>1078</b>	<b>90</b>	<b>1709</b>	<b>5907</b>
Apprch %	24.2	25.3	50.5		7.6	80	12.4		26.8	56	17.2		31.7	63.1	5.3		
Total %	5.3	5.6	11.1	22	3	32.1	5	40.1	2.4	5	1.5	9	9.2	18.2	1.5	28.9	
Passenger Vehicles	304	322	641	1267	176	1800	283	2259	138	288	87	513	519	967	89	1575	5614
% Passenger Vehicles	96.5	98.2	97.7	97.5	98.3	94.9	96.3	95.3	97.2	97.3	95.6	97	95.9	89.7	98.9	92.2	95
Large 2 Axle Vehicles	10	6	9	25	3	43	7	53	3	6	3	12	4	56	1	61	151
% Large 2 Axle Vehicles	3.2	1.8	1.4	1.9	1.7	2.3	2.4	2.2	2.1	2	3.3	2.3	0.7	5.2	1.1	3.6	2.6
3 Axle Vehicles	1	0	2	3	0	10	1	11	0	1	0	1	7	11	0	18	33
% 3 Axle Vehicles	0.3	0	0.3	0.2	0	0.5	0.3	0.5	0	0.3	0	0.2	1.3	1	0	1.1	0.6
4+ Axle Trucks	0	0	4	4	0	44	3	47	1	1	1	3	11	44	0	55	109
% 4+ Axle Trucks	0	0	0.6	0.3	0	2.3	1	2	0.7	0.3	1.1	0.6	2	4.1	0	3.2	1.8

Start Time	Apple Valley Road Southbound				Bear Valley Road Westbound				Apple Valley Road Northbound				Bear Valley 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	40	33	91	164	10	250	48	308	16	39	12	67	90	<b>157</b>	6	<b>253</b>	792
07:45 AM	30	48	<b>101</b>	179	<b>34</b>	<b>305</b>	<b>55</b>	<b>394</b>	13	41	5	59	85	150	11	246	<b>878</b>
08:00 AM	46	<b>57</b>	101	<b>204</b>	26	236	34	296	<b>22</b>	<b>44</b>	<b>15</b>	<b>81</b>	49	148	<b>12</b>	209	790
08:15 AM	<b>49</b>	47	90	186	29	250	24	303	19	27	11	57	<b>92</b>	127	11	230	776
Total Volume	165	185	383	733	99	1041	161	1301	70	151	43	264	316	582	40	938	3236
% App. Total	22.5	25.2	52.3		7.6	80	12.4		26.5	57.2	16.3		33.7	62	4.3		
PHF	.842	.811	.948	.898	.728	.853	.732	.826	.795	.858	.717	.815	.859	.927	.833	.927	.921

City of Apple Valley  
 N/S: Apple Valley Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 06\_APV\_AV\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 2



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

	07:45 AM				07:30 AM				08:00 AM				07:30 AM			
+0 mins.	30	48	<b>101</b>	179	10	250	48	308	<b>22</b>	44	15	81	90	<b>157</b>	6	<b>253</b>
+15 mins.	46	<b>57</b>	101	<b>204</b>	<b>34</b>	<b>305</b>	<b>55</b>	<b>394</b>	19	27	11	57	85	150	11	246
+30 mins.	49	47	90	186	26	236	34	296	21	<b>63</b>	13	<b>97</b>	49	148	<b>12</b>	209
+45 mins.	<b>51</b>	44	80	175	29	250	24	303	20	41	<b>22</b>	83	<b>92</b>	127	11	230
Total Volume	176	196	372	744	99	1041	161	1301	82	175	61	318	316	582	40	938
% App. Total	23.7	26.3	50		7.6	80	12.4		25.8	55	19.2		33.7	62	4.3	
PHF	.863	.860	.921	.912	.728	.853	.732	.826	.932	.694	.693	.820	.859	.927	.833	.927

City of Apple Valley  
 N/S: Apple Valley Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 06\_APV\_AV\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

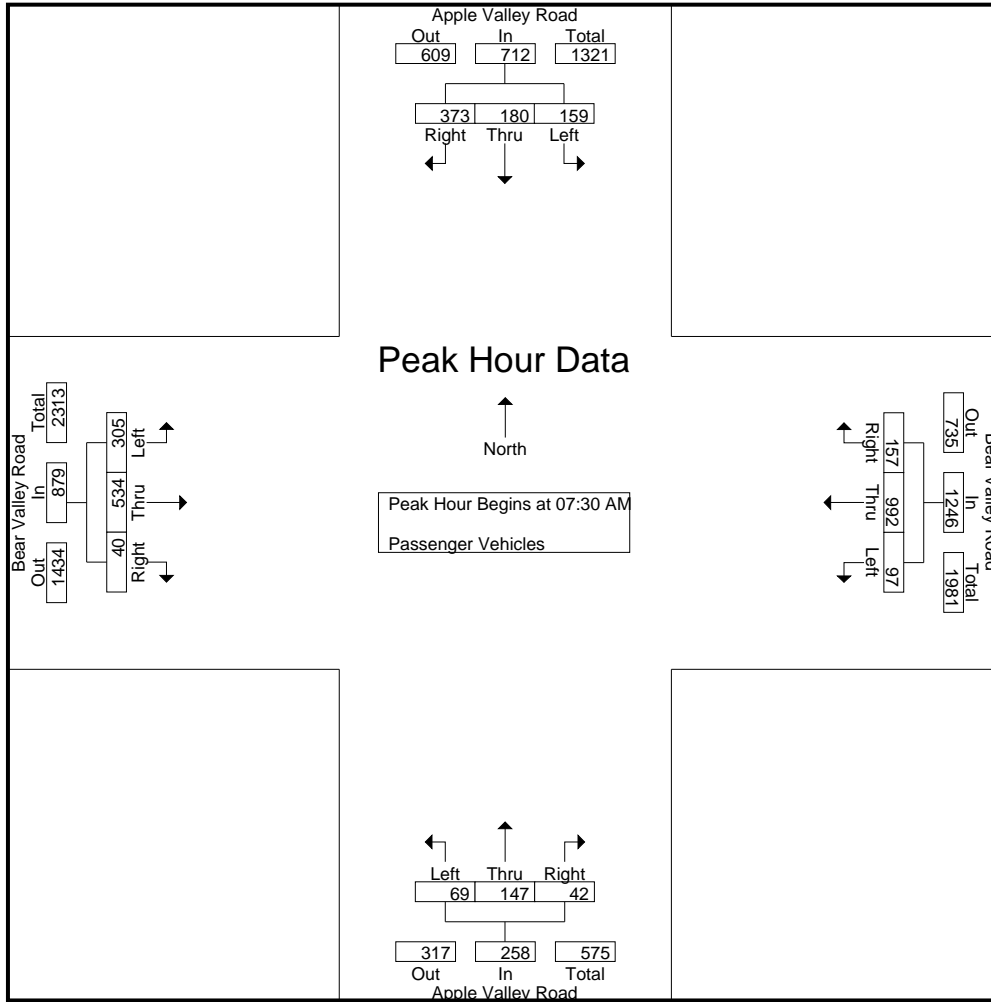
Groups Printed- Passenger Vehicles

Start Time	Apple Valley Road Southbound				Bear Valley Road Westbound				Apple Valley Road Northbound				Bear Valley 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	23	18	55	96	8	193	36	237	17	17	7	41	35	86	8	129	503
07:15 AM	34	24	56	114	6	192	35	233	12	23	4	39	43	102	7	152	538
07:30 AM	38	33	87	158	10	246	47	303	15	36	12	63	86	145	6	237	761
07:45 AM	29	47	99	175	33	290	53	376	13	41	5	59	84	142	11	237	847
Total	124	122	297	543	57	921	171	1149	57	117	28	202	248	475	32	755	2649
08:00 AM	45	54	99	198	25	223	33	281	22	43	15	80	47	136	12	195	754
08:15 AM	47	46	88	181	29	233	24	286	19	27	10	56	88	111	11	210	733
08:30 AM	49	44	78	171	28	204	23	255	20	62	13	95	64	117	16	197	718
08:45 AM	39	56	79	174	37	219	32	288	20	39	21	80	72	128	18	218	760
Total	180	200	344	724	119	879	112	1110	81	171	59	311	271	492	57	820	2965
Grand Total	304	322	641	1267	176	1800	283	2259	138	288	87	513	519	967	89	1575	5614
Apprch %	24	25.4	50.6		7.8	79.7	12.5		26.9	56.1	17		33	61.4	5.7		
Total %	5.4	5.7	11.4	22.6	3.1	32.1	5	40.2	2.5	5.1	1.5	9.1	9.2	17.2	1.6	28.1	

Start Time	Apple Valley Road Southbound				Bear Valley Road Westbound				Apple Valley Road Northbound				Bear Valley 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	38	33	87	158	10	246	47	303	15	36	12	63	86	<b>145</b>	6	<b>237</b>	761
07:45 AM	29	47	<b>99</b>	175	<b>33</b>	<b>290</b>	<b>53</b>	<b>376</b>	13	41	5	59	84	142	11	237	<b>847</b>
08:00 AM	45	<b>54</b>	99	<b>198</b>	25	223	33	281	<b>22</b>	<b>43</b>	<b>15</b>	<b>80</b>	47	136	<b>12</b>	195	754
08:15 AM	<b>47</b>	46	88	181	29	233	24	286	19	27	10	56	<b>88</b>	111	11	210	733
Total Volume	159	180	373	712	97	992	157	1246	69	147	42	258	305	534	40	879	3095
% App. Total	22.3	25.3	52.4		7.8	79.6	12.6		26.7	57	16.3		34.7	60.8	4.6		
PHF	.846	.833	.942	.899	.735	.855	.741	.828	.784	.855	.700	.806	.866	.921	.833	.927	.914

City of Apple Valley  
 N/S: Apple Valley Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 06\_APV\_AV\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 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.	38	33	87	158	10	246	47	303	15	36	12	63	86	<b>145</b>	6	<b>237</b>
+15 mins.	29	47	<b>99</b>	175	<b>33</b>	<b>290</b>	<b>53</b>	<b>376</b>	13	41	5	59	84	142	11	237
+30 mins.	45	<b>54</b>	99	<b>198</b>	25	223	33	281	<b>22</b>	<b>43</b>	<b>15</b>	<b>80</b>	47	136	<b>12</b>	195
+45 mins.	<b>47</b>	46	88	181	29	233	24	286	19	27	10	56	<b>88</b>	111	11	210
Total Volume	159	180	373	712	97	992	157	1246	69	147	42	258	305	534	40	879
% App. Total	22.3	25.3	52.4		7.8	79.6	12.6		26.7	57	16.3		34.7	60.8	4.6	
PHF	.846	.833	.942	.899	.735	.855	.741	.828	.784	.855	.700	.806	.866	.921	.833	.927

City of Apple Valley  
 N/S: Apple Valley Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 06\_APV\_AV\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

Start Time	Apple Valley Road Southbound				Bear Valley Road Westbound				Apple Valley Road Northbound				Bear Valley 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	6	2	8	1	1	1	3	0	6	0	6	18
07:15 AM	1	0	1	2	1	3	1	5	0	0	0	0	0	10	1	11	18
07:30 AM	2	0	3	5	0	1	1	2	1	3	0	4	0	6	0	6	17
07:45 AM	1	1	2	4	1	7	1	9	0	0	0	0	0	3	0	3	16
<b>Total</b>	<b>4</b>	<b>2</b>	<b>6</b>	<b>12</b>	<b>2</b>	<b>17</b>	<b>5</b>	<b>24</b>	<b>2</b>	<b>4</b>	<b>1</b>	<b>7</b>	<b>0</b>	<b>25</b>	<b>1</b>	<b>26</b>	<b>69</b>
08:00 AM	1	3	1	5	1	4	1	6	0	0	0	0	0	7	0	7	18
08:15 AM	2	1	1	4	0	10	0	10	0	0	1	1	1	10	0	11	26
08:30 AM	1	0	1	2	0	6	1	7	1	1	0	2	3	4	0	7	18
08:45 AM	2	0	0	2	0	6	0	6	0	1	1	2	0	10	0	10	20
<b>Total</b>	<b>6</b>	<b>4</b>	<b>3</b>	<b>13</b>	<b>1</b>	<b>26</b>	<b>2</b>	<b>29</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>5</b>	<b>4</b>	<b>31</b>	<b>0</b>	<b>35</b>	<b>82</b>
<b>Grand Total</b>	<b>10</b>	<b>6</b>	<b>9</b>	<b>25</b>	<b>3</b>	<b>43</b>	<b>7</b>	<b>53</b>	<b>3</b>	<b>6</b>	<b>3</b>	<b>12</b>	<b>4</b>	<b>56</b>	<b>1</b>	<b>61</b>	<b>151</b>
Apprch %	40	24	36		5.7	81.1	13.2		25	50	25		6.6	91.8	1.6		
Total %	6.6	4	6	16.6	2	28.5	4.6	35.1	2	4	2	7.9	2.6	37.1	0.7	40.4	

Start Time	Apple Valley Road Southbound				Bear Valley Road Westbound				Apple Valley Road Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:30 AM	2	0	3	5	0	1	1	2	1	3	0	4	0	6	0	6	17
07:45 AM	1	1	2	4	1	7	1	9	0	0	0	0	0	3	0	3	16
08:00 AM	1	3	1	5	1	4	1	6	0	0	0	0	0	7	0	7	18
08:15 AM	2	1	1	4	0	10	0	10	0	0	1	1	1	10	0	11	26
Total Volume	6	5	7	18	2	22	3	27	1	3	1	5	1	26	0	27	77
% App. Total	33.3	27.8	38.9		7.4	81.5	11.1		20	60	20		3.7	96.3	0		
PHF	.750	.417	.583	.900	.500	.550	.750	.675	.250	.250	.250	.313	.250	.650	.000	.614	.740

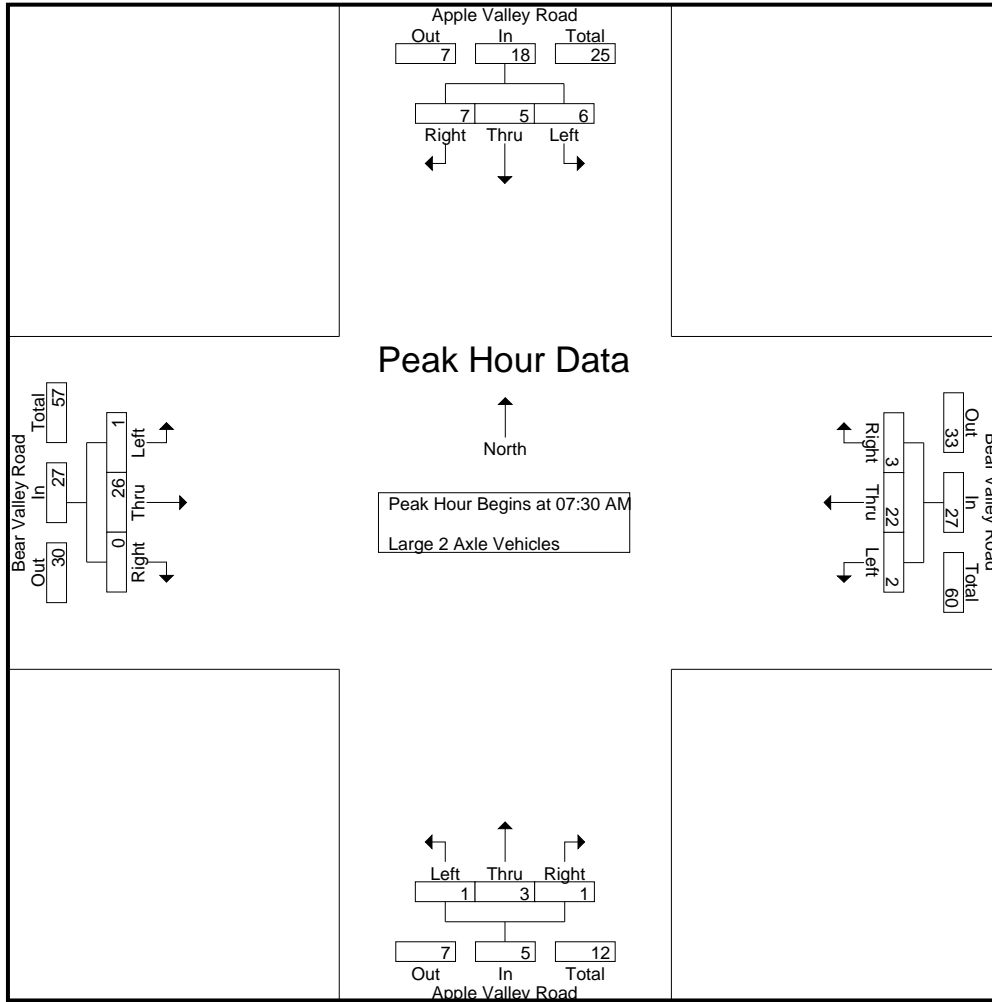
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:30 AM



City of Apple Valley  
 N/S: Apple Valley Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 06\_APV\_AV\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 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.	2	0	3	5	0	1	1	2	1	3	0	4	0	6	0	6
+15 mins.	1	1	2	4	1	7	1	9	0	0	0	0	0	3	0	3
+30 mins.	1	3	1	5	1	4	1	6	0	0	0	0	0	7	0	7
+45 mins.	2	1	1	4	0	10	0	10	0	0	1	1	1	10	0	11
Total Volume	6	5	7	18	2	22	3	27	1	3	1	5	1	26	0	27
% App. Total	33.3	27.8	38.9		7.4	81.5	11.1		20	60	20		3.7	96.3	0	
PHF	.750	.417	.583	.900	.500	.550	.750	.675	.250	.250	.250	.313	.250	.650	.000	.614

City of Apple Valley  
 N/S: Apple Valley Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 06\_APV\_AV\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- 3 Axle Vehicles

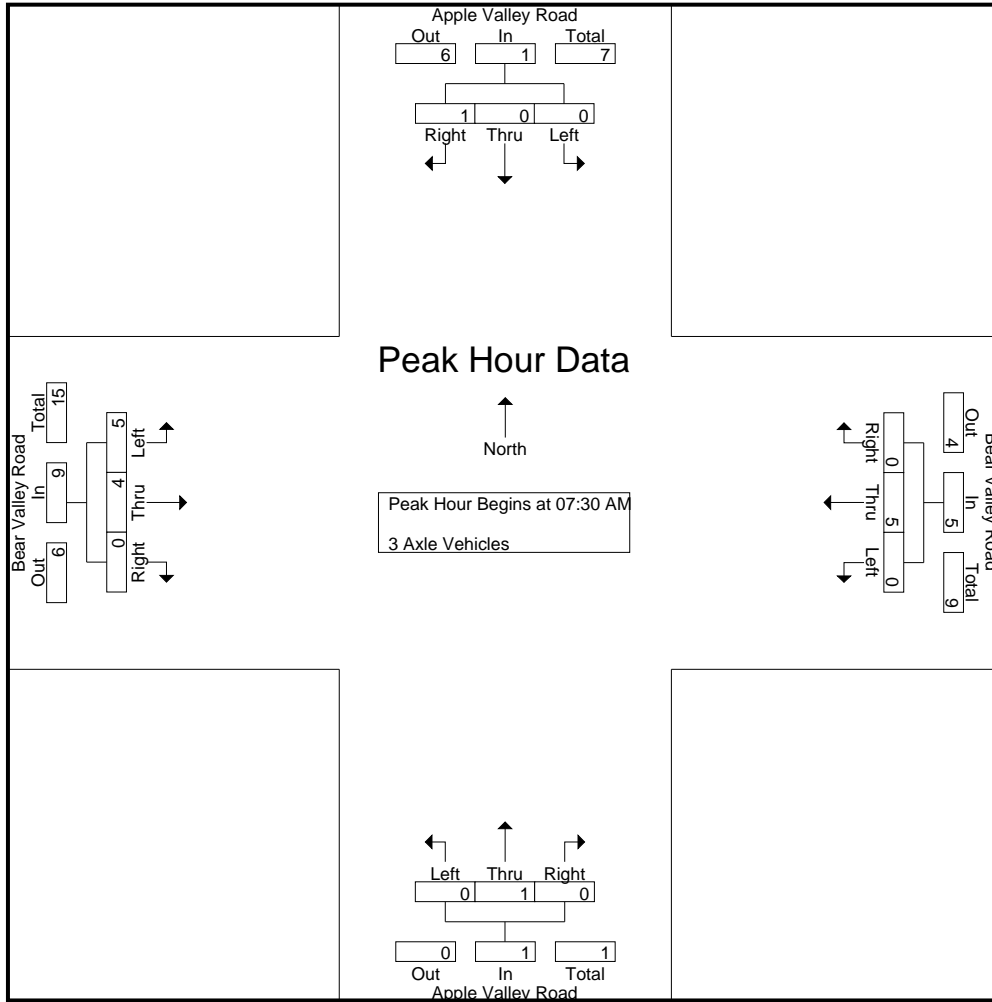
Start Time	Apple Valley Road Southbound				Bear Valley Road Westbound				Apple Valley Road Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	1	1	2	0	0	0	0	1	3	0	4	6
07:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
07:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	4	0	0	4	5
07:45 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
Total	0	0	0	0	0	5	1	6	0	0	0	0	5	7	0	12	18
08:00 AM	0	0	0	0	0	1	0	1	0	1	0	1	1	1	0	2	4
08:15 AM	0	0	1	1	0	1	0	1	0	0	0	0	0	1	0	1	3
08:30 AM	1	0	0	1	0	2	0	2	0	0	0	0	1	2	0	3	6
08:45 AM	0	0	1	1	0	1	0	1	0	0	0	0	0	0	0	0	2
Total	1	0	2	3	0	5	0	5	0	1	0	1	2	4	0	6	15
Grand Total	1	0	2	3	0	10	1	11	0	1	0	1	7	11	0	18	33
Apprch %	33.3	0	66.7		0	90.9	9.1		0	100	0		38.9	61.1	0		
Total %	3	0	6.1	9.1	0	30.3	3	33.3	0	3	0	3	21.2	33.3	0	54.5	

Start Time	Apple Valley Road Southbound				Bear Valley Road Westbound				Apple Valley Road Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	4	0	0	4	5
07:45 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
08:00 AM	0	0	0	0	0	1	0	1	0	1	0	1	1	1	0	2	4
08:15 AM	0	0	1	1	0	1	0	1	0	0	0	0	0	1	0	1	3
Total Volume	0	0	1	1	0	5	0	5	0	1	0	1	5	4	0	9	16
% App. Total	0	0	100		0	100	0		0	100	0		55.6	44.4	0		
PHF	.000	.000	.250	.250	.000	.625	.000	.625	.000	.250	.000	.250	.313	.500	.000	.563	.800

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

City of Apple Valley  
 N/S: Apple Valley Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 06\_APV\_AV\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 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	1	0	1	0	0	0	0	4	0	0	4
+15 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2
+30 mins.	0	0	0	0	0	1	0	1	0	1	0	1	1	1	0	2
+45 mins.	0	0	1	1	0	1	0	1	0	0	0	0	0	1	0	1
Total Volume	0	0	1	1	0	5	0	5	0	1	0	1	5	4	0	9
% App. Total	0	0	100		0	100	0		0	100	0		55.6	44.4	0	
PHF	.000	.000	.250	.250	.000	.625	.000	.625	.000	.250	.000	.250	.313	.500	.000	.563

City of Apple Valley  
 N/S: Apple Valley Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 06\_APV\_AV\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- 4+ Axle Trucks

Start Time	Apple Valley Road Southbound				Bear Valley Road Westbound				Apple Valley Road Northbound				Bear Valley 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	5	0	5	0	0	0	0	4	8	0	12	17
07:15 AM	0	0	1	1	0	6	2	8	1	0	1	2	0	5	0	5	16
07:30 AM	0	0	1	1	0	2	0	2	0	0	0	0	0	6	0	6	9
07:45 AM	0	0	0	0	0	6	1	7	0	0	0	0	1	3	0	4	11
Total	0	0	2	2	0	19	3	22	1	0	1	2	5	22	0	27	53
08:00 AM	0	0	1	1	0	8	0	8	0	0	0	0	1	4	0	5	14
08:15 AM	0	0	0	0	0	6	0	6	0	0	0	0	3	5	0	8	14
08:30 AM	0	0	1	1	0	4	0	4	0	0	0	0	1	5	0	6	11
08:45 AM	0	0	0	0	0	7	0	7	0	1	0	1	1	8	0	9	17
Total	0	0	2	2	0	25	0	25	0	1	0	1	6	22	0	28	56
Grand Total	0	0	4	4	0	44	3	47	1	1	1	3	11	44	0	55	109
Apprch %	0	0	100		0	93.6	6.4		33.3	33.3	33.3		20	80	0		
Total %	0	0	3.7	3.7	0	40.4	2.8	43.1	0.9	0.9	0.9	2.8	10.1	40.4	0	50.5	

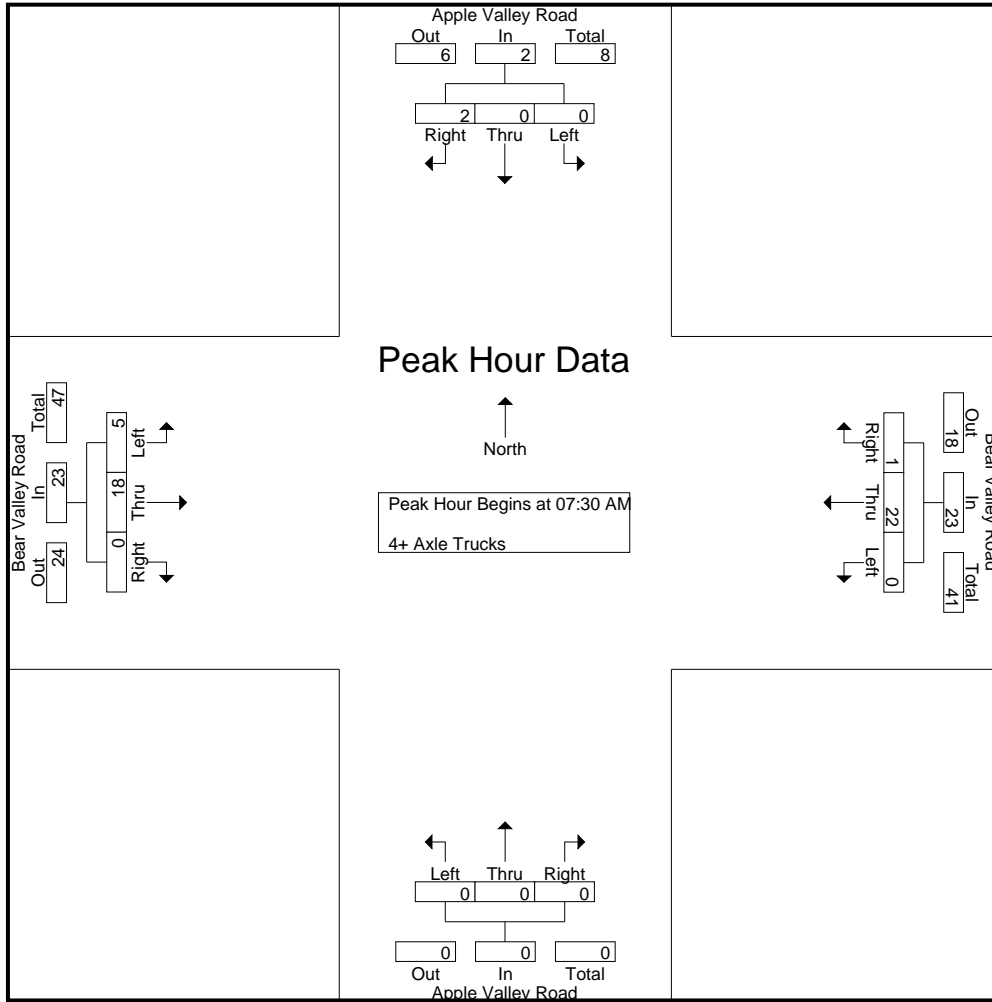
Start Time	Apple Valley Road Southbound				Bear Valley Road Westbound				Apple Valley Road Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:30 AM	0	0	1	1	0	2	0	2	0	0	0	0	0	6	0	6	9
07:45 AM	0	0	0	0	0	6	1	7	0	0	0	0	1	3	0	4	11
08:00 AM	0	0	1	1	0	8	0	8	0	0	0	0	1	4	0	5	14
08:15 AM	0	0	0	0	0	6	0	6	0	0	0	0	3	5	0	8	14
Total Volume	0	0	2	2	0	22	1	23	0	0	0	0	5	18	0	23	48
% App. Total	0	0	100		0	95.7	4.3		0	0	0		21.7	78.3	0		
PHF	.000	.000	.500	.500	.000	.688	.250	.719	.000	.000	.000	.000	.417	.750	.000	.719	.857

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

City of Apple Valley  
 N/S: Apple Valley Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 06\_APV\_AV\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 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	1	1	0	2	0	2	0	0	0	0	0	6	0	6
+15 mins.	0	0	0	0	0	6	1	7	0	0	0	0	1	3	0	4
+30 mins.	0	0	1	1	0	8	0	8	0	0	0	0	1	4	0	5
+45 mins.	0	0	0	0	0	6	0	6	0	0	0	0	3	5	0	8
Total Volume	0	0	2	2	0	22	1	23	0	0	0	0	5	18	0	23
% App. Total	0	0	100		0	95.7	4.3		0	0	0		21.7	78.3	0	
PHF	.000	.000	.500	.500	.000	.688	.250	.719	.000	.000	.000	.000	.417	.750	.000	.719

City of Apple Valley  
 N/S: Apple Valley Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 06\_APV\_AV\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

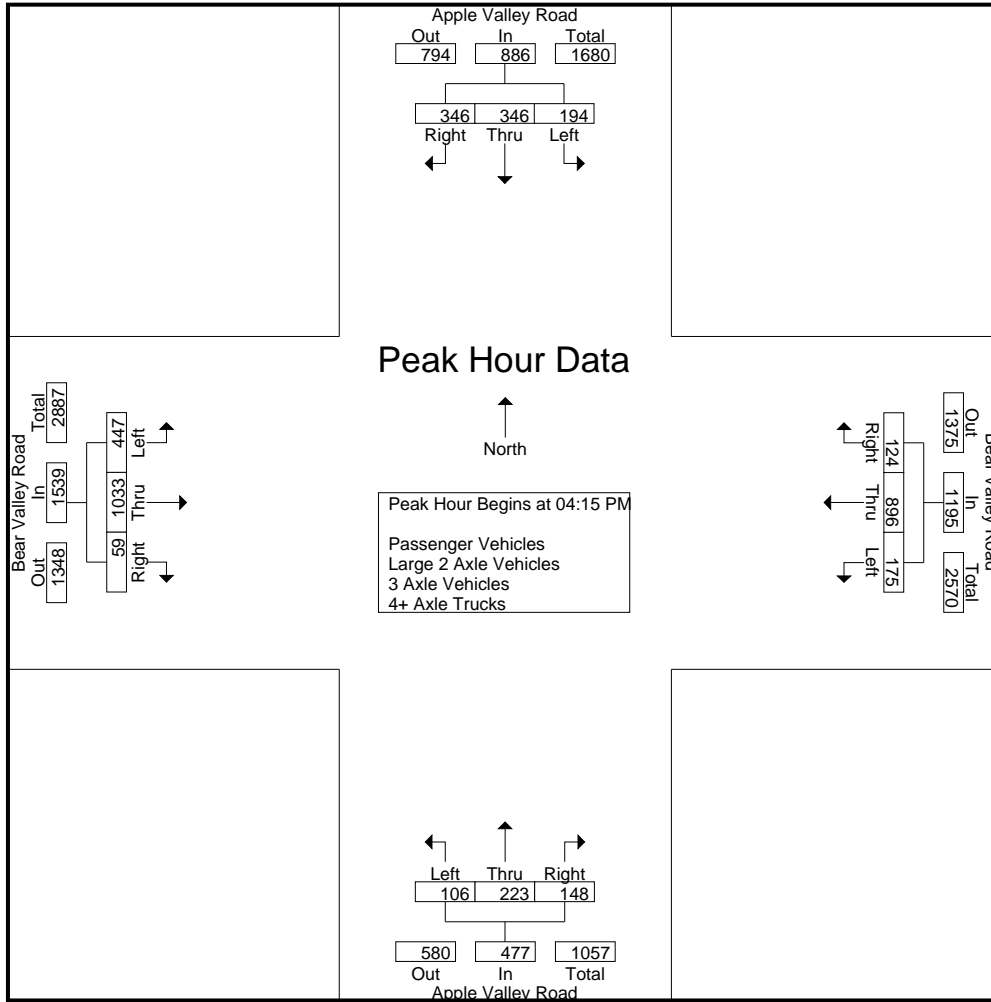
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Apple Valley Road Southbound				Bear Valley Road Westbound				Apple Valley Road Northbound				Bear Valley 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	63	74	79	216	45	193	21	259	32	58	36	126	113	233	15	361	962
04:15 PM	48	74	85	207	49	230	28	307	25	40	31	96	119	270	18	407	1017
04:30 PM	54	97	83	234	33	203	32	268	28	56	22	106	111	238	13	362	970
04:45 PM	42	104	99	245	45	228	31	304	34	78	42	154	86	267	16	369	1072
<b>Total</b>	<b>207</b>	<b>349</b>	<b>346</b>	<b>902</b>	<b>172</b>	<b>854</b>	<b>112</b>	<b>1138</b>	<b>119</b>	<b>232</b>	<b>131</b>	<b>482</b>	<b>429</b>	<b>1008</b>	<b>62</b>	<b>1499</b>	<b>4021</b>
05:00 PM	50	71	79	200	48	235	33	316	19	49	53	121	131	258	12	401	1038
05:15 PM	57	54	89	200	43	211	38	292	37	49	32	118	122	248	10	380	990
05:30 PM	36	58	82	176	32	190	24	246	21	37	40	98	99	210	12	321	841
05:45 PM	54	66	86	206	36	155	26	217	27	65	42	134	84	228	10	322	879
<b>Total</b>	<b>197</b>	<b>249</b>	<b>336</b>	<b>782</b>	<b>159</b>	<b>791</b>	<b>121</b>	<b>1071</b>	<b>104</b>	<b>200</b>	<b>167</b>	<b>471</b>	<b>436</b>	<b>944</b>	<b>44</b>	<b>1424</b>	<b>3748</b>
<b>Grand Total</b>	<b>404</b>	<b>598</b>	<b>682</b>	<b>1684</b>	<b>331</b>	<b>1645</b>	<b>233</b>	<b>2209</b>	<b>223</b>	<b>432</b>	<b>298</b>	<b>953</b>	<b>865</b>	<b>1952</b>	<b>106</b>	<b>2923</b>	<b>7769</b>
Apprch %	24	35.5	40.5		15	74.5	10.5		23.4	45.3	31.3		29.6	66.8	3.6		
Total %	5.2	7.7	8.8	21.7	4.3	21.2	3	28.4	2.9	5.6	3.8	12.3	11.1	25.1	1.4	37.6	
Passenger Vehicles	398	592	668	1658	327	1608	231	2166	222	426	296	944	859	1898	106	2863	7631
% Passenger Vehicles	98.5	99	97.9	98.5	98.8	97.8	99.1	98.1	99.6	98.6	99.3	99.1	99.3	97.2	100	97.9	98.2
Large 2 Axle Vehicles	4	5	10	19	4	17	1	22	1	5	2	8	6	30	0	36	85
% Large 2 Axle Vehicles	1	0.8	1.5	1.1	1.2	1	0.4	1	0.4	1.2	0.7	0.8	0.7	1.5	0	1.2	1.1
3 Axle Vehicles	0	0	2	2	0	2	1	3	0	1	0	1	0	4	0	4	10
% 3 Axle Vehicles	0	0	0.3	0.1	0	0.1	0.4	0.1	0	0.2	0	0.1	0	0.2	0	0.1	0.1
4+ Axle Trucks	2	1	2	5	0	18	0	18	0	0	0	0	0	20	0	20	43
% 4+ Axle Trucks	0.5	0.2	0.3	0.3	0	1.1	0	0.8	0	0	0	0	0	1	0	0.7	0.6

Start Time	Apple Valley Road Southbound				Bear Valley Road Westbound				Apple Valley Road Northbound				Bear Valley 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 04:15 PM																	
04:15 PM	48	74	85	207	<b>49</b>	230	28	307	25	40	31	96	119	<b>270</b>	<b>18</b>	<b>407</b>	1017
04:30 PM	<b>54</b>	97	83	234	33	203	32	268	28	56	22	106	111	238	13	362	970
04:45 PM	42	<b>104</b>	<b>99</b>	<b>245</b>	45	228	31	304	<b>34</b>	<b>78</b>	42	<b>154</b>	86	267	16	369	<b>1072</b>
05:00 PM	50	71	79	200	48	<b>235</b>	<b>33</b>	<b>316</b>	19	49	<b>53</b>	121	<b>131</b>	258	12	401	1038
Total Volume	194	346	346	886	175	896	124	1195	106	223	148	477	447	1033	59	1539	4097
% App. Total	21.9	39.1	39.1		14.6	75	10.4		22.2	46.8	31		29	67.1	3.8		
PHF	.898	.832	.874	.904	.893	.953	.939	.945	.779	.715	.698	.774	.853	.956	.819	.945	.955

City of Apple Valley  
 N/S: Apple Valley Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 06\_APV\_AV\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 2



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

	04:00 PM				04:15 PM				04:30 PM				04:45 PM			
+0 mins.	<b>63</b>	74	79	216	<b>49</b>	230	28	307	28	56	22	106	119	<b>270</b>	<b>18</b>	<b>407</b>
+15 mins.	48	74	85	207	33	203	32	268	34	<b>78</b>	42	<b>154</b>	111	238	13	362
+30 mins.	54	97	83	234	45	228	31	304	19	49	<b>53</b>	121	86	267	16	369
+45 mins.	42	<b>104</b>	<b>99</b>	<b>245</b>	48	<b>235</b>	<b>33</b>	<b>316</b>	<b>37</b>	49	32	118	<b>131</b>	258	12	401
Total Volume	207	349	346	902	175	896	124	1195	118	232	149	499	447	1033	59	1539
% App. Total	22.9	38.7	38.4		14.6	75	10.4		23.6	46.5	29.9		29	67.1	3.8	
PHF	.821	.839	.874	.920	.893	.953	.939	.945	.797	.744	.703	.810	.853	.956	.819	.945

City of Apple Valley  
 N/S: Apple Valley Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 06\_APV\_AV\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- Passenger Vehicles

Start Time	Apple Valley Road Southbound				Bear Valley Road Westbound				Apple Valley Road Northbound				Bear Valley 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	62	73	76	211	45	185	21	251	32	56	36	124	111	224	15	350	936
04:15 PM	47	71	82	200	47	222	28	297	25	40	31	96	118	265	18	401	994
04:30 PM	54	97	81	232	33	197	32	262	28	55	22	105	110	227	13	350	949
04:45 PM	41	103	98	242	44	226	31	301	33	77	42	152	85	256	16	357	1052
Total	204	344	337	885	169	830	112	1111	118	228	131	477	424	972	62	1458	3931
05:00 PM	49	71	78	198	48	230	32	310	19	48	52	119	131	254	12	397	1024
05:15 PM	56	53	86	195	42	207	37	286	37	49	32	118	122	243	10	375	974
05:30 PM	36	58	81	175	32	188	24	244	21	37	40	98	98	207	12	317	834
05:45 PM	53	66	86	205	36	153	26	215	27	64	41	132	84	222	10	316	868
Total	194	248	331	773	158	778	119	1055	104	198	165	467	435	926	44	1405	3700
Grand Total	398	592	668	1658	327	1608	231	2166	222	426	296	944	859	1898	106	2863	7631
Apprch %	24	35.7	40.3		15.1	74.2	10.7		23.5	45.1	31.4		30	66.3	3.7		
Total %	5.2	7.8	8.8	21.7	4.3	21.1	3	28.4	2.9	5.6	3.9	12.4	11.3	24.9	1.4	37.5	

Start Time	Apple Valley Road Southbound				Bear Valley Road Westbound				Apple Valley Road Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:15 PM	47	71	82	200	47	222	28	297	25	40	31	96	118	<b>265</b>	<b>18</b>	<b>401</b>	994
04:30 PM	<b>54</b>	97	81	232	33	197	<b>32</b>	262	28	55	22	105	110	227	13	350	949
04:45 PM	41	<b>103</b>	<b>98</b>	<b>242</b>	44	226	31	301	<b>33</b>	<b>77</b>	42	<b>152</b>	85	256	16	357	<b>1052</b>
05:00 PM	49	71	78	198	<b>48</b>	<b>230</b>	32	<b>310</b>	19	48	<b>52</b>	119	<b>131</b>	254	12	397	1024
Total Volume	191	342	339	872	172	875	123	1170	105	220	147	472	444	1002	59	1505	4019
% App. Total	21.9	39.2	38.9		14.7	74.8	10.5		22.2	46.6	31.1		29.5	66.6	3.9		
PHF	.884	.830	.865	.901	.896	.951	.961	.944	.795	.714	.707	.776	.847	.945	.819	.938	.955

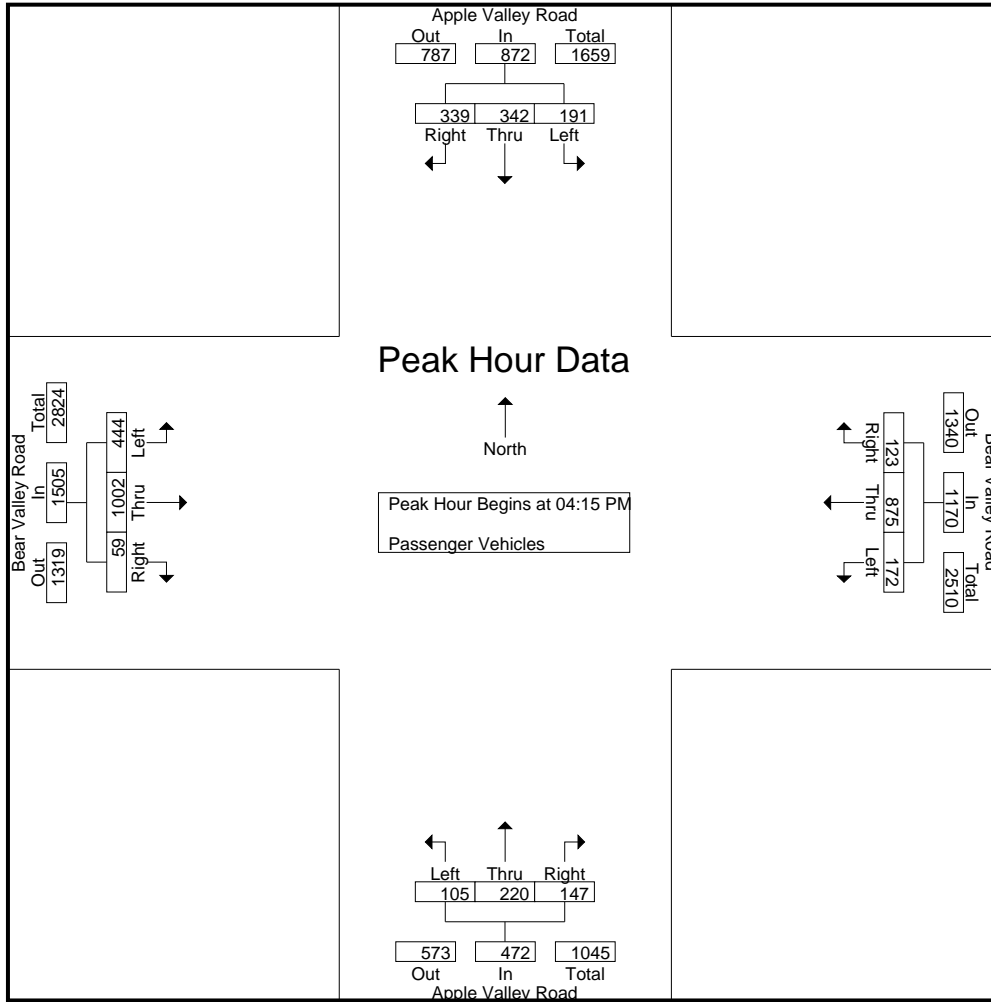
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:15 PM



City of Apple Valley  
 N/S: Apple Valley Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 06\_APV\_AV\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 2



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

	04:15 PM				04:15 PM				04:15 PM				04:15 PM			
+0 mins.	47	71	82	200	47	222	28	297	25	40	31	96	118	<b>265</b>	<b>18</b>	<b>401</b>
+15 mins.	<b>54</b>	97	81	232	33	197	<b>32</b>	262	28	55	22	105	110	227	13	350
+30 mins.	41	<b>103</b>	<b>98</b>	<b>242</b>	44	226	31	301	<b>33</b>	<b>77</b>	42	<b>152</b>	85	256	16	357
+45 mins.	49	71	78	198	<b>48</b>	<b>230</b>	32	<b>310</b>	19	48	<b>52</b>	119	<b>131</b>	254	12	397
Total Volume	191	342	339	872	172	875	123	1170	105	220	147	472	444	1002	59	1505
% App. Total	21.9	39.2	38.9		14.7	74.8	10.5		22.2	46.6	31.1		29.5	66.6	3.9	
PHF	.884	.830	.865	.901	.896	.951	.961	.944	.795	.714	.707	.776	.847	.945	.819	.938

City of Apple Valley  
 N/S: Apple Valley Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 06\_APV\_AV\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

Start Time	Apple Valley Road Southbound				Bear Valley Road Westbound				Apple Valley Road Northbound				Bear Valley 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	1	1	3	0	4	0	4	0	1	0	1	2	6	0	8	16
04:15 PM	1	2	2	5	2	3	0	5	0	0	0	0	1	5	0	6	16
04:30 PM	0	0	2	2	0	1	0	1	0	1	0	1	1	5	0	6	10
04:45 PM	1	1	0	2	1	1	0	2	1	1	0	2	1	5	0	6	12
<b>Total</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>12</b>	<b>3</b>	<b>9</b>	<b>0</b>	<b>12</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>4</b>	<b>5</b>	<b>21</b>	<b>0</b>	<b>26</b>	<b>54</b>
05:00 PM	0	0	1	1	0	3	1	4	0	1	1	2	0	1	0	1	8
05:15 PM	0	1	3	4	1	2	0	3	0	0	0	0	0	1	0	1	8
05:30 PM	0	0	1	1	0	1	0	1	0	0	0	0	1	2	0	3	5
05:45 PM	1	0	0	1	0	2	0	2	0	1	1	2	0	5	0	5	10
<b>Total</b>	<b>1</b>	<b>1</b>	<b>5</b>	<b>7</b>	<b>1</b>	<b>8</b>	<b>1</b>	<b>10</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>4</b>	<b>1</b>	<b>9</b>	<b>0</b>	<b>10</b>	<b>31</b>
<b>Grand Total</b>	<b>4</b>	<b>5</b>	<b>10</b>	<b>19</b>	<b>4</b>	<b>17</b>	<b>1</b>	<b>22</b>	<b>1</b>	<b>5</b>	<b>2</b>	<b>8</b>	<b>6</b>	<b>30</b>	<b>0</b>	<b>36</b>	<b>85</b>
Apprch %	21.1	26.3	52.6		18.2	77.3	4.5		12.5	62.5	25		16.7	83.3	0		
Total %	4.7	5.9	11.8	22.4	4.7	20	1.2	25.9	1.2	5.9	2.4	9.4	7.1	35.3	0	42.4	

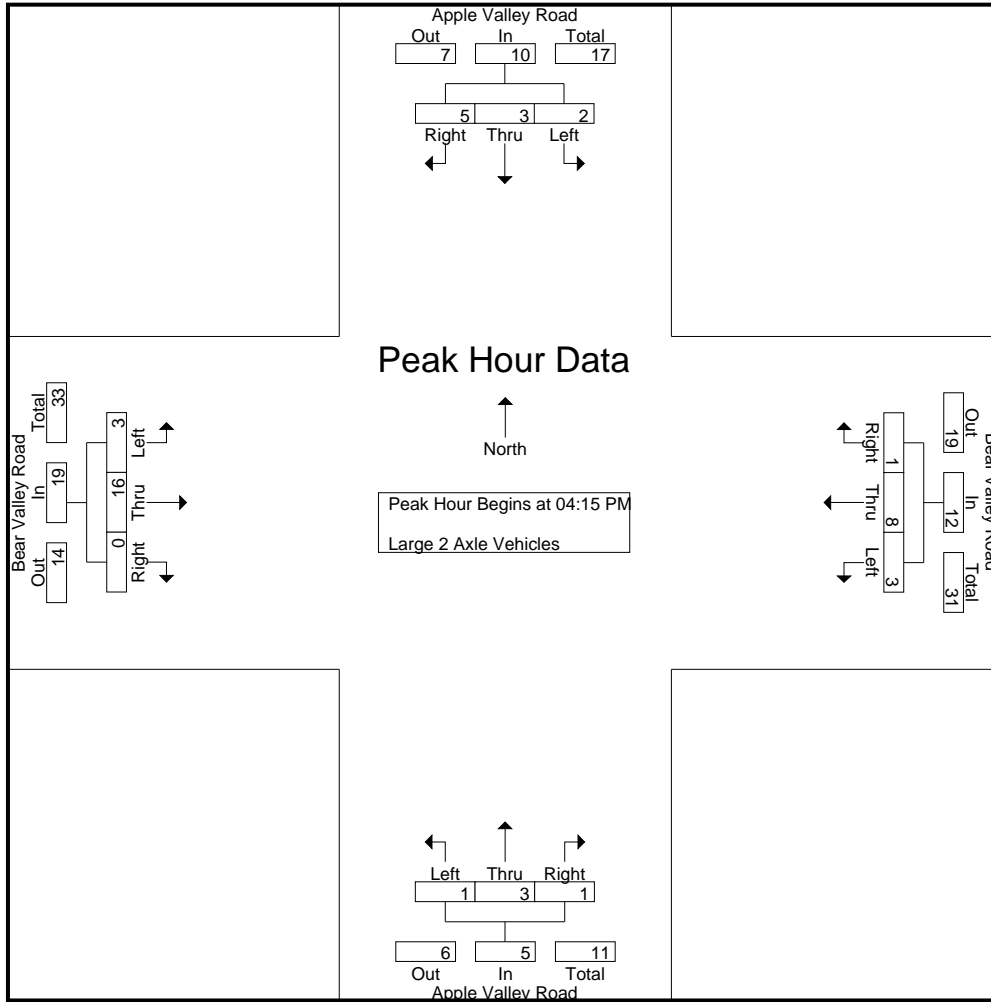
Start Time	Apple Valley Road Southbound				Bear Valley Road Westbound				Apple Valley Road Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:15 PM	1	2	2	5	2	3	0	5	0	0	0	0	1	5	0	6	16
04:30 PM	0	0	2	2	0	1	0	1	0	1	0	1	1	5	0	6	10
04:45 PM	1	1	0	2	1	1	0	2	1	1	0	2	1	5	0	6	12
05:00 PM	0	0	1	1	0	3	1	4	0	1	1	2	0	1	0	1	8
Total Volume	2	3	5	10	3	8	1	12	1	3	1	5	3	16	0	19	46
% App. Total	20	30	50		25	66.7	8.3		20	60	20		15.8	84.2	0		
PHF	.500	.375	.625	.500	.375	.667	.250	.600	.250	.750	.250	.625	.750	.800	.000	.792	.719

Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:15 PM

City of Apple Valley  
 N/S: Apple Valley Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 06\_APV\_AV\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 2



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

	04:15 PM				04:15 PM				04:15 PM				04:15 PM			
+0 mins.	1	2	2	5	2	3	0	5	0	0	0	0	1	5	0	6
+15 mins.	0	0	2	2	0	1	0	1	0	1	0	1	1	5	0	6
+30 mins.	1	1	0	2	1	1	0	2	1	1	0	2	1	5	0	6
+45 mins.	0	0	1	1	0	3	1	4	0	1	1	2	0	1	0	1
Total Volume	2	3	5	10	3	8	1	12	1	3	1	5	3	16	0	19
% App. Total	20	30	50		25	66.7	8.3		20	60	20		15.8	84.2	0	
PHF	.500	.375	.625	.500	.375	.667	.250	.600	.250	.750	.250	.625	.750	.800	.000	.792

City of Apple Valley  
 N/S: Apple Valley Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 06\_APV\_AV\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- 3 Axle Vehicles

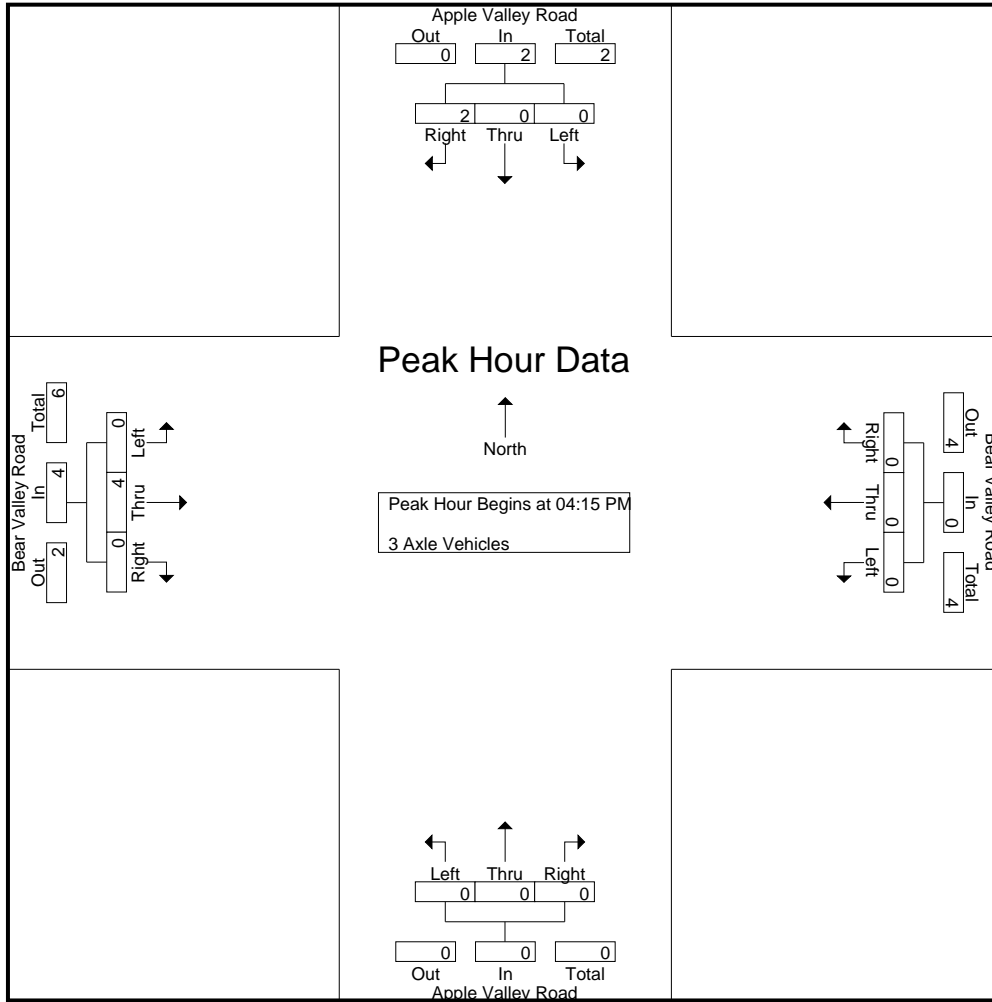
Start Time	Apple Valley Road Southbound				Bear Valley Road Westbound				Apple Valley Road Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	2	0	2	0	1	0	1	0	0	0	0	3
04:15 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
04:45 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	1	2
<b>Total</b>	0	0	2	2	0	2	0	2	0	1	0	1	0	3	0	3	8
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	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
<b>Total</b>	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	1	2
<b>Grand Total</b>	0	0	2	2	0	2	1	3	0	1	0	1	0	4	0	4	10
Apprch %	0	0	100		0	66.7	33.3		0	100	0		0	100	0		
Total %	0	0	20	20	0	20	10	30	0	10	0	10	0	40	0	40	

Start Time	Apple Valley Road Southbound				Bear Valley Road Westbound				Apple Valley Road Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:15 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
04:45 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	1	2
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total Volume	0	0	2	2	0	0	0	0	0	0	0	0	0	4	0	4	6
% App. Total	0	0	100		0	0	0		0	0	0		0	100	0		
PHF	.000	.000	.500	.500	.000	.000	.000	.000	.000	.000	.000	.000	.000	.500	.000	.500	.750

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

City of Apple Valley  
 N/S: Apple Valley Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 06\_APV\_AV\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 2



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

	04:15 PM				04:15 PM				04:15 PM				04:15 PM			
+0 mins.	0	0	1	1	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	2	0	2
+30 mins.	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	1
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Total Volume	0	0	2	2	0	0	0	0	0	0	0	0	0	4	0	4
% App. Total	0	0	100		0	0	0		0	0	0		0	100	0	
PHF	.000	.000	.500	.500	.000	.000	.000	.000	.000	.000	.000	.000	.000	.500	.000	.500

City of Apple Valley  
 N/S: Apple Valley Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 06\_APV\_AV\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- 4+ Axle Trucks

Start Time	Apple Valley Road Southbound				Bear Valley Road Westbound				Apple Valley Road Northbound				Bear Valley 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	2	2	0	2	0	2	0	0	0	0	0	3	0	3	7
04:15 PM	0	1	0	1	0	5	0	5	0	0	0	0	0	0	0	0	6
04:30 PM	0	0	0	0	0	5	0	5	0	0	0	0	0	4	0	4	9
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	5	0	5	6
Total	0	1	2	3	0	13	0	13	0	0	0	0	0	12	0	12	28
05:00 PM	1	0	0	1	0	2	0	2	0	0	0	0	0	2	0	2	5
05:15 PM	1	0	0	1	0	2	0	2	0	0	0	0	0	4	0	4	7
05:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	2	0	0	2	0	5	0	5	0	0	0	0	0	8	0	8	15
Grand Total	2	1	2	5	0	18	0	18	0	0	0	0	0	20	0	20	43
Apprch %	40	20	40		0	100	0		0	0	0		0	100	0		
Total %	4.7	2.3	4.7	11.6	0	41.9	0	41.9	0	0	0	0	0	46.5	0	46.5	

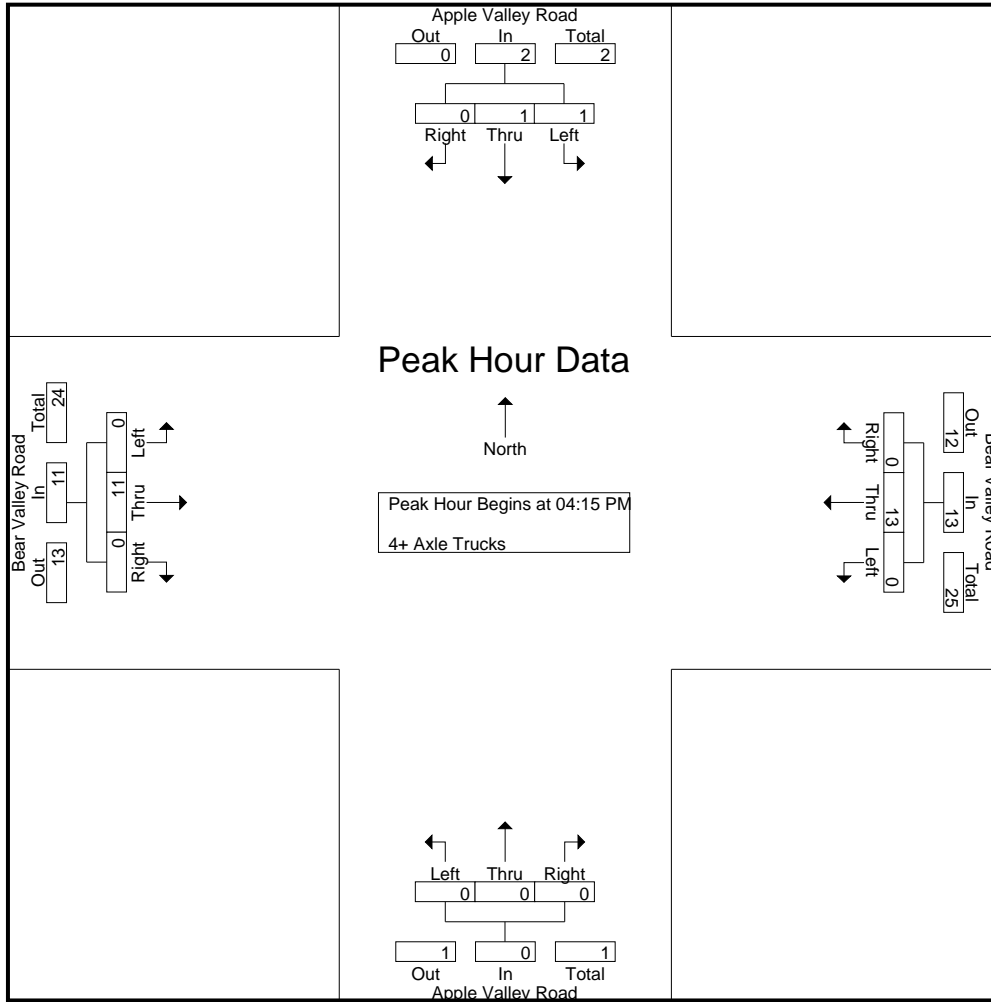
Start Time	Apple Valley Road Southbound				Bear Valley Road Westbound				Apple Valley Road Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:15 PM	0	1	0	1	0	5	0	5	0	0	0	0	0	0	0	0	6
04:30 PM	0	0	0	0	0	5	0	5	0	0	0	0	0	4	0	4	9
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	5	0	5	6
05:00 PM	1	0	0	1	0	2	0	2	0	0	0	0	0	2	0	2	5
Total Volume	1	1	0	2	0	13	0	13	0	0	0	0	0	11	0	11	26
% App. Total	50	50	0		0	100	0		0	0	0		0	100	0		
PHF	.250	.250	.000	.500	.000	.650	.000	.650	.000	.000	.000	.000	.000	.550	.000	.550	.722

Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:15 PM

City of Apple Valley  
 N/S: Apple Valley Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 06\_APV\_AV\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 2



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

	04:15 PM				04:15 PM				04:15 PM				04:15 PM			
+0 mins.	0	1	0	1	0	5	0	5	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	5	0	5	0	0	0	0	0	4	0	4
+30 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	5	0	5
+45 mins.	1	0	0	1	0	2	0	2	0	0	0	0	0	2	0	2
Total Volume	1	1	0	2	0	13	0	13	0	0	0	0	0	11	0	11
% App. Total	50	50	0	0	0	100	0	0	0	0	0	0	0	100	0	0
PHF	.250	.250	.000	.500	.000	.650	.000	.650	.000	.000	.000	.000	.000	.550	.000	.550

Location: Apple Valley  
 N/S: Apple Valley Road  
 E/W: Bear Valley Road



Date: 11/17/2022  
 Day: Thursday

**PEDESTRIANS**

	North Leg Apple Valley Road	East Leg Bear Valley Road	South Leg Apple Valley Road	West Leg Bear Valley Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	1	1
8:00 AM	0	1	0	0	1
8:15 AM	0	1	1	0	2
8:30 AM	0	0	0	0	0
8:45 AM	2	1	0	3	6
<b>TOTAL VOLUMES:</b>	2	3	1	4	10

	North Leg Apple Valley Road	East Leg Bear Valley Road	South Leg Apple Valley Road	West Leg Bear Valley Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	3	0	1	4	8
4:15 PM	1	0	0	0	1
4:30 PM	1	0	0	1	2
4:45 PM	1	0	0	0	1
5:00 PM	2	1	1	3	7
5:15 PM	1	0	0	0	1
5:30 PM	0	0	0	1	1
5:45 PM	0	0	1	0	1
<b>TOTAL VOLUMES:</b>	9	1	3	9	22



Location: Apple Valley  
 N/S: Apple Valley Road  
 E/W: Bear Valley Road



Date: 11/17/2022  
 Day: Thursday

BICYCLES

	Southbound Apple Valley Road			Westbound Bear Valley Road			Northbound Apple Valley Road			Eastbound Bear Valley Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	1	0	0	0	0	1

	Southbound Apple Valley Road			Westbound Bear Valley Road			Northbound Apple Valley Road			Eastbound Bear Valley Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

City of Apple Valley  
 N/S: Westmont Drive  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 07\_APV\_West\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
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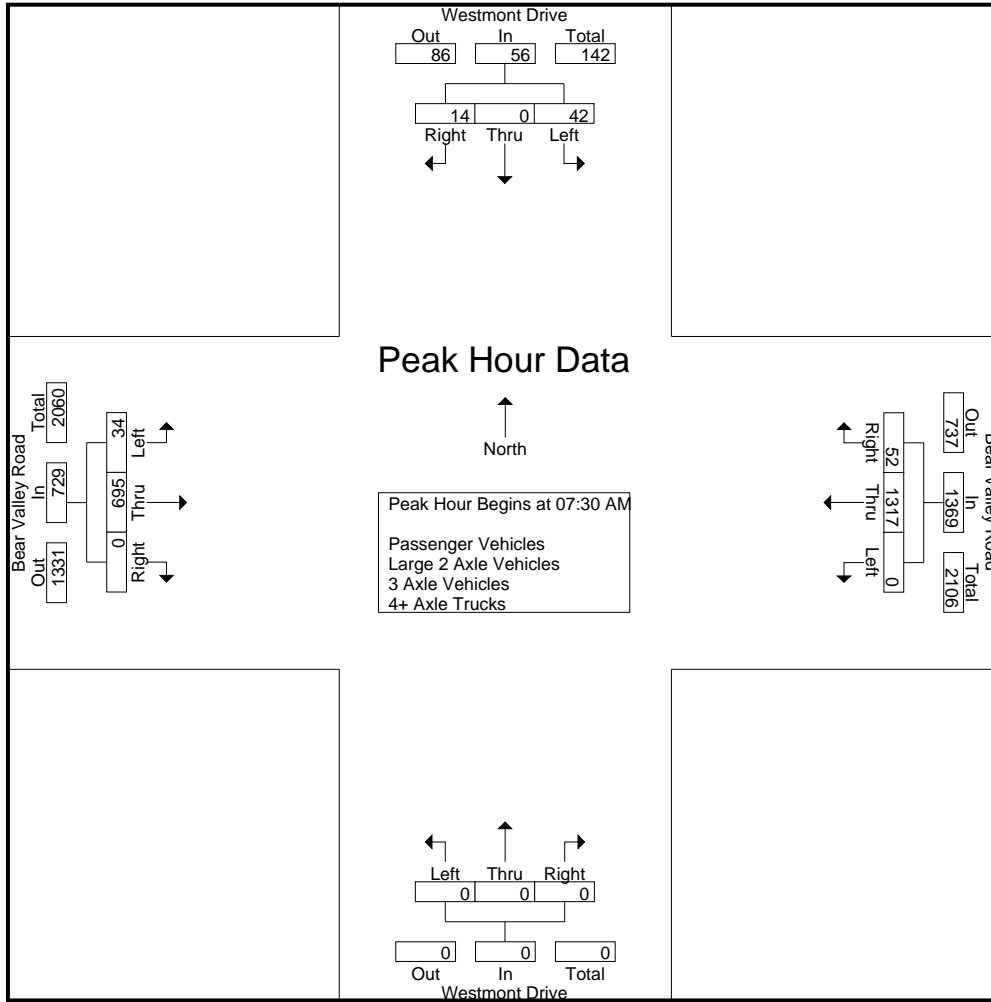
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Westmont Drive Southbound				Bear Valley Road Westbound				Westmont Drive Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	3	0	1	4	0	260	8	268	0	0	0	0	3	126	0	129	401
07:15 AM	8	0	0	8	0	254	6	260	0	0	0	0	1	154	0	155	423
07:30 AM	6	0	4	10	0	330	15	345	0	0	0	0	8	185	0	193	548
07:45 AM	13	0	1	14	0	372	16	388	0	0	0	0	8	167	0	175	577
<b>Total</b>	<b>30</b>	<b>0</b>	<b>6</b>	<b>36</b>	<b>0</b>	<b>1216</b>	<b>45</b>	<b>1261</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>20</b>	<b>632</b>	<b>0</b>	<b>652</b>	<b>1949</b>
08:00 AM	11	0	5	16	0	313	10	323	0	0	0	0	9	188	0	197	536
08:15 AM	12	0	4	16	0	302	11	313	0	0	0	0	9	155	0	164	493
08:30 AM	16	0	6	22	0	274	15	289	0	0	0	0	12	183	0	195	506
08:45 AM	8	0	1	9	0	278	14	292	0	0	0	0	17	171	0	188	489
<b>Total</b>	<b>47</b>	<b>0</b>	<b>16</b>	<b>63</b>	<b>0</b>	<b>1167</b>	<b>50</b>	<b>1217</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>47</b>	<b>697</b>	<b>0</b>	<b>744</b>	<b>2024</b>
<b>Grand Total</b>	<b>77</b>	<b>0</b>	<b>22</b>	<b>99</b>	<b>0</b>	<b>2383</b>	<b>95</b>	<b>2478</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>67</b>	<b>1329</b>	<b>0</b>	<b>1396</b>	<b>3973</b>
Apprch %	77.8	0	22.2		0	96.2	3.8		0	0	0		4.8	95.2	0		
Total %	1.9	0	0.6	2.5	0	60	2.4	62.4	0	0	0	0	1.7	33.5	0	35.1	
Passenger Vehicles	69	0	16	85	0	2275	90	2365	0	0	0	0	59	1217	0	1276	3726
% Passenger Vehicles	89.6	0	72.7	85.9	0	95.5	94.7	95.4	0	0	0	0	88.1	91.6	0	91.4	93.8
Large 2 Axle Vehicles	5	0	2	7	0	61	4	65	0	0	0	0	5	70	0	75	147
% Large 2 Axle Vehicles	6.5	0	9.1	7.1	0	2.6	4.2	2.6	0	0	0	0	7.5	5.3	0	5.4	3.7
3 Axle Vehicles	3	0	1	4	0	10	0	10	0	0	0	0	0	12	0	12	26
% 3 Axle Vehicles	3.9	0	4.5	4	0	0.4	0	0.4	0	0	0	0	0	0.9	0	0.9	0.7
4+ Axle Trucks	0	0	3	3	0	37	1	38	0	0	0	0	3	30	0	33	74
% 4+ Axle Trucks	0	0	13.6	3	0	1.6	1.1	1.5	0	0	0	0	4.5	2.3	0	2.4	1.9

Start Time	Westmont Drive Southbound				Bear Valley Road Westbound				Westmont Drive Northbound				Bear Valley 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	6	0	4	10	0	330	15	345	0	0	0	0	8	185	0	193	548
07:45 AM	13	0	1	14	0	372	16	388	0	0	0	0	8	167	0	175	577
08:00 AM	11	0	5	16	0	313	10	323	0	0	0	0	9	188	0	197	536
08:15 AM	12	0	4	16	0	302	11	313	0	0	0	0	9	155	0	164	493
Total Volume	42	0	14	56	0	1317	52	1369	0	0	0	0	34	695	0	729	2154
% App. Total	75	0	25		0	96.2	3.8		0	0	0		4.7	95.3	0		
PHF	.808	.000	.700	.875	.000	.885	.813	.882	.000	.000	.000	.000	.944	.924	.000	.925	.933

City of Apple Valley  
 N/S: Westmont Drive  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 07\_APV\_West\_BV AM  
 Site Code : 221022  
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Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:45 AM				07:30 AM				07:00 AM				08:00 AM			
+0 mins.	13	0	1	14	0	330	15	345	0	0	0	0	9	<b>188</b>	0	<b>197</b>
+15 mins.	11	0	5	16	0	<b>372</b>	<b>16</b>	<b>388</b>	0	0	0	0	9	155	0	164
+30 mins.	12	0	4	16	0	313	10	323	0	0	0	0	12	183	0	195
+45 mins.	<b>16</b>	0	<b>6</b>	<b>22</b>	0	302	11	313	0	0	0	0	<b>17</b>	171	0	188
Total Volume	52	0	16	68	0	1317	52	1369	0	0	0	0	47	697	0	744
% App. Total	76.5	0	23.5		0	96.2	3.8		0	0	0		6.3	93.7	0	
PHF	.813	.000	.667	.773	.000	.885	.813	.882	.000	.000	.000	.000	.691	.927	.000	.944

City of Apple Valley  
 N/S: Westmont Drive  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 07\_APV\_West\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
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Groups Printed- Passenger Vehicles

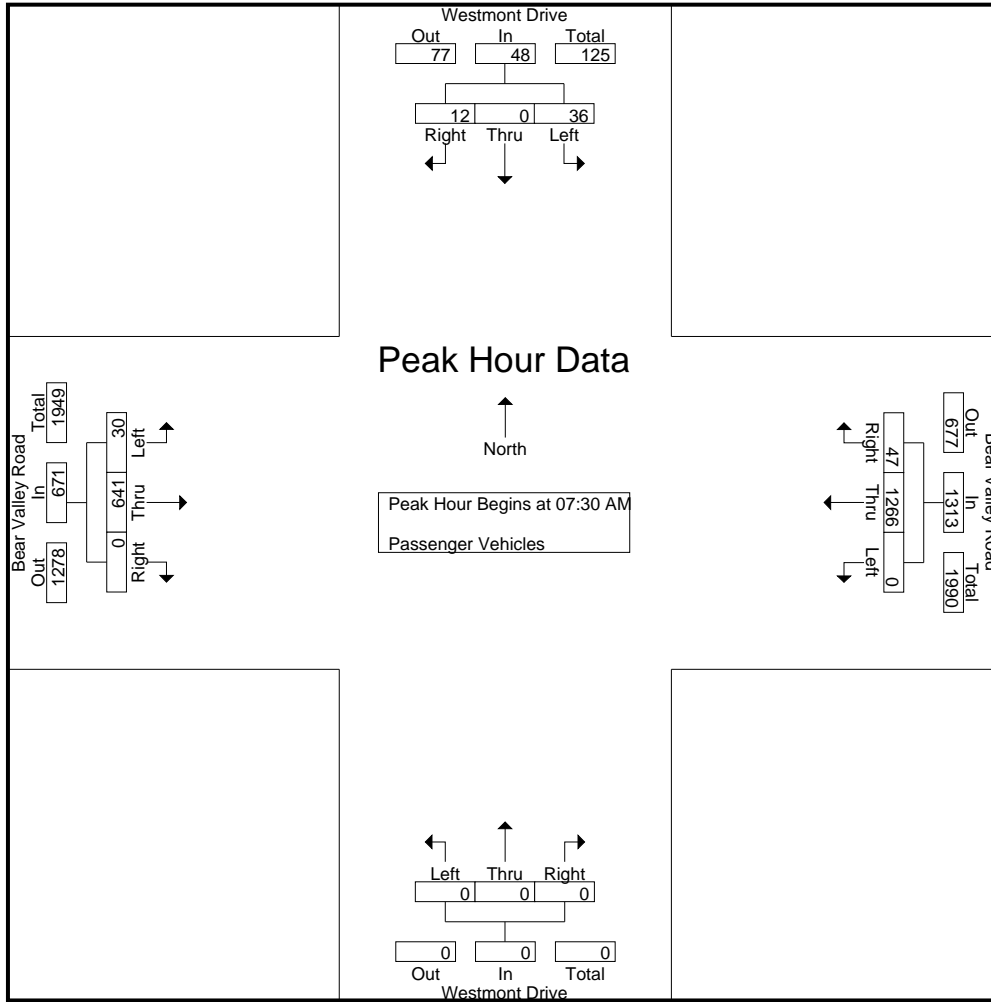
Start Time	Westmont Drive Southbound				Bear Valley Road Westbound				Westmont Drive Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	3	0	0	3	0	243	8	251	0	0	0	0	2	110	0	112	366
07:15 AM	7	0	0	7	0	242	6	248	0	0	0	0	1	136	0	137	392
07:30 AM	5	0	4	9	0	322	15	337	0	0	0	0	8	171	0	179	525
07:45 AM	11	0	1	12	0	351	13	364	0	0	0	0	7	159	0	166	542
Total	26	0	5	31	0	1158	42	1200	0	0	0	0	18	576	0	594	1825
08:00 AM	10	0	4	14	0	305	9	314	0	0	0	0	7	174	0	181	509
08:15 AM	10	0	3	13	0	288	10	298	0	0	0	0	8	137	0	145	456
08:30 AM	15	0	3	18	0	260	15	275	0	0	0	0	11	171	0	182	475
08:45 AM	8	0	1	9	0	264	14	278	0	0	0	0	15	159	0	174	461
Total	43	0	11	54	0	1117	48	1165	0	0	0	0	41	641	0	682	1901
Grand Total	69	0	16	85	0	2275	90	2365	0	0	0	0	59	1217	0	1276	3726
Apprch %	81.2	0	18.8		0	96.2	3.8		0	0	0		4.6	95.4	0		
Total %	1.9	0	0.4	2.3	0	61.1	2.4	63.5	0	0	0	0	1.6	32.7	0	34.2	

Start Time	Westmont Drive Southbound				Bear Valley Road Westbound				Westmont Drive Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:30 AM	5	0	4	9	0	322	15	337	0	0	0	0	8	171	0	179	525
07:45 AM	11	0	1	12	0	351	13	364	0	0	0	0	7	159	0	166	542
08:00 AM	10	0	4	14	0	305	9	314	0	0	0	0	7	174	0	181	509
08:15 AM	10	0	3	13	0	288	10	298	0	0	0	0	8	137	0	145	456
Total Volume	36	0	12	48	0	1266	47	1313	0	0	0	0	30	641	0	671	2032
% App. Total	75	0	25		0	96.4	3.6		0	0	0		4.5	95.5	0		
PHF	.818	.000	.750	.857	.000	.902	.783	.902	.000	.000	.000	.000	.938	.921	.000	.927	.937

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

City of Apple Valley  
 N/S: Westmont Drive  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 07\_APV\_West\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
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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.	5	0	4	9	0	322	15	337	0	0	0	0	8	171	0	179
+15 mins.	11	0	1	12	0	351	13	364	0	0	0	0	7	159	0	166
+30 mins.	10	0	4	14	0	305	9	314	0	0	0	0	7	174	0	181
+45 mins.	10	0	3	13	0	288	10	298	0	0	0	0	8	137	0	145
Total Volume	36	0	12	48	0	1266	47	1313	0	0	0	0	30	641	0	671
% App. Total	75	0	25		0	96.4	3.6		0	0	0		4.5	95.5	0	
PHF	.818	.000	.750	.857	.000	.902	.783	.902	.000	.000	.000	.000	.938	.921	.000	.927

City of Apple Valley  
 N/S: Westmont Drive  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 07\_APV\_West\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

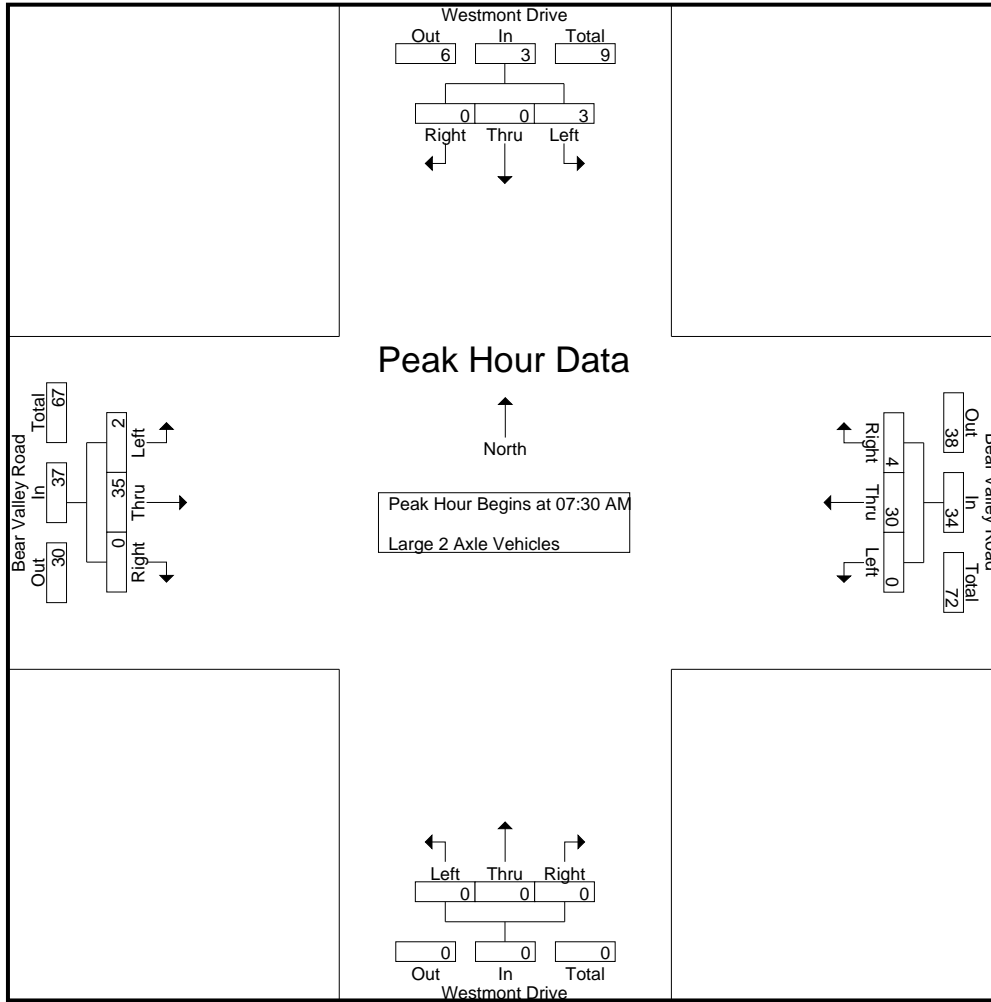
Start Time	Westmont Drive Southbound				Bear Valley Road Westbound				Westmont Drive Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	9	0	9	0	0	0	0	1	5	0	6	15
07:15 AM	1	0	0	1	0	5	0	5	0	0	0	0	0	11	0	11	17
07:30 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	8	0	8	12
07:45 AM	1	0	0	1	0	11	2	13	0	0	0	0	0	4	0	4	18
Total	2	0	0	2	0	29	2	31	0	0	0	0	1	28	0	29	62
08:00 AM	1	0	0	1	0	5	1	6	0	0	0	0	1	9	0	10	17
08:15 AM	1	0	0	1	0	10	1	11	0	0	0	0	1	14	0	15	27
08:30 AM	1	0	2	3	0	7	0	7	0	0	0	0	0	9	0	9	19
08:45 AM	0	0	0	0	0	10	0	10	0	0	0	0	2	10	0	12	22
Total	3	0	2	5	0	32	2	34	0	0	0	0	4	42	0	46	85
Grand Total	5	0	2	7	0	61	4	65	0	0	0	0	5	70	0	75	147
Apprch %	71.4	0	28.6		0	93.8	6.2		0	0	0		6.7	93.3	0		
Total %	3.4	0	1.4	4.8	0	41.5	2.7	44.2	0	0	0	0	3.4	47.6	0	51	

Start Time	Westmont Drive Southbound				Bear Valley Road Westbound				Westmont Drive Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:30 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	8	0	8	12
07:45 AM	1	0	0	1	0	11	2	13	0	0	0	0	0	4	0	4	18
08:00 AM	1	0	0	1	0	5	1	6	0	0	0	0	1	9	0	10	17
08:15 AM	1	0	0	1	0	10	1	11	0	0	0	0	1	14	0	15	27
Total Volume	3	0	0	3	0	30	4	34	0	0	0	0	2	35	0	37	74
% App. Total	100	0	0		0	88.2	11.8		0	0	0		5.4	94.6	0		
PHF	.750	.000	.000	.750	.000	.682	.500	.654	.000	.000	.000	.000	.500	.625	.000	.617	.685

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

City of Apple Valley  
 N/S: Westmont Drive  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 07\_APV\_West\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
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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	4	0	4	0	0	0	0	0	8	0	8
+15 mins.	1	0	0	1	0	11	2	13	0	0	0	0	0	4	0	4
+30 mins.	1	0	0	1	0	5	1	6	0	0	0	0	1	9	0	10
+45 mins.	1	0	0	1	0	10	1	11	0	0	0	0	1	14	0	15
Total Volume	3	0	0	3	0	30	4	34	0	0	0	0	2	35	0	37
% App. Total	100	0	0		0	88.2	11.8		0	0	0		5.4	94.6	0	
PHF	.750	.000	.000	.750	.000	.682	.500	.654	.000	.000	.000	.000	.500	.625	.000	.617

City of Apple Valley  
 N/S: Westmont Drive  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 07\_APV\_West\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- 3 Axle Vehicles

Start Time	Westmont Drive Southbound				Bear Valley Road Westbound				Westmont Drive Northbound				Bear Valley 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	1	0	1	0	0	0	0	0	2	0	2	3
07:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
07:30 AM	1	0	0	1	0	2	0	2	0	0	0	0	0	0	0	3	
07:45 AM	1	0	0	1	0	2	0	2	0	0	0	0	0	3	0	3	6
Total	2	0	0	2	0	6	0	6	0	0	0	0	0	7	0	7	15
08:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	2	0	2	3
08:15 AM	1	0	0	1	0	1	0	1	0	0	0	0	0	2	0	2	4
08:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1	
08:45 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
Total	1	0	1	2	0	4	0	4	0	0	0	0	0	5	0	5	11
Grand Total	3	0	1	4	0	10	0	10	0	0	0	0	0	12	0	12	26
Apprch %	75	0	25		0	100	0		0	0	0		0	100	0		
Total %	11.5	0	3.8	15.4	0	38.5	0	38.5	0	0	0	0	0	46.2	0	46.2	

Start Time	Westmont Drive Southbound				Bear Valley Road Westbound				Westmont Drive Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:30 AM	1	0	0	1	0	2	0	2	0	0	0	0	0	0	0	0	3
07:45 AM	1	0	0	1	0	2	0	2	0	0	0	0	0	3	0	3	6
08:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	2	0	2	3
08:15 AM	1	0	0	1	0	1	0	1	0	0	0	0	0	2	0	2	4
Total Volume	3	0	1	4	0	5	0	5	0	0	0	0	0	7	0	7	16
% App. Total	75	0	25		0	100	0		0	0	0		0	100	0		
PHF	.750	.000	.250	1.00	.000	.625	.000	.625	.000	.000	.000	.000	.000	.583	.000	.583	.667

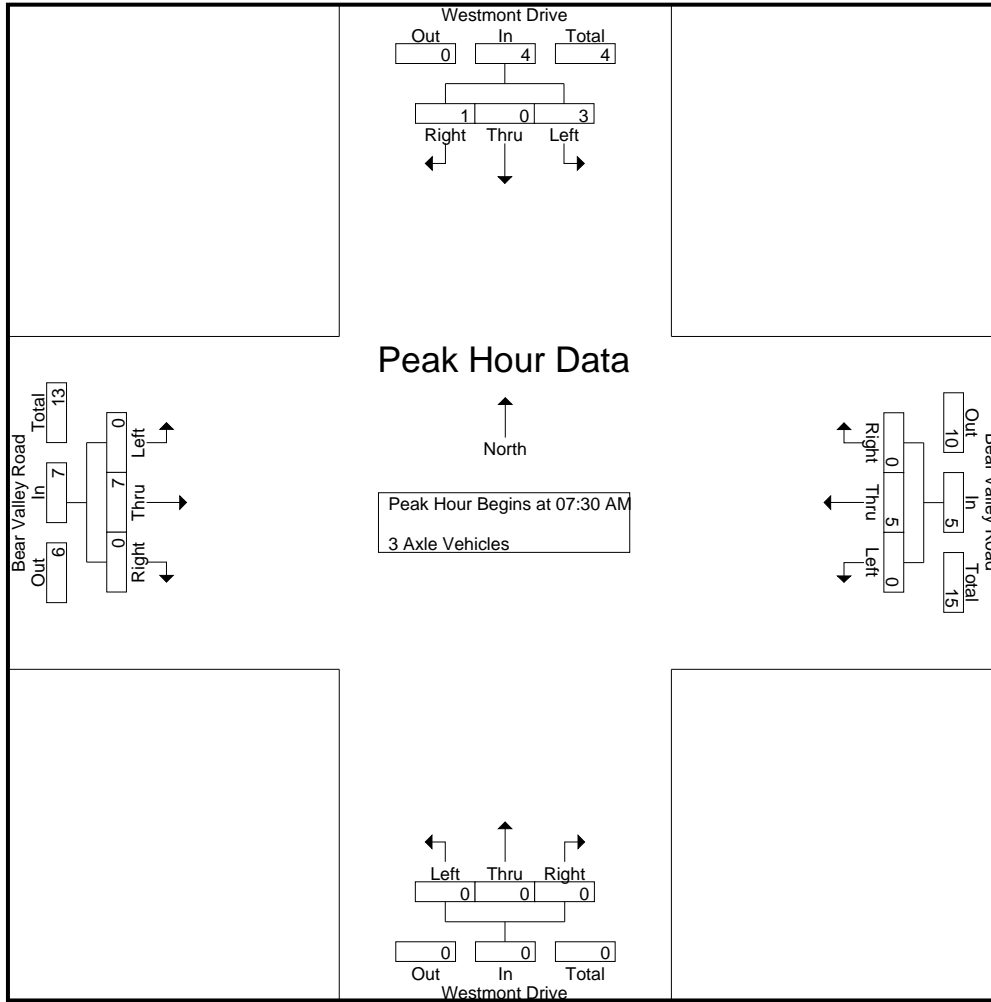
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:30 AM



City of Apple Valley  
 N/S: Westmont Drive  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 07\_APV\_West\_BV AM  
 Site Code : 221022  
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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	0	0	1	0	2	0	2	0	0	0	0	0	0	0	0
+15 mins.	1	0	0	1	0	2	0	2	0	0	0	0	0	3	0	3
+30 mins.	0	0	1	1	0	0	0	0	0	0	0	0	0	2	0	2
+45 mins.	1	0	0	1	0	1	0	1	0	0	0	0	0	2	0	2
Total Volume	3	0	1	4	0	5	0	5	0	0	0	0	0	7	0	7
% App. Total	75	0	25	100	0	100	0	100	0	0	0	0	0	100	0	100
PHF	.750	.000	.250	1.000	.000	.625	.000	.625	.000	.000	.000	.000	.000	.583	.000	.583

City of Apple Valley  
 N/S: Westmont Drive  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 07\_APV\_West\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
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Groups Printed- 4+ Axle Trucks

Start Time	Westmont Drive Southbound				Bear Valley Road Westbound				Westmont Drive Northbound				Bear Valley 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	1	1	0	7	0	7	0	0	0	0	0	9	0	9	17
07:15 AM	0	0	0	0	0	6	0	6	0	0	0	0	0	5	0	5	11
07:30 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	6	0	6	8
07:45 AM	0	0	0	0	0	8	1	9	0	0	0	0	1	1	0	2	11
Total	0	0	1	1	0	23	1	24	0	0	0	0	1	21	0	22	47
08:00 AM	0	0	0	0	0	3	0	3	0	0	0	0	1	3	0	4	7
08:15 AM	0	0	1	1	0	3	0	3	0	0	0	0	0	2	0	2	6
08:30 AM	0	0	1	1	0	6	0	6	0	0	0	0	1	3	0	4	11
08:45 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
Total	0	0	2	2	0	14	0	14	0	0	0	0	2	9	0	11	27
Grand Total	0	0	3	3	0	37	1	38	0	0	0	0	3	30	0	33	74
Apprch %	0	0	100		0	97.4	2.6		0	0	0		9.1	90.9	0		
Total %	0	0	4.1	4.1	0	50	1.4	51.4	0	0	0	0	4.1	40.5	0	44.6	

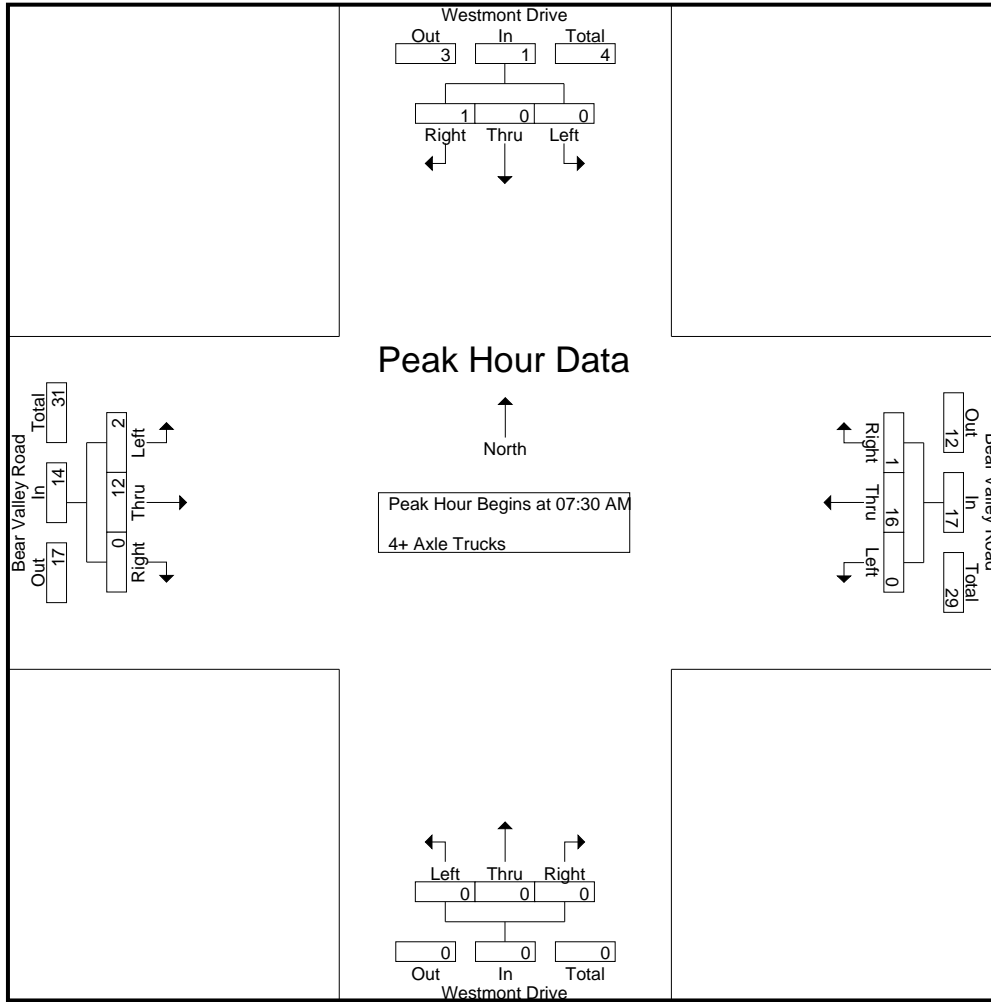
Start Time	Westmont Drive Southbound				Bear Valley Road Westbound				Westmont Drive Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:30 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	6	0	6	8
07:45 AM	0	0	0	0	0	8	1	9	0	0	0	0	1	1	0	2	11
08:00 AM	0	0	0	0	0	3	0	3	0	0	0	0	1	3	0	4	7
08:15 AM	0	0	1	1	0	3	0	3	0	0	0	0	0	2	0	2	6
Total Volume	0	0	1	1	0	16	1	17	0	0	0	0	2	12	0	14	32
% App. Total	0	0	100		0	94.1	5.9		0	0	0		14.3	85.7	0		
PHF	.000	.000	.250	.250	.000	.500	.250	.472	.000	.000	.000	.000	.500	.500	.000	.583	.727

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

City of Apple Valley  
 N/S: Westmont Drive  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 07\_APV\_West\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 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	2	0	2	0	0	0	0	0	6	0	6
+15 mins.	0	0	0	0	0	8	1	9	0	0	0	0	1	1	0	2
+30 mins.	0	0	0	0	0	3	0	3	0	0	0	0	1	3	0	4
+45 mins.	0	0	1	1	0	3	0	3	0	0	0	0	0	2	0	2
Total Volume	0	0	1	1	0	16	1	17	0	0	0	0	2	12	0	14
% App. Total	0	0	100		0	94.1	5.9		0	0	0		14.3	85.7	0	
PHF	.000	.000	.250	.250	.000	.500	.250	.472	.000	.000	.000	.000	.500	.500	.000	.583

City of Apple Valley  
 N/S: Westmont Drive  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 07\_APV\_West\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

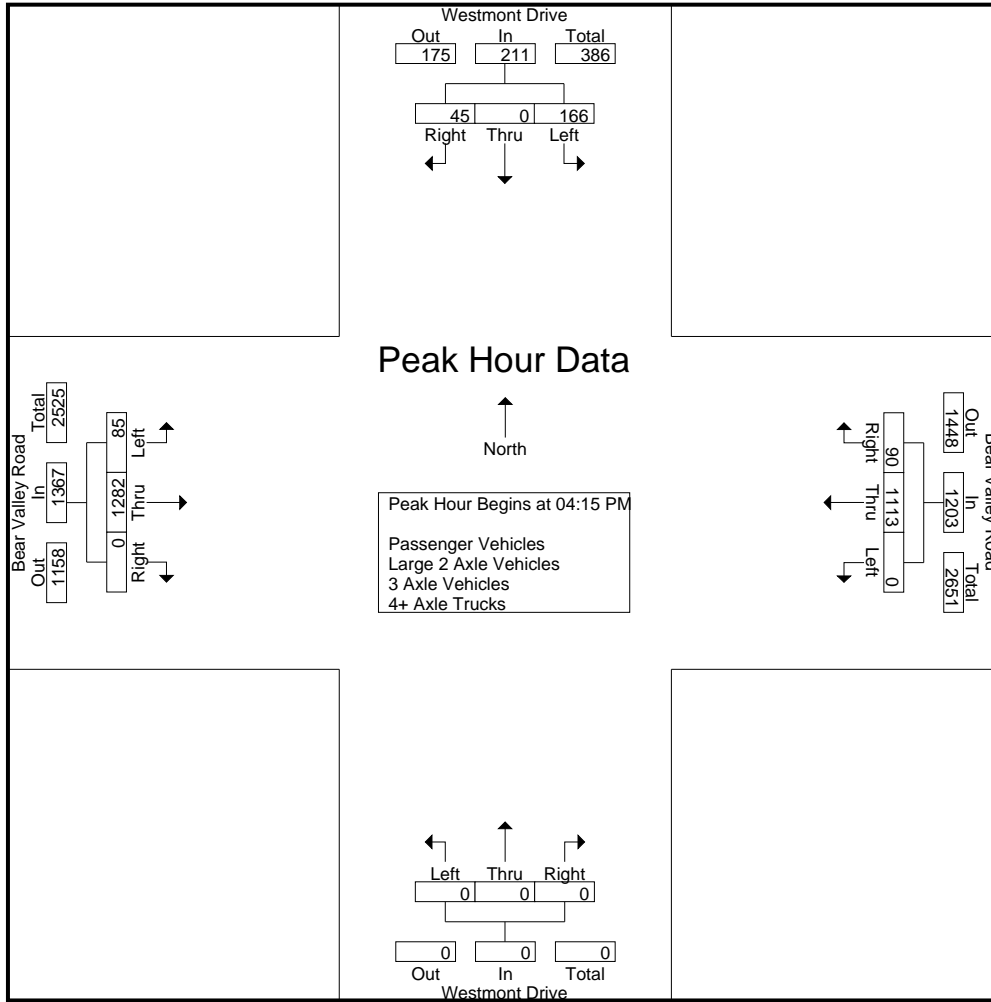
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Westmont Drive Southbound				Bear Valley Road Westbound				Westmont Drive Northbound				Bear Valley 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	46	0	12	58	0	247	31	278	0	0	0	0	34	294	0	328	664
04:15 PM	38	0	19	57	0	265	20	285	0	0	0	0	23	326	0	349	691
04:30 PM	46	0	8	54	0	258	26	284	0	0	0	0	18	303	0	321	659
04:45 PM	43	0	7	50	0	288	23	311	0	0	0	0	22	328	0	350	711
<b>Total</b>	<b>173</b>	<b>0</b>	<b>46</b>	<b>219</b>	<b>0</b>	<b>1058</b>	<b>100</b>	<b>1158</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>97</b>	<b>1251</b>	<b>0</b>	<b>1348</b>	<b>2725</b>
05:00 PM	39	0	11	50	0	302	21	323	0	0	0	0	22	325	0	347	720
05:15 PM	26	0	10	36	0	268	24	292	0	0	0	0	29	321	0	350	678
05:30 PM	37	0	5	42	0	238	18	256	0	0	0	0	23	293	0	316	614
05:45 PM	40	0	10	50	0	215	13	228	0	0	0	0	14	277	0	291	569
<b>Total</b>	<b>142</b>	<b>0</b>	<b>36</b>	<b>178</b>	<b>0</b>	<b>1023</b>	<b>76</b>	<b>1099</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>88</b>	<b>1216</b>	<b>0</b>	<b>1304</b>	<b>2581</b>
<b>Grand Total</b>	<b>315</b>	<b>0</b>	<b>82</b>	<b>397</b>	<b>0</b>	<b>2081</b>	<b>176</b>	<b>2257</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>185</b>	<b>2467</b>	<b>0</b>	<b>2652</b>	<b>5306</b>
Apprch %	79.3	0	20.7		0	92.2	7.8		0	0	0		7	93	0		
Total %	5.9	0	1.5	7.5	0	39.2	3.3	42.5	0	0	0	0	3.5	46.5	0	50	
Passenger Vehicles	311	0	80	391	0	2021	172	2193	0	0	0	0	185	2399	0	2584	5168
% Passenger Vehicles	98.7	0	97.6	98.5	0	97.1	97.7	97.2	0	0	0	0	100	97.2	0	97.4	97.4
Large 2 Axle Vehicles	4	0	2	6	0	36	4	40	0	0	0	0	0	43	0	43	89
% Large 2 Axle Vehicles	1.3	0	2.4	1.5	0	1.7	2.3	1.8	0	0	0	0	0	1.7	0	1.6	1.7
3 Axle Vehicles	0	0	0	0	0	3	0	3	0	0	0	0	0	4	0	4	7
% 3 Axle Vehicles	0	0	0	0	0	0.1	0	0.1	0	0	0	0	0	0.2	0	0.2	0.1
4+ Axle Trucks	0	0	0	0	0	21	0	21	0	0	0	0	0	21	0	21	42
% 4+ Axle Trucks	0	0	0	0	0	1	0	0.9	0	0	0	0	0	0.9	0	0.8	0.8

Start Time	Westmont Drive Southbound				Bear Valley Road Westbound				Westmont Drive Northbound				Bear Valley 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 04:15 PM																	
04:15 PM	38	0	<b>19</b>	<b>57</b>	0	265	20	285	0	0	0	0	<b>23</b>	326	0	349	691
04:30 PM	<b>46</b>	0	8	54	0	258	<b>26</b>	284	0	0	0	0	18	303	0	321	659
04:45 PM	43	0	7	50	0	288	23	311	0	0	0	0	22	<b>328</b>	0	<b>350</b>	711
05:00 PM	39	0	11	50	0	<b>302</b>	21	<b>323</b>	0	0	0	0	22	325	0	347	<b>720</b>
Total Volume	166	0	45	211	0	1113	90	1203	0	0	0	0	85	1282	0	1367	2781
% App. Total	78.7	0	21.3		0	92.5	7.5		0	0	0		6.2	93.8	0		
PHF	.902	.000	.592	.925	.000	.921	.865	.931	.000	.000	.000	.000	.924	.977	.000	.976	.966

City of Apple Valley  
 N/S: Westmont Drive  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 07\_APV\_West\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
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Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	04:00 PM				04:30 PM				04:00 PM				04:30 PM			
+0 mins.	<b>46</b>	0	12	<b>58</b>	0	258	<b>26</b>	284	0	0	0	0	18	303	0	321
+15 mins.	38	0	<b>19</b>	57	0	288	23	311	0	0	0	0	22	<b>328</b>	0	<b>350</b>
+30 mins.	46	0	8	54	0	<b>302</b>	21	<b>323</b>	0	0	0	0	22	325	0	347
+45 mins.	43	0	7	50	0	268	24	292	0	0	0	0	<b>29</b>	321	0	350
Total Volume	173	0	46	219	0	1116	94	1210	0	0	0	0	91	1277	0	1368
% App. Total	79	0	21		0	92.2	7.8		0	0	0		6.7	93.3	0	
PHF	.940	.000	.605	.944	.000	.924	.904	.937	.000	.000	.000	.000	.784	.973	.000	.977

City of Apple Valley  
 N/S: Westmont Drive  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 07\_APV\_West\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- Passenger Vehicles

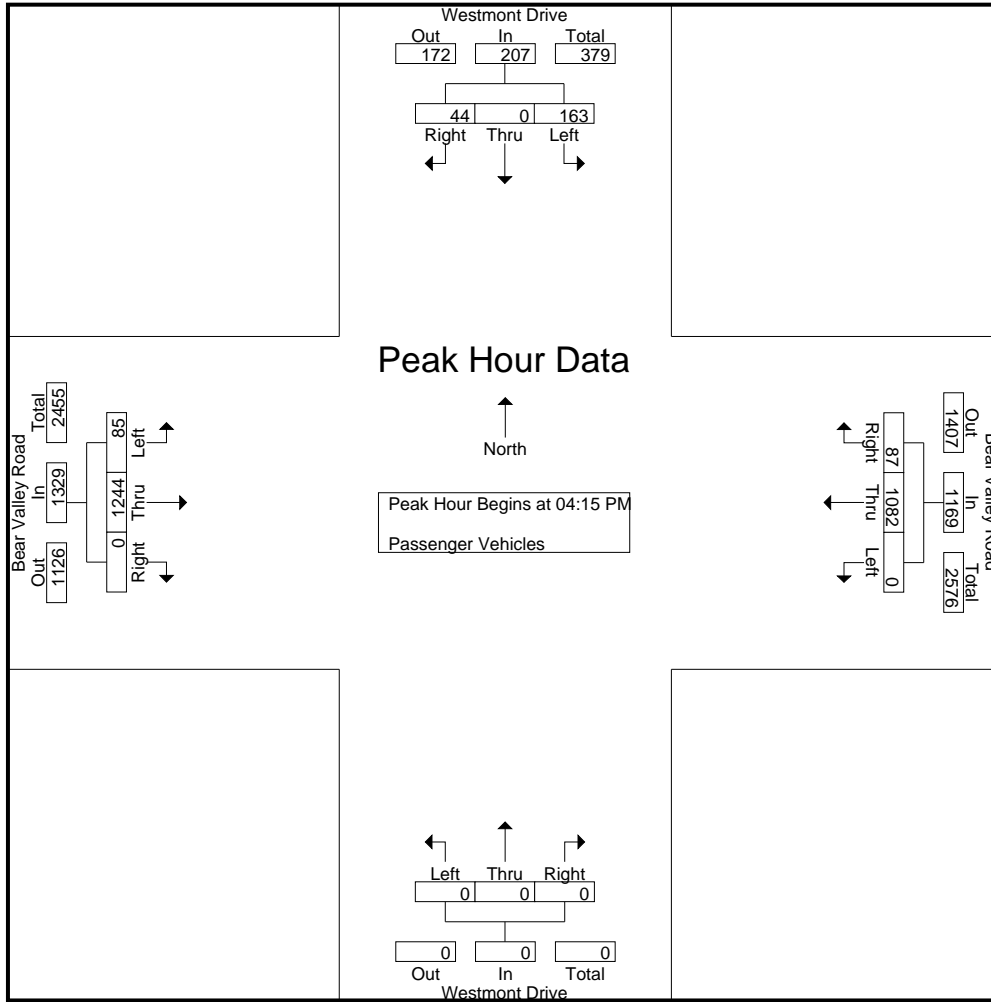
Start Time	Westmont Drive Southbound				Bear Valley Road Westbound				Westmont Drive Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	45	0	12	57	0	234	31	265	0	0	0	0	34	284	0	318	640
04:15 PM	37	0	19	56	0	256	20	276	0	0	0	0	23	318	0	341	673
04:30 PM	45	0	7	52	0	250	25	275	0	0	0	0	18	291	0	309	636
04:45 PM	43	0	7	50	0	285	23	308	0	0	0	0	22	316	0	338	696
Total	170	0	45	215	0	1025	99	1124	0	0	0	0	97	1209	0	1306	2645
05:00 PM	38	0	11	49	0	291	19	310	0	0	0	0	22	319	0	341	700
05:15 PM	26	0	10	36	0	261	24	285	0	0	0	0	29	314	0	343	664
05:30 PM	37	0	5	42	0	234	18	252	0	0	0	0	23	285	0	308	602
05:45 PM	40	0	9	49	0	210	12	222	0	0	0	0	14	272	0	286	557
Total	141	0	35	176	0	996	73	1069	0	0	0	0	88	1190	0	1278	2523
Grand Total	311	0	80	391	0	2021	172	2193	0	0	0	0	185	2399	0	2584	5168
Apprch %	79.5	0	20.5		0	92.2	7.8		0	0	0		7.2	92.8	0		
Total %	6	0	1.5	7.6	0	39.1	3.3	42.4	0	0	0	0	3.6	46.4	0	50	

Start Time	Westmont Drive Southbound				Bear Valley Road Westbound				Westmont Drive Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:15 PM	37	0	19	56	0	256	20	276	0	0	0	0	23	318	0	341	673
04:30 PM	45	0	7	52	0	250	25	275	0	0	0	0	18	291	0	309	636
04:45 PM	43	0	7	50	0	285	23	308	0	0	0	0	22	316	0	338	696
05:00 PM	38	0	11	49	0	291	19	310	0	0	0	0	22	319	0	341	700
Total Volume	163	0	44	207	0	1082	87	1169	0	0	0	0	85	1244	0	1329	2705
% App. Total	78.7	0	21.3		0	92.6	7.4		0	0	0		6.4	93.6	0		
PHF	.906	.000	.579	.924	.000	.930	.870	.943	.000	.000	.000	.000	.924	.975	.000	.974	.966

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

City of Apple Valley  
 N/S: Westmont Drive  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 07\_APV\_West\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 2



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

	04:15 PM				04:15 PM				04:15 PM				04:15 PM			
+0 mins.	37	0	19	56	0	256	20	276	0	0	0	0	23	318	0	341
+15 mins.	45	0	7	52	0	250	25	275	0	0	0	0	18	291	0	309
+30 mins.	43	0	7	50	0	285	23	308	0	0	0	0	22	316	0	338
+45 mins.	38	0	11	49	0	291	19	310	0	0	0	0	22	319	0	341
Total Volume	163	0	44	207	0	1082	87	1169	0	0	0	0	85	1244	0	1329
% App. Total	78.7	0	21.3		0	92.6	7.4		0	0	0		6.4	93.6	0	
PHF	.906	.000	.579	.924	.000	.930	.870	.943	.000	.000	.000	.000	.924	.975	.000	.974

City of Apple Valley  
 N/S: Westmont Drive  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 07\_APV\_West\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

Start Time	Westmont Drive Southbound				Bear Valley Road Westbound				Westmont Drive Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	1	0	0	1	0	9	0	9	0	0	0	0	0	7	0	7	17
04:15 PM	1	0	0	1	0	4	0	4	0	0	0	0	0	8	0	8	13
04:30 PM	1	0	1	2	0	3	1	4	0	0	0	0	0	6	0	6	12
04:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	6	0	6	8
<b>Total</b>	<b>3</b>	<b>0</b>	<b>1</b>	<b>4</b>	<b>0</b>	<b>18</b>	<b>1</b>	<b>19</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>27</b>	<b>0</b>	<b>27</b>	<b>50</b>
05:00 PM	1	0	0	1	0	7	2	9	0	0	0	0	0	4	0	4	14
05:15 PM	0	0	0	0	0	7	0	7	0	0	0	0	0	3	0	3	10
05:30 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	6	0	6	9
05:45 PM	0	0	1	1	0	1	1	2	0	0	0	0	0	3	0	3	6
<b>Total</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>18</b>	<b>3</b>	<b>21</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>16</b>	<b>0</b>	<b>16</b>	<b>39</b>
<b>Grand Total</b>	<b>4</b>	<b>0</b>	<b>2</b>	<b>6</b>	<b>0</b>	<b>36</b>	<b>4</b>	<b>40</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>43</b>	<b>0</b>	<b>43</b>	<b>89</b>
Apprch %	66.7	0	33.3		0	90	10		0	0	0		0	100	0		
Total %	4.5	0	2.2	6.7	0	40.4	4.5	44.9	0	0	0	0	0	48.3	0	48.3	

Start Time	Westmont Drive Southbound				Bear Valley Road Westbound				Westmont Drive Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:15 PM	1	0	0	1	0	4	0	4	0	0	0	0	0	8	0	8	13
04:30 PM	1	0	1	2	0	3	1	4	0	0	0	0	0	6	0	6	12
04:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	6	0	6	8
05:00 PM	1	0	0	1	0	7	2	9	0	0	0	0	0	4	0	4	14
Total Volume	3	0	1	4	0	16	3	19	0	0	0	0	0	24	0	24	47
% App. Total	75	0	25		0	84.2	15.8		0	0	0		0	100	0		
PHF	.750	.000	.250	.500	.000	.571	.375	.528	.000	.000	.000	.000	.000	.750	.000	.750	.839

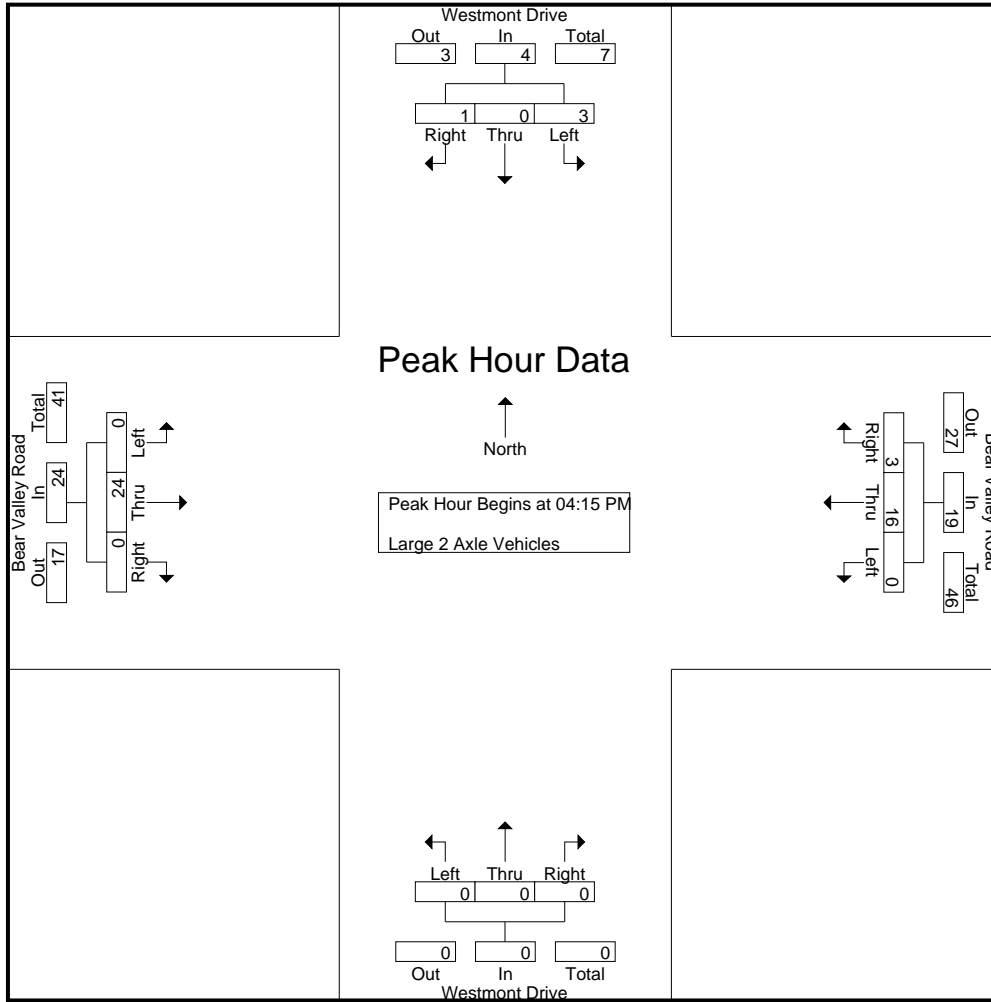
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:15 PM



City of Apple Valley  
 N/S: Westmont Drive  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 07\_APV\_West\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
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Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	04:15 PM				04:15 PM				04:15 PM				04:15 PM			
+0 mins.	1	0	0	1	0	4	0	4	0	0	0	0	0	8	0	8
+15 mins.	1	0	1	2	0	3	1	4	0	0	0	0	0	6	0	6
+30 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	6	0	6
+45 mins.	1	0	0	1	0	7	2	9	0	0	0	0	0	4	0	4
Total Volume	3	0	1	4	0	16	3	19	0	0	0	0	0	24	0	24
% App. Total	75	0	25		0	84.2	15.8		0	0	0		0	100	0	
PHF	.750	.000	.250	.500	.000	.571	.375	.528	.000	.000	.000	.000	.000	.750	.000	.750

City of Apple Valley  
 N/S: Westmont Drive  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 07\_APV\_West\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- 3 Axle Vehicles

Start Time	Westmont Drive Southbound				Bear Valley Road Westbound				Westmont Drive Northbound				Bear Valley 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	2	0	2	0	0	0	0	0	0	0	0	2
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>3</b>	<b>5</b>
05:00 PM	0	0	0	0	0	1	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	1	0	1	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
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>2</b>
<b>Grand Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>4</b>	<b>7</b>
Apprch %	0	0	0	0	0	100	0	0	0	0	0	0	0	100	0	0	
Total %	0	0	0	0	0	42.9	0	42.9	0	0	0	0	0	57.1	0	57.1	

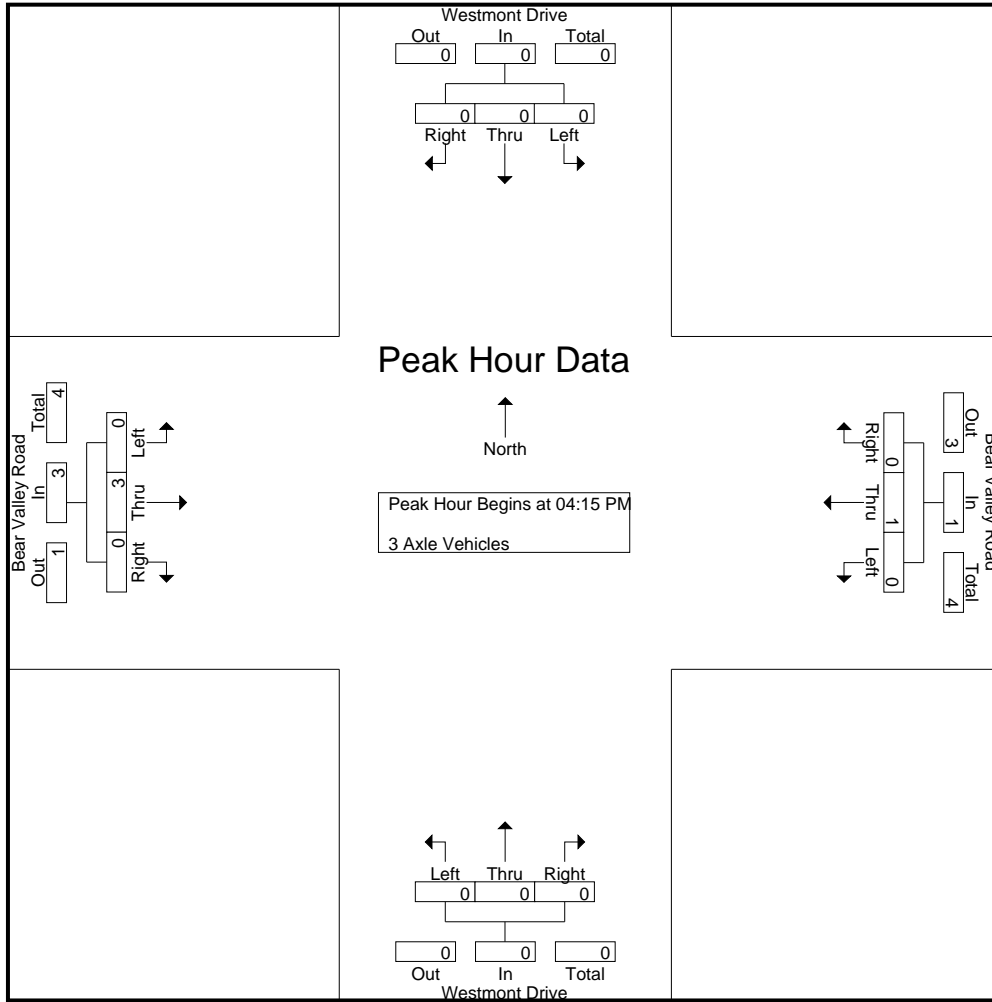
Start Time	Westmont Drive Southbound				Bear Valley Road Westbound				Westmont Drive Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
05:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
<b>Total Volume</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>3</b>	<b>4</b>
% App. Total	0	0	0	0	0	100	0	0	0	0	0	0	0	100	0	0	
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.000	.375	.000	.375	.500

Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:15 PM

City of Apple Valley  
 N/S: Westmont Drive  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 07\_APV\_West\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 2



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

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

City of Apple Valley  
 N/S: Westmont Drive  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 07\_APV\_West\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- 4+ Axle Trucks

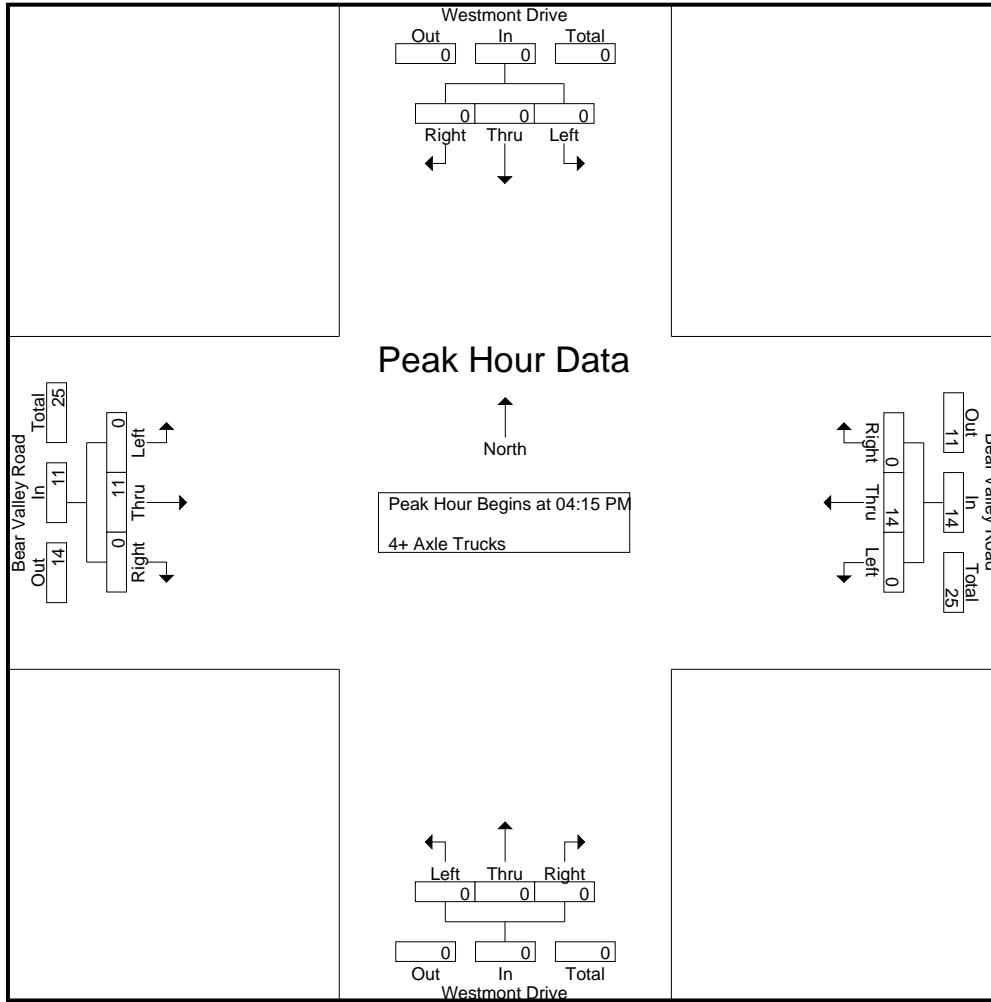
Start Time	Westmont Drive Southbound				Bear Valley Road Westbound				Westmont Drive Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	3	0	3	5
04:15 PM	0	0	0	0	0	5	0	5	0	0	0	0	0	0	0	0	5
04:30 PM	0	0	0	0	0	5	0	5	0	0	0	0	0	4	0	4	9
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	5	0	5	6
Total	0	0	0	0	0	13	0	13	0	0	0	0	0	12	0	12	25
05:00 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2	5
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	3
05:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
05:45 PM	0	0	0	0	0	4	0	4	0	0	0	0	0	2	0	2	6
Total	0	0	0	0	0	8	0	8	0	0	0	0	0	9	0	9	17
Grand Total	0	0	0	0	0	21	0	21	0	0	0	0	0	21	0	21	42
Apprch %	0	0	0	0	0	100	0	50	0	0	0	0	0	100	0	50	
Total %	0	0	0	0	0	50	0	50	0	0	0	0	0	50	0	50	

Start Time	Westmont Drive Southbound				Bear Valley Road Westbound				Westmont Drive Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:15 PM	0	0	0	0	0	5	0	5	0	0	0	0	0	0	0	0	5
04:30 PM	0	0	0	0	0	5	0	5	0	0	0	0	0	4	0	4	9
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	5	0	5	6
05:00 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2	5
Total Volume	0	0	0	0	0	14	0	14	0	0	0	0	0	11	0	11	25
% App. Total	0	0	0	0	0	100	0	700	0	0	0	0	0	100	0	550	
PHF	.000	.000	.000	.000	.000	.700	.000	.700	.000	.000	.000	.000	.000	.550	.000	.550	.694

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

City of Apple Valley  
 N/S: Westmont Drive  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 07\_APV\_West\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 2



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

	04:15 PM				04:15 PM				04:15 PM				04:15 PM			
+0 mins.	0	0	0	0	0	5	0	5	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	5	0	5	0	0	0	0	0	4	0	4
+30 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	5	0	5
+45 mins.	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2
Total Volume	0	0	0	0	0	14	0	14	0	0	0	0	0	11	0	11
% App. Total	0	0	0	0	0	100	0	100	0	0	0	0	0	100	0	100
PHF	.000	.000	.000	.000	.000	.700	.000	.700	.000	.000	.000	.000	.000	.550	.000	.550

Location: Apple Valley  
 N/S: Westmont Drive  
 E/W: Bear Valley Road



Date: 11/17/2022  
 Day: Thursday

**PEDESTRIANS**

	North Leg Westmont Drive	East Leg Bear Valley Road	South Leg Westmont Drive	West Leg Bear Valley Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
<b>TOTAL VOLUMES:</b>	0	0	0	0	0

	North Leg Westmont Drive	East Leg Bear Valley Road	South Leg Westmont Drive	West Leg Bear Valley Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
<b>TOTAL VOLUMES:</b>	0	0	0	0	0

Location: Apple Valley  
 N/S: Westmont Drive  
 E/W: Bear Valley Road



Date: 11/17/2022  
 Day: Thursday

BICYCLES

	Southbound Westmont Drive			Westbound Bear Valley Road			Northbound Westmont Drive			Eastbound Bear Valley Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	1	0	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	1	0	0	0	0	0	0	0	0	0	0	0	1

	Southbound Westmont Drive			Westbound Bear Valley Road			Northbound Westmont Drive			Eastbound Bear Valley Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	1	0	1

City of Apple Valley  
 N/S: Flying Feather Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 08\_APV\_FF\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

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

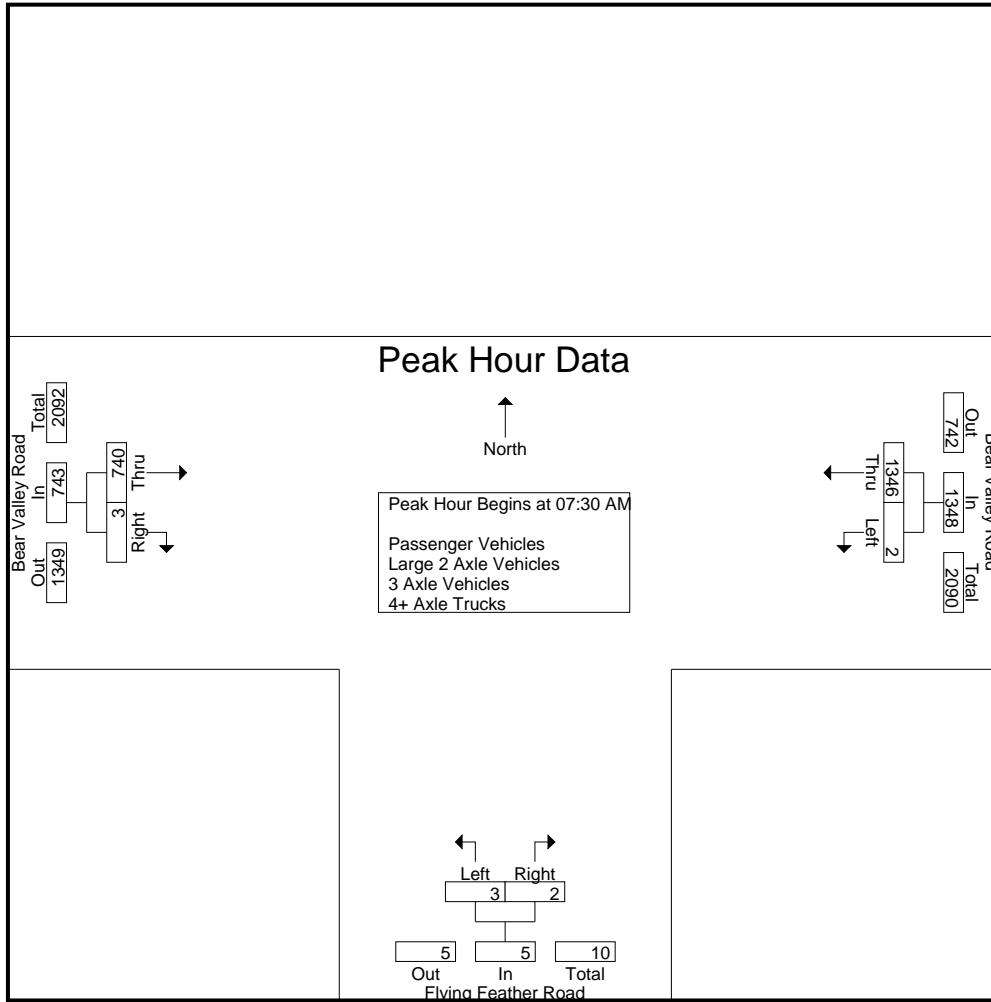
Start Time	Bear Valley Road Westbound			Flying Feather Road Northbound			Bear Valley Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	2	262	264	1	0	1	125	0	125	390
07:15 AM	1	256	257	1	1	2	158	0	158	417
07:30 AM	0	319	319	2	0	2	200	1	201	522
07:45 AM	0	408	408	0	1	1	174	1	175	584
<b>Total</b>	<b>3</b>	<b>1245</b>	<b>1248</b>	<b>4</b>	<b>2</b>	<b>6</b>	<b>657</b>	<b>2</b>	<b>659</b>	<b>1913</b>
08:00 AM	1	316	317	0	1	1	198	1	199	517
08:15 AM	1	303	304	1	0	1	168	0	168	473
08:30 AM	1	283	284	2	1	3	203	0	203	490
08:45 AM	1	306	307	0	0	0	196	0	196	503
<b>Total</b>	<b>4</b>	<b>1208</b>	<b>1212</b>	<b>3</b>	<b>2</b>	<b>5</b>	<b>765</b>	<b>1</b>	<b>766</b>	<b>1983</b>
<b>Grand Total</b>	<b>7</b>	<b>2453</b>	<b>2460</b>	<b>7</b>	<b>4</b>	<b>11</b>	<b>1422</b>	<b>3</b>	<b>1425</b>	<b>3896</b>
Apprch %	0.3	99.7		63.6	36.4		99.8	0.2		
Total %	0.2	63	63.1	0.2	0.1	0.3	36.5	0.1	36.6	
Passenger Vehicles	7	2363	2370	7	4	11	1302	3	1305	3686
% Passenger Vehicles	100	96.3	96.3	100	100	100	91.6	100	91.6	94.6
Large 2 Axle Vehicles	0	39	39	0	0	0	61	0	61	100
% Large 2 Axle Vehicles	0	1.6	1.6	0	0	0	4.3	0	4.3	2.6
3 Axle Vehicles	0	11	11	0	0	0	15	0	15	26
% 3 Axle Vehicles	0	0.4	0.4	0	0	0	1.1	0	1.1	0.7
4+ Axle Trucks	0	40	40	0	0	0	44	0	44	84
% 4+ Axle Trucks	0	1.6	1.6	0	0	0	3.1	0	3.1	2.2

Start Time	Bear Valley Road Westbound			Flying Feather Road Northbound			Bear Valley Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	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	0	319	319	2	0	2	200	1	201	522
07:45 AM	0	408	408	0	1	1	174	1	175	584
08:00 AM	1	316	317	0	1	1	198	1	199	517
08:15 AM	1	303	304	1	0	1	168	0	168	473
Total Volume	2	1346	1348	3	2	5	740	3	743	2096
% App. Total	0.1	99.9		60	40		99.6	0.4		
PHF	.500	.825	.826	.375	.500	.625	.925	.750	.924	.897



City of Apple Valley  
 N/S: Flying Feather Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 08\_APV\_FF\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 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			08:00 AM		
+0 mins.	0	319	319	1	0	1	198	1	199
+15 mins.	0	<b>408</b>	<b>408</b>	1	1	2	168	0	168
+30 mins.	1	316	317	2	0	2	<b>203</b>	0	<b>203</b>
+45 mins.	1	303	304	0	1	1	196	0	196
Total Volume	2	1346	1348	4	2	6	765	1	766
% App. Total	0.1	99.9		66.7	33.3		99.9	0.1	
PHF	.500	.825	.826	.500	.500	.750	.942	.250	.943

City of Apple Valley  
 N/S: Flying Feather Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 08\_APV\_FF\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- Passenger Vehicles

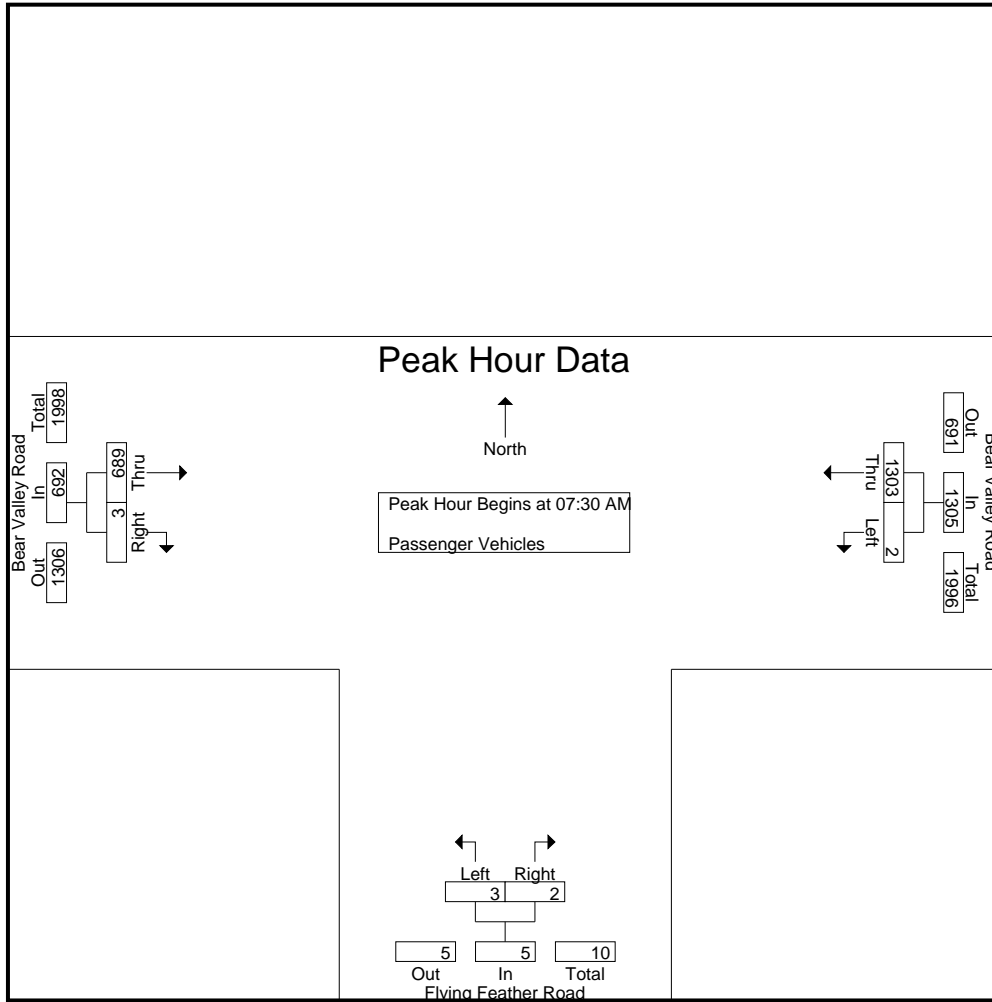
Start Time	Bear Valley Road Westbound			Flying Feather Road Northbound			Bear Valley Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	2	251	253	1	0	1	110	0	110	364
07:15 AM	1	245	246	1	1	2	138	0	138	386
07:30 AM	0	314	314	2	0	2	186	1	187	503
07:45 AM	0	395	395	0	1	1	167	1	168	564
Total	3	1205	1208	4	2	6	601	2	603	1817
08:00 AM	1	304	305	0	1	1	186	1	187	493
08:15 AM	1	290	291	1	0	1	150	0	150	442
08:30 AM	1	270	271	2	1	3	189	0	189	463
08:45 AM	1	294	295	0	0	0	176	0	176	471
Total	4	1158	1162	3	2	5	701	1	702	1869
Grand Total	7	2363	2370	7	4	11	1302	3	1305	3686
Apprch %	0.3	99.7		63.6	36.4		99.8	0.2		
Total %	0.2	64.1	64.3	0.2	0.1	0.3	35.3	0.1	35.4	

Start Time	Bear Valley Road Westbound			Flying Feather Road Northbound			Bear Valley Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:30 AM	0	314	314	2	0	2	186	1	187	503
07:45 AM	0	<b>395</b>	<b>395</b>	0	1	1	167	1	168	<b>564</b>
08:00 AM	1	304	305	0	1	1	186	1	187	493
08:15 AM	1	290	291	1	0	1	150	0	150	442
Total Volume	2	1303	1305	3	2	5	689	3	692	2002
% App. Total	0.2	99.8		60	40		99.6	0.4		
PHF	.500	.825	.826	.375	.500	.625	.926	.750	.925	.887

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

City of Apple Valley  
 N/S: Flying Feather Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 08\_APV\_FF\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 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.	0	314	314	2	0	2	186	1	187
+15 mins.	0	395	395	0	1	1	167	1	168
+30 mins.	1	304	305	0	1	1	186	1	187
+45 mins.	1	290	291	1	0	1	150	0	150
Total Volume	2	1303	1305	3	2	5	689	3	692
% App. Total	0.2	99.8		60	40		99.6	0.4	
PHF	.500	.825	.826	.375	.500	.625	.926	.750	.925

City of Apple Valley  
 N/S: Flying Feather Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 08\_APV\_FF\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

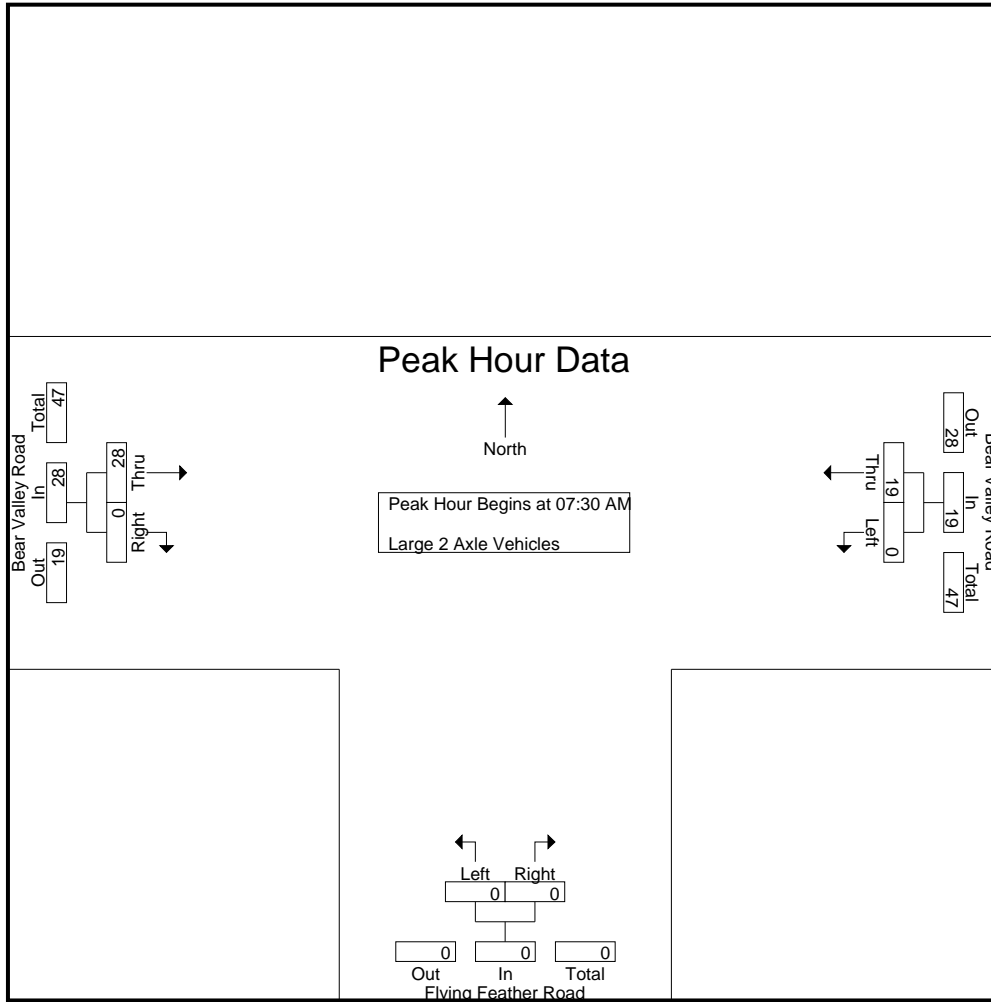
Start Time	Bear Valley Road Westbound			Flying Feather Road Northbound			Bear Valley Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	0	5	5	0	0	0	4	0	4	9
07:15 AM	0	4	4	0	0	0	12	0	12	16
07:30 AM	0	2	2	0	0	0	7	0	7	9
07:45 AM	0	7	7	0	0	0	3	0	3	10
Total	0	18	18	0	0	0	26	0	26	44
08:00 AM	0	4	4	0	0	0	7	0	7	11
08:15 AM	0	6	6	0	0	0	11	0	11	17
08:30 AM	0	8	8	0	0	0	6	0	6	14
08:45 AM	0	3	3	0	0	0	11	0	11	14
Total	0	21	21	0	0	0	35	0	35	56
Grand Total	0	39	39	0	0	0	61	0	61	100
Apprch %	0	100		0	0		100	0		
Total %	0	39	39	0	0	0	61	0	61	

Start Time	Bear Valley Road Westbound			Flying Feather Road Northbound			Bear Valley Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:30 AM	0	2	2	0	0	0	7	0	7	9
07:45 AM	0	7	7	0	0	0	3	0	3	10
08:00 AM	0	4	4	0	0	0	7	0	7	11
08:15 AM	0	6	6	0	0	0	11	0	11	17
Total Volume	0	19	19	0	0	0	28	0	28	47
% App. Total	0	100		0	0		100	0		
PHF	.000	.679	.679	.000	.000	.000	.636	.000	.636	.691

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

City of Apple Valley  
 N/S: Flying Feather Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 08\_APV\_FF\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 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.	0	2	2	0	0	0	7	0	7
+15 mins.	0	7	7	0	0	0	3	0	3
+30 mins.	0	4	4	0	0	0	7	0	7
+45 mins.	0	6	6	0	0	0	11	0	11
Total Volume	0	19	19	0	0	0	28	0	28
% App. Total	0	100		0	0		100	0	
PHF	.000	.679	.679	.000	.000	.000	.636	.000	.636

City of Apple Valley  
 N/S: Flying Feather Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 08\_APV\_FF\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- 3 Axle Vehicles

Start Time	Bear Valley Road Westbound			Flying Feather Road Northbound			Bear Valley Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	0	2	2	0	0	0	4	0	4	6
07:15 AM	0	1	1	0	0	0	1	0	1	2
07:30 AM	0	1	1	0	0	0	1	0	1	2
07:45 AM	0	2	2	0	0	0	2	0	2	4
Total	0	6	6	0	0	0	8	0	8	14
08:00 AM	0	1	1	0	0	0	2	0	2	3
08:15 AM	0	1	1	0	0	0	2	0	2	3
08:30 AM	0	1	1	0	0	0	3	0	3	4
08:45 AM	0	2	2	0	0	0	0	0	0	2
Total	0	5	5	0	0	0	7	0	7	12
Grand Total	0	11	11	0	0	0	15	0	15	26
Apprch %	0	100		0	0		100	0		
Total %	0	42.3	42.3	0	0	0	57.7	0	57.7	

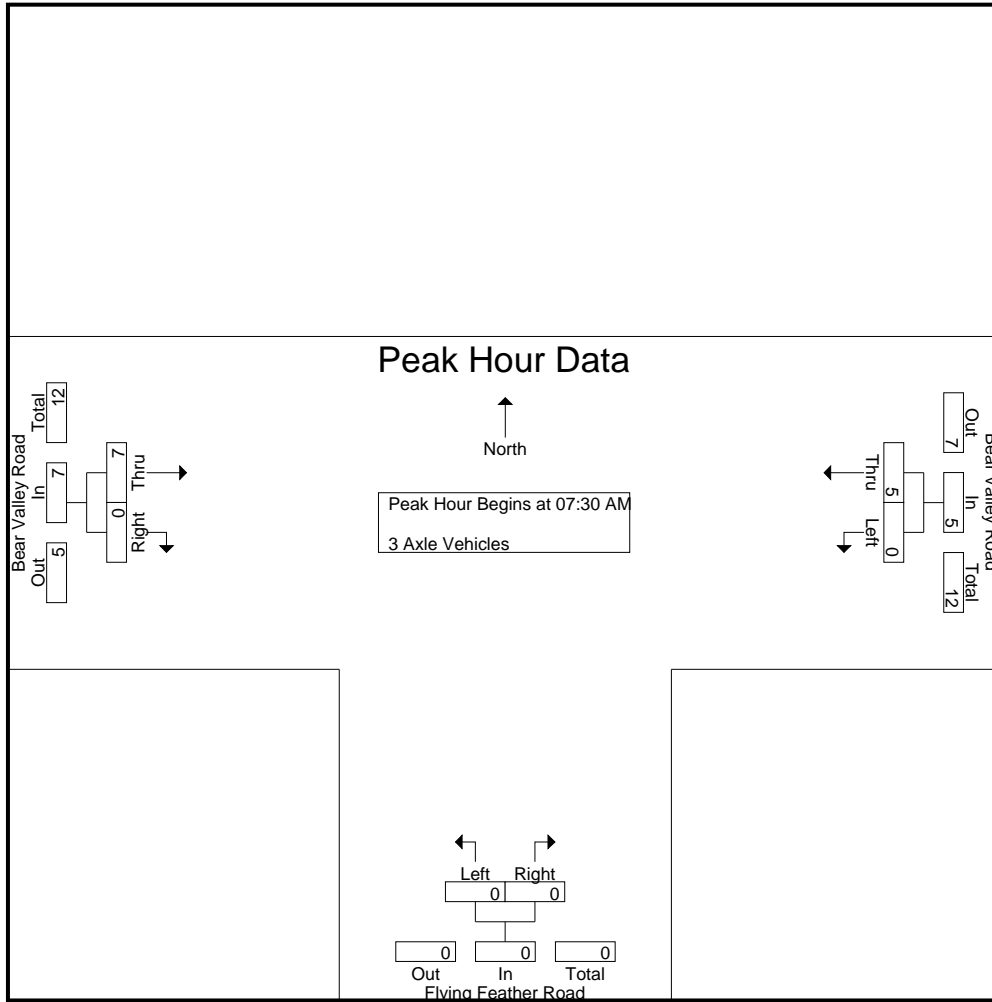
Start Time	Bear Valley Road Westbound			Flying Feather Road Northbound			Bear Valley Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:30 AM	0	1	1	0	0	0	1	0	1	2
07:45 AM	0	2	2	0	0	0	2	0	2	4
08:00 AM	0	1	1	0	0	0	2	0	2	3
08:15 AM	0	1	1	0	0	0	2	0	2	3
Total Volume	0	5	5	0	0	0	7	0	7	12
% App. Total	0	100		0	0		100	0		
PHF	.000	.625	.625	.000	.000	.000	.875	.000	.875	.750

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

City of Apple Valley  
 N/S: Flying Feather Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 08\_APV\_FF\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 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.	0	1	1	0	0	0	1	0	1
+15 mins.	0	2	2	0	0	0	2	0	2
+30 mins.	0	1	1	0	0	0	2	0	2
+45 mins.	0	1	1	0	0	0	2	0	2
Total Volume	0	5	5	0	0	0	7	0	7
% App. Total	0	100		0	0		100	0	
PHF	.000	.625	.625	.000	.000	.000	.875	.000	.875

City of Apple Valley  
 N/S: Flying Feather Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 08\_APV\_FF\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- 4+ Axle Trucks

Start Time	Bear Valley Road Westbound			Flying Feather Road Northbound			Bear Valley Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	0	4	4	0	0	0	7	0	7	11
07:15 AM	0	6	6	0	0	0	7	0	7	13
07:30 AM	0	2	2	0	0	0	6	0	6	8
07:45 AM	0	4	4	0	0	0	2	0	2	6
Total	0	16	16	0	0	0	22	0	22	38
08:00 AM	0	7	7	0	0	0	3	0	3	10
08:15 AM	0	6	6	0	0	0	5	0	5	11
08:30 AM	0	4	4	0	0	0	5	0	5	9
08:45 AM	0	7	7	0	0	0	9	0	9	16
Total	0	24	24	0	0	0	22	0	22	46
Grand Total	0	40	40	0	0	0	44	0	44	84
Apprch %	0	100		0	0		100	0		
Total %	0	47.6	47.6	0	0	0	52.4	0	52.4	

Start Time	Bear Valley Road Westbound			Flying Feather Road Northbound			Bear Valley Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:30 AM	0	2	2	0	0	0	6	0	6	8
07:45 AM	0	4	4	0	0	0	2	0	2	6
08:00 AM	0	7	7	0	0	0	3	0	3	10
08:15 AM	0	6	6	0	0	0	5	0	5	11
Total Volume	0	19	19	0	0	0	16	0	16	35
% App. Total	0	100		0	0		100	0		
PHF	.000	.679	.679	.000	.000	.000	.667	.000	.667	.795

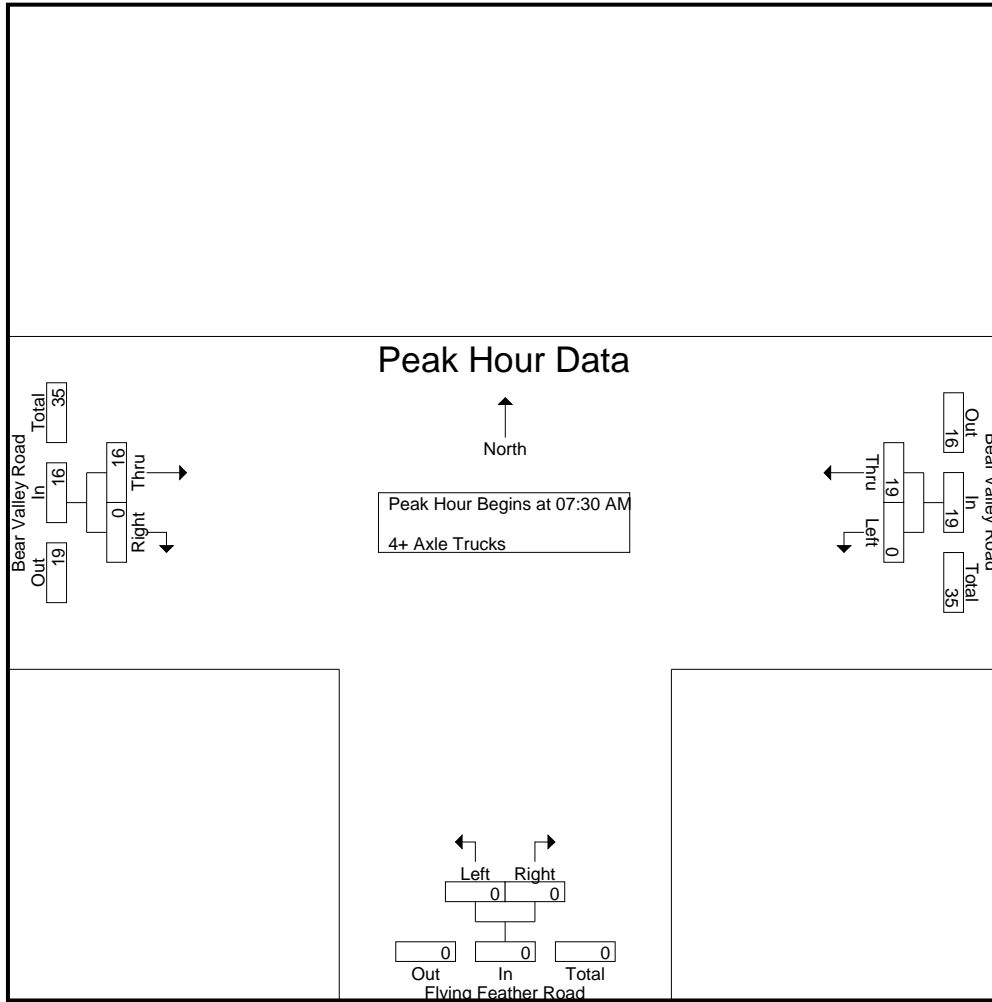
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:30 AM



City of Apple Valley  
 N/S: Flying Feather Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 08\_APV\_FF\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 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.	0	2	2	0	0	0	<b>6</b>	0	<b>6</b>
+15 mins.	0	4	4	0	0	0	2	0	2
+30 mins.	0	7	7	0	0	0	3	0	3
+45 mins.	0	6	6	0	0	0	5	0	5
Total Volume	0	19	19	0	0	0	16	0	16
% App. Total	0	100		0	0		100	0	
PHF	.000	.679	.679	.000	.000	.000	.667	.000	.667

City of Apple Valley  
 N/S: Flying Feather Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 08\_APV\_FF\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

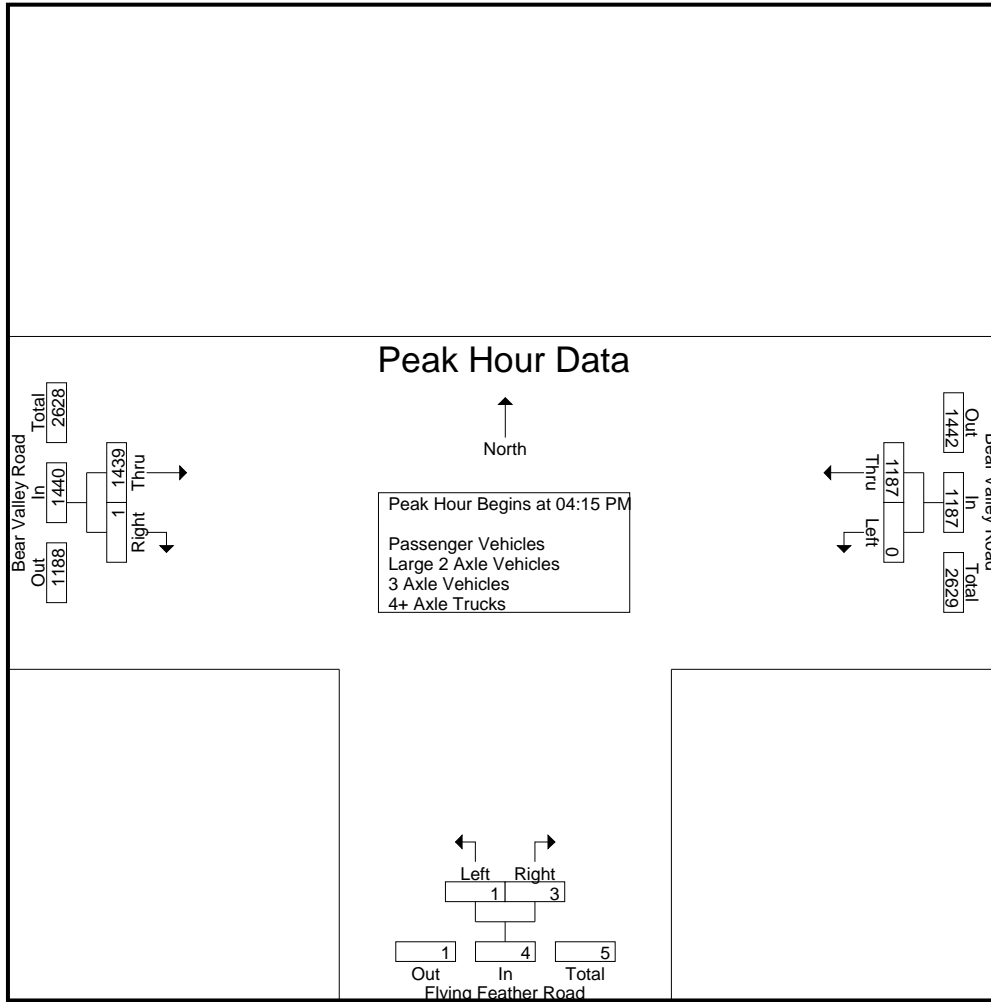
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Bear Valley Road Westbound			Flying Feather Road Northbound			Bear Valley Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	0	270	270	0	0	0	341	1	342	612
04:15 PM	0	275	275	0	0	0	369	0	369	644
04:30 PM	0	283	283	0	0	0	336	0	336	619
04:45 PM	0	307	307	0	0	0	376	1	377	684
Total	0	1135	1135	0	0	0	1422	2	1424	2559
05:00 PM	0	322	322	1	3	4	358	0	358	684
05:15 PM	0	287	287	2	1	3	341	3	344	634
05:30 PM	0	254	254	0	0	0	320	0	320	574
05:45 PM	0	213	213	2	0	2	322	0	322	537
Total	0	1076	1076	5	4	9	1341	3	1344	2429
Grand Total	0	2211	2211	5	4	9	2763	5	2768	4988
Apprch %	0	100		55.6	44.4		99.8	0.2		
Total %	0	44.3	44.3	0.1	0.1	0.2	55.4	0.1	55.5	
Passenger Vehicles	0	2178	2178	5	4	9	2707	5	2712	4899
% Passenger Vehicles	0	98.5	98.5	100	100	100	98	100	98	98.2
Large 2 Axle Vehicles	0	15	15	0	0	0	31	0	31	46
% Large 2 Axle Vehicles	0	0.7	0.7	0	0	0	1.1	0	1.1	0.9
3 Axle Vehicles	0	3	3	0	0	0	4	0	4	7
% 3 Axle Vehicles	0	0.1	0.1	0	0	0	0.1	0	0.1	0.1
4+ Axle Trucks	0	15	15	0	0	0	21	0	21	36
% 4+ Axle Trucks	0	0.7	0.7	0	0	0	0.8	0	0.8	0.7

Start Time	Bear Valley Road Westbound			Flying Feather Road Northbound			Bear Valley Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	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 04:15 PM										
04:15 PM	0	275	275	0	0	0	369	0	369	644
04:30 PM	0	283	283	0	0	0	336	0	336	619
04:45 PM	0	307	307	0	0	0	<b>376</b>	<b>1</b>	<b>377</b>	<b>684</b>
05:00 PM	0	<b>322</b>	<b>322</b>	<b>1</b>	<b>3</b>	<b>4</b>	358	0	358	684
Total Volume	0	1187	1187	1	3	4	1439	1	1440	2631
% App. Total	0	100		25	75		99.9	0.1		
PHF	.000	.922	.922	.250	.250	.250	.957	.250	.955	.962

City of Apple Valley  
 N/S: Flying Feather Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 08\_APV\_FF\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 2



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

	04:30 PM		05:00 PM			04:15 PM			
+0 mins.	0	283	283	1	3	4	369	0	369
+15 mins.	0	307	307	2	1	3	336	0	336
+30 mins.	0	<b>322</b>	<b>322</b>	0	0	0	<b>376</b>	<b>1</b>	<b>377</b>
+45 mins.	0	287	287	2	0	2	358	0	358
Total Volume	0	1199	1199	5	4	9	1439	1	1440
% App. Total	0	100		55.6	44.4		99.9	0.1	
PHF	.000	.931	.931	.625	.333	.563	.957	.250	.955

City of Apple Valley  
 N/S: Flying Feather Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 08\_APV\_FF\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- Passenger Vehicles

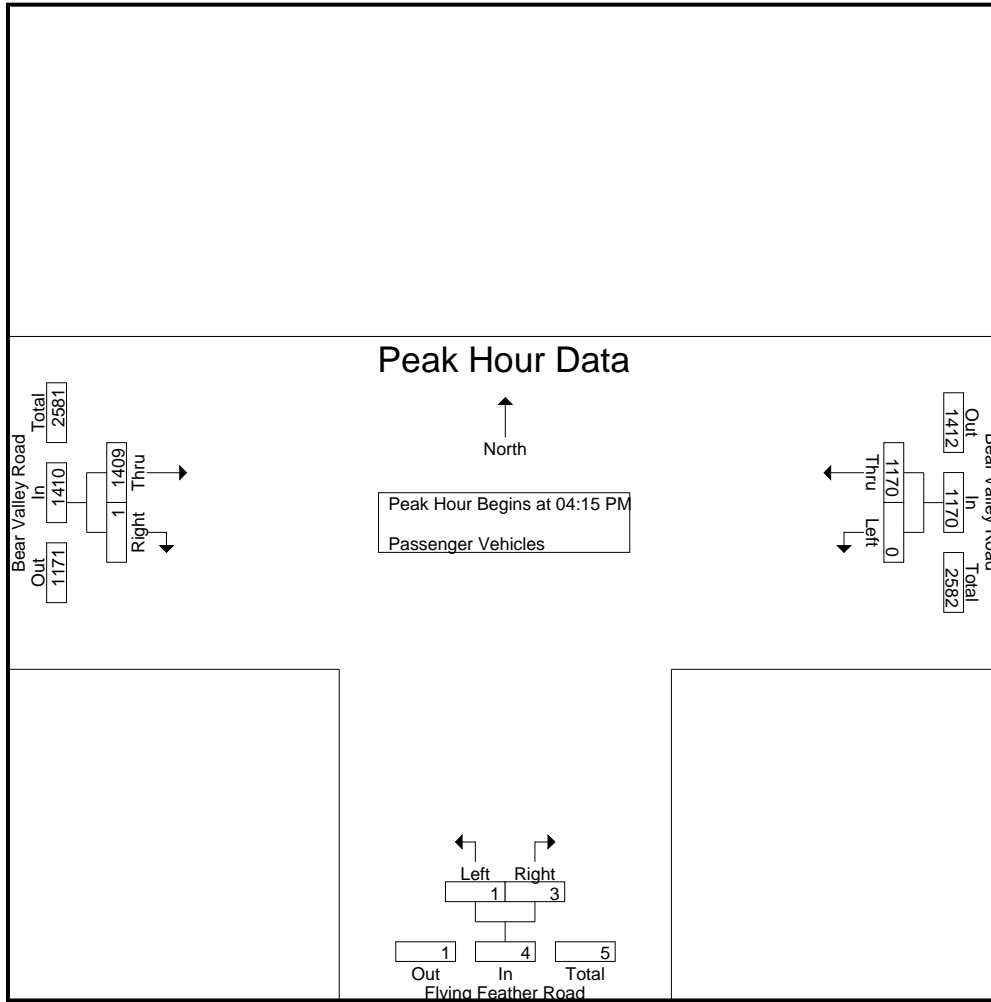
Start Time	Bear Valley Road Westbound			Flying Feather Road Northbound			Bear Valley Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	0	262	262	0	0	0	333	1	334	596
04:15 PM	0	270	270	0	0	0	363	0	363	633
04:30 PM	0	278	278	0	0	0	326	0	326	604
04:45 PM	0	306	306	0	0	0	368	1	369	675
Total	0	1116	1116	0	0	0	1390	2	1392	2508
05:00 PM	0	316	316	1	3	4	352	0	352	672
05:15 PM	0	283	283	2	1	3	333	3	336	622
05:30 PM	0	252	252	0	0	0	318	0	318	570
05:45 PM	0	211	211	2	0	2	314	0	314	527
Total	0	1062	1062	5	4	9	1317	3	1320	2391
Grand Total	0	2178	2178	5	4	9	2707	5	2712	4899
Apprch %	0	100		55.6	44.4		99.8	0.2		
Total %	0	44.5	44.5	0.1	0.1	0.2	55.3	0.1	55.4	

Start Time	Bear Valley Road Westbound			Flying Feather Road Northbound			Bear Valley Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:15 PM	0	270	270	0	0	0	363	0	363	633
04:30 PM	0	278	278	0	0	0	326	0	326	604
04:45 PM	0	306	306	0	0	0	<b>368</b>	<b>1</b>	<b>369</b>	<b>675</b>
05:00 PM	0	<b>316</b>	<b>316</b>	<b>1</b>	<b>3</b>	<b>4</b>	352	0	352	672
Total Volume	0	1170	1170	1	3	4	1409	1	1410	2584
% App. Total	0	100		25	75		99.9	0.1		
PHF	.000	.926	.926	.250	.250	.250	.957	.250	.955	.957

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

City of Apple Valley  
 N/S: Flying Feather Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 08\_APV\_FF\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 2



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

	04:15 PM			04:15 PM			04:15 PM		
+0 mins.	0	270	270	0	0	0	363	0	363
+15 mins.	0	278	278	0	0	0	326	0	326
+30 mins.	0	306	306	0	0	0	<b>368</b>	<b>1</b>	<b>369</b>
+45 mins.	0	<b>316</b>	<b>316</b>	<b>1</b>	<b>3</b>	<b>4</b>	352	0	352
Total Volume	0	1170	1170	1	3	4	1409	1	1410
% App. Total	0	100		25	75		99.9	0.1	
PHF	.000	.926	.926	.250	.250	.250	.957	.250	.955

City of Apple Valley  
 N/S: Flying Feather Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 08\_APV\_FF\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

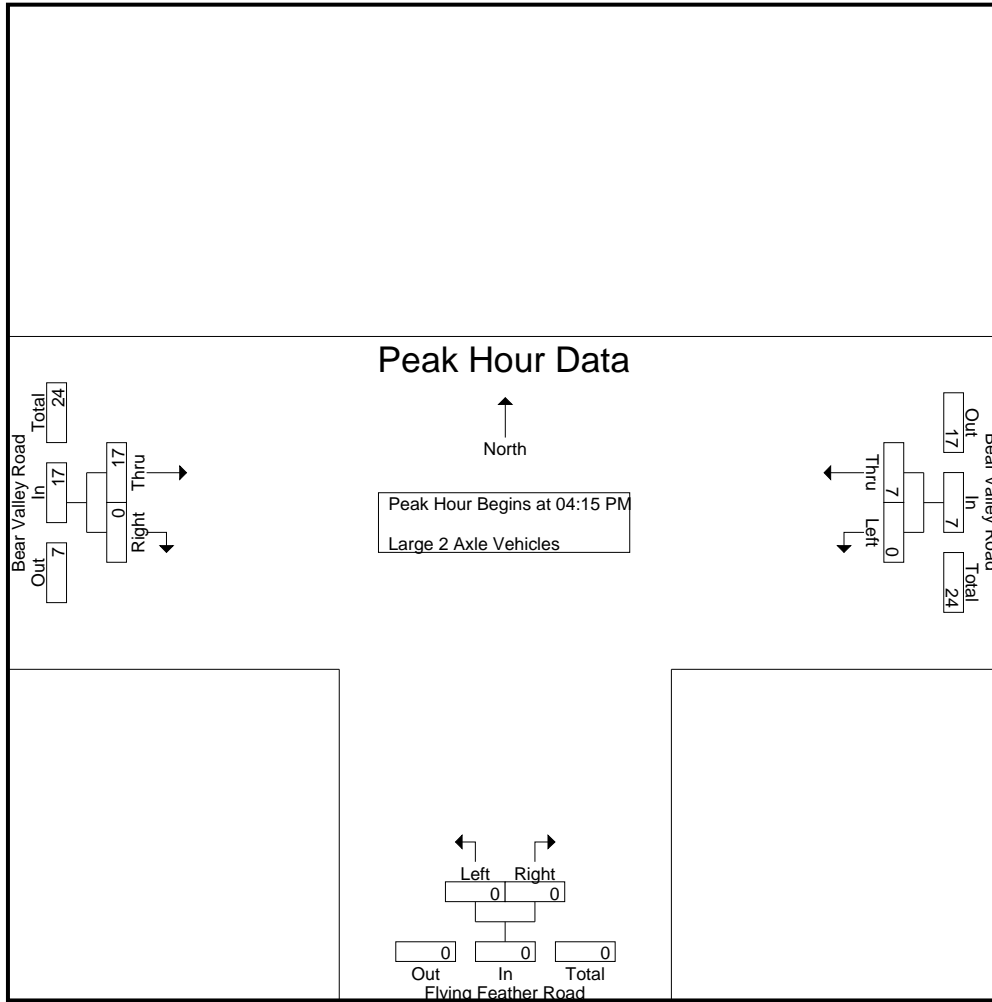
Start Time	Bear Valley Road Westbound			Flying Feather Road Northbound			Bear Valley Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	0	4	4	0	0	0	5	0	5	9
04:15 PM	0	2	2	0	0	0	6	0	6	8
04:30 PM	0	0	0	0	0	0	5	0	5	5
04:45 PM	0	0	0	0	0	0	5	0	5	5
Total	0	6	6	0	0	0	21	0	21	27
05:00 PM	0	5	5	0	0	0	1	0	1	6
05:15 PM	0	1	1	0	0	0	2	0	2	3
05:30 PM	0	1	1	0	0	0	1	0	1	2
05:45 PM	0	2	2	0	0	0	6	0	6	8
Total	0	9	9	0	0	0	10	0	10	19
Grand Total	0	15	15	0	0	0	31	0	31	46
Apprch %	0	100		0	0		100	0		
Total %	0	32.6	32.6	0	0	0	67.4	0	67.4	

Start Time	Bear Valley Road Westbound			Flying Feather Road Northbound			Bear Valley Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:15 PM	0	2	2	0	0	0	6	0	6	8
04:30 PM	0	0	0	0	0	0	5	0	5	5
04:45 PM	0	0	0	0	0	0	5	0	5	5
05:00 PM	0	5	5	0	0	0	1	0	1	6
Total Volume	0	7	7	0	0	0	17	0	17	24
% App. Total	0	100		0	0		100	0		
PHF	.000	.350	.350	.000	.000	.000	.708	.000	.708	.750

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

City of Apple Valley  
 N/S: Flying Feather Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 08\_APV\_FF\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 2



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

	04:15 PM			04:15 PM			04:15 PM		
+0 mins.	0	2	2	0	0	0	<b>6</b>	0	<b>6</b>
+15 mins.	0	0	0	0	0	0	5	0	5
+30 mins.	0	0	0	0	0	0	5	0	5
+45 mins.	0	<b>5</b>	<b>5</b>	0	0	0	1	0	1
Total Volume	0	7	7	0	0	0	17	0	17
% App. Total	0	100		0	0		100	0	
PHF	.000	.350	.350	.000	.000	.000	.708	.000	.708

City of Apple Valley  
 N/S: Flying Feather Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 08\_APV\_FF\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- 3 Axle Vehicles

Start Time	Bear Valley Road Westbound			Flying Feather Road Northbound			Bear Valley Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	0	2	2	0	0	0	0	0	0	2
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	1	0	1	1
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	2	2	0	0	0	1	0	1	3
05:00 PM	0	0	0	0	0	0	2	0	2	2
05:15 PM	0	1	1	0	0	0	1	0	1	2
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	1	1	0	0	0	3	0	3	4
Grand Total	0	3	3	0	0	0	4	0	4	7
Apprch %	0	100		0	0		100	0		
Total %	0	42.9	42.9	0	0	0	57.1	0	57.1	

Start Time	Bear Valley Road Westbound			Flying Feather Road Northbound			Bear Valley Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	1	0	1	1
04:45 PM	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	2	0	2	2
Total Volume	0	0	0	0	0	0	3	0	3	3
% App. Total	0	0		0	0		100	0		
PHF	.000	.000	.000	.000	.000	.000	.375	.000	.375	.375

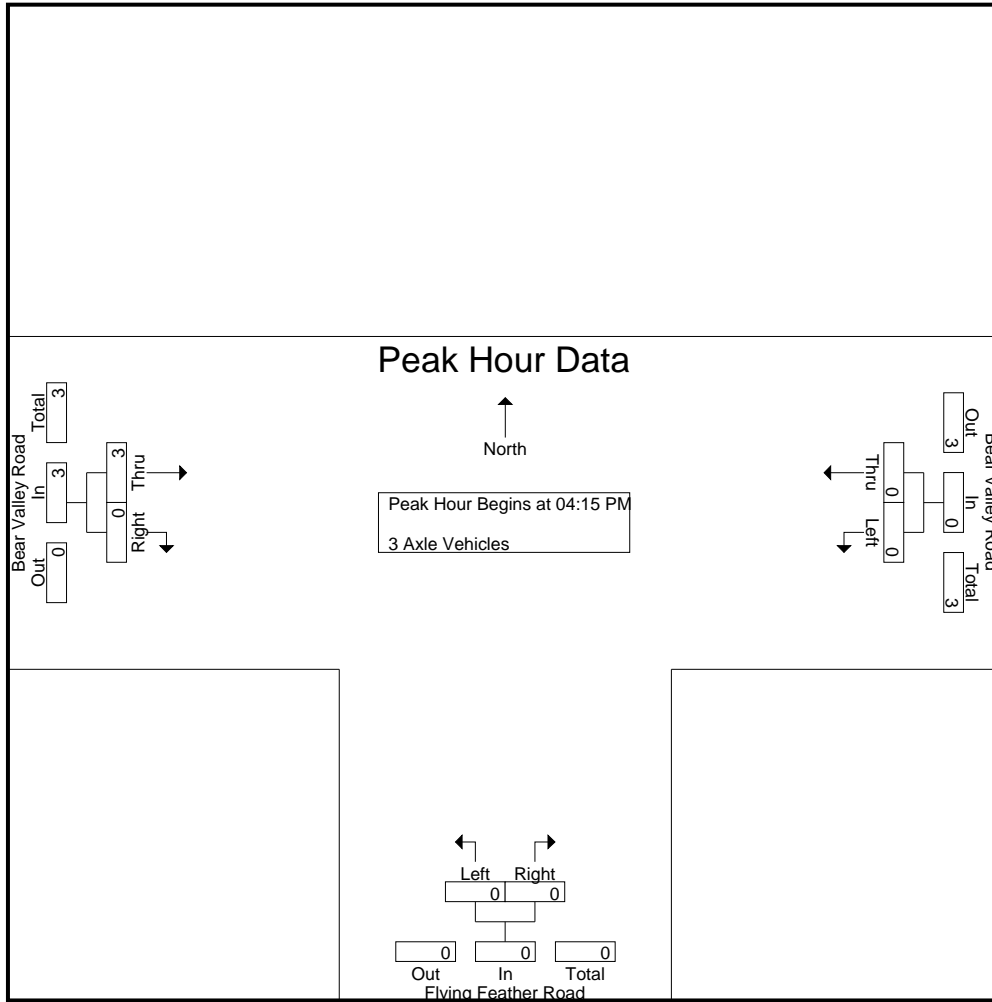
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:15 PM



City of Apple Valley  
 N/S: Flying Feather Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 08\_APV\_FF\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 2



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

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

City of Apple Valley  
 N/S: Flying Feather Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 08\_APV\_FF\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- 4+ Axle Trucks

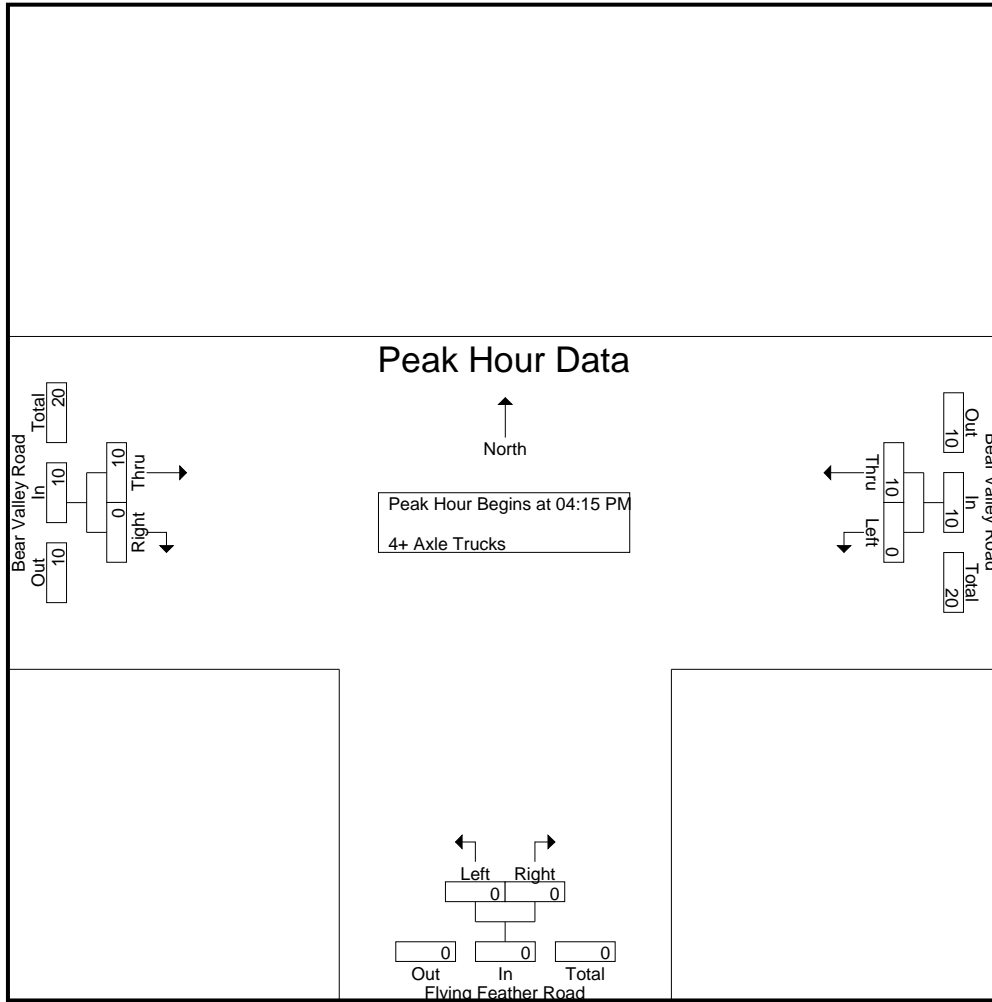
Start Time	Bear Valley Road Westbound			Flying Feather Road Northbound			Bear Valley Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	0	2	2	0	0	0	3	0	3	5
04:15 PM	0	3	3	0	0	0	0	0	0	3
04:30 PM	0	5	5	0	0	0	4	0	4	9
04:45 PM	0	1	1	0	0	0	3	0	3	4
Total	0	11	11	0	0	0	10	0	10	21
05:00 PM	0	1	1	0	0	0	3	0	3	4
05:15 PM	0	2	2	0	0	0	5	0	5	7
05:30 PM	0	1	1	0	0	0	1	0	1	2
05:45 PM	0	0	0	0	0	0	2	0	2	2
Total	0	4	4	0	0	0	11	0	11	15
Grand Total	0	15	15	0	0	0	21	0	21	36
Apprch %	0	100		0	0		100	0		
Total %	0	41.7	41.7	0	0	0	58.3	0	58.3	

Start Time	Bear Valley Road Westbound			Flying Feather Road Northbound			Bear Valley Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:15 PM	0	3	3	0	0	0	0	0	0	3
04:30 PM	0	5	5	0	0	0	4	0	4	9
04:45 PM	0	1	1	0	0	0	3	0	3	4
05:00 PM	0	1	1	0	0	0	3	0	3	4
Total Volume	0	10	10	0	0	0	10	0	10	20
% App. Total	0	100		0	0		100	0		
PHF	.000	.500	.500	.000	.000	.000	.625	.000	.625	.556

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

City of Apple Valley  
 N/S: Flying Feather Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 08\_APV\_FF\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
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Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	04:15 PM			04:15 PM			04:15 PM		
+0 mins.	0	3	3	0	0	0	0	0	0
+15 mins.	0	5	5	0	0	0	4	0	4
+30 mins.	0	1	1	0	0	0	3	0	3
+45 mins.	0	1	1	0	0	0	3	0	3
Total Volume	0	10	10	0	0	0	10	0	10
% App. Total	0	100		0	0		100	0	
PHF	.000	.500	.500	.000	.000	.000	.625	.000	.625

Location: Apple Valley  
 N/S: Flying Feather Road  
 E/W: Bear Valley Road



Date: 11/17/2022  
 Day: Thursday

**PEDESTRIANS**

	North Leg Dead End	East Leg Bear Valley Road	South Leg Flying Feather Road	West Leg Bear Valley Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
<b>TOTAL VOLUMES:</b>	0	0	0	0	0

	North Leg Dead End	East Leg Bear Valley Road	South Leg Flying Feather Road	West Leg Bear Valley Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
<b>TOTAL VOLUMES:</b>	0	0	0	0	0

Location: Apple Valley  
 N/S: Flying Feather Road  
 E/W: Bear Valley Road



Date: 11/17/2022  
 Day: Thursday

BICYCLES

	Southbound Dead End			Westbound Bear Valley Road			Northbound Flying Feather Road			Eastbound Bear Valley Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

	Southbound Dead End			Westbound Bear Valley Road			Northbound Flying Feather Road			Eastbound Bear Valley Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	1
4:30 PM	0	0	0	0	2	0	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	2	0	0	0	0	0	0	1	3

City of Apple Valley  
 N/S: Deep Creek Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 09\_APV\_DC\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
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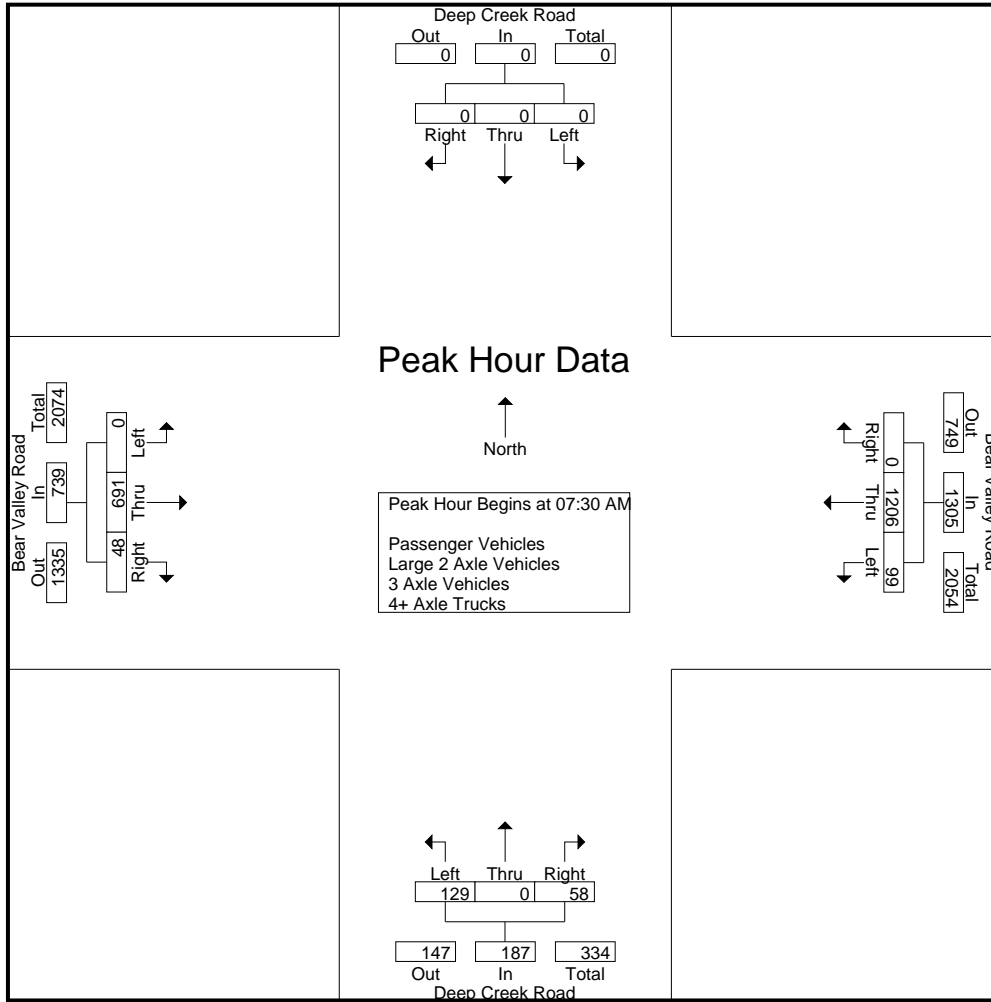
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Deep Creek Road Southbound				Bear Valley Road Westbound				Deep Creek Road Northbound				Bear Valley 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	28	222	0	250	31	0	5	36	0	112	10	122	408
07:15 AM	0	0	0	0	36	245	0	281	26	0	11	37	0	151	15	166	484
07:30 AM	0	0	0	0	24	300	0	324	32	0	14	46	0	190	8	198	568
07:45 AM	0	0	0	0	25	335	0	360	49	0	13	62	0	160	9	169	591
Total	0	0	0	0	113	1102	0	1215	138	0	43	181	0	613	42	655	2051
08:00 AM	0	0	0	0	24	294	0	318	27	0	14	41	0	187	12	199	558
08:15 AM	0	0	0	0	26	277	0	303	21	0	17	38	0	154	19	173	514
08:30 AM	0	0	0	0	26	272	0	298	23	0	16	39	0	190	10	200	537
08:45 AM	0	0	0	0	26	260	0	286	34	0	18	52	0	184	6	190	528
Total	0	0	0	0	102	1103	0	1205	105	0	65	170	0	715	47	762	2137
Grand Total	0	0	0	0	215	2205	0	2420	243	0	108	351	0	1328	89	1417	4188
Apprch %	0	0	0		8.9	91.1	0		69.2	0	30.8		0	93.7	6.3		
Total %	0	0	0	0	5.1	52.7	0	57.8	5.8	0	2.6	8.4	0	31.7	2.1	33.8	
Passenger Vehicles	0	0	0	0	199	2111	0	2310	233	0	105	338	0	1209	85	1294	3942
% Passenger Vehicles	0	0	0	0	92.6	95.7	0	95.5	95.9	0	97.2	96.3	0	91	95.5	91.3	94.1
Large 2 Axle Vehicles	0	0	0	0	10	45	0	55	5	0	1	6	0	62	3	65	126
% Large 2 Axle Vehicles	0	0	0	0	4.7	2	0	2.3	2.1	0	0.9	1.7	0	4.7	3.4	4.6	3
3 Axle Vehicles	0	0	0	0	0	9	0	9	1	0	1	2	0	15	0	15	26
% 3 Axle Vehicles	0	0	0	0	0	0.4	0	0.4	0.4	0	0.9	0.6	0	1.1	0	1.1	0.6
4+ Axle Trucks	0	0	0	0	6	40	0	46	4	0	1	5	0	42	1	43	94
% 4+ Axle Trucks	0	0	0	0	2.8	1.8	0	1.9	1.6	0	0.9	1.4	0	3.2	1.1	3	2.2

Start Time	Deep Creek Road Southbound				Bear Valley Road Westbound				Deep Creek Road Northbound				Bear Valley 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	0	0	0	0	24	300	0	324	32	0	14	46	0	<b>190</b>	8	198	568
07:45 AM	0	0	0	0	25	<b>335</b>	0	<b>360</b>	<b>49</b>	0	13	<b>62</b>	0	160	9	169	<b>591</b>
08:00 AM	0	0	0	0	24	294	0	318	27	0	14	41	0	187	12	<b>199</b>	558
08:15 AM	0	0	0	0	<b>26</b>	277	0	303	21	0	<b>17</b>	38	0	154	<b>19</b>	173	514
Total Volume	0	0	0	0	99	1206	0	1305	129	0	58	187	0	691	48	739	2231
% App. Total	0	0	0		7.6	92.4	0		69	0	31		0	93.5	6.5		
PHF	.000	.000	.000	.000	.952	.900	.000	.906	.658	.000	.853	.754	.000	.909	.632	.928	.944

City of Apple Valley  
 N/S: Deep Creek Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 09\_APV\_DC\_BV AM  
 Site Code : 221022  
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Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:00 AM				07:30 AM				07:30 AM				08:00 AM			
+0 mins.	0	0	0	0	24	300	0	324	32	0	14	46	0	187	12	199
+15 mins.	0	0	0	0	25	<b>335</b>	0	<b>360</b>	<b>49</b>	0	13	<b>62</b>	0	154	<b>19</b>	173
+30 mins.	0	0	0	0	24	294	0	318	27	0	14	41	0	<b>190</b>	10	<b>200</b>
+45 mins.	0	0	0	0	<b>26</b>	277	0	303	21	0	<b>17</b>	38	0	184	6	190
Total Volume	0	0	0	0	99	1206	0	1305	129	0	58	187	0	715	47	762
% App. Total	0	0	0	0	7.6	92.4	0		69	0	31		0	93.8	6.2	
PHF	.000	.000	.000	.000	.952	.900	.000	.906	.658	.000	.853	.754	.000	.941	.618	.953

City of Apple Valley  
 N/S: Deep Creek Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 09\_APV\_DC\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- Passenger Vehicles

Start Time	Deep Creek Road Southbound				Bear Valley Road Westbound				Deep Creek Road Northbound				Bear Valley 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	24	210	0	234	29	0	5	34	0	97	10	107	375
07:15 AM	0	0	0	0	32	235	0	267	25	0	11	36	0	135	13	148	451
07:30 AM	0	0	0	0	23	294	0	317	32	0	14	46	0	176	7	183	546
07:45 AM	0	0	0	0	24	319	0	343	46	0	13	59	0	152	9	161	563
Total	0	0	0	0	103	1058	0	1161	132	0	43	175	0	560	39	599	1935
08:00 AM	0	0	0	0	23	285	0	308	25	0	14	39	0	174	12	186	533
08:15 AM	0	0	0	0	23	262	0	285	21	0	16	37	0	138	18	156	478
08:30 AM	0	0	0	0	24	258	0	282	21	0	14	35	0	174	10	184	501
08:45 AM	0	0	0	0	26	248	0	274	34	0	18	52	0	163	6	169	495
Total	0	0	0	0	96	1053	0	1149	101	0	62	163	0	649	46	695	2007
Grand Total	0	0	0	0	199	2111	0	2310	233	0	105	338	0	1209	85	1294	3942
Apprch %	0	0	0	0	8.6	91.4	0	8.6	68.9	0	31.1	8.6	0	93.4	6.6	32.8	
Total %	0	0	0	0	5	53.6	0	58.6	5.9	0	2.7	8.6	0	30.7	2.2	32.8	

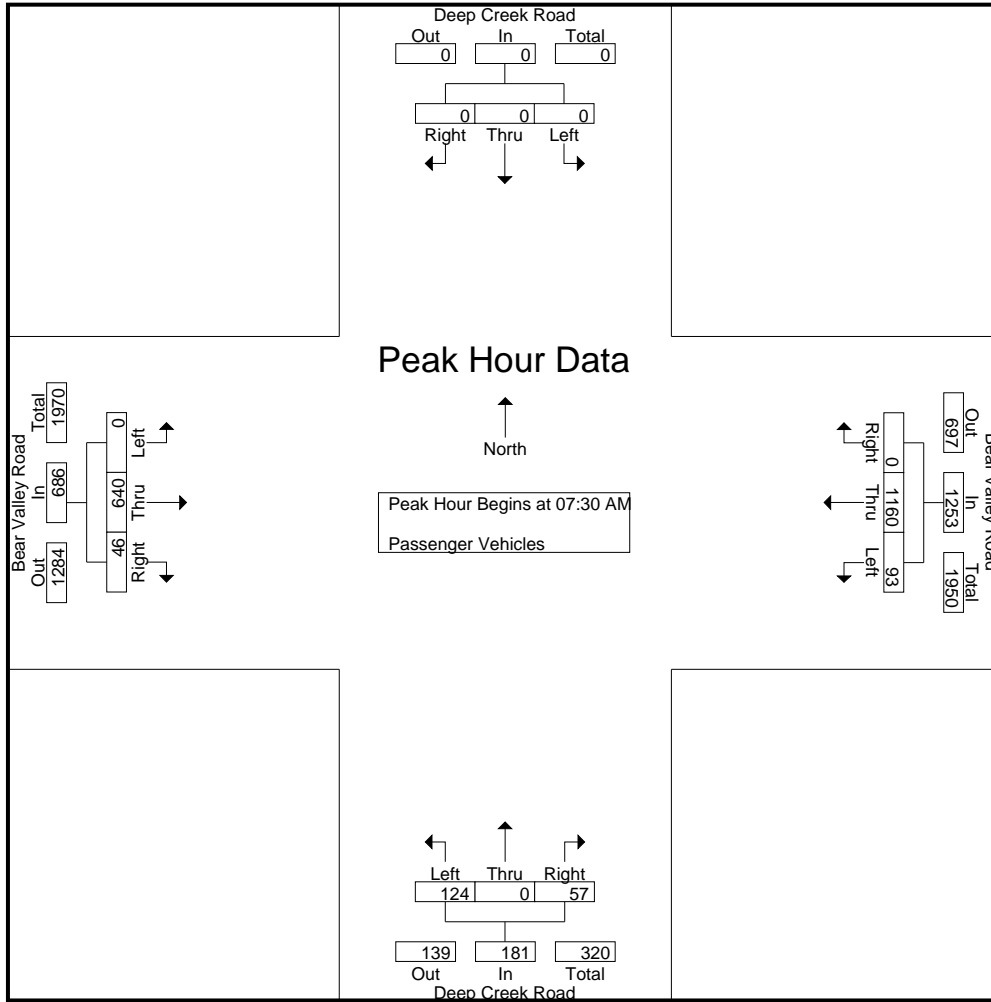
Start Time	Deep Creek Road Southbound				Bear Valley Road Westbound				Deep Creek Road Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:30 AM	0	0	0	0	23	294	0	317	32	0	14	46	0	<b>176</b>	7	183	546
07:45 AM	0	0	0	0	<b>24</b>	<b>319</b>	0	<b>343</b>	<b>46</b>	0	13	<b>59</b>	0	152	9	161	<b>563</b>
08:00 AM	0	0	0	0	23	285	0	308	25	0	14	39	0	174	12	186	533
08:15 AM	0	0	0	0	23	262	0	285	21	0	<b>16</b>	37	0	138	<b>18</b>	156	478
Total Volume	0	0	0	0	93	1160	0	1253	124	0	57	181	0	640	46	686	2120
% App. Total	0	0	0	0	7.4	92.6	0	7.4	68.5	0	31.5	7.4	0	93.3	6.7	32.8	
PHF	.000	.000	.000	.000	.969	.909	.000	.913	.674	.000	.891	.767	.000	.909	.639	.922	.941

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



City of Apple Valley  
 N/S: Deep Creek Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 09\_APV\_DC\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
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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	23	294	0	317	32	0	14	46	0	176	7	183
+15 mins.	0	0	0	0	<b>24</b>	<b>319</b>	0	<b>343</b>	<b>46</b>	0	13	<b>59</b>	0	152	9	161
+30 mins.	0	0	0	0	23	285	0	308	25	0	14	39	0	174	12	<b>186</b>
+45 mins.	0	0	0	0	23	262	0	285	21	0	<b>16</b>	37	0	138	<b>18</b>	156
Total Volume	0	0	0	0	93	1160	0	1253	124	0	57	181	0	640	46	686
% App. Total	0	0	0	0	7.4	92.6	0		68.5	0	31.5		0	93.3	6.7	
PHF	.000	.000	.000	.000	.969	.909	.000	.913	.674	.000	.891	.767	.000	.909	.639	.922

City of Apple Valley  
 N/S: Deep Creek Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 09\_APV\_DC\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

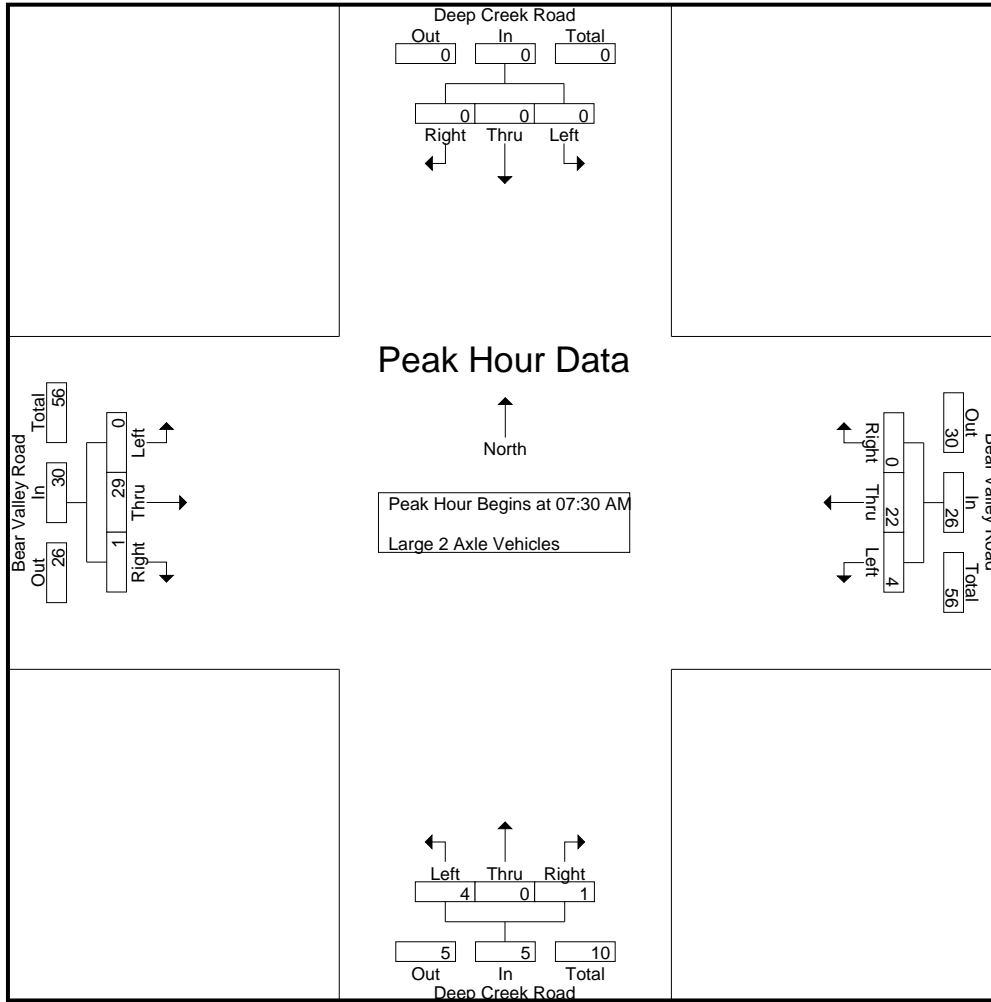
Start Time	Deep Creek Road Southbound				Bear Valley Road Westbound				Deep Creek Road Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	2	7	0	9	0	0	0	0	0	4	0	4	13
07:15 AM	0	0	0	0	3	3	0	6	0	0	0	0	0	9	2	11	17
07:30 AM	0	0	0	0	1	3	0	4	0	0	0	0	0	7	1	8	12
07:45 AM	0	0	0	0	1	8	0	9	2	0	0	2	0	4	0	4	15
Total	0	0	0	0	7	21	0	28	2	0	0	2	0	24	3	27	57
08:00 AM	0	0	0	0	0	3	0	3	2	0	0	2	0	8	0	8	13
08:15 AM	0	0	0	0	2	8	0	10	0	0	1	1	0	10	0	10	21
08:30 AM	0	0	0	0	1	8	0	9	1	0	0	1	0	9	0	9	19
08:45 AM	0	0	0	0	0	5	0	5	0	0	0	0	0	11	0	11	16
Total	0	0	0	0	3	24	0	27	3	0	1	4	0	38	0	38	69
Grand Total	0	0	0	0	10	45	0	55	5	0	1	6	0	62	3	65	126
Apprch %	0	0	0		18.2	81.8	0		83.3	0	16.7		0	95.4	4.6		
Total %	0	0	0		7.9	35.7	0	43.7	4	0	0.8	4.8	0	49.2	2.4	51.6	

Start Time	Deep Creek Road Southbound				Bear Valley Road Westbound				Deep Creek Road Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:30 AM	0	0	0	0	1	3	0	4	0	0	0	0	0	7	1	8	12
07:45 AM	0	0	0	0	1	8	0	9	2	0	0	2	0	4	0	4	15
08:00 AM	0	0	0	0	0	3	0	3	2	0	0	2	0	8	0	8	13
08:15 AM	0	0	0	0	2	8	0	10	0	0	1	1	0	10	0	10	21
Total Volume	0	0	0	0	4	22	0	26	4	0	1	5	0	29	1	30	61
% App. Total	0	0	0		15.4	84.6	0		80	0	20		0	96.7	3.3		
PHF	.000	.000	.000	.000	.500	.688	.000	.650	.500	.000	.250	.625	.000	.725	.250	.750	.726

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

City of Apple Valley  
 N/S: Deep Creek Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 09\_APV\_DC\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 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	1	3	0	4	0	0	0	0	0	7	1	8
+15 mins.	0	0	0	0	1	8	0	9	2	0	0	2	0	4	0	4
+30 mins.	0	0	0	0	0	3	0	3	2	0	0	2	0	8	0	8
+45 mins.	0	0	0	0	2	8	0	10	0	0	1	1	0	10	0	10
Total Volume	0	0	0	0	4	22	0	26	4	0	1	5	0	29	1	30
% App. Total	0	0	0	0	15.4	84.6	0		80	0	20		0	96.7	3.3	
PHF	.000	.000	.000	.000	.500	.688	.000	.650	.500	.000	.250	.625	.000	.725	.250	.750

City of Apple Valley  
 N/S: Deep Creek Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 09\_APV\_DC\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- 3 Axle Vehicles

Start Time	Deep Creek Road Southbound				Bear Valley Road Westbound				Deep Creek Road Northbound				Bear Valley 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	1	0	0	1	0	3	0	3	4
07:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
07:30 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
07:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
Total	0	0	0	0	0	4	0	4	1	0	0	1	0	8	0	8	13
08:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
08:15 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
08:30 AM	0	0	0	0	0	1	0	1	0	0	1	1	0	3	0	3	5
08:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	5	0	5	0	0	1	1	0	7	0	7	13
Grand Total	0	0	0	0	0	9	0	9	1	0	1	2	0	15	0	15	26
Apprch %	0	0	0		0	100	0		50	0	50		0	100	0		
Total %	0	0	0		0	34.6	0	34.6	3.8	0	3.8	7.7	0	57.7	0	57.7	

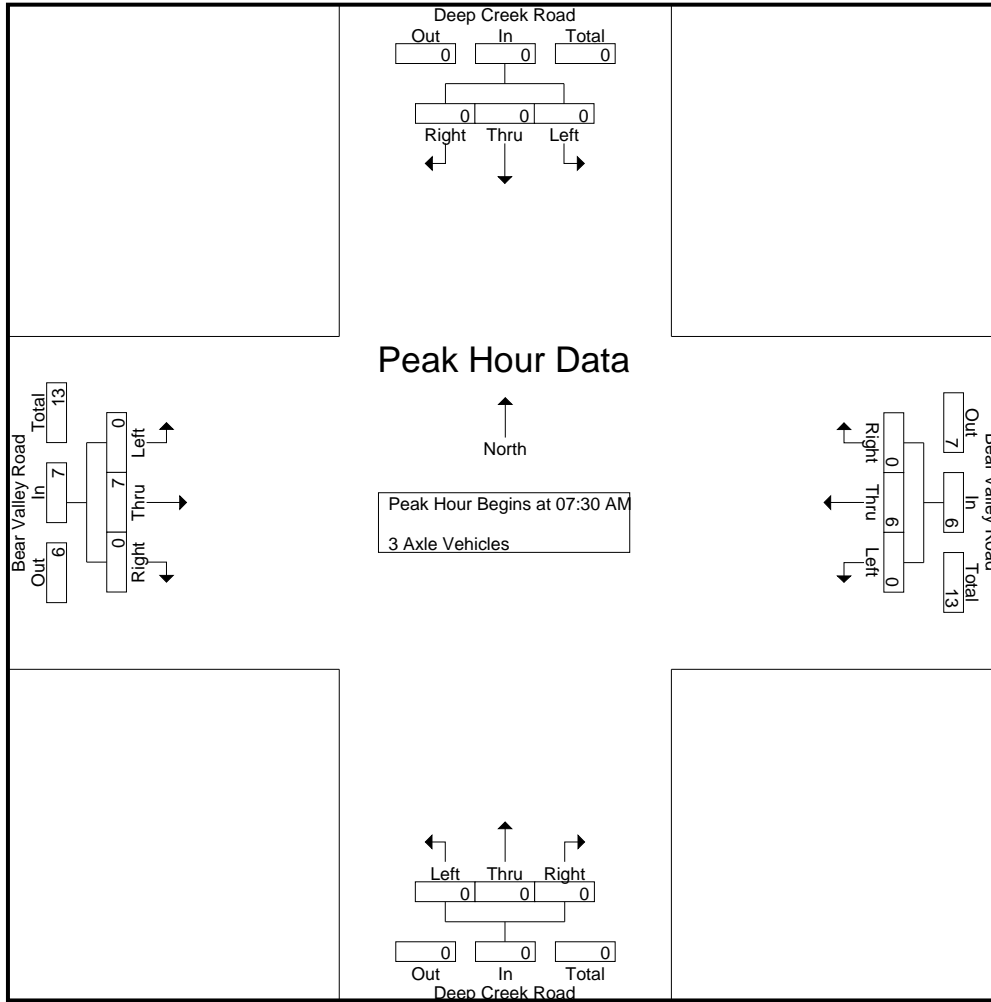
Start Time	Deep Creek Road Southbound				Bear Valley Road Westbound				Deep Creek Road Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:30 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
07:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
08:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
08:15 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
Total Volume	0	0	0	0	0	6	0	6	0	0	0	0	0	7	0	7	13
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.750	.000	.750	.000	.000	.000	.000	.000	.875	.000	.875	.813

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

City of Apple Valley  
 N/S: Deep Creek Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 09\_APV\_DC\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 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	<b>2</b>	0	<b>2</b>	0	0	0	0	0	<b>1</b>	0	<b>1</b>
+15 mins.	0	0	0	0	0	<b>1</b>	0	<b>1</b>	0	0	0	0	0	<b>2</b>	0	<b>2</b>
+30 mins.	0	0	0	0	0	<b>1</b>	0	<b>1</b>	0	0	0	0	0	<b>2</b>	0	<b>2</b>
+45 mins.	0	0	0	0	0	<b>2</b>	0	<b>2</b>	0	0	0	0	0	<b>2</b>	0	<b>2</b>
Total Volume	0	0	0	0	0	<b>6</b>	0	<b>6</b>	0	0	0	0	0	<b>7</b>	0	<b>7</b>
% App. Total	0	0	0	0	0	<b>100</b>	0	<b>100</b>	0	0	0	0	0	<b>100</b>	0	<b>100</b>
PHF	.000	.000	.000	.000	.000	.750	.000	.750	.000	.000	.000	.000	.000	.875	.000	.875

City of Apple Valley  
 N/S: Deep Creek Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 09\_APV\_DC\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

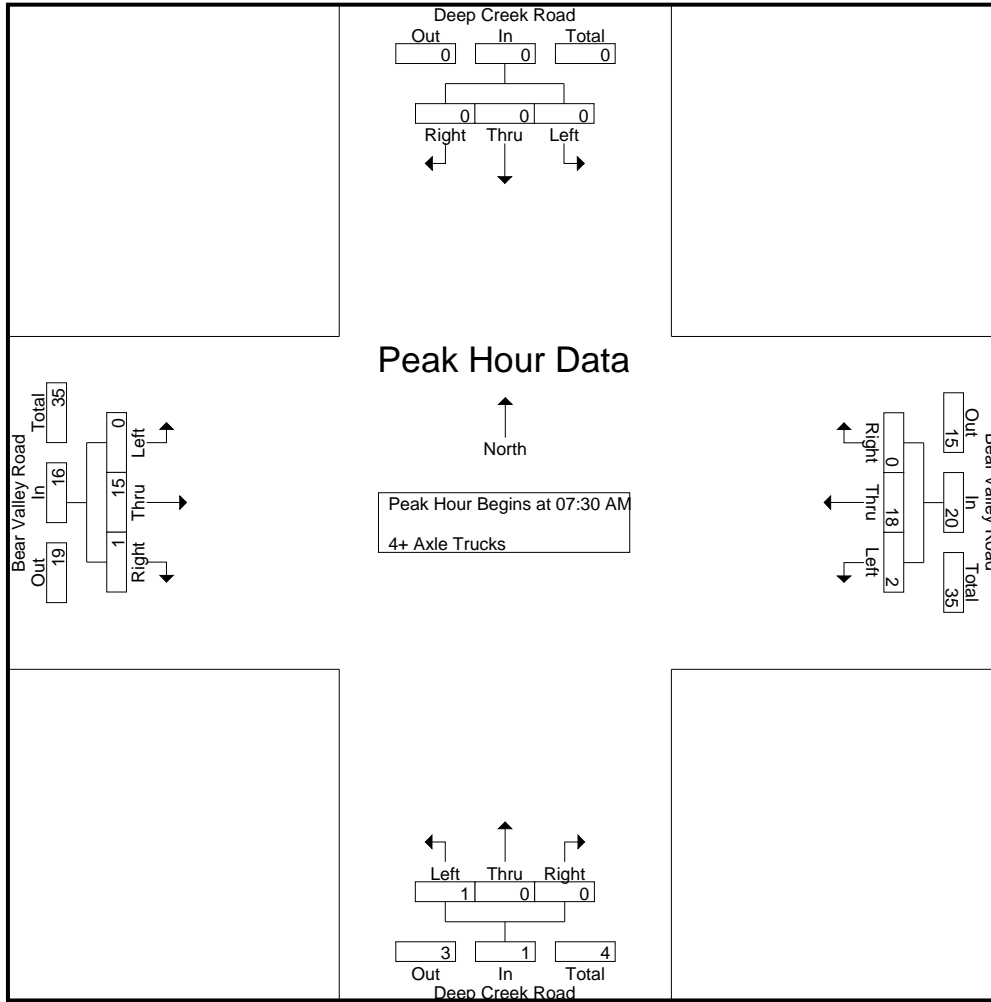
Groups Printed- 4+ Axle Trucks

Start Time	Deep Creek Road Southbound				Bear Valley Road Westbound				Deep Creek Road Northbound				Bear Valley 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	2	5	0	7	1	0	0	1	0	8	0	8	16
07:15 AM	0	0	0	0	1	6	0	7	1	0	0	1	0	5	0	5	13
07:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	6	0	6	7
07:45 AM	0	0	0	0	0	7	0	7	1	0	0	1	0	2	0	2	10
Total	0	0	0	0	3	19	0	22	3	0	0	3	0	21	0	21	46
08:00 AM	0	0	0	0	1	5	0	6	0	0	0	0	0	3	0	3	9
08:15 AM	0	0	0	0	1	5	0	6	0	0	0	0	0	4	1	5	11
08:30 AM	0	0	0	0	1	5	0	6	1	0	1	2	0	4	0	4	12
08:45 AM	0	0	0	0	0	6	0	6	0	0	0	0	0	10	0	10	16
Total	0	0	0	0	3	21	0	24	1	0	1	2	0	21	1	22	48
Grand Total	0	0	0	0	6	40	0	46	4	0	1	5	0	42	1	43	94
Apprch %	0	0	0		13	87	0		80	0	20		0	97.7	2.3		
Total %	0	0	0	0	6.4	42.6	0	48.9	4.3	0	1.1	5.3	0	44.7	1.1	45.7	

Start Time	Deep Creek Road Southbound				Bear Valley Road Westbound				Deep Creek Road Northbound				Bear Valley 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	1	0	1	0	0	0	0	0	6	0	6	7
07:45 AM	0	0	0	0	0	7	0	7	1	0	0	1	0	2	0	2	10
08:00 AM	0	0	0	0	1	5	0	6	0	0	0	0	0	3	0	3	9
08:15 AM	0	0	0	0	1	5	0	6	0	0	0	0	0	4	1	5	11
Total Volume	0	0	0	0	2	18	0	20	1	0	0	1	0	15	1	16	37
% App. Total	0	0	0		10	90	0		100	0	0		0	93.8	6.2		
PHF	.000	.000	.000	.000	.500	.643	.000	.714	.250	.000	.000	.250	.000	.625	.250	.667	.841

City of Apple Valley  
 N/S: Deep Creek Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 09\_APV\_DC\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 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	1	0	1	0	0	0	0	0	6	0	6
+15 mins.	0	0	0	0	0	7	0	7	1	0	0	1	0	2	0	2
+30 mins.	0	0	0	0	1	5	0	6	0	0	0	0	0	3	0	3
+45 mins.	0	0	0	0	1	5	0	6	0	0	0	0	0	4	1	5
Total Volume	0	0	0	0	2	18	0	20	1	0	0	1	0	15	1	16
% App. Total	0	0	0	0	10	90	0	100	100	0	0	100	0	93.8	6.2	100
PHF	.000	.000	.000	.000	.500	.643	.000	.714	.250	.000	.000	.250	.000	.625	.250	.667

City of Apple Valley  
 N/S: Deep Creek Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 09\_APV\_DC\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

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

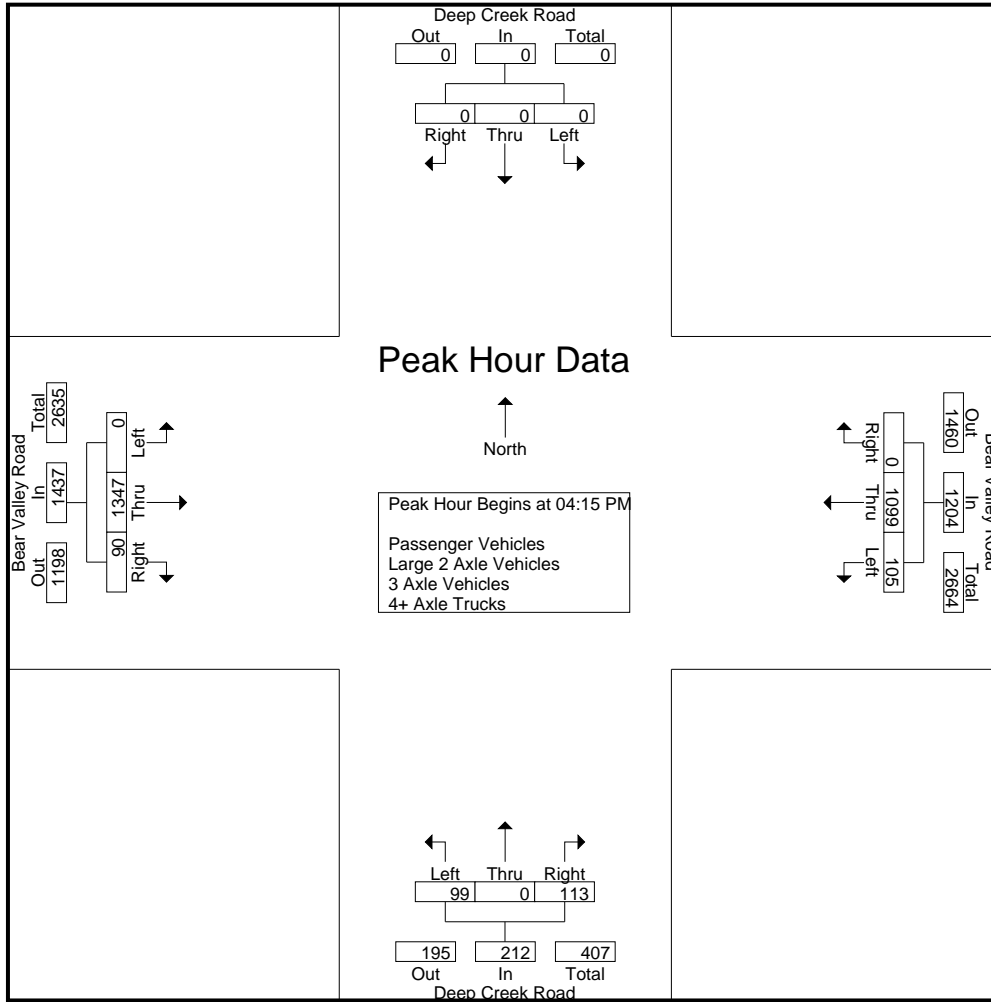
Start Time	Deep Creek Road Southbound				Bear Valley Road Westbound				Deep Creek Road Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	31	239	0	270	18	0	20	38	0	310	34	344	652
04:15 PM	0	0	0	0	28	269	0	297	17	0	40	57	0	339	26	365	719
04:30 PM	0	0	0	0	34	272	0	306	27	0	21	48	0	324	23	347	701
04:45 PM	0	0	0	0	18	268	0	286	28	0	29	57	0	341	20	361	704
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>111</b>	<b>1048</b>	<b>0</b>	<b>1159</b>	<b>90</b>	<b>0</b>	<b>110</b>	<b>200</b>	<b>0</b>	<b>1314</b>	<b>103</b>	<b>1417</b>	<b>2776</b>
05:00 PM	0	0	0	0	25	290	0	315	27	0	23	50	0	343	21	364	729
05:15 PM	0	0	0	0	35	255	0	290	24	0	30	54	0	313	24	337	681
05:30 PM	0	0	0	0	21	238	0	259	19	0	36	55	0	299	25	324	638
05:45 PM	0	0	0	0	18	189	0	207	22	0	21	43	0	308	20	328	578
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>99</b>	<b>972</b>	<b>0</b>	<b>1071</b>	<b>92</b>	<b>0</b>	<b>110</b>	<b>202</b>	<b>0</b>	<b>1263</b>	<b>90</b>	<b>1353</b>	<b>2626</b>
<b>Grand Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>210</b>	<b>2020</b>	<b>0</b>	<b>2230</b>	<b>182</b>	<b>0</b>	<b>220</b>	<b>402</b>	<b>0</b>	<b>2577</b>	<b>193</b>	<b>2770</b>	<b>5402</b>
Apprch %	0	0	0		9.4	90.6	0		45.3	0	54.7		0	93	7		
Total %	0	0	0	0	3.9	37.4	0	41.3	3.4	0	4.1	7.4	0	47.7	3.6	51.3	
Passenger Vehicles	0	0	0	0	202	1978	0	2180	181	0	214	395	0	2516	190	2706	5281
% Passenger Vehicles	0	0	0	0	96.2	97.9	0	97.8	99.5	0	97.3	98.3	0	97.6	98.4	97.7	97.8
Large 2 Axle Vehicles	0	0	0	0	5	21	0	26	1	0	4	5	0	38	2	40	71
% Large 2 Axle Vehicles	0	0	0	0	2.4	1	0	1.2	0.5	0	1.8	1.2	0	1.5	1	1.4	1.3
3 Axle Vehicles	0	0	0	0	1	2	0	3	0	0	0	0	0	4	0	4	7
% 3 Axle Vehicles	0	0	0	0	0.5	0.1	0	0.1	0	0	0	0	0	0.2	0	0.1	0.1
4+ Axle Trucks	0	0	0	0	2	19	0	21	0	0	2	2	0	19	1	20	43
% 4+ Axle Trucks	0	0	0	0	1	0.9	0	0.9	0	0	0.9	0.5	0	0.7	0.5	0.7	0.8

Start Time	Deep Creek Road Southbound				Bear Valley Road Westbound				Deep Creek Road Northbound				Bear Valley 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 04:15 PM																	
04:15 PM	0	0	0	0	28	269	0	297	17	0	<b>40</b>	<b>57</b>	0	339	<b>26</b>	<b>365</b>	719
04:30 PM	0	0	0	0	<b>34</b>	272	0	306	27	0	21	48	0	324	23	347	701
04:45 PM	0	0	0	0	18	268	0	286	<b>28</b>	0	29	57	0	341	20	361	704
05:00 PM	0	0	0	0	25	<b>290</b>	0	<b>315</b>	27	0	23	50	0	<b>343</b>	21	364	<b>729</b>
Total Volume	0	0	0	0	105	1099	0	1204	99	0	113	212	0	1347	90	1437	2853
% App. Total	0	0	0	0	8.7	91.3	0		46.7	0	53.3		0	93.7	6.3		
PHF	.000	.000	.000	.000	.772	.947	.000	.956	.884	.000	.706	.930	.000	.982	.865	.984	.978



City of Apple Valley  
 N/S: Deep Creek Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 09\_APV\_DC\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 2



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

	04:00 PM				04:15 PM				04:45 PM				04:15 PM			
+0 mins.	0	0	0	0	28	269	0	297	<b>28</b>	0	29	<b>57</b>	0	339	<b>26</b>	<b>365</b>
+15 mins.	0	0	0	0	<b>34</b>	272	0	306	27	0	23	50	0	324	23	347
+30 mins.	0	0	0	0	18	268	0	286	24	0	30	54	0	341	20	361
+45 mins.	0	0	0	0	25	<b>290</b>	0	<b>315</b>	19	0	<b>36</b>	55	0	<b>343</b>	21	364
Total Volume	0	0	0	0	105	1099	0	1204	98	0	118	216	0	1347	90	1437
% App. Total	0	0	0	0	8.7	91.3	0		45.4	0	54.6		0	93.7	6.3	
PHF	.000	.000	.000	.000	.772	.947	.000	.956	.875	.000	.819	.947	.000	.982	.865	.984

City of Apple Valley  
 N/S: Deep Creek Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 09\_APV\_DC\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- Passenger Vehicles

Start Time	Deep Creek Road Southbound				Bear Valley Road Westbound				Deep Creek Road Northbound				Bear Valley 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	28	231	0	259	18	0	19	37	0	299	34	333	629
04:15 PM	0	0	0	0	27	260	0	287	17	0	39	56	0	332	25	357	700
04:30 PM	0	0	0	0	32	266	0	298	27	0	21	48	0	313	22	335	681
04:45 PM	0	0	0	0	18	267	0	285	28	0	28	56	0	331	20	351	692
Total	0	0	0	0	105	1024	0	1129	90	0	107	197	0	1275	101	1376	2702
05:00 PM	0	0	0	0	25	281	0	306	26	0	23	49	0	337	20	357	712
05:15 PM	0	0	0	0	34	251	0	285	24	0	28	52	0	307	24	331	668
05:30 PM	0	0	0	0	20	236	0	256	19	0	35	54	0	298	25	323	633
05:45 PM	0	0	0	0	18	186	0	204	22	0	21	43	0	299	20	319	566
Total	0	0	0	0	97	954	0	1051	91	0	107	198	0	1241	89	1330	2579
Grand Total	0	0	0	0	202	1978	0	2180	181	0	214	395	0	2516	190	2706	5281
Apprch %	0	0	0	0	9.3	90.7	0	9.3	45.8	0	54.2	45.8	0	93	7	93	7
Total %	0	0	0	0	3.8	37.5	0	41.3	3.4	0	4.1	7.5	0	47.6	3.6	51.2	51.2

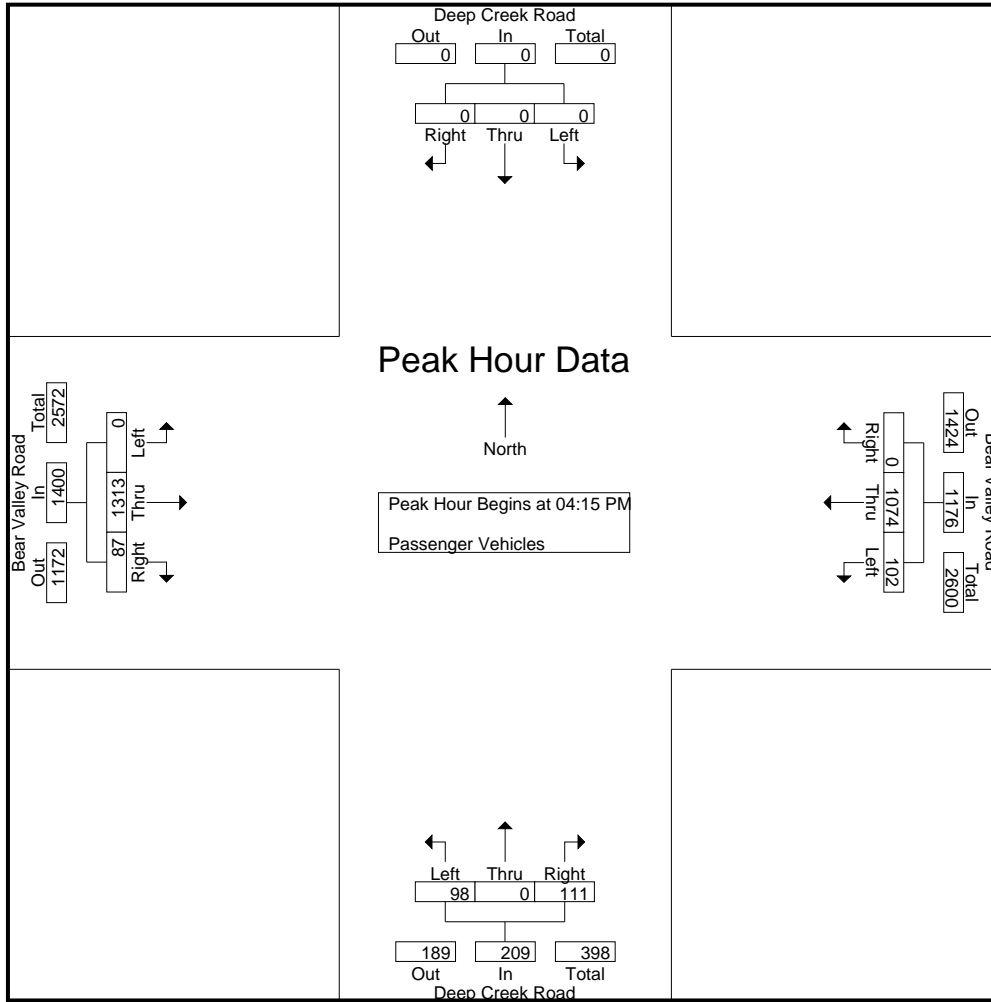
Start Time	Deep Creek Road Southbound				Bear Valley Road Westbound				Deep Creek Road Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:15 PM	0	0	0	0	27	260	0	287	17	0	<b>39</b>	<b>56</b>	0	332	<b>25</b>	<b>357</b>	700
04:30 PM	0	0	0	0	<b>32</b>	266	0	298	27	0	21	48	0	313	22	335	681
04:45 PM	0	0	0	0	18	267	0	285	<b>28</b>	0	28	56	0	331	20	351	692
05:00 PM	0	0	0	0	25	<b>281</b>	0	<b>306</b>	26	0	23	49	0	<b>337</b>	20	357	<b>712</b>
Total Volume	0	0	0	0	102	1074	0	1176	98	0	111	209	0	1313	87	1400	2785
% App. Total	0	0	0	0	8.7	91.3	0	9.3	46.9	0	53.1	46.9	0	93.8	6.2	93.8	6.2
PHF	.000	.000	.000	.000	.797	.956	.000	.961	.875	.000	.712	.933	.000	.974	.870	.980	.978

Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:15 PM

City of Apple Valley  
 N/S: Deep Creek Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 09\_APV\_DC\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 2



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

	04:15 PM				04:15 PM				04:15 PM				04:15 PM			
+0 mins.	0	0	0	0	27	260	0	287	17	0	<b>39</b>	<b>56</b>	0	332	<b>25</b>	<b>357</b>
+15 mins.	0	0	0	0	<b>32</b>	266	0	298	27	0	21	48	0	313	22	335
+30 mins.	0	0	0	0	18	267	0	285	<b>28</b>	0	28	56	0	331	20	351
+45 mins.	0	0	0	0	25	<b>281</b>	0	<b>306</b>	26	0	23	49	0	<b>337</b>	20	357
Total Volume	0	0	0	0	102	1074	0	1176	98	0	111	209	0	1313	87	1400
% App. Total	0	0	0	0	8.7	91.3	0		46.9	0	53.1		0	93.8	6.2	
PHF	.000	.000	.000	.000	.797	.956	.000	.961	.875	.000	.712	.933	.000	.974	.870	.980

City of Apple Valley  
 N/S: Deep Creek Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 09\_APV\_DC\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

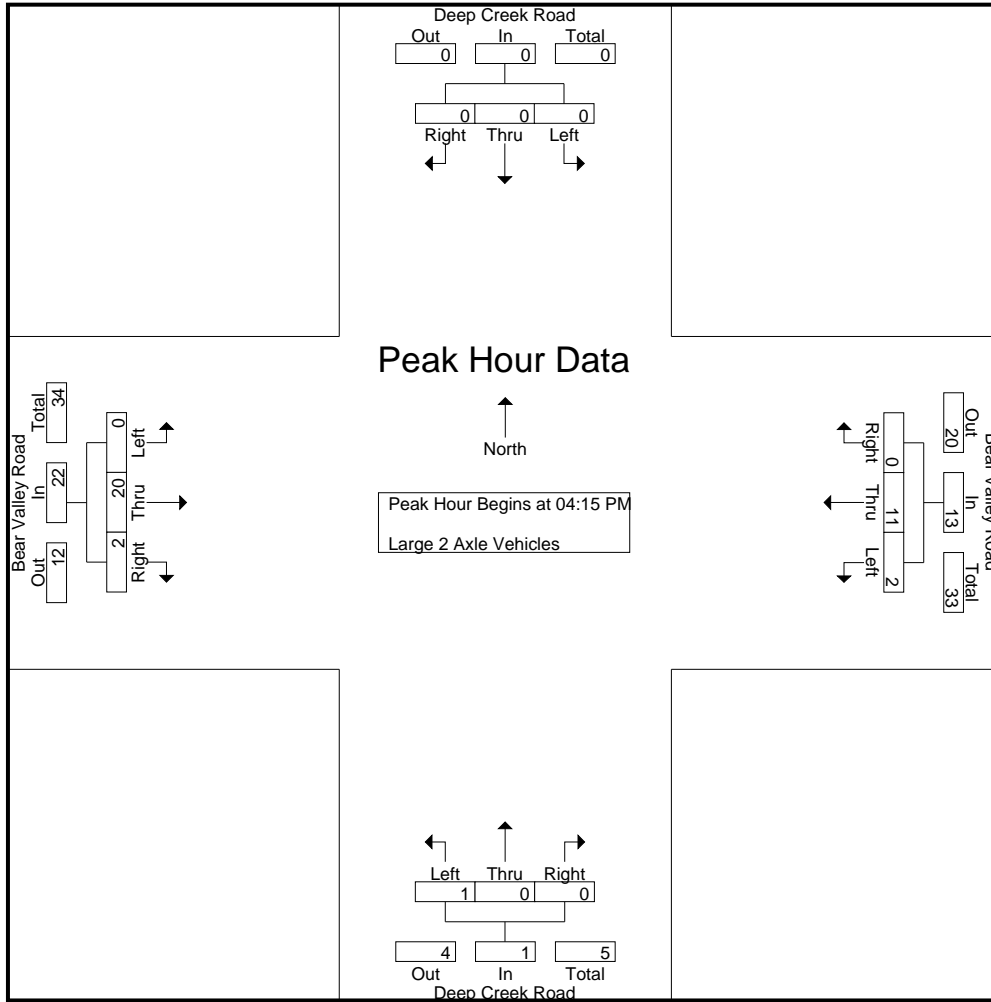
Start Time	Deep Creek Road Southbound				Bear Valley Road Westbound				Deep Creek Road Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	3	5	0	8	0	0	1	1	0	8	0	8	17
04:15 PM	0	0	0	0	1	4	0	5	0	0	0	0	0	7	1	8	13
04:30 PM	0	0	0	0	1	1	0	2	0	0	0	0	0	6	0	6	8
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	6	6
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>10</b>	<b>0</b>	<b>15</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>27</b>	<b>1</b>	<b>28</b>	<b>44</b>
05:00 PM	0	0	0	0	0	6	0	6	1	0	0	1	0	1	1	2	9
05:15 PM	0	0	0	0	0	2	0	2	0	0	2	2	0	2	0	2	6
05:30 PM	0	0	0	0	0	1	0	1	0	0	1	1	0	1	0	1	3
05:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	7	0	7	9
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>11</b>	<b>0</b>	<b>11</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>4</b>	<b>0</b>	<b>11</b>	<b>1</b>	<b>12</b>	<b>27</b>
<b>Grand Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>21</b>	<b>0</b>	<b>26</b>	<b>1</b>	<b>0</b>	<b>4</b>	<b>5</b>	<b>0</b>	<b>38</b>	<b>2</b>	<b>40</b>	<b>71</b>
Apprch %	0	0	0		19.2	80.8	0		20	0	80		0	95	5		
Total %	0	0	0		7	29.6	0	36.6	1.4	0	5.6	7	0	53.5	2.8	56.3	

Start Time	Deep Creek Road Southbound				Bear Valley Road Westbound				Deep Creek Road Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:15 PM	0	0	0	0	1	4	0	5	0	0	0	0	0	7	1	8	13
04:30 PM	0	0	0	0	1	1	0	2	0	0	0	0	0	6	0	6	8
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	6	6
05:00 PM	0	0	0	0	0	6	0	6	1	0	0	1	0	1	1	2	9
<b>Total Volume</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>11</b>	<b>0</b>	<b>13</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>20</b>	<b>2</b>	<b>22</b>	<b>36</b>
% App. Total	0	0	0		15.4	84.6	0		100	0	0		0	90.9	9.1		
PHF	.000	.000	.000	.000	.500	.458	.000	.542	.250	.000	.000	.250	.000	.714	.500	.688	.692

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

City of Apple Valley  
 N/S: Deep Creek Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 09\_APV\_DC\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
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Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	04:15 PM				04:15 PM				04:15 PM				04:15 PM			
+0 mins.	0	0	0	0	1	4	0	5	0	0	0	0	0	7	1	8
+15 mins.	0	0	0	0	1	1	0	2	0	0	0	0	0	6	0	6
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	6
+45 mins.	0	0	0	0	0	6	0	6	1	0	0	1	0	1	1	2
Total Volume	0	0	0	0	2	11	0	13	1	0	0	1	0	20	2	22
% App. Total	0	0	0	0	15.4	84.6	0	100	100	0	0	0	0	90.9	9.1	100
PHF	.000	.000	.000	.000	.500	.458	.000	.542	.250	.000	.000	.250	.000	.714	.500	.688

City of Apple Valley  
 N/S: Deep Creek Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 09\_APV\_DC\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- 3 Axle Vehicles

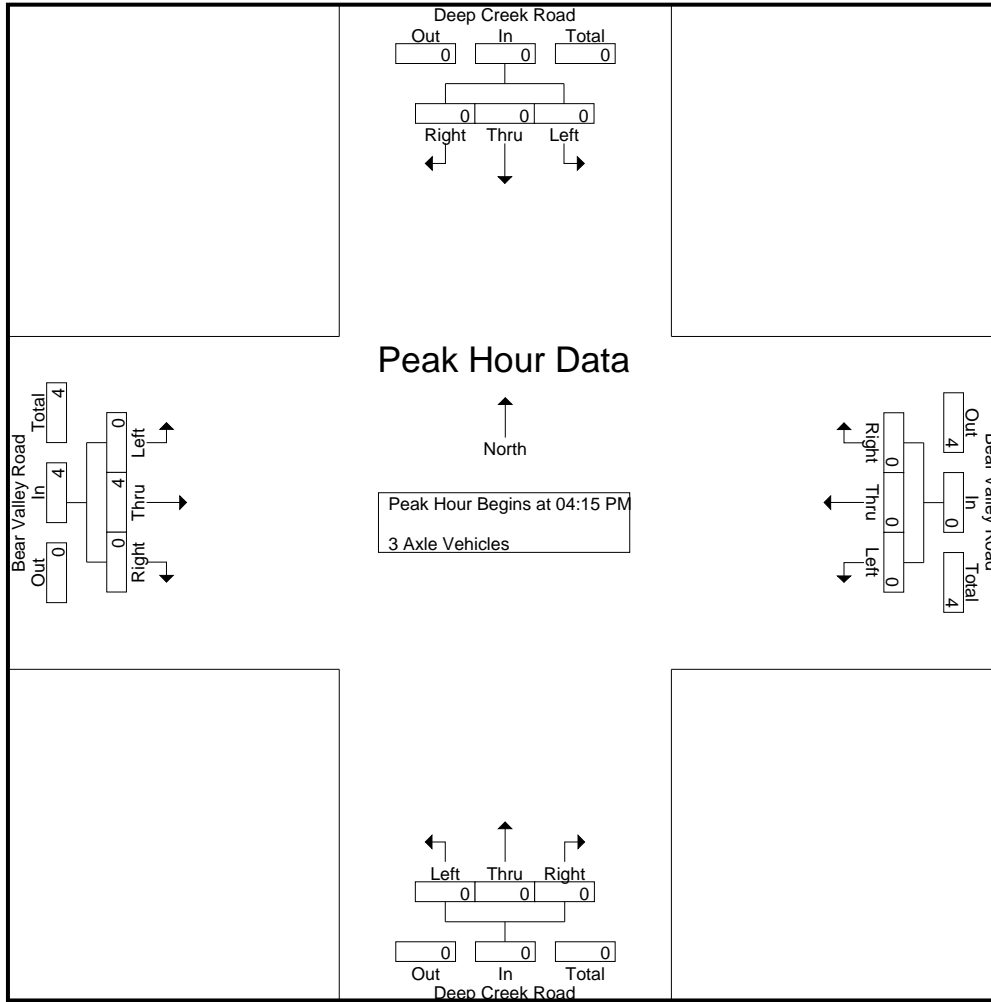
Start Time	Deep Creek Road Southbound				Bear Valley Road Westbound				Deep Creek Road Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>3</b>	<b>5</b>
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	1	0	0	1	0	0	0	0	0	0	0	0	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>2</b>
<b>Grand Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>4</b>	<b>7</b>
Apprch %	0	0	0		33.3	66.7	0		0	0	0		0	100	0		
Total %	0	0	0	0	14.3	28.6	0	42.9	0	0	0	0	0	57.1	0	57.1	

Start Time	Deep Creek Road Southbound				Bear Valley Road Westbound				Deep Creek Road Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:15 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	2	0	2	2
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4	4
% App. Total	0	0	0		0	0	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.500	.000	.500	.500

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

City of Apple Valley  
 N/S: Deep Creek Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 09\_APV\_DC\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
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Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	04:15 PM				04:15 PM				04:15 PM				04:15 PM			
+0 mins.	0	0	0	0	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	2	0	2
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0	100
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.500	.000	.500

City of Apple Valley  
 N/S: Deep Creek Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 09\_APV\_DC\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- 4+ Axle Trucks

Start Time	Deep Creek Road Southbound				Bear Valley Road Westbound				Deep Creek Road Northbound				Bear Valley 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	1	0	1	0	0	0	0	0	3	0	3	4
04:15 PM	0	0	0	0	0	5	0	5	0	0	1	1	0	0	0	0	6
04:30 PM	0	0	0	0	1	5	0	6	0	0	0	0	0	3	1	4	10
04:45 PM	0	0	0	0	0	1	0	1	0	0	1	1	0	3	0	3	5
Total	0	0	0	0	1	12	0	13	0	0	2	2	0	9	1	10	25
05:00 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	4	0	4	7
05:15 PM	0	0	0	0	1	2	0	3	0	0	0	0	0	4	0	4	7
05:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
Total	0	0	0	0	1	7	0	8	0	0	0	0	0	10	0	10	18
Grand Total	0	0	0	0	2	19	0	21	0	0	2	2	0	19	1	20	43
Apprch %	0	0	0		9.5	90.5	0		0	0	100		0	95	5		
Total %	0	0	0		4.7	44.2	0	48.8	0	0	4.7	4.7	0	44.2	2.3	46.5	

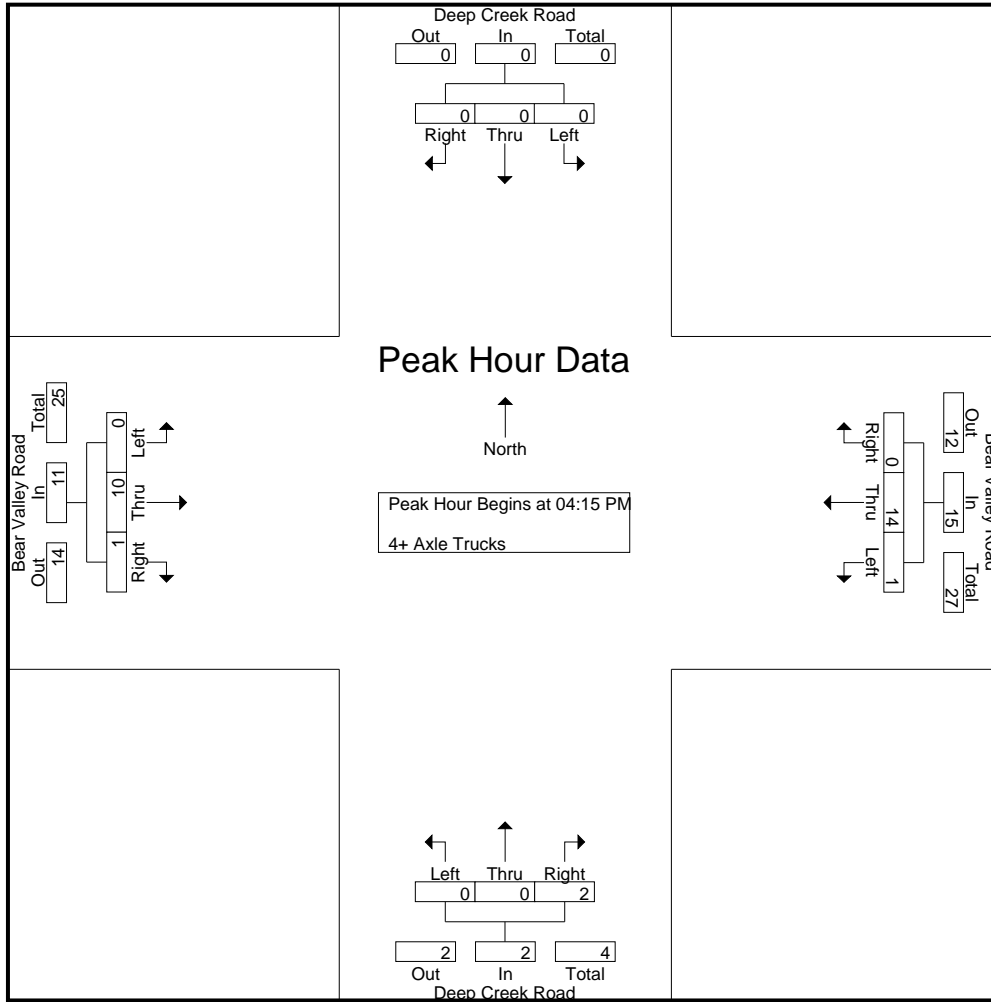
Start Time	Deep Creek Road Southbound				Bear Valley Road Westbound				Deep Creek Road Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:15 PM	0	0	0	0	0	5	0	5	0	0	1	1	0	0	0	0	6
04:30 PM	0	0	0	0	1	5	0	6	0	0	0	0	0	3	1	4	10
04:45 PM	0	0	0	0	0	1	0	1	0	0	1	1	0	3	0	3	5
05:00 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	4	0	4	7
Total Volume	0	0	0	0	1	14	0	15	0	0	2	2	0	10	1	11	28
% App. Total	0	0	0		6.7	93.3	0		0	0	100		0	90.9	9.1		
PHF	.000	.000	.000	.000	.250	.700	.000	.625	.000	.000	.500	.500	.000	.625	.250	.688	.700

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



City of Apple Valley  
 N/S: Deep Creek Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 09\_APV\_DC\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 2



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

	04:15 PM				04:15 PM				04:15 PM				04:15 PM			
+0 mins.	0	0	0	0	0	5	0	5	0	0	1	1	0	0	0	0
+15 mins.	0	0	0	0	1	5	0	6	0	0	0	0	0	3	1	4
+30 mins.	0	0	0	0	0	1	0	1	0	0	1	1	0	3	0	3
+45 mins.	0	0	0	0	0	3	0	3	0	0	0	0	0	4	0	4
Total Volume	0	0	0	0	1	14	0	15	0	0	2	2	0	10	1	11
% App. Total	0	0	0	0	6.7	93.3	0	0	0	0	100	0	0	90.9	9.1	0
PHF	.000	.000	.000	.000	.250	.700	.000	.625	.000	.000	.500	.500	.000	.625	.250	.688

Location: Apple Valley  
 N/S: Deep Creek Road  
 E/W: Bear Valley Road



Date: 11/17/2022  
 Day: Thursday

**PEDESTRIANS**

	North Leg Deep Creek Road	East Leg Bear Valley Road	South Leg Deep Creek Road	West Leg Bear Valley Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
<b>TOTAL VOLUMES:</b>	0	0	0	0	0

	North Leg Deep Creek Road	East Leg Bear Valley Road	South Leg Deep Creek Road	West Leg Bear Valley Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	1	0	0	1
<b>TOTAL VOLUMES:</b>	0	1	0	0	1

Location: Apple Valley  
 N/S: Deep Creek Road  
 E/W: Bear Valley Road



Date: 11/17/2022  
 Day: Thursday

BICYCLES

	Southbound Deep Creek Road			Westbound Bear Valley Road			Northbound Deep Creek Road			Eastbound Bear Valley Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

	Southbound Deep Creek Road			Westbound Bear Valley Road			Northbound Deep Creek Road			Eastbound Bear Valley Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

City of Apple Valley  
 N/S: Kiowa Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 10\_APV\_Kiowa\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

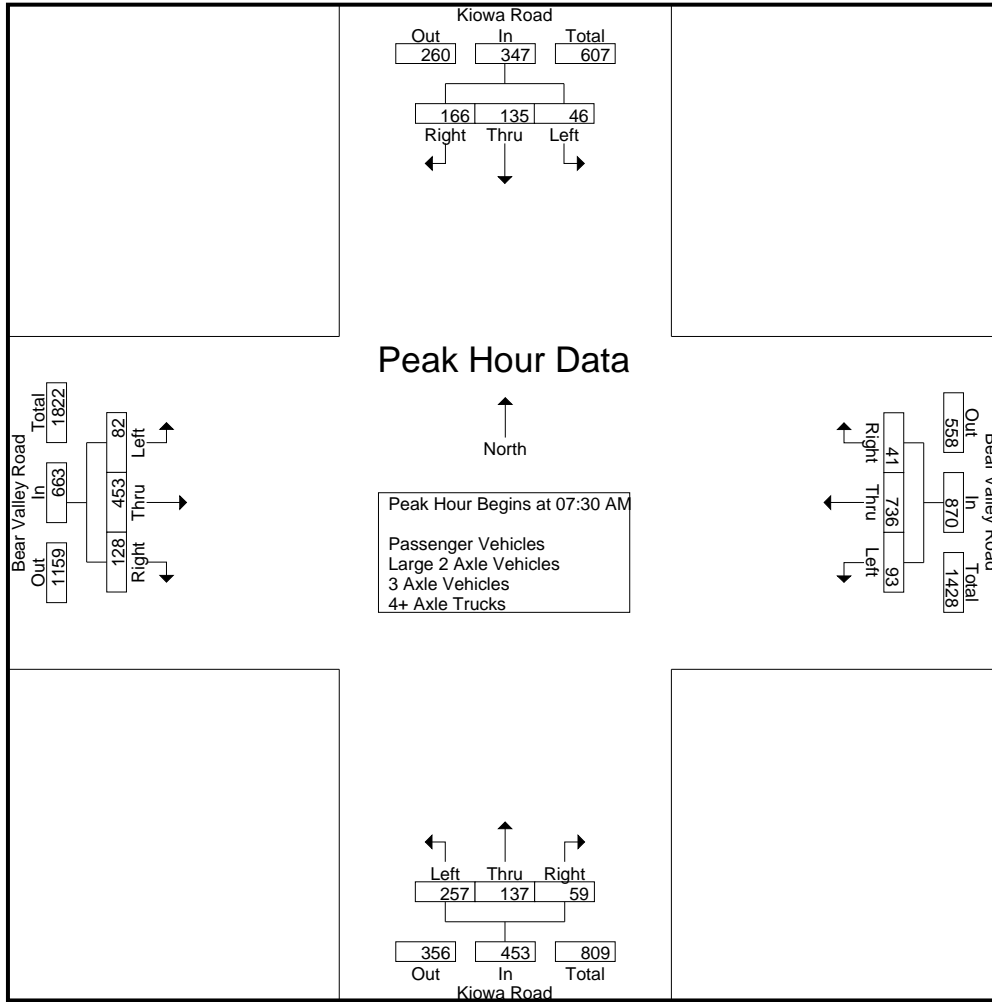
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Kiowa Road Southbound				Bear Valley Road Westbound				Kiowa Road Northbound				Bear Valley 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	9	16	26	51	18	176	5	199	39	30	9	78	5	75	24	104	432
07:15 AM	3	25	35	63	16	154	5	175	48	32	16	96	19	110	20	149	483
07:30 AM	11	26	38	75	23	190	11	224	59	33	19	111	22	130	25	177	587
07:45 AM	20	43	49	112	29	174	11	214	80	48	18	146	13	102	36	151	623
<b>Total</b>	<b>43</b>	<b>110</b>	<b>148</b>	<b>301</b>	<b>86</b>	<b>694</b>	<b>32</b>	<b>812</b>	<b>226</b>	<b>143</b>	<b>62</b>	<b>431</b>	<b>59</b>	<b>417</b>	<b>105</b>	<b>581</b>	<b>2125</b>
08:00 AM	6	40	43	89	28	189	9	226	53	27	10	90	20	90	36	146	551
08:15 AM	9	26	36	71	13	183	10	206	65	29	12	106	27	131	31	189	572
08:30 AM	9	34	36	79	24	173	8	205	42	30	12	84	32	111	22	165	533
08:45 AM	12	30	32	74	16	156	7	179	58	25	11	94	19	119	16	154	501
<b>Total</b>	<b>36</b>	<b>130</b>	<b>147</b>	<b>313</b>	<b>81</b>	<b>701</b>	<b>34</b>	<b>816</b>	<b>218</b>	<b>111</b>	<b>45</b>	<b>374</b>	<b>98</b>	<b>451</b>	<b>105</b>	<b>654</b>	<b>2157</b>
<b>Grand Total</b>	<b>79</b>	<b>240</b>	<b>295</b>	<b>614</b>	<b>167</b>	<b>1395</b>	<b>66</b>	<b>1628</b>	<b>444</b>	<b>254</b>	<b>107</b>	<b>805</b>	<b>157</b>	<b>868</b>	<b>210</b>	<b>1235</b>	<b>4282</b>
Apprch %	12.9	39.1	48		10.3	85.7	4.1		55.2	31.6	13.3		12.7	70.3	17		
Total %	1.8	5.6	6.9	14.3	3.9	32.6	1.5	38	10.4	5.9	2.5	18.8	3.7	20.3	4.9	28.8	
Passenger Vehicles	76	233	290	599	161	1310	60	1531	431	247	104	782	150	783	204	1137	4049
% Passenger Vehicles	96.2	97.1	98.3	97.6	96.4	93.9	90.9	94	97.1	97.2	97.2	97.1	95.5	90.2	97.1	92.1	94.6
Large 2 Axle Vehicles	3	5	4	12	5	45	6	56	9	7	3	19	4	45	4	53	140
% Large 2 Axle Vehicles	3.8	2.1	1.4	2	3	3.2	9.1	3.4	2	2.8	2.8	2.4	2.5	5.2	1.9	4.3	3.3
3 Axle Vehicles	0	0	1	1	1	7	0	8	1	0	0	1	2	11	1	14	24
% 3 Axle Vehicles	0	0	0.3	0.2	0.6	0.5	0	0.5	0.2	0	0	0.1	1.3	1.3	0.5	1.1	0.6
4+ Axle Trucks	0	2	0	2	0	33	0	33	3	0	0	3	1	29	1	31	69
% 4+ Axle Trucks	0	0.8	0	0.3	0	2.4	0	2	0.7	0	0	0.4	0.6	3.3	0.5	2.5	1.6

Start Time	Kiowa Road Southbound				Bear Valley Road Westbound				Kiowa Road Northbound				Bear Valley 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	11	26	38	75	23	<b>190</b>	<b>11</b>	224	59	33	<b>19</b>	111	22	130	25	177	587
07:45 AM	<b>20</b>	<b>43</b>	<b>49</b>	<b>112</b>	<b>29</b>	174	11	214	<b>80</b>	<b>48</b>	18	<b>146</b>	13	102	<b>36</b>	151	<b>623</b>
08:00 AM	6	40	43	89	28	189	9	<b>226</b>	53	27	10	90	20	90	36	146	551
08:15 AM	9	26	36	71	13	183	10	206	65	29	12	106	<b>27</b>	<b>131</b>	31	<b>189</b>	572
Total Volume	46	135	166	347	93	736	41	870	257	137	59	453	82	453	128	663	2333
% App. Total	13.3	38.9	47.8		10.7	84.6	4.7		56.7	30.2	13		12.4	68.3	19.3		
PHF	.575	.785	.847	.775	.802	.968	.932	.962	.803	.714	.776	.776	.759	.865	.889	.877	.936

City of Apple Valley  
 N/S: Kiowa Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 10\_APV\_Kiowa\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 2



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

	07:45 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	20	43	49	112	23	190	11	224	59	33	19	111	22	130	25	177
+15 mins.	6	40	43	89	29	174	11	214	80	48	18	146	13	102	36	151
+30 mins.	9	26	36	71	28	189	9	226	53	27	10	90	20	90	36	146
+45 mins.	9	34	36	79	13	183	10	206	65	29	12	106	27	131	31	189
Total Volume	44	143	164	351	93	736	41	870	257	137	59	453	82	453	128	663
% App. Total	12.5	40.7	46.7		10.7	84.6	4.7		56.7	30.2	13		12.4	68.3	19.3	
PHF	.550	.831	.837	.783	.802	.968	.932	.962	.803	.714	.776	.776	.759	.865	.889	.877

City of Apple Valley  
 N/S: Kiowa Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 10\_APV\_Kiowa\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

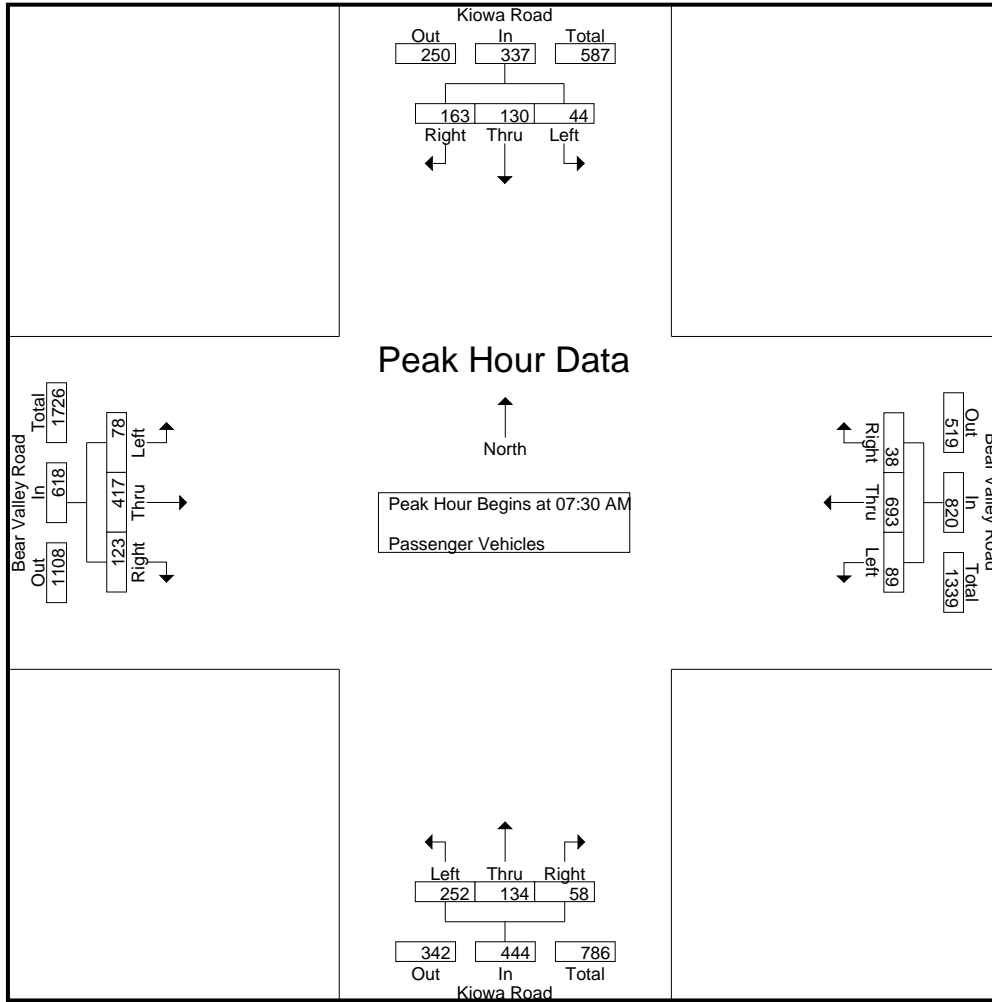
Groups Printed- Passenger Vehicles

Start Time	Kiowa Road Southbound				Bear Valley Road Westbound				Kiowa Road Northbound				Bear Valley 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	9	16	26	51	18	162	4	184	35	30	8	73	5	61	24	90	398
07:15 AM	3	25	33	61	15	145	4	164	47	31	15	93	17	96	20	133	451
07:30 AM	11	23	38	72	22	181	9	212	59	32	19	110	21	121	25	167	561
07:45 AM	19	43	47	109	29	163	11	203	77	46	17	140	13	93	34	140	592
Total	42	107	144	293	84	651	28	763	218	139	59	416	56	371	103	530	2002
08:00 AM	6	39	42	87	27	175	9	211	53	27	10	90	19	81	34	134	522
08:15 AM	8	25	36	69	11	174	9	194	63	29	12	104	25	122	30	177	544
08:30 AM	8	34	36	78	23	163	7	193	41	29	12	82	31	101	22	154	507
08:45 AM	12	28	32	72	16	147	7	170	56	23	11	90	19	108	15	142	474
Total	34	126	146	306	77	659	32	768	213	108	45	366	94	412	101	607	2047
Grand Total	76	233	290	599	161	1310	60	1531	431	247	104	782	150	783	204	1137	4049
Apprch %	12.7	38.9	48.4		10.5	85.6	3.9		55.1	31.6	13.3		13.2	68.9	17.9		
Total %	1.9	5.8	7.2	14.8	4	32.4	1.5	37.8	10.6	6.1	2.6	19.3	3.7	19.3	5	28.1	

Start Time	Kiowa Road Southbound				Bear Valley Road Westbound				Kiowa Road Northbound				Bear Valley 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	11	23	38	72	22	<b>181</b>	9	<b>212</b>	59	32	<b>19</b>	110	21	121	25	167	561
07:45 AM	<b>19</b>	<b>43</b>	<b>47</b>	<b>109</b>	<b>29</b>	163	<b>11</b>	203	<b>77</b>	<b>46</b>	17	<b>140</b>	13	93	<b>34</b>	140	<b>592</b>
08:00 AM	6	39	42	87	27	175	9	211	53	27	10	90	19	81	34	134	522
08:15 AM	8	25	36	69	11	174	9	194	63	29	12	104	<b>25</b>	<b>122</b>	30	<b>177</b>	544
Total Volume	44	130	163	337	89	693	38	820	252	134	58	444	78	417	123	618	2219
% App. Total	13.1	38.6	48.4		10.9	84.5	4.6		56.8	30.2	13.1		12.6	67.5	19.9		
PHF	.579	.756	.867	.773	.767	.957	.864	.967	.818	.728	.763	.793	.780	.855	.904	.873	.937

City of Apple Valley  
 N/S: Kiowa Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 10\_APV\_Kiowa\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 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.	11	23	38	72	22	<b>181</b>	9	<b>212</b>	59	32	<b>19</b>	110	21	121	25	167
+15 mins.	<b>19</b>	<b>43</b>	<b>47</b>	<b>109</b>	<b>29</b>	163	<b>11</b>	203	<b>77</b>	<b>46</b>	17	<b>140</b>	13	93	<b>34</b>	140
+30 mins.	6	39	42	87	27	175	9	211	53	27	10	90	19	81	34	134
+45 mins.	8	25	36	69	11	174	9	194	63	29	12	104	<b>25</b>	<b>122</b>	30	<b>177</b>
Total Volume	44	130	163	337	89	693	38	820	252	134	58	444	78	417	123	618
% App. Total	13.1	38.6	48.4		10.9	84.5	4.6		56.8	30.2	13.1		12.6	67.5	19.9	
PHF	.579	.756	.867	.773	.767	.957	.864	.967	.818	.728	.763	.793	.780	.855	.904	.873

City of Apple Valley  
 N/S: Kiowa Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 10\_APV\_Kiowa\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

Start Time	Kiowa Road Southbound				Bear Valley Road Westbound				Kiowa Road Northbound				Bear Valley 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	6	1	7	3	0	1	4	0	3	0	3	14
07:15 AM	0	0	1	1	1	5	1	7	0	1	1	2	2	8	0	10	20
07:30 AM	0	2	0	2	1	6	2	9	0	1	0	1	1	4	0	5	17
07:45 AM	1	0	2	3	0	4	0	4	2	2	1	5	0	5	1	6	18
<b>Total</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>6</b>	<b>2</b>	<b>21</b>	<b>4</b>	<b>27</b>	<b>5</b>	<b>4</b>	<b>3</b>	<b>12</b>	<b>3</b>	<b>20</b>	<b>1</b>	<b>24</b>	<b>69</b>
08:00 AM	0	1	1	2	0	8	0	8	0	0	0	0	0	5	1	6	16
08:15 AM	1	1	0	2	2	6	1	9	2	0	0	2	0	5	1	6	19
08:30 AM	1	0	0	1	1	5	1	7	1	1	0	2	1	7	0	8	18
08:45 AM	0	1	0	1	0	5	0	5	1	2	0	3	0	8	1	9	18
<b>Total</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>6</b>	<b>3</b>	<b>24</b>	<b>2</b>	<b>29</b>	<b>4</b>	<b>3</b>	<b>0</b>	<b>7</b>	<b>1</b>	<b>25</b>	<b>3</b>	<b>29</b>	<b>71</b>
<b>Grand Total</b>	<b>3</b>	<b>5</b>	<b>4</b>	<b>12</b>	<b>5</b>	<b>45</b>	<b>6</b>	<b>56</b>	<b>9</b>	<b>7</b>	<b>3</b>	<b>19</b>	<b>4</b>	<b>45</b>	<b>4</b>	<b>53</b>	<b>140</b>
Apprch %	25	41.7	33.3		8.9	80.4	10.7		47.4	36.8	15.8		7.5	84.9	7.5		
Total %	2.1	3.6	2.9	8.6	3.6	32.1	4.3	40	6.4	5	2.1	13.6	2.9	32.1	2.9	37.9	

Start Time	Kiowa Road Southbound				Bear Valley Road Westbound				Kiowa Road Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:30 AM	0	2	0	2	1	6	2	9	0	1	0	1	1	4	0	5	17
07:45 AM	1	0	2	3	0	4	0	4	2	2	1	5	0	5	1	6	18
08:00 AM	0	1	1	2	0	8	0	8	0	0	0	0	0	5	1	6	16
08:15 AM	1	1	0	2	2	6	1	9	2	0	0	2	0	5	1	6	19
<b>Total Volume</b>	<b>2</b>	<b>4</b>	<b>3</b>	<b>9</b>	<b>3</b>	<b>24</b>	<b>3</b>	<b>30</b>	<b>4</b>	<b>3</b>	<b>1</b>	<b>8</b>	<b>1</b>	<b>19</b>	<b>3</b>	<b>23</b>	<b>70</b>
% App. Total	22.2	44.4	33.3		10	80	10		50	37.5	12.5		4.3	82.6	13		
PHF	.500	.500	.375	.750	.375	.750	.375	.833	.500	.375	.250	.400	.250	.950	.750	.958	.921

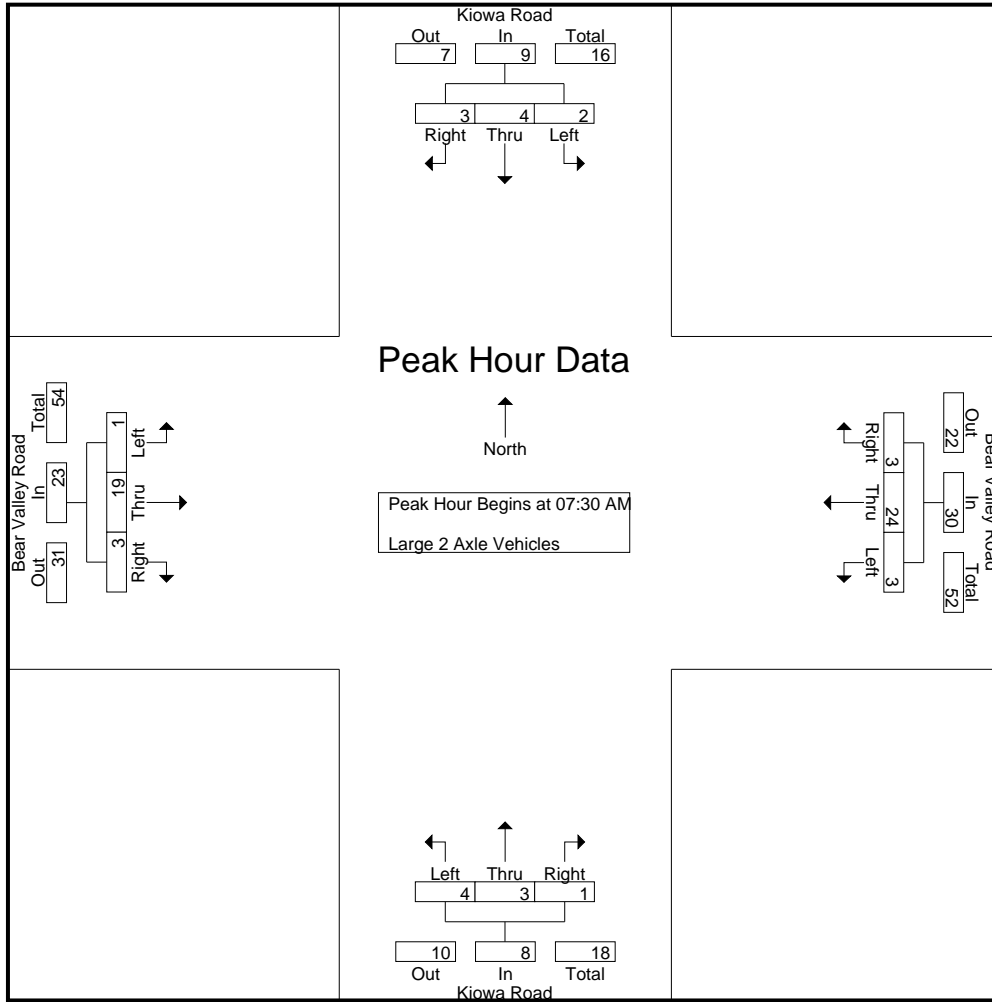
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:30 AM



City of Apple Valley  
 N/S: Kiowa Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 10\_APV\_Kiowa\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
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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	2	0	2	1	6	2	9	0	1	0	1	1	4	0	5
+15 mins.	1	0	2	3	0	4	0	4	2	2	1	5	0	5	1	6
+30 mins.	0	1	1	2	0	8	0	8	0	0	0	0	0	5	1	6
+45 mins.	1	1	0	2	2	6	1	9	2	0	0	2	0	5	1	6
Total Volume	2	4	3	9	3	24	3	30	4	3	1	8	1	19	3	23
% App. Total	22.2	44.4	33.3		10	80	10		50	37.5	12.5		4.3	82.6	13	
PHF	.500	.500	.375	.750	.375	.750	.375	.833	.500	.375	.250	.400	.250	.950	.750	.958

City of Apple Valley  
 N/S: Kiowa Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 10\_APV\_Kiowa\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- 3 Axle Vehicles

Start Time	Kiowa Road Southbound				Bear Valley Road Westbound				Kiowa Road Northbound				Bear Valley 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	3	0	3	3
07:15 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	2	0	2	3
07:30 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
07:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
Total	0	0	1	1	0	3	0	3	0	0	0	0	0	6	0	6	10
08:00 AM	0	0	0	0	1	1	0	2	0	0	0	0	0	3	1	4	6
08:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	2	1	0	3	4
08:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
08:45 AM	0	0	0	0	0	1	0	1	1	0	0	1	0	1	0	1	3
Total	0	0	0	0	1	4	0	5	1	0	0	1	2	5	1	8	14
Grand Total	0	0	1	1	1	7	0	8	1	0	0	1	2	11	1	14	24
Apprch %	0	0	100		12.5	87.5	0		100	0	0		14.3	78.6	7.1		
Total %	0	0	4.2	4.2	4.2	29.2	0	33.3	4.2	0	0	4.2	8.3	45.8	4.2	58.3	

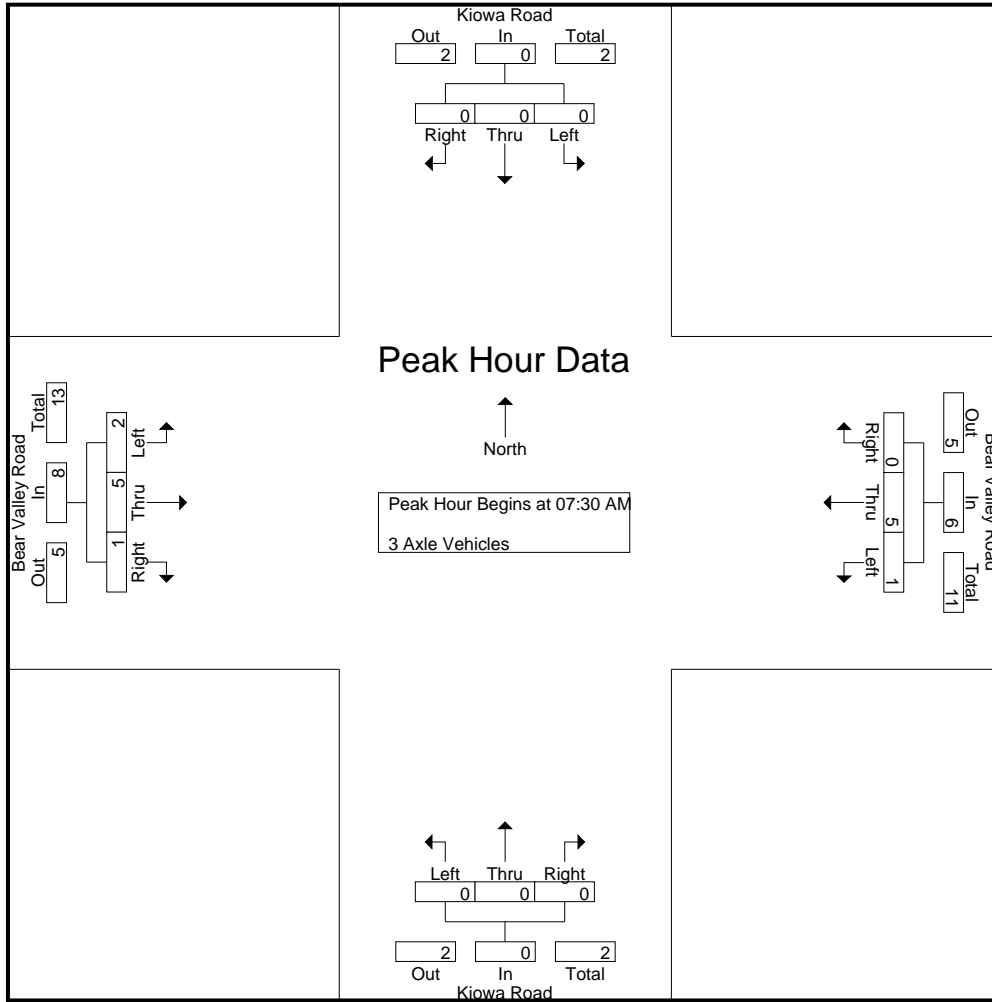
Start Time	Kiowa Road Southbound				Bear Valley Road Westbound				Kiowa Road Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:30 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
07:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
08:00 AM	0	0	0	0	1	1	0	2	0	0	0	0	0	3	1	4	6
08:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	2	1	0	3	4
Total Volume	0	0	0	0	1	5	0	6	0	0	0	0	2	5	1	8	14
% App. Total	0	0	0		16.7	83.3	0		0	0	0		25	62.5	12.5		
PHF	.000	.000	.000	.000	.250	.625	.000	.750	.000	.000	.000	.000	.250	.417	.250	.500	.583

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

City of Apple Valley  
 N/S: Kiowa Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 10\_APV\_Kiowa\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
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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	<b>2</b>	0	<b>2</b>	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1
+30 mins.	0	0	0	0	<b>1</b>	1	0	<b>2</b>	0	0	0	0	0	<b>3</b>	<b>1</b>	<b>4</b>
+45 mins.	0	0	0	0	0	1	0	1	0	0	0	0	<b>2</b>	1	0	3
Total Volume	0	0	0	0	1	5	0	6	0	0	0	0	2	5	1	8
% App. Total	0	0	0	0	16.7	83.3	0	0	0	0	0	0	25	62.5	12.5	0
PHF	.000	.000	.000	.000	.250	.625	.000	.750	.000	.000	.000	.000	.250	.417	.250	.500

City of Apple Valley  
 N/S: Kiowa Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 10\_APV\_Kiowa\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- 4+ Axle Trucks

Start Time	Kiowa Road Southbound				Bear Valley Road Westbound				Kiowa Road Northbound				Bear Valley 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	8	0	8	1	0	0	1	0	8	0	8	17
07:15 AM	0	0	0	0	0	4	0	4	1	0	0	1	0	4	0	4	9
07:30 AM	0	1	0	1	0	1	0	1	0	0	0	0	0	5	0	5	7
07:45 AM	0	0	0	0	0	6	0	6	1	0	0	1	0	3	1	4	11
Total	0	1	0	1	0	19	0	19	3	0	0	3	0	20	1	21	44
08:00 AM	0	0	0	0	0	5	0	5	0	0	0	0	1	1	0	2	7
08:15 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	3	0	3	5
08:30 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	3	0	3	7
08:45 AM	0	1	0	1	0	3	0	3	0	0	0	0	0	2	0	2	6
Total	0	1	0	1	0	14	0	14	0	0	0	0	1	9	0	10	25
Grand Total	0	2	0	2	0	33	0	33	3	0	0	3	1	29	1	31	69
Apprch %	0	100	0		0	100	0		100	0	0		3.2	93.5	3.2		
Total %	0	2.9	0	2.9	0	47.8	0	47.8	4.3	0	0	4.3	1.4	42	1.4	44.9	

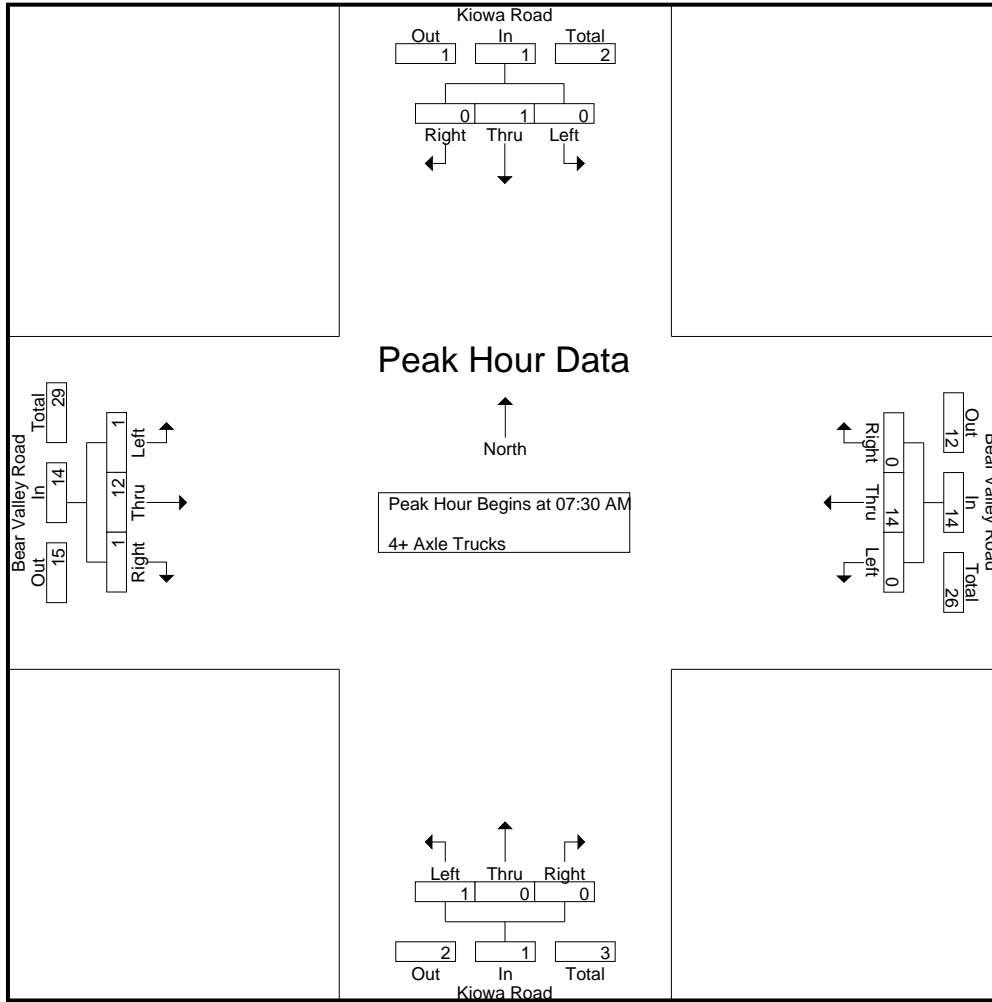
Start Time	Kiowa Road Southbound				Bear Valley Road Westbound				Kiowa Road Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:30 AM	0	1	0	1	0	1	0	1	0	0	0	0	0	5	0	5	7
07:45 AM	0	0	0	0	0	6	0	6	1	0	0	1	0	3	1	4	11
08:00 AM	0	0	0	0	0	5	0	5	0	0	0	0	1	1	0	2	7
08:15 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	3	0	3	5
Total Volume	0	1	0	1	0	14	0	14	1	0	0	1	1	12	1	14	30
% App. Total	0	100	0		0	100	0		100	0	0		7.1	85.7	7.1		
PHF	.000	.250	.000	.250	.000	.583	.000	.583	.250	.000	.000	.250	.250	.600	.250	.700	.682

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

City of Apple Valley  
 N/S: Kiowa Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 10\_APV\_Kiowa\_BV AM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 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	1	0	1	0	0	0	0	0	5	0	5
+15 mins.	0	0	0	0	0	6	0	6	1	0	0	1	0	3	1	4
+30 mins.	0	0	0	0	0	5	0	5	0	0	0	0	1	1	0	2
+45 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	3	0	3
Total Volume	0	1	0	1	0	14	0	14	1	0	0	1	1	12	1	14
% App. Total	0	100	0	0	0	100	0	0	100	0	0	0	7.1	85.7	7.1	0
PHF	.000	.250	.000	.250	.000	.583	.000	.583	.250	.000	.000	.250	.250	.600	.250	.700

City of Apple Valley  
 N/S: Kiowa Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 10\_APV\_Kiowa\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

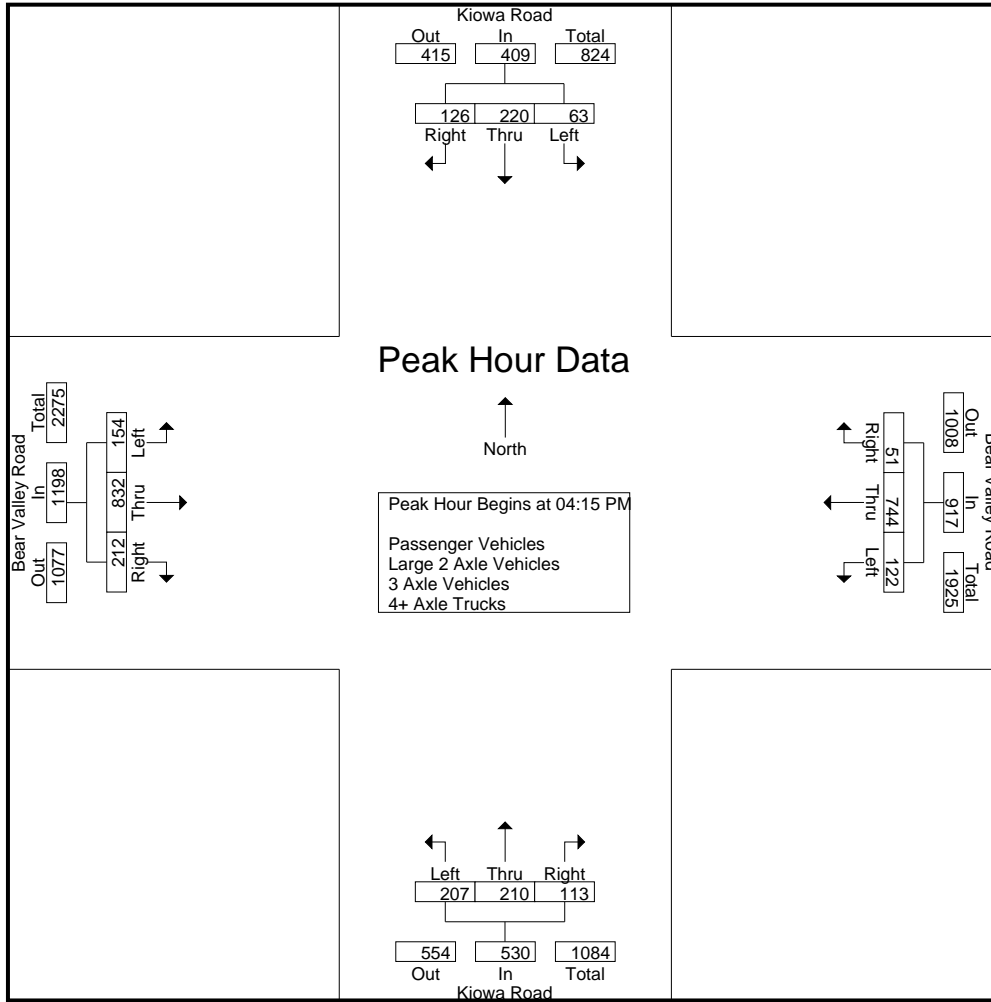
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Kiowa Road Southbound				Bear Valley Road Westbound				Kiowa Road Northbound				Bear Valley 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	12	63	36	111	30	176	12	218	44	57	27	128	28	208	45	281	738
04:15 PM	26	48	37	111	22	150	16	188	60	54	23	137	31	213	66	310	746
04:30 PM	8	61	24	93	25	215	9	249	33	47	23	103	48	189	58	295	740
04:45 PM	17	60	28	105	49	183	14	246	61	49	38	148	41	223	28	292	791
<b>Total</b>	<b>63</b>	<b>232</b>	<b>125</b>	<b>420</b>	<b>126</b>	<b>724</b>	<b>51</b>	<b>901</b>	<b>198</b>	<b>207</b>	<b>111</b>	<b>516</b>	<b>148</b>	<b>833</b>	<b>197</b>	<b>1178</b>	<b>3015</b>
05:00 PM	12	51	37	100	26	196	12	234	53	60	29	142	34	207	60	301	777
05:15 PM	11	58	43	112	21	150	13	184	57	60	20	137	48	183	59	290	723
05:30 PM	13	47	35	95	17	151	15	183	50	48	13	111	50	198	68	316	705
05:45 PM	13	44	34	91	19	145	16	180	52	49	21	122	40	171	53	264	657
<b>Total</b>	<b>49</b>	<b>200</b>	<b>149</b>	<b>398</b>	<b>83</b>	<b>642</b>	<b>56</b>	<b>781</b>	<b>212</b>	<b>217</b>	<b>83</b>	<b>512</b>	<b>172</b>	<b>759</b>	<b>240</b>	<b>1171</b>	<b>2862</b>
<b>Grand Total</b>	<b>112</b>	<b>432</b>	<b>274</b>	<b>818</b>	<b>209</b>	<b>1366</b>	<b>107</b>	<b>1682</b>	<b>410</b>	<b>424</b>	<b>194</b>	<b>1028</b>	<b>320</b>	<b>1592</b>	<b>437</b>	<b>2349</b>	<b>5877</b>
Apprch %	13.7	52.8	33.5		12.4	81.2	6.4		39.9	41.2	18.9		13.6	67.8	18.6		
Total %	1.9	7.4	4.7	13.9	3.6	23.2	1.8	28.6	7	7.2	3.3	17.5	5.4	27.1	7.4	40	
Passenger Vehicles	107	429	270	806	205	1320	102	1627	407	422	193	1022	317	1547	434	2298	5753
% Passenger Vehicles	95.5	99.3	98.5	98.5	98.1	96.6	95.3	96.7	99.3	99.5	99.5	99.4	99.1	97.2	99.3	97.8	97.9
Large 2 Axle Vehicles	5	3	4	12	4	25	5	34	2	2	1	5	2	24	3	29	80
% Large 2 Axle Vehicles	4.5	0.7	1.5	1.5	1.9	1.8	4.7	2	0.5	0.5	0.5	0.5	0.6	1.5	0.7	1.2	1.4
3 Axle Vehicles	0	0	0	0	0	1	0	1	1	0	0	1	0	2	0	2	4
% 3 Axle Vehicles	0	0	0	0	0	0.1	0	0.1	0.2	0	0	0.1	0	0.1	0	0.1	0.1
4+ Axle Trucks	0	0	0	0	0	20	0	20	0	0	0	0	1	19	0	20	40
% 4+ Axle Trucks	0	0	0	0	0	1.5	0	1.2	0	0	0	0	0.3	1.2	0	0.9	0.7

Start Time	Kiowa Road Southbound				Bear Valley Road Westbound				Kiowa Road Northbound				Bear Valley 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 04:15 PM																	
04:15 PM	<b>26</b>	<b>48</b>	<b>37</b>	<b>111</b>	22	150	<b>16</b>	188	60	54	23	137	31	213	<b>66</b>	<b>310</b>	746
04:30 PM	8	<b>61</b>	24	93	25	<b>215</b>	9	<b>249</b>	33	47	23	103	<b>48</b>	189	58	295	740
04:45 PM	17	60	28	105	<b>49</b>	183	14	246	<b>61</b>	49	<b>38</b>	<b>148</b>	41	<b>223</b>	28	292	<b>791</b>
05:00 PM	12	51	37	100	26	196	12	234	53	<b>60</b>	29	142	34	207	60	301	777
Total Volume	63	220	126	409	122	744	51	917	207	210	113	530	154	832	212	1198	3054
% App. Total	15.4	53.8	30.8		13.3	81.1	5.6		39.1	39.6	21.3		12.9	69.4	17.7		
PHF	.606	.902	.851	.921	.622	.865	.797	.921	.848	.875	.743	.895	.802	.933	.803	.966	.965

City of Apple Valley  
 N/S: Kiowa Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 10\_APV\_Kiowa\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
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Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	04:00 PM				04:15 PM				04:45 PM				04:45 PM			
+0 mins.	12	<b>63</b>	36	<b>111</b>	22	150	<b>16</b>	188	<b>61</b>	49	<b>38</b>	<b>148</b>	41	<b>223</b>	28	292
+15 mins.	<b>26</b>	48	<b>37</b>	111	<b>25</b>	<b>215</b>	9	<b>249</b>	53	<b>60</b>	29	142	34	207	60	301
+30 mins.	8	61	24	93	<b>49</b>	183	14	246	57	60	20	137	48	183	59	290
+45 mins.	17	60	28	105	26	196	12	234	50	48	13	111	<b>50</b>	198	<b>68</b>	<b>316</b>
Total Volume	63	232	125	420	122	744	51	917	221	217	100	538	173	811	215	1199
% App. Total	15	55.2	29.8		13.3	81.1	5.6		41.1	40.3	18.6		14.4	67.6	17.9	
PHF	.606	.921	.845	.946	.622	.865	.797	.921	.906	.904	.658	.909	.865	.909	.790	.949

City of Apple Valley  
 N/S: Kiowa Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 10\_APV\_Kiowa\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- Passenger Vehicles

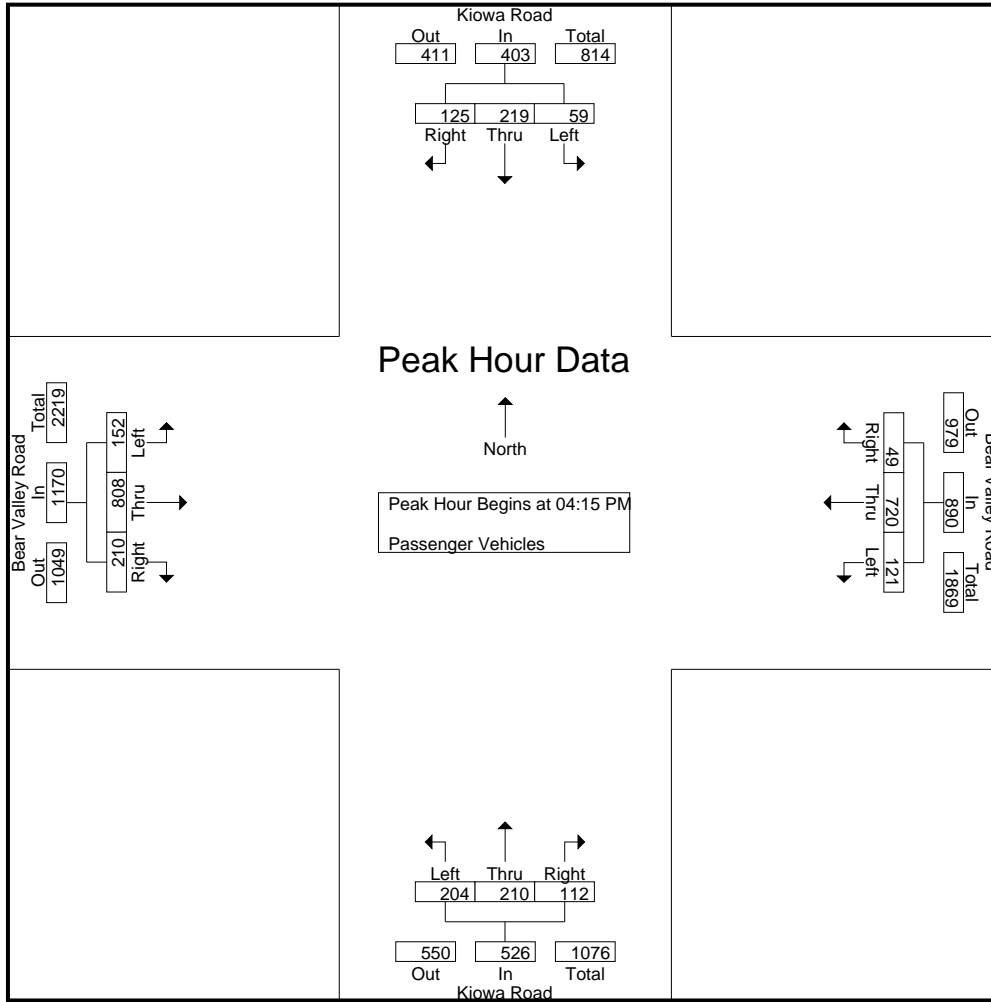
Start Time	Kiowa Road Southbound				Bear Valley Road Westbound				Kiowa Road Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	11	62	35	108	29	166	10	205	44	57	27	128	28	196	44	268	709
04:15 PM	23	48	36	107	22	143	15	180	60	54	23	137	31	207	66	304	728
04:30 PM	7	60	24	91	24	207	9	240	33	47	23	103	47	180	56	283	717
04:45 PM	17	60	28	105	49	180	14	243	61	49	37	147	40	218	28	286	781
Total	58	230	123	411	124	696	48	868	198	207	110	515	146	801	194	1141	2935
05:00 PM	12	51	37	100	26	190	11	227	50	60	29	139	34	203	60	297	763
05:15 PM	11	57	42	110	20	149	13	182	57	60	20	137	47	181	59	287	716
05:30 PM	13	47	35	95	17	145	14	176	50	47	13	110	50	195	68	313	694
05:45 PM	13	44	33	90	18	140	16	174	52	48	21	121	40	167	53	260	645
Total	49	199	147	395	81	624	54	759	209	215	83	507	171	746	240	1157	2818
Grand Total	107	429	270	806	205	1320	102	1627	407	422	193	1022	317	1547	434	2298	5753
Apprch %	13.3	53.2	33.5		12.6	81.1	6.3		39.8	41.3	18.9		13.8	67.3	18.9		
Total %	1.9	7.5	4.7	14	3.6	22.9	1.8	28.3	7.1	7.3	3.4	17.8	5.5	26.9	7.5	39.9	

Start Time	Kiowa Road Southbound				Bear Valley Road Westbound				Kiowa Road Northbound				Bear Valley 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 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	23	48	36	107	22	143	15	180	60	54	23	137	31	207	66	304	728
04:30 PM	7	60	24	91	24	207	9	240	33	47	23	103	47	180	56	283	717
04:45 PM	17	60	28	105	49	180	14	243	61	49	37	147	40	218	28	286	781
05:00 PM	12	51	37	100	26	190	11	227	50	60	29	139	34	203	60	297	763
Total Volume	59	219	125	403	121	720	49	890	204	210	112	526	152	808	210	1170	2989
% App. Total	14.6	54.3	31		13.6	80.9	5.5		38.8	39.9	21.3		13	69.1	17.9		
PHF	.641	.913	.845	.942	.617	.870	.817	.916	.836	.875	.757	.895	.809	.927	.795	.962	.957



City of Apple Valley  
 N/S: Kiowa Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 10\_APV\_Kiowa\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
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Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	04:15 PM				04:15 PM				04:15 PM				04:15 PM			
+0 mins.	23	48	36	107	22	143	15	180	60	54	23	137	31	207	66	304
+15 mins.	7	60	24	91	24	207	9	240	33	47	23	103	47	180	56	283
+30 mins.	17	60	28	105	49	180	14	243	61	49	37	147	40	218	28	286
+45 mins.	12	51	37	100	26	190	11	227	50	60	29	139	34	203	60	297
Total Volume	59	219	125	403	121	720	49	890	204	210	112	526	152	808	210	1170
% App. Total	14.6	54.3	31		13.6	80.9	5.5		38.8	39.9	21.3		13	69.1	17.9	
PHF	.641	.913	.845	.942	.617	.870	.817	.916	.836	.875	.757	.895	.809	.927	.795	.962

City of Apple Valley  
 N/S: Kiowa Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 10\_APV\_Kiowa\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

Start Time	Kiowa Road Southbound				Bear Valley Road Westbound				Kiowa Road Northbound				Bear Valley 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	1	1	3	1	7	2	10	0	0	0	0	0	7	1	8	21
04:15 PM	3	0	1	4	0	4	1	5	0	0	0	0	0	6	0	6	15
04:30 PM	1	1	0	2	1	3	0	4	0	0	0	0	1	4	2	7	13
04:45 PM	0	0	0	0	0	1	0	1	0	0	1	1	1	2	0	3	5
Total	5	2	2	9	2	15	3	20	0	0	1	1	2	19	3	24	54
05:00 PM	0	0	0	0	0	3	1	4	2	0	0	2	0	1	0	1	7
05:15 PM	0	1	1	2	1	1	0	2	0	0	0	0	0	1	0	1	5
05:30 PM	0	0	0	0	0	5	1	6	0	1	0	1	0	2	0	2	9
05:45 PM	0	0	1	1	1	1	0	2	0	1	0	1	0	1	0	1	5
Total	0	1	2	3	2	10	2	14	2	2	0	4	0	5	0	5	26
Grand Total	5	3	4	12	4	25	5	34	2	2	1	5	2	24	3	29	80
Apprch %	41.7	25	33.3		11.8	73.5	14.7		40	40	20		6.9	82.8	10.3		
Total %	6.2	3.8	5	15	5	31.2	6.2	42.5	2.5	2.5	1.2	6.2	2.5	30	3.8	36.2	

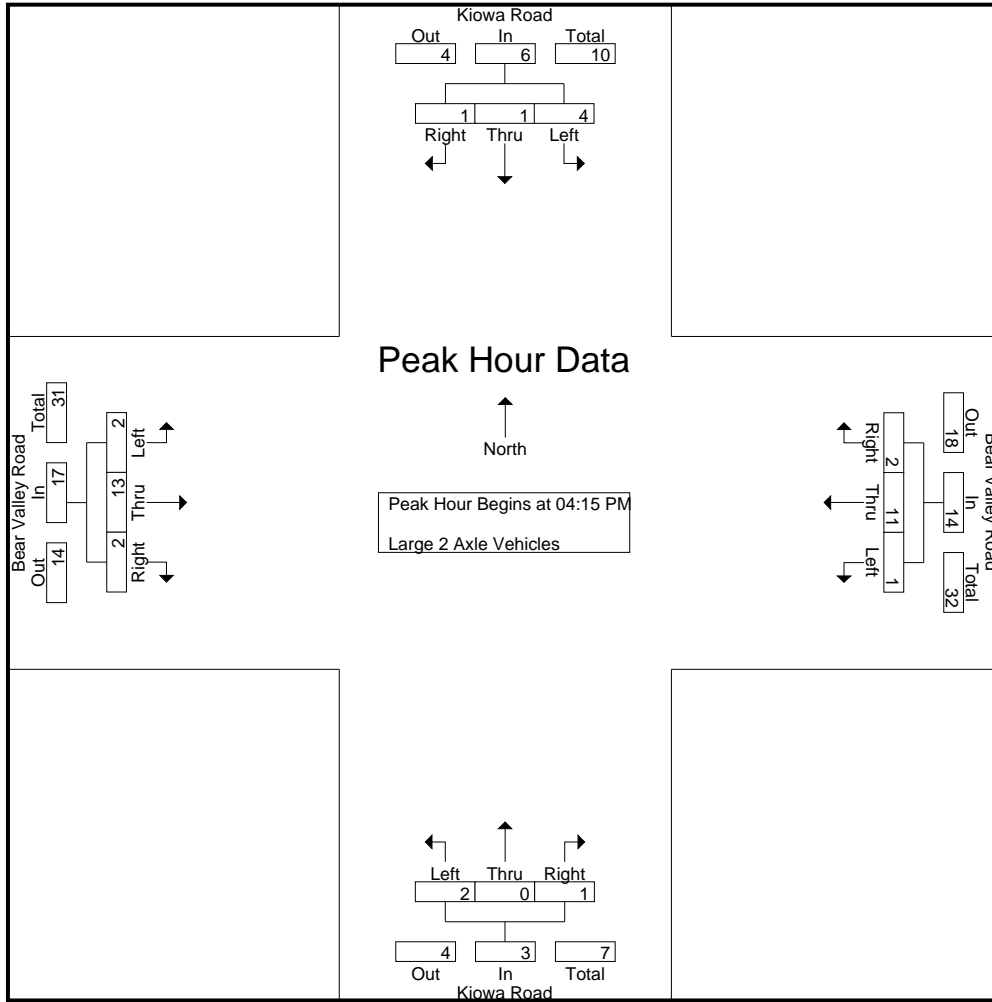
Start Time	Kiowa Road Southbound				Bear Valley Road Westbound				Kiowa Road Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:15 PM	3	0	1	4	0	4	1	5	0	0	0	0	0	6	0	6	15
04:30 PM	1	1	0	2	1	3	0	4	0	0	0	0	1	4	2	7	13
04:45 PM	0	0	0	0	0	1	0	1	0	0	1	1	1	2	0	3	5
05:00 PM	0	0	0	0	0	3	1	4	2	0	0	2	0	1	0	1	7
Total Volume	4	1	1	6	1	11	2	14	2	0	1	3	2	13	2	17	40
% App. Total	66.7	16.7	16.7		7.1	78.6	14.3		66.7	0	33.3		11.8	76.5	11.8		
PHF	.333	.250	.250	.375	.250	.688	.500	.700	.250	.000	.250	.375	.500	.542	.250	.607	.667

Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:15 PM

City of Apple Valley  
 N/S: Kiowa Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 10\_APV\_Kiowa\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
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Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	04:15 PM				04:15 PM				04:15 PM				04:15 PM			
+0 mins.	3	0	1	4	0	4	1	5	0	0	0	0	0	6	0	6
+15 mins.	1	1	0	2	1	3	0	4	0	0	0	0	1	4	2	7
+30 mins.	0	0	0	0	0	1	0	1	0	0	1	1	1	2	0	3
+45 mins.	0	0	0	0	0	3	1	4	2	0	0	2	0	1	0	1
Total Volume	4	1	1	6	1	11	2	14	2	0	1	3	2	13	2	17
% App. Total	66.7	16.7	16.7		7.1	78.6	14.3		66.7	0	33.3		11.8	76.5	11.8	
PHF	.333	.250	.250	.375	.250	.688	.500	.700	.250	.000	.250	.375	.500	.542	.250	.607

City of Apple Valley  
 N/S: Kiowa Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 10\_APV\_Kiowa\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- 3 Axle Vehicles

Start Time	Kiowa Road Southbound				Bear Valley Road Westbound				Kiowa Road Northbound				Bear Valley 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	1	0	1	0	0	0	0	0	0	0	0	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>3</b>
05:00 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>
<b>Grand Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>4</b>
Apprch %	0	0	0		0	100	0		100	0	0		0	100	0		
Total %	0	0	0	0	0	25	0	25	25	0	0	25	0	50	0	50	

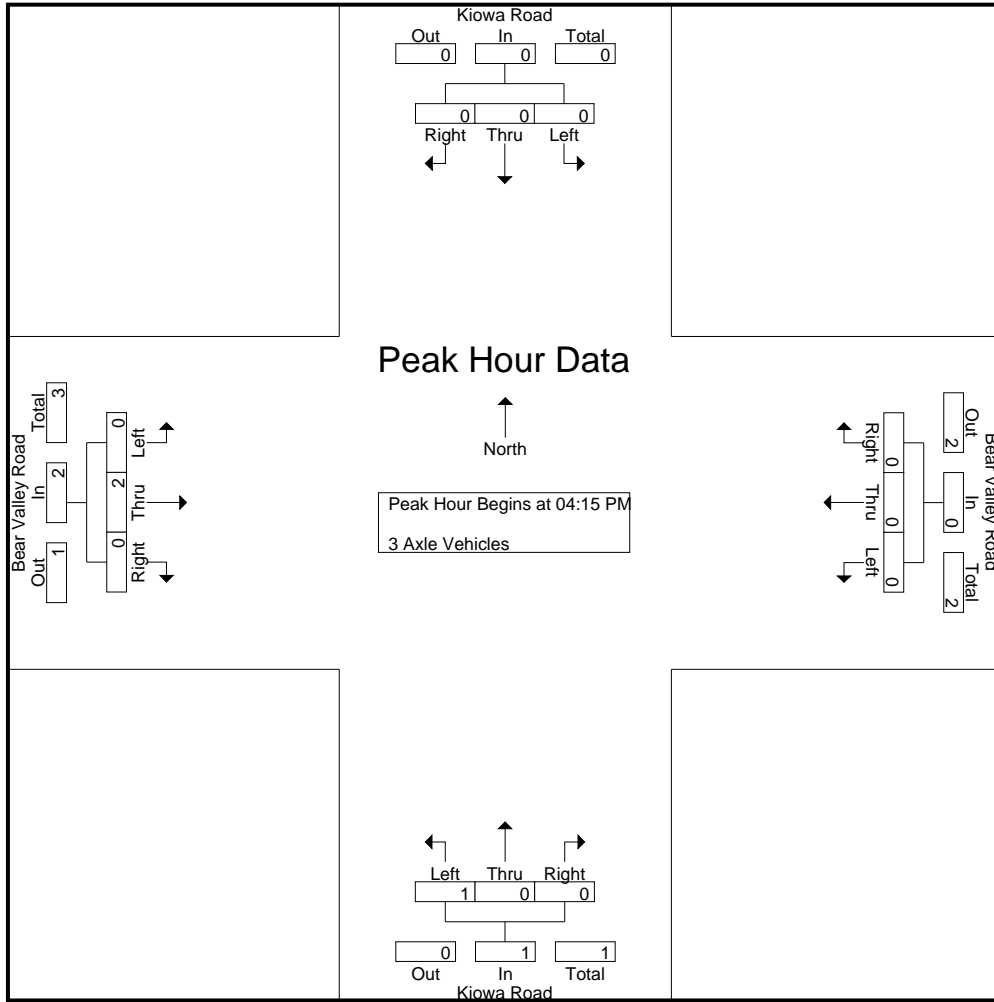
Start Time	Kiowa Road Southbound				Bear Valley Road Westbound				Kiowa Road Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
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	1	0	0	1	0	0	0	0	1
<b>Total Volume</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>3</b>
% App. Total	0	0	0		0	0	0		100	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.000	.250	.000	.250	.000	.250	.375

Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:15 PM

City of Apple Valley  
 N/S: Kiowa Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 10\_APV\_Kiowa\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 2



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

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

City of Apple Valley  
 N/S: Kiowa Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 10\_APV\_Kiowa\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 1

Groups Printed- 4+ Axle Trucks

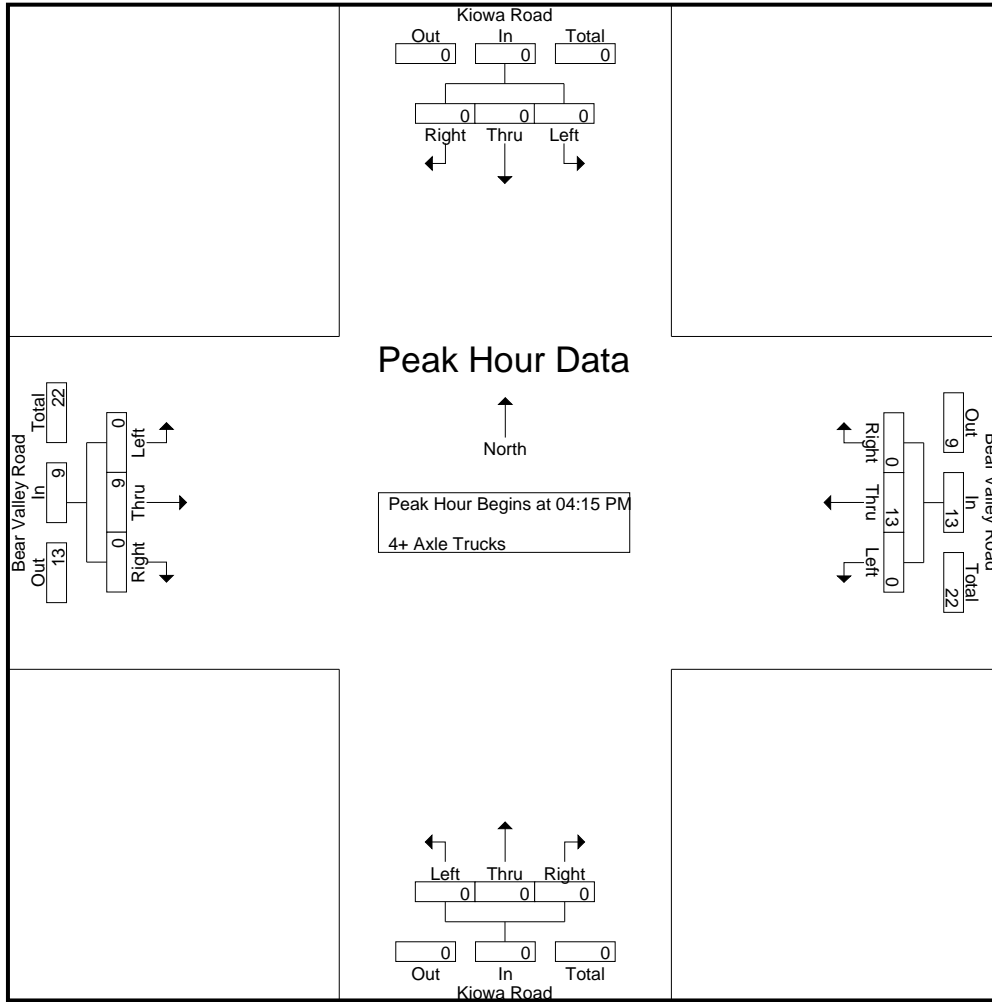
Start Time	Kiowa Road Southbound				Bear Valley Road Westbound				Kiowa Road Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	5	0	5	7
04:15 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	3
04:30 PM	0	0	0	0	0	5	0	5	0	0	0	0	0	3	0	3	8
04:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	3	0	3	5
Total	0	0	0	0	0	12	0	12	0	0	0	0	0	11	0	11	23
05:00 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	3	0	3	6
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	2
05:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
05:45 PM	0	0	0	0	0	4	0	4	0	0	0	0	0	3	0	3	7
Total	0	0	0	0	0	8	0	8	0	0	0	0	1	8	0	9	17
Grand Total	0	0	0	0	0	20	0	20	0	0	0	0	1	19	0	20	40
Apprch %	0	0	0	0	0	100	0	50	0	0	0	0	5	95	0	50	
Total %	0	0	0	0	0	50	0	50	0	0	0	0	2.5	47.5	0	50	

Start Time	Kiowa Road Southbound				Bear Valley Road Westbound				Kiowa Road Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:15 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	3
04:30 PM	0	0	0	0	0	5	0	5	0	0	0	0	0	3	0	3	8
04:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	3	0	3	5
05:00 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	3	0	3	6
Total Volume	0	0	0	0	0	13	0	13	0	0	0	0	0	9	0	9	22
% App. Total	0	0	0	0	0	100	0	65	0	0	0	0	0	100	0	75	
PHF	.000	.000	.000	.000	.000	.650	.000	.650	.000	.000	.000	.000	.000	.750	.000	.750	.688

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

City of Apple Valley  
 N/S: Kiowa Road  
 E/W: Bear Valley Road  
 Weather: Clear

File Name : 10\_APV\_Kiowa\_BV PM  
 Site Code : 221022  
 Start Date : 11/17/2022  
 Page No : 2



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

	04:15 PM				04:15 PM				04:15 PM				04:15 PM			
+0 mins.	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	<b>5</b>	0	<b>5</b>	0	0	0	0	0	<b>3</b>	0	<b>3</b>
+30 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	3	0	3
+45 mins.	0	0	0	0	0	3	0	3	0	0	0	0	0	3	0	3
Total Volume	0	0	0	0	0	13	0	13	0	0	0	0	0	9	0	9
% App. Total	0	0	0	0	0	100	0	0	0	0	0	0	0	100	0	0
PHF	.000	.000	.000	.000	.000	.650	.000	.650	.000	.000	.000	.000	.000	.750	.000	.750

Location: Apple Valley  
 N/S: Kiowa Road  
 E/W: Bear Valley Road



Date: 11/17/2022  
 Day: Thursday

**PEDESTRIANS**

	North Leg Kiowa Road	East Leg Bear Valley Road	South Leg Kiowa Road	West Leg Bear Valley Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	1	0	2	3
7:45 AM	0	0	0	1	1
8:00 AM	0	0	0	1	1
8:15 AM	0	1	0	1	2
8:30 AM	0	0	0	1	1
8:45 AM	0	0	0	3	3
<b>TOTAL VOLUMES:</b>	0	2	0	9	11

	North Leg Kiowa Road	East Leg Bear Valley Road	South Leg Kiowa Road	West Leg Bear Valley Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	1	0	0	1
4:15 PM	0	0	0	1	1
4:30 PM	0	0	0	1	1
4:45 PM	1	0	0	0	1
5:00 PM	0	0	0	0	0
5:15 PM	2	0	0	0	2
5:30 PM	1	0	2	1	4
5:45 PM	0	2	0	1	3
<b>TOTAL VOLUMES:</b>	4	3	2	4	13



Location: Apple Valley  
 N/S: Kiowa Road  
 E/W: Bear Valley Road



Date: 11/17/2022  
 Day: Thursday

BICYCLES

	Southbound Kiowa Road			Westbound Bear Valley Road			Northbound Kiowa Road			Eastbound Bear Valley Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

	Southbound Kiowa Road			Westbound Bear Valley Road			Northbound Kiowa Road			Eastbound Bear Valley Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

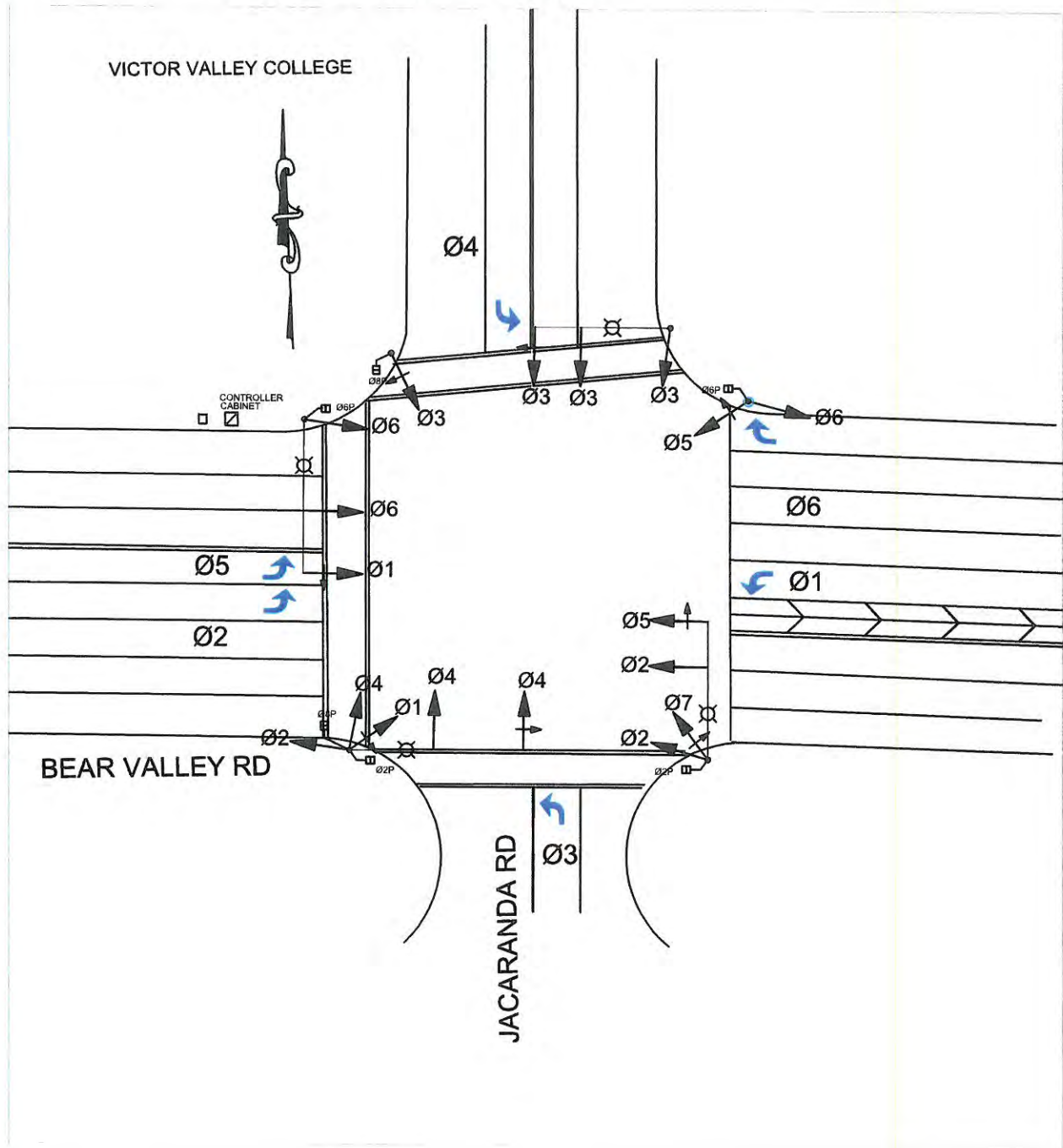


# NAZTEC 980

## TRAFFIC SIGNAL CONTROLLER

### PROGRAM CHART

INTERSECTION: BEAR VALLEY RD @ JACARANDA RD NO: 970-34



INTERSECTION: BEAR VALLEY RD @ JACARANDA RD NO: 970-34

SYSTEM: BEAR VALLEY EAST

I.P. ADDRESS: 192.168.100.151

DESIGN: GSH

APPROVED BY: Bruni Gungler

DATE: 2-9-2017

**Phase Times [1.1.1]**

BEAR VALLEY @ JACARANDA

	1	2	3	4	5	6	7	8	9	10	11	13	14	15	16
Min Grn	4	5	5	5	4	5		5							
Gap, Ext	1	1	1	1	1	1		1							
Max 1	25	40	25	25	30	40	20	20							
Max 2	25	40	25	25	30	40	20	20							
Yel Clr	3.0	4.7	3.9	3.0	3.0	4.7	3.0	3.9							
Red Clr	2.0	0.5	1.4	2.0	1.5	0.5	1.0	1.0							
Walk		4				4		4							
Ped Clr		14				15		24							
Red Revt	3	3	3	3	3	3		3							
Add Init															
Max Init															
Gap Reduce															
Time B4															
Cars B4															
Time To															
ReducBy															
Min Gap															
DyMaxLim															
Max Step															

**Phase Options [1.1.2]**

	1	2	3	4	5	6	7	8	9	10	11	13	14	15	16
Enable	X	X	X	X	X	X		X							
Min Recall		X				X									
Max Recall															
Ped Recall															
Soft Recall															
Lock Calls															
A Flash Entry															
A Flash Exit															
Dual Entry															
Enable Sim Gap	X	X	X	X	X	X	X	X							
Gaur Passage															
Rest In Walk															
Cond Service															
Non-Act 1															
Non-Act 2															
Add Init Calc	S	S	S	S	S	S	S	S							

**Coordination, Splits, Split Table 1-6 [2.7.1]**

<i>Split 1</i>	1	2	3	4	5	6	7	8	9	10	11	12	13	15	16
Pri-Frc	20	42	22	16	18	44	16	22							
Coor F						X									
Mode	NON	MAX	NON	NON	NON	MAX	OMT	NON	NON	NON	NON	NON	NON	NON	NON

<i>Split 2</i>	1	2	3	4	5	6	7	8	9	10	11	12	13	15	16
Pri-Frc	20	42	20	18	16	46	18	20							
Coor F						X									
Mode	NON	MAX	NON	NON	NON	MAX	OMT	NON	NON	NON	NON	NON	NON	NON	NON

<i>Split 3</i>	1	2	3	4	5	6	7	8	9	10	11	12	13	15	16
Pri-Frc	20	40	18	22	20	40	22	18							
Coor F						X									
Mode	NON	MAX	NON	NON	NON	MAX	OMT	NON							

<i>Split 4</i>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	16
Pri-Frc	20	42	22	16	18	44	16	22							
Coor F						X									
Mode	NON	MAX	NON	NON	NON	MAX	OMT	NON	NON	NON	NON	NON	NON	NON	NON

<i>Split 5</i>	1	2	3	4	5	6	7	8	9	10	11	12	13	15	16
Pri-Frc	20	42	22	16	18	44	16	22							
Coor F						X									
Mode	NON	MAX	NON	NON	NON	MAX	OMT	NON	NON	NON	NON	NON	NON	NON	NON

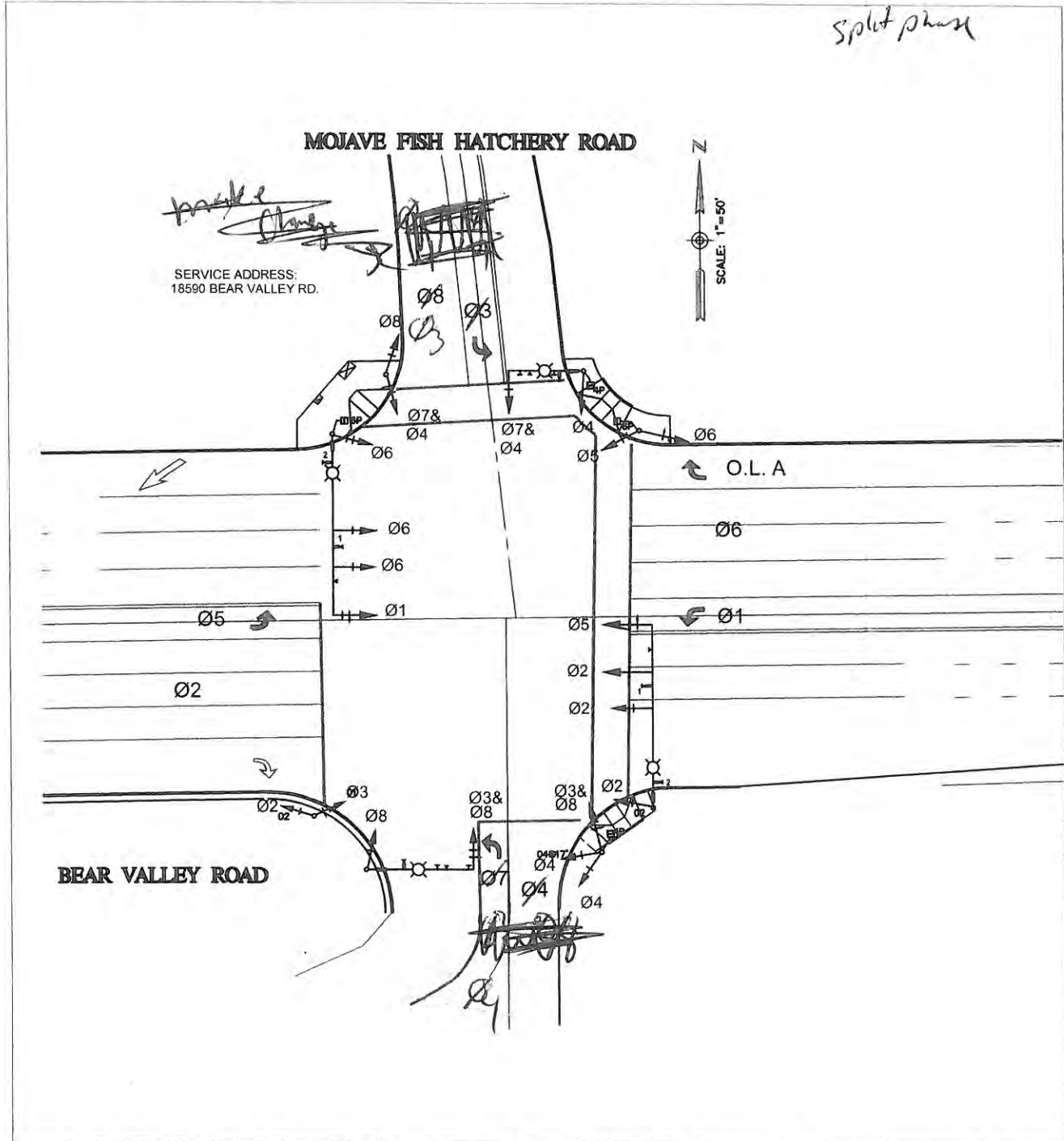


# NAZTEC 980

## TRAFFIC SIGNAL CONTROLLER

### PROGRAM CHART

NO:970-80



INTERSECTION: BEAR VALLEY RD @ FISH HATCHERY RD

INTERSECTION: BEAR VALLEY RD @ FISH HATCHERY RD NO: 970-80

SYSTEM: BEAR VALLEY WEST I.P. ADDRESS: 192.168.100.140

TIMED BY: LGL REVIEWED BY: Aw

APPROVED BY: *Brian Gengler* DATE: 8-30-2019

**Phase Times [1.1.1] BEAR VALLEY @ FISH HATCHERY**

	1	2	3	4	5	6	7	8	9	10	11	13	14	15	16
Min Grn	5	5	5	5	5	5	5	5							
Gap, Ext	1	3	1	1	1	3	1	1							
Max 1	15	40	15	25	15	40	15	25							
Max 2	20	45	20	30	20	45	20	30							
Yel Clr	3.0	5.9	3.0	3.9	3.0	5.9	3.0	3.9							
Red Clr	2.0	0.5	2.0	1.0	2.0	0.5	2.0	1.0							
Walk		4.		4		4									
Ped Clr	4.5 11/20	7.0		25		14		<del>14</del>							
Red Revt	3	3		3	3	3		3							
Add Init															
Max Init															
Gap Reduce															
Time B4															
Cars B4															
Time To															
ReducBy															
Min Gap															
DyMaxLim															
Max Step															

**Phase Options [1.1.2]**

	1	2	3	4	5	6	7	8	9	10	11	13	14	15	16
Enable	X	X	X	X	X	X	X	X							
Min Recall		X				X									
Max Recall															
Ped Recall															
Soft Recall															
Don't Lock Calls															
A Flash Entry															
A Flash Exit															
Dual Entry															
Disable Sim Gap															
Gaur Passage															
Rest In Walk															
Cond Service															
Non-Act 1															
Non-Act 2															
Add Init Calc															

Diadble



Naz .ic.  
Programming Sheets

Coordination, Splits, Split Table 1-6 [2.7.1]

Split 1	1	2	3	4	5	6	7	8	9	10	11	12	14	15	16
Pri-Frc	18	48	14	20	18	48	14	20							
Coor F			17	17		X									
Mode	NON	MIN MAX	NON	NON	NON	MIN MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON

Ont Ont

Split 2	1	2	3	4	5	6	7	8	9	10	11	12	14	15	16
Pri-Frc	18	48	14	20	18	48	14	20							
Coor F			17	17		X									
Mode	NON	MIN MAX	NON	NON	NON	MIN MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON

Ont Ont

Split 3	1	2	3	4	5	6	7	8	9	10	11	12	14	15	16
Pri-Frc	<del>18</del>	<del>48</del>	<del>14</del>	<del>20</del>	<del>18</del>	<del>48</del>	<del>14</del>	<del>20</del>							
Coor F			<del>17</del>	<del>17</del>		<del>X</del>									
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON

Leave alone

Ont Ont

Split 4	1	2	3	4	5	6	7	8	9	10	11	12	14	15	16
Pri-Frc	18	48	14	20	18	48	14	20							
Coor F						X									
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON

Split 5	1	2	3	4	5	6	7	8	9	10	11	12	14	15	16
Pri-Frc	18	48	14	20	18	48	14	20							
Coor F						X									
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON

Split 6	1	2	3	4	5	6	7	8	9	10	11	12	14	15	16
Pri-Frc	18	48	14	20	18	48	14	20							
Coor F						X									
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON

**INTERSECTION:**

QuicNet System Parameters

Group Assignment:  
 Field Master Assignment:  
 System Reference Number:  
 Communications Channel:  
 Drop Address:  
 Area Number:  
 Area Address:

N/S Street Name: **JESS RANCH PARKWAY**  
 E/W Street Name: **BEAR VALLEY ROAD**

Last QuicNet Database Change:

**Notes:**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Field Change Record					
Change	By	Date	Change	By	Date

Excl Ped Assignment		<b>Note:</b> Set the Exclusive Ped Outputs on the "Outputs / General" page				
Exclusive Walk						
Exclusive FDW						
All Red Clear						
<b>Exclusive Ped Phase</b>		<table border="1"> <tr><td>Walk Output</td><td></td></tr> <tr><td>Don't Walk Output</td><td></td></tr> </table>	Walk Output		Don't Walk Output	
Walk Output						
Don't Walk Output						

	Phase							
	1	2	3	4	5	6	7	8
Min Green	3	15		6		15		
Extension	2.0	5.0		2.0		5.0		
Max	10	50		25		50		
Max 2								
Cond Serve Check								

	Phase							
	1	2	3	4	5	6	7	8
Alternate Walk								
Alternate Ped Clear								
Alternate Minimum								
Alternate Extension								

**Alternate Timing - Bank 1**

Yellow Change	3.6	5.2		4.1		5.2		
Red Clear	1.0	1.0		1.0		1.0		

Red Lock	
Yellow Lock	
Simultaneous Gap	<u>2 4 6</u>
Rest In Walk	
Advance Walk	
Flashing Walk	
Max Extension	

Red Rest	
Dual Entry	<u>2 4 6</u>
Sequential Timing	
Inhibit Ped Reserve	
Semi-Actuated	
Guaranteed Passage	
Conditional Service	

Walk		7		7				
Ped Clear - FDW		21		30				
Adv / Delay Walk								
PE Min Ped FDW								

**Phase Functions - Page 1**

Type 3 Disconnect								
Added per Vehicle		1.0		1.0		1.0		
Max Added Initial								
Min Gap	2.0	5.0		2.0		5.0		
Max Gap								
Reduce Every								

Minimum Recall	<u>2 6</u>
Ped Recall	
Maximum Recall	
Green Flash	
Overlap Green Flash	
PPLT FYA	

Soft Recall	
External Recall	
Manual Control Calls	
Fast Green Flash	
Fast Overlap G. Flash	
Semi Act	

**Phase Timing - Bank 1**

		Phase							
		1	2	3	4	5	6	7	8
Basic Phase Timing	Min Green								
	Extension								
	Max								
	Max 2								
	Cond Serve Check								
Clear	Yellow Change								
	Red Clear								
Pedestrian Timing	Walk								
	Ped Clear - FDW								
	Adv / Delay Walk								
	PE Min Ped FDW								
Volume Density	Type 3 Disconnect								
	Added per Vehicle								
	Max Added Initial								
	Min Gap								
	Max Gap								
	Reduce Every								

Phase Timing - Bank 2

		Phase							
		1	2	3	4	5	6	7	8
Basic Phase Timing	Min Green								
	Extension								
	Max								
	Max 2								
	Cond Serve Check								
Clear	Yellow Change								
	Red Clear								
Pedestrian Timing	Walk								
	Ped Clear - FDW								
	Adv / Delay Walk								
	PE Min Ped FDW								
Volume Density	Type 3 Disconnect								
	Added per Vehicle								
	Max Added Initial								
	Min Gap								
	Max Gap								
	Reduce Every								

Phase Timing - Bank 3

		Phase							
		1	2	3	4	5	6	7	8
Alternate Walk									
Alternate Ped Clear									
Alternate Minimum									
Alternate Extension									

Alternate Timing - Bank 2

		Phase							
		1	2	3	4	5	6	7	8
Alternate Walk									
Alternate Ped Clear									
Alternate Minimum									
Alternate Extension									

Alternate Timing - Bank 3

Note: Set the Limited Service Interval on the "Utilities / Misc" page

Clear Phases	
Delay	
Clear Time	
<b>Railroad - 1</b>	

Clear Phases	
Limited Service Phases	
Delay	
Clear Time	
<b>Railroad - 2</b>	

**Railroad Preempt Parameters**

Min Grn Before PE Force-Off	
Max Pre-Empt Time	
Min Time Before Same PE	

	Delay	Clear	Clear Phases
EV - A	0	6	2
EV - B	0	6	
EV - C	0	6	1 6
EV - D	0	6	

**Emergency Vehicle Preempt**

SE - 1	
SE - 2	
EV - A	
EV - B	
EV - C	
EV - D	

**Preempt Priority**

Step	Time	Clear	Ped Call	Hold	Advance	Force Off	Vehicle Call	Permit	Ped Omit	Output
0										
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										

**Special Event Sequence - 1**

Step	Time	Clear	Ped Call	Hold	Advance	Force Off	Vehicle Call	Permit	Ped Omit	Output
0										
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										

**Special Event Sequence - 2**

**Note:**  
The Ring-Barrier Sum of these Minimums will be the Minimum Cycle Length During Transition

Transition Type	
Coord Extra Functions	
Phase 1 - Minimum	
Phase 2 - Minimum	
Phase 3 - Minimum	
Phase 4 - Minimum	
Phase 5 - Minimum	
Phase 6 - Minimum	
Phase 7 - Minimum	
Phase 8 - Minimum	

**Coordination - General**

- Coord Extra**
- 1 = Programmed Walk Time for Sync Phases
  - 2 = Always Terminate Sync Phase Peds
  - 3 = Use "Floating Force Off"
  - 4 =
  - 5 = Use "Start of Green" for Sync Point

- Transition Type**
- 0.X = Shortway
  - 1.X = Lengthen Only
  - 2.X = Shorten Only
  - X.1 thru X.4 = Number of Cycles to get "In Step"

Coordination Plan									
	1	2	3	4	5	6	7	8	9
Cycle									
Offset - 1									
Offset - 2									
Offset - 3									
Zone Offset									
Ring Offset									
Hold Release									
Ped Adjust									
Force Off - 1									
Force Off - 2									
Force Off - 3									
Force Off - 4									
Force Off - 5									
Force Off - 6									
Force Off - 7									
Force Off - 8									

**Coordination - Cycle, Offsets, & Force Offs**

Coordination Plan									
	1	2	3	4	5	6	7	8	9
Perm 1 - Begin									
Perm 1 - End									
Perm 1 - Veh Phases									
Perm 1 - Ped Phases									
Perm 2 - Begin									
Perm 2 - End									
Perm 2 - Veh Phases									
Perm 2 - Ped Phases									
Perm 3 - Begin									
Perm 3 - End									
Perm 3 - Veh Phases									
Perm 3 - Ped Phases									
Max Inhibit Phases									
Max Recall Phases									
Sync Phases									
Lag Phases									
Pre-Timed Phases									

**Coordination - Permissives & Phase Sequence**

	Overlap Number							
	1	2	3	4	5	6	7	8
Load Switch Number								
Vehicle Set 1								
Vehicle Set 2								
Vehicle Set 3								
Negative Vehicle								
Negative Ped								
Green Omit								
Green Clear Omit								
Green Clearance								
Yellow Change								
Red Clearance								

**Overlaps**

	AND 1	AND 2	AND 3	AND 4
Input - A				
Input - B				
Output				

**AND Gates**

	NAND 1	NAND 2	NAND 3	NAND 4
Input - A				
Input - B				
Output				

**NAND Gates**

	OR 1	OR 2	OR 3	OR 4	OR 5	OR 6
Input - A						
Input - B						
Output						

**2 Input - OR Gates**

	OR 7	OR 8
Input - A		
Input - B		
Input - C		
Input - D		
Output		

**4 Input - OR Gates**

	NOT 1	NOT 2	NOT 3	NOT 4
Input				
Output				

**NOT Gates (Inverters)**

	DELAY 1	DELAY 2	DELAY 3	DELAY 4	DELAY 5	DELAY 6
Input						
Delay Time						
Output						

**DELAY Gates**

Latch:	1	2	3	4	5	6	7	8
Set								
Reset								
Out								
/Out								

**Logic Latches**

Det. #	C-1 Pin #	Delay	Carry-over	Phase Assignmmts	Detector Attributes	Detector Set Assignments
1	39			2		
2	40			6		
3	41			4		
4	42			8		
5	43			2		
6	44			6		
7	45			4		
8	46			8		
9	47			2		
10	48			6		
11	49			4		
12	50			8		
13	55			5		
14	56			1		
15	57			7		
16	58			3		
17	59			5		
18	60			1		
19	61			7		
20	62			3		
21	63			2		
22	64			6		
23	65			4		
24	66			8		
25	67			2		
26	68			6		
27	69			4		
28	70			8		
29	76			2		
30	77			6		
31	78			4		
32	79			8		

**Detector Attributes**

- 1 = Full Time Delay
- 2 = Ped Call
- 3 =
- 4 = Count
- 5 = Extension
- 6 = Type 3
- 7 = Calling
- 8 = Alternate

**Detector Assignments**

- 1 = Detector Set 1
- 2 = Detector Set 2
- 3 = Detector Set 3
- 4 =
- 5 =
- 6 = Failure - Min Recall
- 7 = Failure - Max Recall
- 8 = Report on Failure

	C-1 Pin #
Flash Sense	81
External Permit - 1	
External Permit - 2	
External Permit - 3	
Exclusive Ped Omit	
Max. Term Inhibit	
Max. 2	
External Lag Phases	
External Max. Recall	
Stop Time	82
Manual Control Enable	
Manual Cont. Advance	
External Min. Recall	

**General Inputs**

	C-1 Pin #
Railroad - 1	51
Railroad - 2	52
Special Event - 1	
Special Event - 2	
Gate Down	
EV - A	71
EV - B	72
EV - C	73
EV - D	74

**Preempt Inputs**

	C-1 Pin #
Gate Down	
Door Ajar	
UPS Battery	
UPS Power	
Cabinet Temperature	

**Alarm Inputs**

	C-1 Pin #
Plan 1	
Plan 2	
Plan 3	
Plan 4	
Plan 5	
Plan 6	
Plan 7	
Plan 8	
Plan 9	
Free	
Flash	

**Coordination Plan Inputs**

	C-1 Pin #
Phase Bank - 2	
Phase Bank - 3	
Detector Set - 2	
Detector Set - 3	
Overlap Vehicle Set - 2	
Overlap Vehicle Set - 3	

**Bank & Set Inputs**

	C-1 Pin #
Alarm - 1	
Alarm - 2	
Alarm - 3	
Alarm - 4	

	C-1 Pin #
Phase - 1	
Phase - 2	
Phase - 3	
Phase - 4	
Phase - 5	
Phase - 6	
Phase - 7	
Phase - 8	
<b>FYA Inhibit</b>	

	C-1 Pin #
Advance Warning - 1	
Advance Warning - 2	
Detector Failure	
Flasher - Alternating 1	
Flasher - Alternating 2	
Fast Flasher	
On Line	
Exclusive - Walk	
Exclusive - Don't Walk	

**General Outputs**

	C-1 Pin #
Output - 1	
Output - 2	
Output - 3	
Output - 4	
Output - 5	
Output - 6	
Output - 7	
Output - 8	

**Time of Day Outputs**

	C-1 Pin #
Plan - 1	
Plan - 2	
Plan - 3	
Plan - 4	
Plan - 5	
Plan - 6	
Plan - 7	
Plan - 8	
Plan - 9	
Free	

**Coordination Plan Out**

	Ped Phase
Ped 2-P Loadswitch	<u>  2  </u>
Ped 4-P Loadswitch	<u>  4  </u>
Ped 6-P Loadswitch	
Ped 8-P Loadswitch	

**Ped Loadswitch Assignment**

	C-1 Pin #
Phase - 1	
Phase - 2	
Phase - 3	
Phase - 4	
Phase - 5	
Phase - 6	
Phase - 7	
Phase - 8	

**FYA PPLT Outputs**

	C-1 Pin #
Dial - 2	
Dial - 3	
Offset - 1	
Offset - 2	
Offset - 3	
Free	
Flash	

**Seven Wire Outputs**

	C-1 Pin #	
	On	Flash
Railroad - 1		
Railroad - 2		
Special Event - 1		
Special Event - 2		
Preempt Failure		
EV - A		
EV - B		
EV - C		
EV - D		
Any Preempt		

**Preemption Outputs**

	C-1 Pin #
Output - 1	
Output - 2	
Output - 3	
Output - 4	
Output - 5	
Output - 6	
Output - 7	
Output - 8	

**Special Event Outputs**

	C-1 Pin #
Output - 1	
Output - 2	
Output - 3	
Output - 4	
Output - 5	
Output - 6	
Output - 7	
Output - 8	

**Special Function Output**

	Phase Number							
	1	2	3	4	5	6	7	8
Red								
Yellow								
Green								
Walk								
Don't Walk								

**Phase Output Redirection**

	Overlap Number							
	1	2	3	4	5	6	7	8
Red								
Yellow								
Green								

**Overlap Output Redirection**



Event	Day of Week	Season	Hour	Minute	Plan	Offset
0						
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						

**Time Base Coordination Events**

Event	Day of Week	Season	Hour	Minute	Funct.	Phase / Bits
0						
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						

**Time of Day Function Events**

- TOD Functions
- 0 = Permitted Phases
  - 1 = Red Lock
  - 2 = Yellow Lock
  - 3 = Vehicle Min Recall
  - 4 = Ped Recall
  - 5 =
  - 6 = Rest In Walk
  - 7 = Red Rest
  - 8 = Double Entry
  - 9 = Vehicle Max Recall
  - 10 = Soft Recall
  - 11 = Max Extension 2
  - 12 = Conditional Service
  - 13 = Lag Free Phases
  - 14, Bit 1 = Local Override
  - 14, Bit 4 = Disable Det Off Monitoring
  - 15 = TOD Outputs

#	Holiday Type	Day	Month	Year
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
31				

**Holiday Dates**

Event	Holiday Type	Hour	Minute	Plan	Offset
0					
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					

**Holiday Time Base Coordination Events**

Event	Holiday Type	Hour	Minute	Funct.	Phase / Bits
0					
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					

**Holiday Time of Day Function Events**

Season #	Start Month	Start Day	End Month	End Day
1	1	1	12	31
2				
3				
4				
5				
6				
7				
8				

**Season Definitions**

Red Start Time	<b>0.0</b>
Yellow Start Phases	<u>  4  </u>
First Green Phases	<u>  2  6  </u>
Startup Vehicle Calls	<u>12_4_6_</u>
Startup Ped Calls	<u>  2_4  </u>

**Startup**

Max ON Time	
Max OFF Time	
Chatter	

**Detector Check**

	<b>Sign 1</b>	<b>Sign 2</b>
Phase Number		
Time Before Yellow		

**Advance Warning Signs**

Flash Entry Phases	
Flash Phases Yellow	
Flash Overlaps Yellow	
Flash Type	

**Flash Setup**

Exclusive Phases	
Protect / Permissive	
Disable Yellow Range	
Extra One	
Lag Phases - Free	<u>  2_4_6_8  </u>

**Configuration**

Permitted Phases	<b>12_4_6_</b>
Restricted Phases	
Disable Overlap Range	
Extra Two	
External Permit 1	
External Permit 2	
External Permit 3	

**Configuration**

Keyboard Beep	
Backlight Timeout	
Spec Evnt 1 - Ltd Serv Interval	
Spec Evnt 2 - Ltd Serv Interval	
Red Start	<b>6.0</b>
Flash Start	<b>0</b>
Red Revert	<b>6.0</b>

**Miscellaneous**

Spring Month (Begin)	
Spring Week (Begin)	
Fall Month (End)	
Fall Week (End)	

**Daylight Savings Time**

Manual Plan	<b>14</b>
Manual Offset	

**Manual**

Address	
Area Number	
Area Address	
IP Port	
IP Address	
Subnet Mask	
Gateway	

**Ethernet Port Address**

	<b>Port 1</b>	<b>Port 2</b>	<b>Port 3</b>	<b>Port 4</b>
Address				
Area Number				
Area Address				
Comm Time Out				
CTS Delay				
RTS Hold				
Baud Rate				
Data Format				

**Communications Parameters**

Event	Day of Week	Hour	Minute	Headway	Direction
0					
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					

**Bus Headway Schedule**

Approach	A	B	C	D
Travel Time				
Passage				
Extension				
Phases				

**Bus Approach**

	A	B	C	D
Phase 1				
Phase 2				
Phase 3				
Phase 4				
Phase 5				
Phase 6				
Phase 7				
Phase 8				

**Non-Priority Phase Maximums**

NOTES:

**INTERSECTION:**

QuicNet System Parameters

Group Assignment:  
 Field Master Assignment:  
 System Reference Number:  
 Communications Channel:  
 Drop Address:  
 Area Number:  
 Area Address:

N/S Street Name: **REATA ROAD**  
 E/W Street Name: **BEAR VALLEY ROAD**

Last QuicNet Database Change:

**Notes:**

*7/14/19 - Yellow Clearance Changed - V. Buff*

Field Change Record					
Change	By	Date	Change	By	Date

Excl Ped Assignment		<b>Note:</b> Set the Exclusive Ped Outputs on the "Outputs / General" page
Exclusive Walk		
Exclusive FDW		
All Red Clear		
<b>Exclusive Ped Phase</b>		Walk Output Don't Walk Output

	Phase							
	1	2	3	4	5	6	7	8
Min Green	3	15		5	3	15		5
Extension	2.0	5.0		2.0	2.0	5.0		2.0
Max	15	50		40	15	50		40
Max 2								
Cond Serve Check								

	Phase							
	1	2	3	4	5	6	7	8
Alternate Walk								
Alternate Ped Clear								
Alternate Minimum								
Alternate Extension								

**Alternate Timing - Bank 1**

Clear	Yellow Change	<del>3.6</del> <sup>4.6</sup>	5.2		4.1	<del>3.6</del> <sup>4.6</sup>	5.2		4.1
	Red Clear	1.0	1.0		1.0	1.0	1.0		1.0

Red Lock		Red Rest	
Yellow Lock		Dual Entry	<u>2 4 6 8</u>
Simultaneous Gap	<u>2 6</u>	Sequential Timing	
Rest In Walk		Inhibit Ped Reserve	
Advance Walk		Semi-Actuated	
Flashing Walk		Guaranteed Passage	
Max Extension		Conditional Service	

Pedestrian Timing	Walk		7		5		7		5
	Ped Clear - FDW		18		28		18		28
	Adv / Delay Walk								
	PE Min Ped FDW								

**Phase Functions - Page 1**

Volume Density	Type 3 Disconnect								
	Added per Vehicle		1.0				1.0		
	Max Added Initial								
	Min Gap	2.0	5.0		2.0	2.0	5.0		2.0
	Max Gap								
Reduce Every									

Minimum Recall	<u>2 6</u>	Soft Recall	
Ped Recall		External Recall	
Maximum Recall		Manual Control Calls	
Green Flash		Fast Green Flash	
Overlap Green Flash		Fast Overlap G. Flash	
PPLT FYA		Semi Act	

**Phase Timing - Bank 1**

		Phase							
		1	2	3	4	5	6	7	8
Basic Phase Timing	Min Green								
	Extension								
	Max								
	Max 2								
	Cond Serve Check								
Clear	Yellow Change								
	Red Clear								
Pedestrian Timing	Walk								
	Ped Clear - FDW								
	Adv / Delay Walk								
	PE Min Ped FDW								
Volume Density	Type 3 Disconnect								
	Added per Vehicle								
	Max Added Initial								
	Min Gap								
	Max Gap								
	Reduce Every								

**Phase Timing - Bank 2**

		Phase							
		1	2	3	4	5	6	7	8
Basic Phase Timing	Min Green								
	Extension								
	Max								
	Max 2								
	Cond Serve Check								
Clear	Yellow Change								
	Red Clear								
Pedestrian Timing	Walk								
	Ped Clear - FDW								
	Adv / Delay Walk								
	PE Min Ped FDW								
Volume Density	Type 3 Disconnect								
	Added per Vehicle								
	Max Added Initial								
	Min Gap								
	Max Gap								
	Reduce Every								

**Phase Timing - Bank 3**

		Phase							
		1	2	3	4	5	6	7	8
Alternate Walk									
Alternate Ped Clear									
Alternate Minimum									
Alternate Extension									

**Alternate Timing - Bank 2**

		Phase							
		1	2	3	4	5	6	7	8
Alternate Walk									
Alternate Ped Clear									
Alternate Minimum									
Alternate Extension									

**Alternate Timing - Bank 3**

Note: Set the Limited Service Interval on the "Utilities / Misc" page

Clear Phases	
Delay	
Clear Time	
<b>Railroad - 1</b>	

Clear Phases	
Limited Service Phases	
Delay	
Clear Time	
<b>Railroad - 2</b>	

**Railroad Preempt Parameters**

Min Grn Before PE Force-Off	
Max Pre-Empt Time	
Min Time Before Same PE	

	Delay	Clear	Clear Phases
EV - A	0	6	2_5
EV - B	0	6	
EV - C	0	6	1_6
EV - D	0	6	

**Emergency Vehicle Preempt**

SE - 1	
SE - 2	
EV - A	
EV - B	
EV - C	
EV - D	

**Preempt Priority**

Step	Time	Clear	Ped Call	Hold	Advance	Force Off	Vehicle Call	Permit	Ped Omit	Output
0										
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										

**Special Event Sequence - 1**

Step	Time	Clear	Ped Call	Hold	Advance	Force Off	Vehicle Call	Permit	Ped Omit	Output
0										
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										

**Special Event Sequence - 2**



**Note:**  
The Ring-Barrier Sum of these Minimums will be the Minimum Cycle Length During Transition

Transition Type	
Coord Extra Functions	
Phase 1 - Minimum	
Phase 2 - Minimum	
Phase 3 - Minimum	
Phase 4 - Minimum	
Phase 5 - Minimum	
Phase 6 - Minimum	
Phase 7 - Minimum	
Phase 8 - Minimum	

**Coordination - General**

- Coord Extra**
- 1 = Programmed Walk Time for Sync Phases
  - 2 = Always Terminate Sync Phase Peds
  - 3 = Use "Floating Force Off"
  - 4 =
  - 5 = Use "Start of Green" for Sync Point

- Transition Type**
- 0.X = Shortway
  - 1.X = Lengthen Only
  - 2.X = Shorten Only
  - X.1 thru X.4 = Number of Cycles to get "In Step"

Coordination Plan									
	1	2	3	4	5	6	7	8	9
Cycle									
Offset - 1									
Offset - 2									
Offset - 3									
Zone Offset									
Ring Offset									
Hold Release									
Ped Adjust									
Force Off - 1									
Force Off - 2									
Force Off - 3									
Force Off - 4									
Force Off - 5									
Force Off - 6									
Force Off - 7									
Force Off - 8									

**Coordination - Cycle, Offsets, & Force Offs**

Coordination Plan									
	1	2	3	4	5	6	7	8	9
Perm 1 - Begin									
Perm 1 - End									
Perm 1 - Veh Phases									
Perm 1 - Ped Phases									
Perm 2 - Begin									
Perm 2 - End									
Perm 2 - Veh Phases									
Perm 2 - Ped Phases									
Perm 3 - Begin									
Perm 3 - End									
Perm 3 - Veh Phases									
Perm 3 - Ped Phases									
Max Inhibit Phases									
Max Recall Phases									
Sync Phases									
Lag Phases									
Pre-Timed Phases									

**Coordination - Permissives & Phase Sequence**

	Overlap Number							
	1	2	3	4	5	6	7	8
Load Switch Number								
Vehicle Set 1								
Vehicle Set 2								
Vehicle Set 3								
Negative Vehicle								
Negative Ped								
Green Omit								
Green Clear Omit								
Green Clearance								
Yellow Change								
Red Clearance								

-----  
Overlaps  
-----

	AND 1	AND 2	AND 3	AND 4
Input - A				
Input - B				
Output				

-----  
AND Gates  
-----

	NAND 1	NAND 2	NAND 3	NAND 4
Input - A				
Input - B				
Output				

-----  
NAND Gates  
-----

	OR 1	OR 2	OR 3	OR 4	OR 5	OR 6
Input - A						
Input - B						
Output						

-----  
2 Input - OR Gates  
-----

	OR 7	OR 8
Input - A		
Input - B		
Input - C		
Input - D		
Output		

-----  
4 Input - OR Gates  
-----

	NOT 1	NOT 2	NOT 3	NOT 4
Input				
Output				

-----  
NOT Gates (Inverters)  
-----

	DELAY 1	DELAY 2	DELAY 3	DELAY 4	DELAY 5	DELAY 6
Input						
Delay Time						
Output						

-----  
DELAY Gates  
-----

Latch:	1	2	3	4	5	6	7	8
Set								
Reset								
Out								
/Out								

-----  
Logic Latches  
-----

Det. #	C-1 Pin #	Delay	Carry-over	Phase Assignmmts	Detector Attributes	Detector Set Assignments
1	39			2	EB ADV 1	
2	40			6	WB ADV	
3	41			4		
4	42			8		
5	43			2	EB ADV 2	
6	44			6	WB ADV	
7	45			4		
8	46			8		
9	47			2		
10	48			6		
11	49			4		
12	50			8		
13	55			5	EBLT	
14	56			1	WBLT 1,2	
15	57			7		
16	58			3		
17	59			5		
18	60			1		
19	61			7		
20	62			3		
21	63			2	EB LIMIT 1,2	
22	64			6	WB LIMIT 1,2	
23	65			4	SB THRU	
24	66			8	NB LT/LIMIT 1	
25	67			2		
26	68			6		
27	69			4		
28	70			8		
29	76			2	EB LIMIT 3	
30	77			6	WB LIMIT 3	
31	78			4	SBLT	
32	79			8	NB LIMIT 2	

**Detector Assignments**

**Detector Attributes**

- 1 = Full Time Delay
- 2 = Ped Call
- 3 =
- 4 = Count
- 5 = Extension
- 6 = Type 3
- 7 = Calling
- 8 = Alternate

**Detector Assignments**

- 1 = Detector Set 1
- 2 = Detector Set 2
- 3 = Detector Set 3
- 4 =
- 5 =
- 6 = Failure - Min Recall
- 7 = Failure - Max Recall
- 8 = Report on Failure

	C-1 Pin #
Flash Sense	81
External Permit - 1	
External Permit - 2	
External Permit - 3	
Exclusive Ped Omit	
Max. Term Inhibit	
Max. 2	
External Lag Phases	
External Max. Recall	
Stop Time	82
Manual Control Enable	
Manual Cont. Advance	
External Min. Recall	

**General Inputs**

	C-1 Pin #
Railroad - 1	51
Railroad - 2	52
Special Event - 1	
Special Event - 2	
Gate Down	
EV - A	71
EV - B	72
EV - C	73
EV - D	74

**Preempt Inputs**

	C-1 Pin #
Gate Down	
Door Ajar	
UPS Battery	
UPS Power	
Cabinet Temperature	

**Alarm Inputs**

	C-1 Pin #
Plan 1	
Plan 2	
Plan 3	
Plan 4	
Plan 5	
Plan 6	
Plan 7	
Plan 8	
Plan 9	
Free	
Flash	

**Coordination Plan Inputs**

	C-1 Pin #
Phase Bank - 2	
Phase Bank - 3	
Detector Set - 2	
Detector Set - 3	
Overlap Vehicle Set - 2	
Overlap Vehicle Set - 3	

**Bank & Set Inputs**

	C-1 Pin #
Alarm - 1	
Alarm - 2	
Alarm - 3	
Alarm - 4	

	C-1 Pin #
Phase - 1	
Phase - 2	
Phase - 3	
Phase - 4	
Phase - 5	
Phase - 6	
Phase - 7	
Phase - 8	

**FYA Inhibit**

	C-1 Pin #
Advance Warning - 1	
Advance Warning - 2	
Detector Failure	
Flasher - Alternating 1	
Flasher - Alternating 2	
Fast Flasher	
On Line	
Exclusive - Walk	
Exclusive - Don't Walk	

**General Outputs**

	C-1 Pin #
Output - 1	
Output - 2	
Output - 3	
Output - 4	
Output - 5	
Output - 6	
Output - 7	
Output - 8	

**Time of Day Outputs**

	C-1 Pin #
Plan - 1	
Plan - 2	
Plan - 3	
Plan - 4	
Plan - 5	
Plan - 6	
Plan - 7	
Plan - 8	
Plan - 9	
Free	

**Coordination Plan Out**

	Ped Phase
Ped 2-P Loadswitch	2
Ped 4-P Loadswitch	4
Ped 6-P Loadswitch	6
Ped 8-P Loadswitch	8

**Ped Loadswitch Assignment**

	C-1 Pin #
Dial - 2	
Dial - 3	
Offset - 1	
Offset - 2	
Offset - 3	
Free	
Flash	

**Seven Wire Outputs**

	C-1 Pin #	
	On	Flash
Railroad - 1		
Railroad - 2		
Special Event - 1		
Special Event - 2		
Preempt Failure		
EV - A		
EV - B		
EV - C		
EV - D		
Any Preempt		

**Preemption Outputs**

	C-1 Pin #
Output - 1	
Output - 2	
Output - 3	
Output - 4	
Output - 5	
Output - 6	
Output - 7	
Output - 8	

**Special Event Outputs**

	C-1 Pin #
Phase - 1	
Phase - 2	
Phase - 3	
Phase - 4	
Phase - 5	
Phase - 6	
Phase - 7	
Phase - 8	

**FYA PPLT Outputs**

	C-1 Pin #
Output - 1	
Output - 2	
Output - 3	
Output - 4	
Output - 5	
Output - 6	
Output - 7	
Output - 8	

**Special Function Output**

	Phase Number							
	1	2	3	4	5	6	7	8
Red								
Yellow								
Green								
Walk								
Don't Walk								

**Phase Output Redirection**

	Overlap Number							
	1	2	3	4	5	6	7	8
Red								
Yellow								
Green								

**Overlap Output Redirection**

Event	Day of Week	Season	Hour	Minute	Plan	Offset
0						
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						

Time Base Coordination Events

Event	Day of Week	Season	Hour	Minute	Funct.	Phase / Bits
0						
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						

Time of Day Function Events

- TOD Functions
- 0 = Permitted Phases
  - 1 = Red Lock
  - 2 = Yellow Lock
  - 3 = Vehicle Min Recall
  - 4 = Ped Recall
  - 5 =
  - 6 = Rest In Walk
  - 7 = Red Rest
  - 8 = Double Entry
  - 9 = Vehicle Max Recall
  - 10 = Soft Recall
  - 11 = Max Extension 2
  - 12 = Conditional Service
  - 13 = Lag Free Phases
  - 14, Bit 1 = Local Override
  - 14, Bit 4 = Disable Det Off Monitoring
  - 15 = TOD Outputs

#	Holiday Type	Day	Month	Year
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
31				

**Holiday Dates**

Event	Holiday Type	Hour	Minute	Plan	Offset
0					
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					

**Holiday Time Base Coordination Events**

Event	Holiday Type	Hour	Minute	Funct.	Phase / Bits
0					
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					

**Holiday Time of Day Function Events**

Season #	Start Month	Start Day	End Month	End Day
1	1	1	12	31
2				
3				
4				
5				
6				
7				
8				

**Season Definitions**

Red Start Time	5.0
Yellow Start Phases	4 8
First Green Phases	2 6
Startup Vehicle Calls	12 456 8
Startup Ped Calls	2 4 6 8

**Startup**

Max ON Time	5
Max OFF Time	15
Chatter	45

**Detector Check**

	Sign 1	Sign 2
Phase Number		
Time Before Yellow		

**Advance Warning Signs**

Flash Entry Phases	
Flash Phases Yellow	
Flash Overlaps Yellow	
Flash Type	

**Flash Setup**

Exclusive Phases	
Protect / Permissive	
Disable Yellow Range	
Extra One	1 3 5
Lag Phases - Free	2 4 6 8

**Configuration**

Permitted Phases	12 456 8
Restricted Phases	
Disable Overlap Range	
Extra Two	
External Permit 1	
External Permit 2	
External Permit 3	

**Configuration**

Keyboard Beep	
Backlight Timeout	
Spec Evnt 1 - Ltd Serv Interval	
Spec Evnt 2 - Ltd Serv Interval	
Red Start	6.0
Flash Start	
Red Revert	6.0

**Miscellaneous**

Spring Month (Begin)	
Spring Week (Begin)	
Fall Month (End)	
Fall Week (End)	

**Daylight Savings Time**

Manual Plan	14
Manual Offset	

**Manual**

Manual Plan  
 1 thru 9 =  
 Coordination  
 Plan 1 thru 9  
 14 = Free  
 15 = Flash

- |  |  |
|--|--|
| <p><u>Extra One</u></p> <ul style="list-style-type: none"> <li>1 =</li> <li>2 =</li> <li>3 = Auto Daylight Savings</li> <li>4 = Solid FDW on EV</li> <li>5 = Extended Status</li> <li>6 = International Ped</li> <li>7 =</li> <li>8 =</li> </ul> | <p><u>Extra Two</u></p> <ul style="list-style-type: none"> <li>1 =</li> <li>2 =</li> <li>3 = Disable Min Walk</li> <li>4 = QuicNet/4 System</li> <li>5 = Ignor P/P on EV</li> <li>6 =</li> <li>7 =</li> <li>8 =</li> </ul> |
|--|--|

Address				
Area Number				
Area Address				
IP Port				
IP Address				
Subnet Mask				
Gateway				

**Ethernet Port Address**

	Port 1	Port 2	Port 3	Port 4
Address				
Area Number				
Area Address				
Comm Time Out				
CTS Delay				
RTS Hold				
Baud Rate				
Data Format				

**Communications Parameters**

Event	Day of Week	Hour	Minute	Headway	Direction
0					
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					

**Bus Headway Schedule**

Approach	A	B	C	D
Travel Time				
Passage				
Extension				
Phases				

**Bus Approach**

	A	B	C	D
Phase 1				
Phase 2				
Phase 3				
Phase 4				
Phase 5				
Phase 6				
Phase 7				
Phase 8				

**Non-Priority Phase Maximums**



APPLE VALLEY - APPLE VALLEY RD. & PIMLICO RD.

Configuration Phase Sequence Page 1

Phase Ring (MM)1-1-1

Phase															
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	1	1	1	2	2	2	2	1	1	2	2	1	1	2	2

Hardware Alternate Sequence Enable: No

Phase Ring Sequence

Sequence	Ring	Phase															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	Barrier Mode	B		B		B		B		B							
1	1	1	2	3	4	9	10	13	14	0	0	0	0	0	0	0	0
1	2	5	6	7	8	11	12	15	16	0	0	0	0	0	0	0	0
2	1	2	1	3	4	10	9	13	14	0	0	0	0	0	0	0	0
2	2	5	6	7	8	11	12	15	16	0	0	0	0	0	0	0	0
3	1	1	2	4	3	9	10	14	13	0	0	0	0	0	0	0	0
3	2	5	6	7	8	11	12	15	16	0	0	0	0	0	0	0	0
4	1	2	1	4	3	10	9	14	13	0	0	0	0	0	0	0	0
4	2	5	6	7	8	11	12	15	16	0	0	0	0	0	0	0	0
5	1	1	2	3	4	9	10	13	14	0	0	0	0	0	0	0	0
5	2	6	5	7	8	12	11	15	16	0	0	0	0	0	0	0	0
6	1	2	1	3	4	10	9	13	14	0	0	0	0	0	0	0	0
6	2	6	5	7	8	12	11	15	16	0	0	0	0	0	0	0	0
7	1	1	2	4	3	9	10	14	13	0	0	0	0	0	0	0	0
7	2	6	5	7	8	12	11	15	16	0	0	0	0	0	0	0	0
8	1	2	1	4	3	10	9	14	13	0	0	0	0	0	0	0	0
8	2	6	5	7	8	12	11	15	16	0	0	0	0	0	0	0	0
9	1	1	2	3	4	9	10	13	14	0	0	0	0	0	0	0	0
9	2	5	6	8	7	11	12	16	15	0	0	0	0	0	0	0	0
10	1	2	1	3	4	10	9	13	14	0	0	0	0	0	0	0	0
10	2	5	6	8	7	11	12	16	15	0	0	0	0	0	0	0	0
11	1	1	2	4	3	9	10	14	13	0	0	0	0	0	0	0	0
11	2	5	6	8	7	11	12	16	15	0	0	0	0	0	0	0	0
12	1	2	1	4	3	10	9	14	13	0	0	0	0	0	0	0	0
12	2	5	6	8	7	11	12	16	15	0	0	0	0	0	0	0	0
13	1	1	2	3	4	9	10	13	14	0	0	0	0	0	0	0	0
13	2	6	5	8	7	12	11	16	15	0	0	0	0	0	0	0	0
14	1	2	1	3	4	10	9	13	14	0	0	0	0	0	0	0	0
14	2	6	5	8	7	12	11	16	15	0	0	0	0	0	0	0	0
15	1	1	2	4	3	9	10	14	13	0	0	0	0	0	0	0	0
15	2	6	5	8	7	12	11	16	15	0	0	0	0	0	0	0	0
16	1	2	1	4	3	10	9	14	13	0	0	0	0	0	0	0	0
16	2	6	5	8	7	12	11	16	15	0	0	0	0	0	0	0	0

Phase  
Compatibility  
(MM)1-1-2

Phase 1	Phase 2
1	5
1	6
2	5
2	6
3	7
3	8
4	7
4	8
9	11
9	12
10	11
10	12
13	15
13	16
14	15
14	16

Phase Direction  
Descriptions

Phase	Description
1	SBLT
2	NB
4	EB
5	NBLT
6	SB
8	WB

Overlap Direction  
Descriptions

Overlap	Description
---------	-------------

Administration (MM)1-7-1

Enable CRC Check: No

CRC: 0000

Request Download Program Data: No

Enable Automatic Backup to Datakey: No

PROGRAM REFERENCE CARD

INTERSECTION: Apple Valley Rd. & Pimlico Rd Date Prepared: 1-27-17 By: \_\_\_\_\_

T.S. No.: \_\_\_\_\_ Date Implemented: \_\_\_\_\_ By: \_\_\_\_\_

CONTROLLER SUBMENU

2-1. CONTROLLER TIMING DATA

TIMING PLAN	1	PHASE DATA															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
MINIMUM GREEN		3	12	0	4	3	12	0	4								
BICYCLE MIN GREEN																	
CONDITIONAL SERVICE MIN GRN																	
DELAY GREEN																	
WALK			7				7		7								
WALK 2																	
WALK MAX																	
PEDESTRIAN CLEARANCE			17				21		29								
PEDESTRIAN CLEARANCE 2																	
PEDESTRIAN CLEARANCE MAX																	
PEDESTRIAN CARRY OVER																	
VEHICLE EXTENSION		1.5	0.1	0.0	2.0	1.5	0.1	0.0	2.0								
VEHICLE EXTENSION 2																	
MAX 1		25	50	0	30	15	50	0	30								
MAX 2																	
MAX 3																	
DYNAMIC MAX																	
DYNAMIC STEP																	
YELLOW		3.6	5.5	3.0	4.1	3.6	5.5	3.0	3.6								
RED CLEARANCE		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0								
RED MAX																	
RED REVERT		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0								
ACTUATIONS BEFORE (ACT B4)																	
SEC/ACTUATION																	
MAX ADDED INITIAL (MAX INI)																	
TIME BEFORE GAP REDUCTION																	
CARS WAITING B4 REDUCTION																	
STEP TO REDUCE (STPTDUC)																	
TIME TO REDUCE (TTREDUC)																	
MINIMUM GAP																	

Comments:

APPLE VALLEY - APPLE VALLEY RD. & PIMLICO RD.

Controller Start/Fash (MM) 2-5

Startup

Phase	Phase Setting
4	Y
8	Y

Overlap
A
B
C
D

Flash > Mon: No  
Flash Time: 0  
All Red: 4  
Power Start Sequence: 1

Automatic Flash

Entry Phase
4
8

Exit Phase
4
8

Overlap Exit
A
B
C
D

Flash > Mon: No  
Exit Flash Interval: W  
Minimum Auto Flash: 8  
Minimum Recall: No  
Cycle Through Phase: No

APPLE VALLEY - APPLE VALLEY RD. & PIMLICO RD.

**Controller Options**

**Controller Options (MM)2-6-1**

Phase	Flashing Green Phase	Guaranteed Passage	Non Act 1	Non Act 2	Dual Entry	Conditional Service	Conditional Reservice	Ped Reservice	Rest In Walk	Flashing Walk	Ped Clear Yellow	Ped Clear Red	I GRN + Veh Ext
4	No	No	No	No	Yes	No	No	No	No	No	No	No	No
8	No	No	No	No	Yes	No	No	No	No	No	No	No	No

Ped Clear Protect: Off

Red Revert: 2.0

**Act Pre-Time (MM)2-7**

Pre-Time Mode Enable: No

Free Input Enables Pre-Timed: Yes

**Pre-Timed Phase**

Phase Recall Options (MM)2-8

Plan	Phase	Lock Detector	Vehicle Recall	Ped Recall	Max Recall	Soft Recall	No Rest	AI Calc
1	2	No	Yes	No	No	No	No	No
1	6	No	Yes	No	No	No	No	No

APPLE VALLEY - APPLE VALLEY RD. & PIMLICO RD.

Preemptor Preempt Plan (MM)4-1

Preempt Phases

Preempt	Phase	Track Clear Veh	Dwell Veh	Dwell Ped	Cycling Veh	Cycling Ped	Exit Phase	Exit Calls	Special Function
3	1	No	Yes	No	No	No	No	No	No
3	6	No	Yes	No	No	No	No	No	No
4	4	No	Yes	No	No	No	No	No	No
4	8	No	Yes	No	No	No	No	No	No
5	2	No	Yes	No	No	No	No	No	No
5	5	No	Yes	No	No	No	No	No	No

Preempt Overlaps

Preempt	Overlap	Track Clear	Enable Trailing	Dwell Overlap	Cycling Overlap
---------	---------	-------------	-----------------	---------------	-----------------

Preempt	Enable	Preempt Override	Interlock Enable	Detector Lock	Delay	Inhibit	Override Flash	Duration	CLR > GRN
1	No	Yes	No	Yes	0	0	No	0	No
2	No	Yes	No	Yes	0	0	No	0	No
3	Standard	Yes	No	Yes	0	0	No	0	No
4	Standard	Yes	No	Yes	0	0	No	0	No
5	Standard	Yes	No	Yes	0	0	No	0	No
6	Standard	Yes	No	Yes	0	0	No	0	No
7	No	Yes	No	Yes	0	0	No	0	No
8	No	Yes	No	Yes	0	0	No	0	No
9	No	Yes	No	Yes	0	0	No	0	No
10	No	Yes	No	Yes	0	0	No	0	No

Preempt	Term Overlap Asap	PC Through Yellow	Terminate Phase	Ped Dark	Track Clearance Re-service	Dwell Flash	Linked Pmt	Flash Exit Color	Preempt To Coord
1	No	No	No	No	No	Off	0	Green	No
2	No	No	No	No	No	Off	0	Green	No
3	No	No	No	No	No	Off	0	Green	No
4	No	No	No	No	No	Off	0	Green	No
5	No	No	No	No	No	Off	0	Green	No
6	No	No	No	No	No	Off	0	Green	No
7	No	No	No	No	No	Off	0	Green	No
8	No	No	No	No	No	Off	0	Green	No
9	No	No	No	No	No	Off	0	Green	No
10	No	No	No	No	No	Off	0	Green	No

Preempt	Exit Timing Plan	Reservice	Free During Pmt Ring 1	Free During Pmt Ring 2	Free During Pmt Ring 3	Free During Pmt Ring 4
1	0	0	No	No	No	No
2	0	0	No	No	No	No
3	0	0	No	No	No	No
4	0	0	No	No	No	No
5	0	0	No	No	No	No
6	0	0	No	No	No	No
7	0	0	No	No	No	No
8	0	0	No	No	No	No
9	0	0	No	No	No	No
10	0	0	No	No	No	No

Preempt	Entrance Walk	Entrance Ped Clear	Entrance Min Green	Entrance Yellow	Entrance Red	Track Clear Min Green	Gate Down Ext Green	Gate Down Max Green	Track Clear Yellow	Track Clear Red
1	0	255	5	4.0	1.0	0	0	0	4.0	1.0
2	0	255	5	4.0	1.0	0	0	0	4.0	1.0
3	0	255	5	5.5	1.0	0	0	0	4.0	1.0
4	0	255	5	5.5	1.0	0	0	0	4.0	1.0
5	0	255	5	5.5	1.0	0	0	0	4.0	1.0
6	0	255	5	4.0	1.0	0	0	0	4.0	1.0
7	0	255	5	4.0	1.0	0	0	0	4.0	1.0
8	0	255	5	4.0	1.0	0	0	0	4.0	1.0
9	0	255	5	4.0	1.0	0	0	0	4.0	1.0
10	0	255	5	4.0	1.0	0	0	0	4.0	1.0

Preempt	Min Dwell Time	Extend Preempt Input Time	Max Preempt Call Time	Exit Yellow Time	Exit Red Time	Preempt Active Out	Preempt Active Dwell	Other Priority Preempt	Non-Priority Preempt
1	0	0.0	0	4.0	1.0	On	No	Off	Off
2	0	0.0	0	4.0	1.0	On	No	Off	Off
3	0	0.0	0	4.0	1.0	On	No	Off	Off
4	0	0.0	0	4.0	1.0	On	No	Off	Off
5	0	0.0	0	4.0	1.0	On	No	Off	Off
6	0	0.0	0	4.0	1.0	On	No	Off	Off
7	0	0.0	0	4.0	1.0	On	No	Off	Off
8	0	0.0	0	4.0	1.0	On	No	Off	Off
9	0	0.0	0	4.0	1.0	On	No	Off	Off
10	0	0.0	0	4.0	1.0	On	No	Off	Off



APPLE VALLEY - APPLE VALLEY RD. & PIMLICO RD.

**Detectors**

Detectors Page 1

Vehicle Detectors Setup (MM)6-1

Vehicle Plan	Detector Number	Called
1	1	2
1	3	5
1	4	2
1	5	6
1	7	1
1	8	6
1	9	4
1	11	4
1	13	8
1	15	8

Vehicle Detector Setup (MM)6-2 continued

Detector Number	ECPI	TS2 Detector	Detector Description
1	0	Yes	PH 2 NB ADV 1,2
3	0	Yes	PH 5 NBLT
4	0	Yes	PH 2 NB LIMIT 1,2
5	0	Yes	PH 6 SB ADV 1,2
7	0	Yes	PH 1 SBLT
8	0	Yes	PH 6 SB LIMIT 1,2
9	0	Yes	EBLT THRU LIMIT
11	0	Yes	EBRT PH 4 ADV
13	0	Yes	WBLT THRU PH 8 LIMIT
15	0	Yes	WBRT PH 8 ADV

Vehicle Detector Setup (MM)6-2 continued

Detector Number	Vehicle Plan	Assigned Phase	Switch Phase	Extend Time	Delay Time	Queue Limit	Yellow Lock	Added Option	Call Option	Passage Option	Queue Option	NTCIP Occupancy	NTCIP Volume
1	1	2	0	5.0	0.0	0	No	No	Yes	Yes	No	No	No
3	1	5	0	0.0	0.0	0	No	No	Yes	Yes	No	No	No
4	1	2	0	0.5	0.0	0	No	No	Yes	Yes	No	No	No
5	1	6	0	5.0	0.0	0	No	No	Yes	Yes	No	No	No
7	1	1	0	0.0	0.5	0	No	No	Yes	Yes	No	No	No
8	1	6	0	0.5	0.0	0	No	No	Yes	Yes	No	No	No
9	1	4	0	0.0	0.0	0	No	No	Yes	Yes	No	No	No
11	1	4	0	0.0	10.0	0	No	No	Yes	Yes	No	No	No
13	1	8	0	0.0	0.0	0	No	No	Yes	Yes	No	No	No
15	1	8	0	0.0	10.0	0	No	No	Yes	Yes	No	No	No

Ped and System Detector Options (MM)6-4

Phase Ped Detector

Local Ped Detector	Number
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16

Local System Detector

Local System Detector	Number
-----------------------	--------

Programming Sheets for Blank Timing Sheets

~~10-24-19~~  
9/17/2020 V.P.A.

Bear Valley Rd. @ Apple Valley Rd.

Phase Times [1.1.1] <sup>EB</sup> <sup>SB</sup> <sup>WB</sup> <sup>SNB</sup>

	WB 1 LT	2	NB 3 LT	4	EB 6 LT	6	SB 7 LT	8	9	10	11	12	13	14	15	16
Min Grn	3	10	3	10	3	10	3	10								
Gap, Ext			20				20									
Max 1	25	70	15	35	45	70	15	35								
Max 2																
Yel Cir	3.6	5.2	3.6	5.2	3.6	5.2	3.6	5.2								
Red Cir	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0								
Walk		7		7		7		7								
Ped Cir		32-35		35		33		35								
Red Revt	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0								
Add Init																
Max Init																

Gap Reduction	WB 1 LT	2	NB 3 LT	4	EB 6 LT	6	SB 7 LT	8	9	10	11	12	13	14	15	16
Time B4		20		12		20		12								
Cars B4																
Time To		20		12		20		12								
ReducBy		0.1		0.1		0.1		0.1								
Min Gap	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0								
DyMaxLim																
Max Step																

Phase Times [1.1.1] *BEAR VALLEY Rd + LOW'S ENTRANCE*

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Min Grn		10		3	5	10										
Gap, Ext		3.0		2.0	3.0	3.0										
Max 1		40		25	15	40										
Max 2		40		25	15	40										
Yel Clr		5.5		3.6	3.6	5.5										
Red Clr		1.5		1.0	1.5	1.0										
Walk				5		5										
Ped Clr				20		10										
Red Revt		6.0		6.0	6.0	6.0										
Add Init																
Max Init																

Gap Reduction	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time B4																
Cars B4																
Time To																
ReducBy																
Min Gap																
DyMaxLim																
Max Step																

# BEAR VALLEY ROAD AT LOWE'S ENTRANCE

## Phase Options [1.1.2]

	1	2	3	4	5	6	7	8	9	10	11	13	14	15	16
Enable		X		X	X	X									
Min Recall		X				X									
Max Recall															
Red Recall															
Soft Recall															
Lock Cells															
Flash Entry															
Flash Exit															
Signal Entry		X				X									
Variable Sim Gap		X		X	X	X									
Vehicle Passage															
Lost in Walk															
Second Service															
Non-Act 1															
Non-Act 2															
Added Init Calc	S	S	S	S	S	S	S	S							









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Programming Sheets

Unit Parameters [1.2.1]

BEAR VALLEY ROAD AT LOWE'S ENTRANCE

Start Up Flash (s)	10	Red Revert	3.0
Backup Time (m)	0	Auto Ped Clear	OFF
Local Flash Start	OFF	Display Time	10
Allow <3 Sec Yel	OFF	Tone Disable	OFF
Allow Skip Yellow	OFF	H/W Station ID	
Start Red Time	5.0	Phase Mode	STD8
Disable Init Ped	OFF	Enable Run	ON
TOD Dim Enable	OFF	Diamond Mode	48 (PHASE)
SDLC Retry Time	0	TS2 Det Flts	OFF
Stop TM Over Pmpt	OFF	Free Ring Seq	1
Feature Profile	0	I/O Mode	AUTO
Max Seek Trak Tim	0	Max Cycle Tm	0
Max Seek Dwel Tim	0	CycFit Actn	ALARM
Prmpt/Ext Coor Out-	EXT.	Invert Rail In	OFF

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Ring Sequence [1.2.4]

BEAR VALLEY ROAD AT LOWE'S ENTRANCE

Seq #	Ring
1	1
1	2
1	3
1	4
2	1
2	2
2	3
2	4
3	1
3	2
3	3
3	4
4	1
4	2
4	3
4	4
5	1
5	2
5	3
5	4
6	1
6	2
6	3

Sequence of Phases

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

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Programming Sheets

6	4
7	1
7	2
7	3
7	4
8	1
8	2
8	3
8	4
9	1
9	2
9	3
9	4
10	1
10	2
10	3
10	4
11	1
11	2
11	3
11	4
12	1
12	2
12	3
12	4

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

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**Programming Sheets**

13 1  
 13 2  
 13 3  
 13 4  
 14 1  
 14 2  
 14 3  
 14 4  
 15 1  
 15 2  
 15 3  
 15 4  
 16 1  
 16 2  
 16 3  
 16 4

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

**Ring Parameters + [1.2.5]**

Ring Input Map

Ring #	1	2	3	4
Use Ring Input #	1	2	1	2



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Chan/SDLC, Parameters [1.3.3] *BEAR VALLEY ROAD AT LOWE'S ENTRANCE*

Chan 17-24 Mapping

DEFAULT
TX2-V14
<i>SINGLE TFBII</i>

D Conn Mapping

ALT T&F Btu Map

Chan/SDLC, MMU Map [1.3.5]

MMU-to-Controller Channel Map

MMU Chan	1	2	3	4	5	6	7	8
1-8	1	2	3	4	5	6	7	8
9-16	9	10	11	12	13	14	15	16

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Alarms, Parameters [1.4.1]

BEAR VALLEY ROAD AT LOWES ENTRANCE

Auto Flash Parameter

Mode	CHANNEL
Source	D-CONN

Clearance Times

Yellow	3.5
Red	1.5

Alarms, Phases/Overlaps [1.4.2]

Auto Flash

Flash Yellow

Phases

(more)

Overlaps

(more)


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BEAR VALLEY ROAD AT LOWE'S ENTRANCE

Preemption 1, Times [3.1]

Delay	0	MinGrn	4	Track Grn	0
MinDura	5	MinWik	0	Min Dwell	5
MaxPres	120	PedClr	0		

Preemption 1, Phases [3.2]

Track Veh									
Dwell Veh	2	5							
Dwell (more)									
Dwell Ped									
Exit	2	6							

Preemption 1, Options [3.3]

Lock Input	ON
Override Auto Flash	ON
Override Higher # Preempt	ON
Flash in Dwell	OFF
Link to Preempt #	0



**Preemption 1, Times+ [3.4]**

Extend Dwell	0
Return Max	0

PedClr	0
Yel	5
Red	0.5

**Preemption 1, Overlaps+ [3.5]**

Track							
(more)							
Dwell							
(more)							

**Preemption 1, Options+ [3.6]**

Enable	ON
Type	EMERG
Output	TS2

Pattern	0
Skip if Override	OFF
Coord+Preempt	OFF

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**Preemption 2, Times [3.1]**

Delay	0
MinDura	5
MaxPres	120

MinGrn	4
MinWlk	0
PedClr	10

Track Grn	0
Min Dwell	5

**Preemption 2, Phases [3.2]**

Track Veh							
Dwell Veh	2	6					
Dwell (more)							
Dwell Ped							
Exit	2	6					

**Preemption 2, Options [3.3]**

Lock Input	ON
Override Auto Flash	ON
Override Higher # Preempt	ON
Flash in Dwell	OFF
Link to Preempt #	0

**Preemption 2, Times+ [3.4]**

Extend Call	0	PedClr	0
Return Max	0	Yel	5
		Red	0.5

**Preemption 2, Overlaps+ [3.5]**

Track								
(more)								
Dwell								
(more)								

**Preemption 2, Options+ [3.6]**

Enable	ON	Pattern	0
Type	EMERG	Skip if Override	OFF
Output	TS2	Coord+Preempt	OFF

**Preemption 3, Times [3.1]**

Delay	0	MinGrn	4	Track Grn	0
MinDura	5	MinWlk	0	Min Dwell	5
MaxPres	120	PedClr	20		

**Preemption 3, Phases [3.2]**

Track Veh									
Dwell Veh	4								
Dwell (more)									
Dwell Ped									
Exit	4								

**Preemption 3, Options [3.3]**

Lock Input	ON
Override Auto Flash	ON
Override Higher # Preempt	ON
Flash in Dwell	OFF
Link to Preempt #	0

**Preemption 3, Times+ [3.4]**

Extend Dwell	0	PedClr	0
Return Max	0	Yel	3
		Red	0

**Preemption 3, Overlaps+ [3.5]**

Track								
(more)								
Dwell								
(more)								

**Preemption 3, Options+ [3.6]**

Enable	ON	Pattern	0
Type	EMERG	Skip if Override	OFF
Output	TS2	Coord+Preempt	OFF

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Programming Sheets

**Preemption 4, Times [3.1]**

Delay	0
MinDura	5
MaxPres	120

MinGrn	4
MinWik	0
PedCir	20

Track Grn	0
Min Dwell	5

**Preemption 4, Phases [3.2]**

Track Veh									
Dwell Veh	4								
Dwell (more)									
Dwell Ped									
Exit	4								

**Preemption 4, Options [3.3]**

Lock Input	ON
Override Auto Flash	ON
Override Higher # Preempt	ON
Flash in Dwell	OFF
Link to Preempt #	0

**Preemption 4, Times+ [3.4]**

Extend Dwell	0	PedCir	0
Return Max	0	Yel	3.0
		Red	0

**Preemption 4, Overlaps+ [3.5]**

Track								
(more)								
Dwell								
(more)								

**Preemption 4, Options+ [3.6]**

Enable	OFF	Pattern	0
Type	EMERG	Skip If Override	OFF
Output	TS2	Coord+Preempt	OFF

**Preemption 5, Times [3.1]**

Delay		MinGrn		Track Grn	
MinDura		MinWlk		Min Dwell	
MaxPres		PedClr			

**Preemption 5, Phases [3.2]**

Track Veh								
Dwell Veh								
Dwell (more)								
Dwell Ped								
Exit								

**Preemption 5, Options [3.3]**

Lock Input	ON
Override Auto Flash	ON
Override Higher # Preempt	ON
Flash in Dwell	ON
Link to Preempt #	0



**Preemption 5, Times + [3.4]**

Extend Dwell		PedClr	
Return Max		Yel	
		Red	

**Preemption 5, Overlaps + [3.5]**

Track									
(more)									
Dwell									
(more)									

**Preemption 5, Options + [3.6]**

Enable	OFF	Pattern	0
Type	EMERG	Skip If Override	OFF
Output	TS2	Coord+Preempt	OFF



BEAR VALLEY ROAD AT LOWE'S ENTRANCE

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Detector, Vehicle Options 1-16 [5.2]

Programming Sheets

et#	Call	Extend	Queue	Add Init	Red Lock	Yel Lock	Occup	Volume
1	X	X					X	X
2	X	X					X	X
3	X	X					X	X
4	X	X					X	X
5	X	X					X	X
6	X	X					X	X
7	X	X					X	X
8	X	X					X	X
9	X	X					X	X
10	X	X					X	X
11	X	X					X	X
12	X	X					X	X
13	X	X					X	X
14	X	X					X	X
15	X	X					X	X
16	X	X					X	X

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Programming Sheets

Detector, Ped Parameters [5.4]

Det#	Call	NoAct	MaxPres	ErrCnt
1				
2	2			
3				
4	4			

Det#	Call	NoAct	MaxPres	ErrCnt
5				
6	6			
7				
8	8			



Sequence 12

Ring 1	2	1	4	3	10	9	14	13	.	.	.	.	.	.	.	.
Ring 2	5	6	8	7	11	12	16	15	.	.	.	.	.	.	.	.

Sequence 13

Ring 1	1	2	3	4	9	10	13	14	.	.	.	.	.	.	.	.
Ring 2	6	5	8	7	12	11	16	15	.	.	.	.	.	.	.	.

Sequence 14

Ring 1	2	1	3	4	10	9	13	14	.	.	.	.	.	.	.	.
Ring 2	6	5	8	7	12	11	16	15	.	.	.	.	.	.	.	.

Sequence 15

Ring 1	1	2	4	3	9	10	14	13	.	.	.	.	.	.	.	.
Ring 2	6	5	8	7	12	11	16	15	.	.	.	.	.	.	.	.

Sequence 16

Ring 1	2	1	4	3	10	9	14	13	.	.	.	.	.	.	.	.
Ring 2	6	5	8	7	12	11	16	15	.	.	.	.	.	.	.	.

Phases In Use / Exclusive PED (MM)1-2

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Phases in Use	X	X				X		X								
Exclusive PED																

Phase Compatibility (MM)1-1-2

Phase	Compatible Phase
n/a	Barrier Mode

Phase and Overlap Descriptions

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	WBLT	EB				WB		NB								
Overlap	A	B	C	D	E	F	G	H	I	J	L	K	L	M	N	O
Description																

Administration (MM)1-7-1

Enable CU/Cabinet Interlock CRC	No
Request Download Controller Data	No
Controller Database CRC	0000
Enable Automatic Backup to Datakey	No

Backup Prevent (MM)1-1-3

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
<b>Timing /</b>	<b>1</b>	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<b>Backup</b>	<b>2</b>	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>3</b>	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>4</b>	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>5</b>	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>6</b>	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>7</b>	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>8</b>	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>9</b>	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>10</b>	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>11</b>	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>12</b>	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>13</b>	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>14</b>	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>15</b>	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>16</b>	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Simultaneous Gap (MM)1-1-4

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	<b>1</b>	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>2</b>	.	.	.	.	X	.	.	.	.	.	.	.	.	.	X
	<b>3</b>	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>4</b>	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>5</b>	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Phase	<b>6</b>	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.
Must	<b>7</b>	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Gap	<b>8</b>	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
With	<b>9</b>	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Phase	<b>10</b>	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>11</b>	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>12</b>	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>13</b>	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>14</b>	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>15</b>	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>16</b>	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Disable</b>	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Load Switch Assignments (MMU Channel) (MM)1-3

Phase / Type  
Overlap

Dimming

Power Up

Auto

Flash  
Together

			Red	Yellow	Green	Dark	Auto	Red	Yellow	Dark	Red	Yellow
1	1	V				+	X				X	
2	2	V				+	X				X	X
3	0					+	X				X	
4	0					+	X				X	X
5	0					-	X				X	
6	6	V				-	X				X	X
7	0					-	X				X	
8	8	V				-	X				X	X
9	0					+	X					
10	0					+	X					
11	0					-	X					
12	0					-	X					
13	2	P				+	X				X	
14	0					-	X				X	X
15	0					+	X				X	
16	8	P				-	X				X	X





APPLE VALLEY - Bear Valley & Deep Creek (Active)

### Configuration Communications

#### Ethernet Port Configuration (MM)1-5-1 NTCIP Parameters (MM)1-5-5

Controller IP:	10.70.10.51	Backup Time:	0
Subnet Mask:	255.0.0.0	UDP Port:	501
Default Gateway IP:	0.0.0.0	Ethernet Priority:	1
Server IP:	10.70.10.1	Port 2 Priority:	4
		Port 3A Priority:	2
		Port 3B Priority:	3

#### Port Configuration (MM)1-5-2 to 1-5-4

Port	2 (C50S)	3A (C21S)	3B (C22S)
Protocol	NTCIP	NTCIP	ECPIP
Enable	Yes	No	Yes
Data Rate	9600	19.2K	1200
Data Parity Stop	8 N 1	8 N 1	8 0 1
Modem Setup String	None	None	None
User String			
Comm Port Address	1	0	10
System Detector 9-1	0	0	0
Telemetry Response Delay	0.0	0.0	0.9
Duplex Half/Full	Half	Full	Full
Flow Control	Yes	Yes	Yes
AB3418 NTCIP Group Address	0	0	0
AB3418 NTCIP Single Flag Enable	No	No	No
RTS to CTS Delay	0.0	0.0	3.0
RTS Turn Off Delay	0.0	0.0	2.0
Droupout Time	10	10	300
Early RTS	No	No	No
Telemetry Mode	FSK	FSK	FSK
Rail Road	0	0	0
Rail Road Line	0	0	0
ATCS Group	0	0	0
Wayside Device	0	0	0
ATCS Device	0	0	0
Wayside SubNode	0	0	0
ATCS SubNode	0	0	0

**ECPIP Parameters (MM)1-5-6**

Controller Address: 10

Expanded System Detector Address: 0

Local System Detector

Local System Detector	Number
--------------------------	--------

APPLE VALLEY - Bear Valley & Deep Creek (Active)

**Configuration Logging/Display**

**Event Logging (MM)1-6-1**

Critical RFE's	Yes	3 Critical RFE's in 24 Hours	Yes
MMU Flash Faults	Yes	Local Flash Faults	Yes
Non-Critical RFE's (Det/Test)	Yes	Detector Errors	Yes
Coordination Errors	Yes	Controller Download	Yes
Preempt	Yes	TSP	Yes
Power On/Off	Yes	Low Battery	Yes
Access	Yes	Data Change	Yes
Online/Offline	Yes		

Alarm Log	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Enable Logging	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

**Display Options (MM)1-7-2**

Key Click Enable:	No
Backlight Enable:	Yes
LED Mode:	Auto
Main Status Display Mode:	Basic
Screen Format:	Advanced
Trans Mode Pop-up Disable:	No

**Sign On (MM)8-5**

Sign On Message Line 1: Solutions that Move the World

Sign On Message Line 2:





APPLE VALLEY - Bear Valley & Deep Creek (Active)

**Controller Start/Flash (MM) 2-5**

**Startup**

Phase	Phase Setting
8	Y

Overlap

A  
B  
C  
D

Flash > Mon:	No
Flash Time:	0
All Red:	4
Power Start Sequence:	1
MUTCD Enabled:	No
MUTCD Yellow to Green:	n/a

**Automatic Flash**

Entry Phase

2  
6

Exit Phase

2  
6

Overlap Exit

A  
B  
C  
D

Flash > Mon:	No
Exit Flash Interval:	Y
Minimum Auto Flash:	8
Minimumin Recall:	No
Cycle Through Phase:	No







APPLE VALLEY - Bear Valley & Deep Creek (Active)

**Preemptor**

**Preempt Plan (MM)4-1**

Plan 4

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Overlap	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Track Clear Vehicle																
Track Clear Overlap																
Enable Trailing	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Dwell Vehicle								X								
Dwell Ped																
Dwell Overlap																
Cycling Vehicle																
Cycling Ped																
Cycling Overlap																
Exit Phase																
Exit Calls																
Special Function																

Enable	Yes	Preempt Override	Yes	Interlock Enable	No
Detector Lock	Yes	Delay	0	Inhibit	0
Override Flash	No	Duration	0	CLR > GRN	No
Term Overlap Asap	No	PC Through Yellow	No	Terminate Phase	No
Ped Dark	No	Track Clear Rsrv	No	Dwell Flash	Off
Linked Pmt	0	Flash Exit Color	Green	Exit Option	Off
Exit Timing Plan	0	Reservice	0	Fault Type	Hard

Ring	1	2	3	4
Free During Preempt	No	No	No	No

Timing	Walk	Ped Clr	Min Grn	Yellow	Red
Entrance	0	255	5	4.0	1.0
	Min Grn	Ext Grn	Max Grn	Yellow	Red
Track Clear	0	0	0	4.0	1.0
	Min	Pmt Ext	Max	Yellow	Red

	Dwell		Time		
Dwell / Cycle-Exit	0	0.0	0	4.0	1.0

Preempt Active Out On      Preempt Active Dwell      No

Other Priority Preempt On      Non-Priority Preempt      No

Inhibit Extension Time 0.0      Ped Priority Return      Off

Veh Priority Return Off      Queue Delay      Off

Conditional Delay Off

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Veh Pri Return % Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Plan 5

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Overlap	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Track Clear Vehicle																
Track Clear Overlap																
Enable Trailing	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Dwell Vehicle		X														
Dwell Ped																
Dwell Overlap																
Cycling Vehicle																
Cycling Ped																
Cycling Overlap																
Exit Phase																
Exit Calls																
Special Funciton																

Enable Yes      Preempt Override Yes      Interlock Enable No

Detector Lock Yes      Delay 0      Inhibit 0

Override Flash No      Duration 0      CLR > GRN No

Term Overlap Asap No      PC Through Yellow No      Terminate Phase No

Ped Dark No      Track Clear Rsrv No      Dwell Flash Off

Linked Pmt 0      Flash Exit Color Green      Exit Option Off

Exit Timing Plan 0      Reservice 0      Fault Type Hard

Ring	1	2	3	4
Free During Preempt	No	No	No	No

Timing	Walk	Ped Clr	Min Grn	Yellow	Red
Entrance	0	255	5	4.0	1.0
	Min Grn	Ext Grn	Max Grn	Yellow	Red
Track Clear	0	0	0	4.0	1.0
	Min Dwell	Pmt Ext	Max Time	Yellow	Red
Dwell / Cycle-Exit	0	0.0	0	4.0	1.0

Preempt Active Out On                      Preempt Active Dwell                      No  
Other Priority Preempt                      On                      Non-Priority Preempt                      No  
Inhibit Extension Time                      0.0                      Ped Priority Return                      Off  
Veh Priority Return                      Off                      Queue Delay                      Off  
Conditional Delay                      Off

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Veh Pri Return % Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Plan 6

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Overlap	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Track Clear Vehicle																
Track Clear Overlap																
Enable Trailing	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Dwell Vehicle	X					X										
Dwell Ped																
Dwell Overlap																
Cycling Vehicle																
Cycling Ped																
Cycling Overlap																
Exit Phase																
Exit Calls																
Special Function																

Enable                      Yes                      Preempt Override                      Yes                      Interlock Enable                      No  
Detector Lock                      Yes                      Delay                      0                      Inhibit                      0  
Override Flash                      No                      Duration                      0                      CLR > GRN                      No  
Term Overlap                      No                      PC Through Yellow                      No                      Terminate Phase                      No



APPLE VALLEY - Bear Valley & Deep Creek (Active)

**Detectors**

**Detectors Page 1**

Vehicle Detectors Setup (MM)6-1

Vehicle Plan	Detector Number	Called	Type
1	1	1	S
1	2	2	S
1	3	2	S
1	4	6	S
1	6	6	S
1	9	2	D
1	10	2	S
1	11	6	S
1	12	6	D
1	13	8	S
1	14	8	S
1	15	8	S
1	16	8	S

Vehicle Detector Setup (MM)6-2 continued

Detector Number	Type	TS2 Detector	Detector Description
1	S-STANDARD	Yes	PH 1 WBLT
2	S-STANDARD	Yes	PH 2 EB ADV 1
3	S-STANDARD	Yes	PH 2 EB MID
4	S-STANDARD	Yes	PH 4 WB MID
5	S-STANDARD	Yes	
6	S-STANDARD	Yes	PH 6 WB ADV 1
7	S-STANDARD	Yes	
8	S-STANDARD	Yes	
9	D-DISCONNECT	Yes	PH 2 EB LIMIT 1,2
10	S-STANDARD	Yes	PH 2 EB ADV 2
11	S-STANDARD	Yes	PH 6 WB ADV 2
12	D-DISCONNECT	Yes	PH 6 WB LIMIT 1,2
13	S-STANDARD	Yes	PH 8 NBLT
14	S-STANDARD	Yes	PH 8 NBRT
15	S-STANDARD	Yes	PH 8 NB ADV 1
16	S-STANDARD	Yes	PH 8 NB ADV 2

61	N-NTCIP	Yes
62	N-NTCIP	Yes
63	N-NTCIP	Yes
64	N-NTCIP	Yes

Vehicle Detector Setup (MM)6-2 continued

Det Num	Veh Det Plan	Phase	ECPI Log	Call Option	Delay Time	Ext Option	Extend Time / Passage Time	Queue Lim / Discon. Time	Use Added Initial	Cross Switch Phase	Lock In	NTCIP Vol.	NTCIP Occ.	Pmt Queue Delay
1	1	1	No	Yes	0.0	Passage	1.5	0	No	6	None	No	No	No
1	2	1	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
1	3	1	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
1	4	1	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
2	1	2	No	Yes	0.0	Passage	2.3	0	No	0	None	No	No	No
2	2	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
2	3	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
2	4	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
3	1	2	No	Yes	0.0	Passage	1.5	0	No	0	None	No	No	No
3	2	3	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
3	3	3	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
3	4	3	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
4	1	6	No	Yes	0.0	Passage	2.0	0	No	0	None	No	No	No
4	2	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
4	3	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
4	4	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
5	1	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
5	2	5	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
5	3	5	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
5	4	5	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
6	1	6	No	Yes	0.0	Passage	2.7	0	No	0	None	No	No	No
6	2	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
6	3	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
6	4	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
7	1	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
7	2	7	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
7	3	7	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
7	4	7	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
8	1	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
8	2	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
8	3	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
8	4	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
9	1	2	No	Yes	0.0	Queue	0.0	15	No	0	None	No	No	No
9	2	9	No	Yes	0.0	Queue	0.0	0	No	0	None	No	No	No

9	3	9	No	Yes	0.0	Queue	0.0	0	No	0	None	No	No	No
9	4	9	No	Yes	0.0	Queue	0.0	0	No	0	None	No	No	No
10	1	2	No	Yes	0.0	Passage	2.3	0	No	0	None	No	No	No
10	2	10	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
10	3	10	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
10	4	10	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
11	1	6	No	Yes	0.0	Passage	2.7	0	No	0	None	No	No	No
11	2	11	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
11	3	11	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
11	4	11	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
12	1	6	No	Yes	0.0	Queue	0.0	15	No	0	None	No	No	No
12	2	12	No	Yes	0.0	Queue	0.0	0	No	0	None	No	No	No
12	3	12	No	Yes	0.0	Queue	0.0	0	No	0	None	No	No	No
12	4	12	No	Yes	0.0	Queue	0.0	0	No	0	None	No	No	No
13	1	8	No	Yes	2.0	Passage	0.0	0	No	0	None	No	No	No
13	2	13	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
13	3	13	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
13	4	13	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
14	1	8	No	Yes	36.0	Passage	0.0	0	No	0	None	No	No	No
14	2	14	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
14	3	14	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
14	4	14	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
15	1	8	No	Yes	2.0	Passage	0.0	0	No	0	None	No	No	No
15	2	15	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
15	3	15	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
15	4	15	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
16	1	8	No	Yes	2.0	Passage	0.0	0	No	0	None	No	No	No
16	2	16	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
16	3	16	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
16	4	16	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

Ped Detector Options (MM)6-3

Phase Ped Detector (NTCIP)

Local Ped Detector	Number
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8



### Controller Submenu

#### MM-2-1 Controller Timing Data, sheet 1 of 2

TIMING PLAN _____																
PHASE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
MINIMUM GREEN	5	10	5	6	5	10	5	6								
BICYCLE MINIMUM GREEN																
CONDITIONAL SERVICE MIN. GREEN																
DELAYED GREEN																
WALK		7		7		7		7								
WALK 2																
WALK MAX																
PEDESTRIAN CLEARANCE		19		19		15		22								
PEDESTRIAN CLEARANCE 2																
PEDESTRIAN CLEARANCE MAX																
PEDESTRIAN CARRY OVER																
VEHICLE EXTENSION	<del>1.5</del>	5.0	<del>1.5</del>	3.0	<del>1.5</del>	5.0	<del>1.5</del>	3.0								
VEHICLE EXTENSION 2	2.0	2.0		2.0		2.0		2.0								
MAX1	20	45	20	30	20	45	25	30								
MAX2																
MAX3																
DYNAMIC MAX																
DYNAMIC MAX STEP																
YELLOW CHANGE	3.6	5.5	3.6	5.2	3.6	5.5	3.6	5.2								
RED CLEARANCE	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0								
RED MAX																
RED REVERT	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0								
ACTUATIONS BEFORE GAP REDUCTION																
SECONDS PER ACTIONS ADDED TO INITIAL																
MAXIMUM ADDED INITIAL GREEN																
TIME BEFORE GAP REDUCTION		12		10		12		10								
CARS WAITING BEFORE GAP REDUCTION																
STEP TO REDUCE																
TIME TO REDUCE TO MINIMUM																
MINIMUM GAP		2.0		2.0		2.0		2.0								

**Phase  
Compatibility  
(MM)1-1-2**

Phase 1	Phase 2
1	5
1	6
2	5
2	6
3	7
3	8
4	7
4	8
9	11
9	12
10	11
10	12
13	15
13	16
14	15
14	16

**Phase Direction  
Descriptions**

Phase	Description
1	WBLT
2	EB
3	SBLT
4	NB
5	EBLT
6	WB
7	NBLT
8	SB

**Overlap Direction  
Descriptions**

Overlap	Description
---------	-------------

**Administration (MM)1-7-1**

Enable CRC Check: No

CRC: 0000

Request Download Program Data: No

Enable Automatic Backup to Datakey: No

APPLE VALLEY - BEAR VALLEY RD. AND KIOWA RD.

Controller Timing Plan (MM)2-1

Plan 1

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Min Green	5	10	6	6	5	10	5	6	0	0	0	0	0	0	0	0
BK Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	7	0	7	0	7	0	7	0	0	0	0	0	0	0	0
Walk 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	16	0	16	0	13	0	19	0	0	0	0	0	0	0	0
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	1.5	5.0	1.5	3.0	1.5	5.0	1.5	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max 1	20	45	20	30	20	45	25	30	0	0	0	0	0	0	0	0
Max 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Stp	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	3.0	5.0	3.0	4.7	3.0	5.0	3.0	4.7	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
ACT B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SEC/ACT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time B4	0	12	0	10	0	12	0	10	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPT Duc	0.0	0.0	0.0	10.0	0.0	0.0	0.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce	0	12	0	0	0	12	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	2.0	0.0	2.0	0.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

APPLE VALLEY - BEAR VALLEY RD. AND KIOWA RD.

Controller Start/Fash (MM) 2-5

Startup

Phase	Phase Setting
4	Y
8	Y

Overlap
A
B
C
D

Flash > Mon: No  
Flash Time: 0  
All Red: 4  
Power Start Sequence: 1

Automatic Flash

Entry Phase
4
8

Exit Phase
4
8

Overlap Exit
A
B
C
D

Flash > Mon: No  
Exit Flash Interval: Y  
Minimum Auto Flash: 0  
Minimum Recall: No  
Cycle Through Phase: No

APPLE VALLEY - BEAR VALLEY RD. AND KIOWA RD.

**Controller Options**

**Controller Options (MM)2-6-1**

Phase	Fishing Green Phase	Guaranteed Passage	Non Act 1	Non Act 2	Dual Entry	Conditional Service	Conditional Reservice	Ped Reservice	Rest in Walk	Fishing Walk	Ped Clear Yellow	Ped Clear Red	IGRN + Veh Ext
2	No	No	Yes	No	Yes	No	No	No	No	No	No	No	No
4	No	No	No	Yes	Yes	No	No	No	No	No	No	No	No
6	No	No	Yes	No	Yes	No	No	No	No	No	No	No	No
8	No	No	No	Yes	Yes	No	No	No	No	No	No	No	No

Ped Clear Protect: Off

Red Revert: 5.0

**Act Pre-Time (MM)2-7**

Pre-Time Mode Enable: No

Free Input Enables Pre-Timed: Yes

**Pre-Timed Phase**

**Phase Recall Options (MM)2-8**

<b>Plan</b>	<b>Phase</b>	<b>Lock Detector</b>	<b>Vehicle Recall</b>	<b>Ped Recall</b>	<b>Max Recall</b>	<b>Soft Recall</b>	<b>No Rest</b>	<b>AI Calc</b>
1	2	Yes	No	No	No	No	No	No
1	6	Yes	No	No	No	No	No	No

APPLE VALLEY - BEAR VALLEY RD. AND KIOWA RD.

Preemptor Preempt Plan (MM)4-1

Preempt Phases

Preempt	Phase	Track Clear Veh	Dwell Veh	Dwell Ped	Cycling Veh	Cycling Ped	Exit Phase	Exit Calls	Special Function
3	1	No	Yes	No	No	No	No	No	No
3	8	No	Yes	No	No	No	No	No	No
4	2	No	Yes	No	No	No	No	No	No
4	5	No	Yes	No	No	No	No	No	No
5	4	No	Yes	No	No	No	No	No	No
5	7	No	Yes	No	No	No	No	No	No
6	3	No	Yes	No	No	No	No	No	No
6	8	No	Yes	No	No	No	No	No	No

Preempt Overlaps

Preempt	Overlap	Track Clear	Enable Trailing	Dwell Overlap	Cycling Overlap
---------	---------	-------------	-----------------	---------------	-----------------

Preempt	Enable	Preempt Override	Interlock Enable	Detector Lock	Delay	Inhibit	Override Flash	Duration	CLR > GRN
1	No	No	No	No	0	0	No	0	No
2	No	Yes	No	Yes	0	0	No	0	No
3	Standard	No	No	Yes	0	0	No	5	No
4	Standard	No	No	Yes	0	0	No	5	No
5	Standard	No	No	Yes	0	0	No	5	No
6	Standard	Yes	No	Yes	0	0	No	0	No
7	No	Yes	No	Yes	0	0	No	0	No
8	No	Yes	No	Yes	0	0	No	0	No
9	No	Yes	No	Yes	0	0	No	0	No
10	No	Yes	No	Yes	0	0	No	0	No

Preempt	Term Overlap Asp	PC Through Yellow	Terminate Phase	Ped Dark	Track Clearance Re-service	Dwell Flash	Linked Pmt	Flash Exit Color	Preempt To Coord
1	No	No	No	No	No	Off	0	Green	No
2	No	No	No	No	No	Off	0	Green	No
3	No	No	No	No	No	Off	0	Green	No
4	No	No	No	No	No	Off	0	Green	No
5	No	No	No	No	No	Off	0	Green	No
6	No	No	No	No	No	Off	0	Green	No
7	No	No	No	No	No	Off	0	Green	No
8	No	No	No	No	No	Off	0	Green	No
9	No	No	No	No	No	Off	0	Green	No
10	No	No	No	No	No	Off	0	Green	No

Preempt	Exit Timing Plan	Reservice	Free During Pmt Ring 1	Free During Pmt Ring 2	Free During Pmt Ring 3	Free During Pmt Ring 4
1	0	0	No	No	No	No
2	0	0	No	No	No	No
3	0	0	No	No	No	No
4	0	0	No	No	No	No
5	0	0	No	No	No	No
6	0	0	No	No	No	No
7	0	0	No	No	No	No
8	0	0	No	No	No	No
9	0	0	No	No	No	No
10	0	0	No	No	No	No

Preempt	Entrance Walk	Entrance Ped Clear	Entrance Min Green	Entrance Yellow	Entrance Red	Track Clear Min Green	Gate Down Ext Green	Gate Down Max Green	Track Clear Yellow	Track Clear Red
1	0	255	0	25.5	25.5	5	0	0	5.0	0.5
2	0	255	0	25.5	25.5	5	0	0	5.0	0.5
3	0	16	5	5.0	1.0	0	0	0	25.5	25.5
4	0	255	0	25.5	25.5	0	0	0	25.5	25.5
5	0	255	0	25.5	25.5	0	0	0	25.5	25.5
6	0	255	0	25.5	25.5	0	0	0	25.5	25.5
7	0	255	0	25.5	25.5	0	0	0	25.5	25.5
8	0	255	0	25.5	25.5	0	0	0	25.5	25.5
9	0	255	0	25.5	25.5	0	0	0	25.5	25.5
10	0	255	0	25.5	25.5	0	0	0	25.5	25.5

Preempt	Min Dwell Time	Extend Preempt Input Time	Max Preempt Call Time	Exit Yellow Time	Exit Red Time	Preempt Active Out	Preempt Active Dwell	Other Priority Preempt	Non-Priority Preempt
1	0	0.0	0	25.5	25.5	On	No	Off	Off
2	0	0.0	0	25.5	25.5	On	No	Off	Off
3	5	0.0	0	5.0	0.5	On	No	Off	Off
4	5	0.0	0	5.0	0.5	On	No	Off	Off
5	5	0.0	0	5.0	0.5	On	No	Off	Off
6	5	0.0	0	5.0	0.5	On	No	Off	Off
7	0	0.0	0	25.5	25.5	On	No	Off	Off
8	0	0.0	0	25.5	25.5	On	No	Off	Off
9	0	0.0	0	25.5	25.5	On	No	Off	Off
10	0	0.0	0	25.5	25.5	On	No	Off	Off



APPLE VALLEY - BEAR VALLEY RD. AND KIOWA RD.

Detectors

Detectors Page 1

Vehicle Detectors Setup (MM)6-1

Vehicle Plan	Detector Number	Called
1	1	1
1	2	2
1	3	3
1	4	4
1	5	5
1	6	6
1	7	7
1	8	8
1	10	2
1	12	4
1	14	6
1	16	8
1	18	2
1	20	4
1	22	6
1	23	8
1	24	8
1	26	2
1	30	8
1	32	8

**Vehicle Detector Setup (MM)6-2 continued**

Detector Number	ECPI	TS2 Detector	Detector Description
1	0	Yes	PH 1 WBLT
2	0	Yes	PH 2 EB ADV 1
3	0	Yes	PH 3 SBLT
4	0	Yes	PH 4 NB ADV 1
5	0	Yes	PH 5 EBLT
6	0	Yes	PH 6 WB ADV 1
7	0	Yes	PH 7 NBLT
8	0	Yes	PH 8 SB ADV 1
10	0	Yes	PH 2 EB ADV 1
12	0	Yes	PH 4 NB ADV 2
14	0	Yes	PH 6 WB ADV 2
16	0	Yes	PH 8 SB ADV 2
18	0	Yes	PH 2 EB LIMIT 1,2
20	0	Yes	PH 4 NB LIMIT 1,2
22	0	Yes	PH 6 WB LIMIT 1,2
24	0	Yes	PH 8 SB LIMIT 1,2
26	0	Yes	PH 2 EBRT
30	0	Yes	PH 8 WBRT
32	0	Yes	PH 8 SBRT

**Vehicle Detector Setup (MM)6-2 continued**

Detector Number	Vehicle Plan	Assigned Phase	Switch Phase	Extend Time	Delay Time	Queue Limit	Yellow Lock	Added Option	Call Option	Passage Option	Queue Option	NTCIP Occupancy	NTCIP Volume
1	1	1	0	0.0	0.0	0	No	No	Yes	Yes	No	No	No
2	1	2	0	0.0	0.0	0	No	No	Yes	Yes	No	No	No
3	1	3	0	0.0	0.0	0	No	No	Yes	Yes	No	No	No
4	1	4	0	0.0	0.0	0	No	No	Yes	Yes	No	No	No
5	1	5	0	0.0	0.0	0	No	No	Yes	Yes	No	No	No
6	1	6	0	0.0	0.0	0	No	No	Yes	Yes	No	No	No
7	1	7	0	0.0	0.0	0	No	No	Yes	Yes	No	No	No
8	1	8	0	0.0	0.0	0	No	No	Yes	Yes	No	No	No
10	1	2	0	0.0	0.0	0	No	No	Yes	Yes	No	No	No
12	1	4	0	0.0	0.0	0	No	No	Yes	Yes	No	No	No
14	1	6	0	0.0	0.0	0	No	No	Yes	Yes	No	No	No
16	1	8	0	0.0	0.0	0	No	No	Yes	Yes	No	No	No
18	1	2	0	0.0	0.0	0	No	No	Yes	Yes	No	No	No
20	1	4	0	0.0	0.0	0	No	No	Yes	Yes	No	No	No
22	1	6	0	0.0	0.0	0	No	No	Yes	Yes	No	No	No
23	1	8	0	0.0	0.0	0	No	No	Yes	Yes	No	No	No
24	1	8	0	0.0	0.0	0	No	No	No	Yes	No	No	No
26	1	2	0	0.0	0.0	0	No	No	Yes	Yes	No	No	No
30	1	8	0	0.0	0.0	0	No	No	Yes	Yes	No	No	No
32	1	8	0	0.0	15.0	0	No	No	Yes	Yes	No	No	No

**Ped and System Detector Options (MM)6-4**

**Phase Ped Detector**

Local Ped Detector	Number
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12

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## APPENDIX C

# VOLUME DEVELOPMENT WORKSHEETS

**Table C-1 - Existing Peak Hour PCE Volume Summary**

	<u>AM Peak Hour</u>	<u>PM Peak Hour</u>
	Existing Traffic Volumes	Existing Traffic Volumes
<b>1 Jacaranda Avenue/Bear Valley Road</b>		
NBL	78	82
NBT	49	9
NBR	264	398
SBL	14	27
SBT	15	18
SBR	36	36
EBL	127	35
EBT	1,273	1,762
EBR	63	46
WBL	217	303
WBT	1,516	1,576
WBR	43	22
North Leg		
Approach	65	81
Departure	219	66
Total	284	147
South Leg		
Approach	391	489
Departure	295	367
Total	686	856
East Leg		
Approach	1,776	1,901
Departure	1,551	2,187
Total	3,327	4,088
West Leg		
Approach	1,463	1,843
Departure	1,630	1,694
Total	3,093	3,537
Total Approaches		
Approach	3,695	4,314
Departure	3,695	4,314
Total	7,390	8,628

**Table C-1 - Existing Peak Hour PCE Volume Summary**

	<u>AM Peak Hour</u>	<u>PM Peak Hour</u>
	Existing Traffic Volumes	Existing Traffic Volumes
<b>2 Mojave Fish Hatchery Road/Bear Valley Road</b>		
NBL	42	104
NBT	6	9
NBR	24	64
SBL	99	115
SBT	5	5
SBR	64	84
EBL	160	57
EBT	1,335	2,033
EBR	55	97
WBL	45	115
WBT	1,669	1,713
WBR	239	90
North Leg		
Approach	168	204
Departure	405	156
Total	573	360
South Leg		
Approach	72	177
Departure	105	217
Total	177	394
East Leg		
Approach	1,953	1,918
Departure	1,458	2,212
Total	3,411	4,130
West Leg		
Approach	1,550	2,187
Departure	1,775	1,901
Total	3,325	4,088
Total Approaches		
Approach	3,743	4,486
Departure	3,743	4,486
Total	7,486	8,972

**Table C-1 - Existing Peak Hour PCE Volume Summary**

	<u>AM Peak Hour</u>	<u>PM Peak Hour</u>
	Existing Traffic Volumes	Existing Traffic Volumes
<b>3 Jess Ranch Parkway/Bear Valley Road</b>		
NBL	265	455
NBT	0	0
NBR	41	173
SBL	0	0
SBT	0	0
SBR	0	0
EBL	0	0
EBT	1,245	1,732
EBR	167	317
WBL	75	191
WBT	1,688	1,463
WBR	0	0
North Leg		
Approach	0	0
Departure	0	0
Total	0	0
South Leg		
Approach	306	628
Departure	242	508
Total	548	1,136
East Leg		
Approach	1,763	1,654
Departure	1,286	1,905
Total	3,049	3,559
West Leg		
Approach	1,412	2,049
Departure	1,953	1,918
Total	3,365	3,967
Total Approaches		
Approach	3,481	4,331
Departure	3,481	4,331
Total	6,962	8,662

**Table C-1 - Existing Peak Hour PCE Volume Summary**

	<u>AM Peak Hour</u>	<u>PM Peak Hour</u>
	Existing Traffic Volumes	Existing Traffic Volumes
<b>4 Reata Road/Bear Valley Road</b>		
NBL	35	201
NBT	24	105
NBR	28	152
SBL	19	28
SBT	39	102
SBR	273	260
EBL	203	293
EBT	994	1,464
EBR	46	127
WBL	59	150
WBT	1,455	1,193
WBR	15	14
North Leg		
Approach	331	390
Departure	242	412
Total	573	802
South Leg		
Approach	87	458
Departure	144	379
Total	231	837
East Leg		
Approach	1,529	1,357
Departure	1,041	1,644
Total	2,570	3,001
West Leg		
Approach	1,243	1,884
Departure	1,763	1,654
Total	3,006	3,538
Total Approaches		
Approach	3,190	4,089
Departure	3,190	4,089
Total	6,380	8,178

**Table C-1 - Existing Peak Hour PCE Volume Summary**

	<u>AM Peak Hour</u>	<u>PM Peak Hour</u>
	Existing Traffic Volumes	Existing Traffic Volumes
<b>5 Apple Valley Road/Pimlico Road - Shopping Center Drive</b>		
NBL	38	70
NBT	575	675
NBR	35	88
SBL	64	142
SBT	760	752
SBR	190	245
EBL	147	275
EBT	35	53
EBR	14	38
WBL	34	80
WBT	26	45
WBR	31	100
North Leg		
Approach	1,014	1,139
Departure	753	1,050
Total	1,767	2,189
South Leg		
Approach	648	833
Departure	808	870
Total	1,456	1,703
East Leg		
Approach	91	225
Departure	134	283
Total	225	508
West Leg		
Approach	196	366
Departure	254	360
Total	450	726
Total Approaches		
Approach	1,949	2,563
Departure	1,949	2,563
Total	3,898	5,126



**Table C-1 - Existing Peak Hour PCE Volume Summary**

	<u>AM Peak Hour</u>	<u>PM Peak Hour</u>
	Existing Traffic Volumes	Existing Traffic Volumes
<b>6 Apple Valley Road/Bear Valley Road</b>		
NBL	71	107
NBT	154	225
NBR	44	149
SBL	168	197
SBT	188	350
SBR	392	351
EBL	332	449
EBT	635	1,067
EBR	40	59
WBL	100	177
WBT	1,101	926
WBR	165	125
North Leg		
Approach	748	898
Departure	651	799
Total	1,399	1,697
South Leg		
Approach	269	481
Departure	328	586
Total	597	1,067
East Leg		
Approach	1,366	1,228
Departure	847	1,413
Total	2,213	2,641
West Leg		
Approach	1,007	1,575
Departure	1,564	1,384
Total	2,571	2,959
Total Approaches		
Approach	3,390	4,182
Departure	3,390	4,182
Total	6,780	8,364

**Table C-1 - Existing Peak Hour PCE Volume Summary**

	<u>AM Peak Hour</u>	<u>PM Peak Hour</u>
	Existing Traffic Volumes	Existing Traffic Volumes
<b>7 Westmont Drive - Apple Bear Road/Bear Valley Road</b>		
NBL	0	0
NBT	0	0
NBR	0	0
SBL	47	168
SBT	0	0
SBR	17	46
EBL	39	85
EBT	744	1,319
EBR	0	0
WBL	0	0
WBT	1,369	1,150
WBR	56	92
North Leg		
Approach	64	214
Departure	95	177
Total	159	391
South Leg		
Approach	0	0
Departure	0	0
Total	0	0
East Leg		
Approach	1,425	1,242
Departure	791	1,487
Total	2,216	2,729
West Leg		
Approach	783	1,404
Departure	1,386	1,196
Total	2,169	2,600
Total Approaches		
Approach	2,272	2,860
Departure	2,272	2,860
Total	4,544	5,720

**Table C-1 - Existing Peak Hour PCE Volume Summary**

	<u>AM Peak Hour</u>	<u>PM Peak Hour</u>
	Existing Traffic Volumes	Existing Traffic Volumes
<b>8 Flying Feather Road/Bear Valley Road</b>		
NBL	3	1
NBT	0	0
NBR	2	3
SBL	0	0
SBT	0	0
SBR	0	0
EBL	0	0
EBT	793	1,471
EBR	3	1
WBL	2	0
WBT	1,399	1,211
WBR	0	0
North Leg		
Approach	0	0
Departure	0	0
Total	0	0
South Leg		
Approach	5	4
Departure	5	1
Total	10	5
East Leg		
Approach	1,401	1,211
Departure	795	1,474
Total	2,196	2,685
West Leg		
Approach	796	1,472
Departure	1,402	1,212
Total	2,198	2,684
Total Approaches		
Approach	2,202	2,687
Departure	2,202	2,687
Total	4,404	5,374

**Table C-1 - Existing Peak Hour PCE Volume Summary**

	<u>AM Peak Hour</u>	<u>PM Peak Hour</u>
	Existing Traffic Volumes	Existing Traffic Volumes
<b>9 Deep Creek Road/Apple Valley Road</b>		
NBL	133	100
NBT	0	0
NBR	59	117
SBL	0	0
SBT	0	0
SBR	0	0
EBL	0	0
EBT	743	1,381
EBR	51	93
WBL	105	108
WBT	1,259	1,133
WBR	0	0
North Leg		
Approach	0	0
Departure	0	0
Total	0	0
South Leg		
Approach	192	217
Departure	156	201
Total	348	418
East Leg		
Approach	1,364	1,241
Departure	802	1,498
Total	2,166	2,739
West Leg		
Approach	794	1,474
Departure	1,392	1,233
Total	2,186	2,707
Total Approaches		
Approach	2,350	2,932
Departure	2,350	2,932
Total	4,700	5,864

**Table C-1 - Existing Peak Hour PCE Volume Summary**

	<u>AM Peak Hour</u>	<u>PM Peak Hour</u>
	Existing Traffic Volumes	Existing Traffic Volumes
<b>10 Kiowa Road/Bear Valley Road</b>		
NBL	261	209
NBT	139	210
NBR	60	114
SBL	47	65
SBT	139	221
SBR	168	127
EBL	87	155
EBT	492	859
EBR	133	213
WBL	96	123
WBT	781	776
WBR	43	52
North Leg		
Approach	354	413
Departure	269	417
Total	623	830
South Leg		
Approach	460	533
Departure	368	557
Total	828	1,090
East Leg		
Approach	920	951
Departure	599	1,038
Total	1,519	1,989
West Leg		
Approach	712	1,227
Departure	1,210	1,112
Total	1,922	2,339
Total Approaches		
Approach	2,446	3,124
Departure	2,446	3,124
Total	4,892	6,248

Table C-2 - Opening Year (2024) Peak Hour PCE Volume Summary

	AM Peak Hour							PM Peak Hour						
	Existing (2,022) PCE	2022- 2,024 Growth	Cumulative Project Trips	OY No Project	Net Project Trips	Pass-by Trips	OY Plus Project	Existing (2,022) PCE	2022- 2,024 Growth	Cumulative Project Trips	OY No Project	Net Project Trips	Pass-by Trips	OY Plus Project
<b>1 Jacaranda Avenue/Bear Valley Road</b>														
NBL	78	3	0	81	0	0	81	82	3	0	85	0	0	85
NBT	49	2	0	51	0	0	51	9	0	0	9	0	0	9
NBR	264	11	7	282	11	0	293	398	16	9	423	11	0	434
SBL	14	1	0	15	0	0	15	27	1	0	28	0	0	28
SBT	15	1	0	16	0	0	16	18	1	0	19	0	0	19
SBR	36	1	0	37	0	0	37	36	1	0	37	0	0	37
EBL	127	5	0	132	0	0	132	35	1	0	36	0	0	36
EBT	1,273	51	118	1,442	21	0	1,463	1,762	70	198	2,030	22	0	2,052
EBR	63	3	0	66	0	0	66	46	2	0	48	0	0	48
WBL	217	9	4	230	9	0	239	303	12	8	323	11	0	334
WBT	1,516	61	177	1,754	17	0	1,771	1,576	63	144	1,783	22	0	1,805
WBR	43	2	0	45	0	0	45	22	1	0	23	0	0	23
<b>North Leg</b>														
Approach	65	3	0	68	0	0	68	81	3	0	84	0	0	84
Departure	219	9	0	228	0	0	228	66	2	0	68	0	0	68
Total	284	12	0	296	0	0	296	147	5	0	152	0	0	152
<b>South Leg</b>														
Approach	391	16	7	414	11	0	425	489	19	9	517	11	0	528
Departure	295	13	4	312	9	0	321	367	15	8	390	11	0	401
Total	686	29	11	726	20	0	746	856	34	17	907	22	0	929
<b>East Leg</b>														
Approach	1,776	72	181	2,029	26	0	2,055	1,901	76	152	2,129	33	0	2,162
Departure	1,551	63	125	1,739	32	0	1,771	2,187	87	207	2,481	33	0	2,514
Total	3,327	135	306	3,768	58	0	3,826	4,088	163	359	4,610	66	0	4,676
<b>West Leg</b>														
Approach	1,463	59	118	1,640	21	0	1,661	1,843	73	198	2,114	22	0	2,136
Departure	1,630	65	177	1,872	17	0	1,889	1,694	67	144	1,905	22	0	1,927
Total	3,093	124	295	3,512	38	0	3,550	3,537	140	342	4,019	44	0	4,063
<b>Total Approaches</b>														
Approach	3,695	150	306	4,151	58	0	4,209	4,314	171	359	4,844	66	0	4,910
Departure	3,695	150	306	4,151	58	0	4,209	4,314	171	359	4,844	66	0	4,910
Total	7,390	300	612	8,302	116	0	8,418	8,628	342	718	9,688	132	0	9,820



Table C-2 - Opening Year (2024) Peak Hour PCE Volume Summary

	AM Peak Hour							PM Peak Hour						
	Existing (2,022) PCE	2022- 2,024 Growth	Cumulative Project Trips	OY No Project	Net Project Trips	Pass-by Trips	OY Plus Project	Existing (2,022) PCE	2022- 2,024 Growth	Cumulative Project Trips	OY No Project	Net Project Trips	Pass-by Trips	OY Plus Project
<b>2 Mojave Fish Hatchery Road/Bear Valley Road</b>														
NBL	42	2	0	44	0	0	44	104	4	0	108	0	0	108
NBT	6	0	0	6	0	0	6	9	0	0	9	0	0	9
NBR	24	1	0	25	0	0	25	64	3	0	67	0	0	67
SBL	99	4	0	103	11	0	114	115	5	0	120	11	0	131
SBT	5	0	0	5	0	0	5	5	0	0	5	0	0	5
SBR	64	3	0	67	0	0	67	84	3	0	87	0	0	87
EBL	160	6	0	166	0	0	166	57	2	0	59	0	0	59
EBT	1,335	53	125	1,513	32	0	1,545	2,033	81	206	2,320	33	0	2,353
EBR	55	2	0	57	0	0	57	97	4	0	101	0	0	101
WBL	45	2	0	47	0	0	47	115	5	0	120	0	0	120
WBT	1,669	67	181	1,917	26	0	1,943	1,713	69	154	1,936	32	0	1,968
WBR	239	10	0	249	9	0	258	90	4	0	94	11	0	105
<b>North Leg</b>														
Approach	168	7	0	175	11	0	186	204	8	0	212	11	0	223
Departure	405	16	0	421	9	0	430	156	6	0	162	11	0	173
Total	573	23	0	596	20	0	616	360	14	0	374	22	0	396
<b>South Leg</b>														
Approach	72	3	0	75	0	0	75	177	7	0	184	0	0	184
Departure	105	4	0	109	0	0	109	217	9	0	226	0	0	226
Total	177	7	0	184	0	0	184	394	16	0	410	0	0	410
<b>East Leg</b>														
Approach	1,953	79	181	2,213	35	0	2,248	1,918	78	154	2,150	43	0	2,193
Departure	1,458	58	125	1,641	43	0	1,684	2,212	89	206	2,507	44	0	2,551
Total	3,411	137	306	3,854	78	0	3,932	4,130	167	360	4,657	87	0	4,744
<b>West Leg</b>														
Approach	1,550	61	125	1,736	32	0	1,768	2,187	87	206	2,480	33	0	2,513
Departure	1,775	72	181	2,028	26	0	2,054	1,901	76	154	2,131	32	0	2,163
Total	3,325	133	306	3,764	58	0	3,822	4,088	163	360	4,611	65	0	4,676
<b>Total Approaches</b>														
Approach	3,743	150	306	4,199	78	0	4,277	4,486	180	360	5,026	87	0	5,113
Departure	3,743	150	306	4,199	78	0	4,277	4,486	180	360	5,026	87	0	5,113
Total	7,486	300	612	8,398	156	0	8,554	8,972	360	720	10,052	174	0	10,226

Table C-2 - Opening Year (2024) Peak Hour PCE Volume Summary

	AM Peak Hour							PM Peak Hour						
	Existing (2,022) PCE	2022- 2,024 Growth	Cumulative Project Trips	OY No Project	Net Project Trips	Pass-by Trips	OY Plus Project	Existing (2,022) PCE	2022- 2,024 Growth	Cumulative Project Trips	OY No Project	Net Project Trips	Pass-by Trips	OY Plus Project
<b>3 Jess Ranch Parkway/Bear Valley Road</b>														
NBL	265	11	16	292	0	0	292	455	18	11	484	0	0	484
NBT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NBR	41	2	5	48	11	0	59	173	7	7	187	11	0	198
SBL	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SBT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SBR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EBL	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EBT	1,245	50	106	1,401	43	0	1,444	1,732	69	183	1,984	43	0	2,027
EBR	167	7	9	183	0	0	183	317	13	14	344	0	0	344
WBL	75	3	3	81	9	0	90	191	8	7	206	11	0	217
WBT	1,688	68	166	1,922	35	0	1,957	1,463	59	140	1,662	43	0	1,705
WBR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>North Leg</b>														
Approach	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Departure	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
<b>South Leg</b>														
Approach	306	13	21	340	11	0	351	628	25	18	671	11	0	682
Departure	242	10	12	264	9	0	273	508	21	21	550	11	0	561
Total	548	23	33	604	20	0	624	1,136	46	39	1,221	22	0	1,243
<b>East Leg</b>														
Approach	1,763	71	169	2,003	44	0	2,047	1,654	67	147	1,868	54	0	1,922
Departure	1,286	52	111	1,449	54	0	1,503	1,905	76	190	2,171	54	0	2,225
Total	3,049	123	280	3,452	98	0	3,550	3,559	143	337	4,039	108	0	4,147
<b>West Leg</b>														
Approach	1,412	57	115	1,584	43	0	1,627	2,049	82	197	2,328	43	0	2,371
Departure	1,953	79	182	2,214	35	0	2,249	1,918	77	151	2,146	43	0	2,189
Total	3,365	136	297	3,798	78	0	3,876	3,967	159	348	4,474	86	0	4,560
<b>Total Approaches</b>														
Approach	3,481	141	305	3,927	98	0	4,025	4,331	174	362	4,867	108	0	4,975
Departure	3,481	141	305	3,927	98	0	4,025	4,331	174	362	4,867	108	0	4,975
Total	6,962	282	610	7,854	196	0	8,050	8,662	348	724	9,734	216	0	9,950



Table C-2 - Opening Year (2024) Peak Hour PCE Volume Summary

	AM Peak Hour							PM Peak Hour						
	Existing (2,022) PCE	2022-2,024 Growth	Cumulative Project Trips	OY No Project	Net Project Trips	Pass-by Trips	OY Plus Project	Existing (2,022) PCE	2022-2,024 Growth	Cumulative Project Trips	OY No Project	Net Project Trips	Pass-by Trips	OY Plus Project
<b>4 Reata Road/Bear Valley Road</b>														
NBL	35	1	0	36	0	0	36	201	8	0	209	0	0	209
NBT	24	1	0	25	0	0	25	105	4	0	109	0	0	109
NBR	28	1	0	29	0	0	29	152	6	0	158	0	0	158
SBL	19	1	0	20	11	0	31	28	1	0	29	11	0	40
SBT	39	2	0	41	0	0	41	102	4	0	106	0	0	106
SBR	273	11	0	284	0	0	284	260	10	0	270	0	0	270
EBL	203	8	0	211	0	0	211	293	12	0	305	0	0	305
EBT	994	40	111	1,145	54	0	1,199	1,464	59	190	1,713	54	0	1,767
EBR	46	2	0	48	0	0	48	127	5	0	132	0	0	132
WBL	59	2	0	61	0	0	61	150	6	0	156	0	0	156
WBT	1,455	58	170	1,683	44	0	1,727	1,193	48	147	1,388	54	0	1,442
WBR	15	1	0	16	9	0	25	14	1	0	15	11	0	26
<b>North Leg</b>														
Approach	331	14	0	345	11	0	356	390	15	0	405	11	0	416
Departure	242	10	0	252	9	0	261	412	17	0	429	11	0	440
Total	573	24	0	597	20	0	617	802	32	0	834	22	0	856
<b>South Leg</b>														
Approach	87	3	0	90	0	0	90	458	18	0	476	0	0	476
Departure	144	6	0	150	0	0	150	379	15	0	394	0	0	394
Total	231	9	0	240	0	0	240	837	33	0	870	0	0	870
<b>East Leg</b>														
Approach	1,529	61	170	1,760	53	0	1,813	1,357	55	147	1,559	65	0	1,624
Departure	1,041	42	111	1,194	65	0	1,259	1,644	66	190	1,900	65	0	1,965
Total	2,570	103	281	2,954	118	0	3,072	3,001	121	337	3,459	130	0	3,589
<b>West Leg</b>														
Approach	1,243	50	111	1,404	54	0	1,458	1,884	76	190	2,150	54	0	2,204
Departure	1,763	70	170	2,003	44	0	2,047	1,654	66	147	1,867	54	0	1,921
Total	3,006	120	281	3,407	98	0	3,505	3,538	142	337	4,017	108	0	4,125
<b>Total Approaches</b>														
Approach	3,190	128	281	3,599	118	0	3,717	4,089	164	337	4,590	130	0	4,720
Departure	3,190	128	281	3,599	118	0	3,717	4,089	164	337	4,590	130	0	4,720
Total	6,380	256	562	7,198	236	0	7,434	8,178	328	674	9,180	260	0	9,440



Table C-2 - Opening Year (2024) Peak Hour PCE Volume Summary

	AM Peak Hour							PM Peak Hour						
	Existing (2,022) PCE	2022- 2,024 Growth	Cumulative Project Trips	OY No Project	Net Project Trips	Pass-by Trips	OY Plus Project	Existing (2,022) PCE	2022- 2,024 Growth	Cumulative Project Trips	OY No Project	Net Project Trips	Pass-by Trips	OY Plus Project
<b>5 Apple Valley Road/Pimlico Road - Shopping Center Driveway</b>														
NBL	38	2	0	40	9	0	49	70	3	0	73	11	0	84
NBT	575	23	62	660	17	0	677	675	27	83	785	22	0	807
NBR	35	1	0	36	0	0	36	88	4	0	92	0	0	92
SBL	64	3	0	67	0	0	67	142	6	0	148	0	0	148
SBT	760	30	69	859	21	0	880	752	30	83	865	22	0	887
SBR	190	8	0	198	0	0	198	245	10	0	255	0	0	255
EBL	147	6	0	153	0	0	153	275	11	0	286	0	0	286
EBT	35	1	0	36	0	0	36	53	2	0	55	0	0	55
EBR	14	1	0	15	11	0	26	38	2	0	40	11	0	51
WBL	34	1	0	35	0	0	35	80	3	0	83	0	0	83
WBT	26	1	0	27	0	0	27	45	2	0	47	0	0	47
WBR	31	1	0	32	0	0	32	100	4	0	104	0	0	104
<b>North Leg</b>														
Approach	1,014	41	69	1,124	21	0	1,145	1,139	46	83	1,268	22	0	1,290
Departure	753	30	62	845	17	0	862	1,050	42	83	1,175	22	0	1,197
Total	1,767	71	131	1,969	38	0	2,007	2,189	88	166	2,443	44	0	2,487
<b>South Leg</b>														
Approach	648	26	62	736	26	0	762	833	34	83	950	33	0	983
Departure	808	32	69	909	32	0	941	870	35	83	988	33	0	1,021
Total	1,456	58	131	1,645	58	0	1,703	1,703	69	166	1,938	66	0	2,004
<b>East Leg</b>														
Approach	91	3	0	94	0	0	94	225	9	0	234	0	0	234
Departure	134	5	0	139	0	0	139	283	12	0	295	0	0	295
Total	225	8	0	233	0	0	233	508	21	0	529	0	0	529
<b>West Leg</b>														
Approach	196	8	0	204	11	0	215	366	15	0	381	11	0	392
Departure	254	11	0	265	9	0	274	360	15	0	375	11	0	386
Total	450	19	0	469	20	0	489	726	30	0	756	22	0	778
<b>Total Approaches</b>														
Approach	1,949	78	131	2,158	58	0	2,216	2,563	104	166	2,833	66	0	2,899
Departure	1,949	78	131	2,158	58	0	2,216	2,563	104	166	2,833	66	0	2,899
Total	3,898	156	262	4,316	116	0	4,432	5,126	208	332	5,666	132	0	5,798

Table C-2 - Opening Year (2024) Peak Hour PCE Volume Summary

	AM Peak Hour							PM Peak Hour						
	Existing (2,022) PCE	2022-2,024 Growth	Cumulative Project Trips	OY No Project	Net Project Trips	Pass-by Trips	OY Plus Project	Existing (2,022) PCE	2022-2,024 Growth	Cumulative Project Trips	OY No Project	Net Project Trips	Pass-by Trips	OY Plus Project
<b>6 Apple Valley Road/Bear Valley Road</b>														
NBL	71	3	4	78	0	0	78	107	4	4	115	0	0	115
NBT	154	6	4	164	0	0	164	225	9	4	238	0	0	238
NBR	44	2	10	56	32	0	88	149	6	15	170	33	0	203
SBL	168	7	32	207	32	0	239	197	8	55	260	33	0	293
SBT	188	8	4	200	0	0	200	350	14	4	368	0	0	368
SBR	392	16	34	442	0	0	442	351	14	25	390	0	0	390
EBL	332	13	22	367	0	0	367	449	18	34	501	0	0	501
EBT	635	25	81	741	64	0	805	1,067	43	154	1,264	65	0	1,329
EBR	40	2	4	46	0	0	46	59	2	4	65	0	0	65
WBL	100	4	7	111	26	0	137	177	7	14	198	32	0	230
WBT	1,101	44	129	1,274	52	0	1,326	926	37	117	1,080	65	0	1,145
WBR	165	7	37	209	26	0	235	125	5	46	176	32	0	208
<b>North Leg</b>														
Approach	748	31	70	849	32	0	881	898	36	84	1,018	33	0	1,051
Departure	651	26	63	740	26	0	766	799	32	84	915	32	0	947
Total	1,399	57	133	1,589	58	0	1,647	1,697	68	168	1,933	65	0	1,998
<b>South Leg</b>														
Approach	269	11	18	298	32	0	330	481	19	23	523	33	0	556
Departure	328	14	15	357	26	0	383	586	23	22	631	32	0	663
Total	597	25	33	655	58	0	713	1,067	42	45	1,154	65	0	1,219
<b>East Leg</b>														
Approach	1,366	55	173	1,594	104	0	1,698	1,228	49	177	1,454	129	0	1,583
Departure	847	34	123	1,004	128	0	1,132	1,413	57	224	1,694	131	0	1,825
Total	2,213	89	296	2,598	232	0	2,830	2,641	106	401	3,148	260	0	3,408
<b>West Leg</b>														
Approach	1,007	40	107	1,154	64	0	1,218	1,575	63	192	1,830	65	0	1,895
Departure	1,564	63	167	1,794	52	0	1,846	1,384	55	146	1,585	65	0	1,650
Total	2,571	103	274	2,948	116	0	3,064	2,959	118	338	3,415	130	0	3,545
<b>Total Approaches</b>														
Approach	3,390	137	368	3,895	232	0	4,127	4,182	167	476	4,825	260	0	5,085
Departure	3,390	137	368	3,895	232	0	4,127	4,182	167	476	4,825	260	0	5,085
Total	6,780	274	736	7,790	464	0	8,254	8,364	334	952	9,650	520	0	10,170



Table C-2 - Opening Year (2024) Peak Hour PCE Volume Summary

	AM Peak Hour							PM Peak Hour						
	Existing (2,022) PCE	2022- 2,024 Growth	Cumulative Project Trips	OY No Project	Net Project Trips	Pass-by Trips	OY Plus Project	Existing (2,022) PCE	2022- 2,024 Growth	Cumulative Project Trips	OY No Project	Net Project Trips	Pass-by Trips	OY Plus Project
<b>7 Westmont Drive - Apple Bear Road/Bear Valley Road</b>														
NBL	0	0	0	0	104	73	180	0	0	0	0	129	63	193
NBT	0	0	0	0	0	5	5	0	0	0	0	0	9	9
NBR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SBL	47	2	28	77	0	(3)	74	168	7	57	232	0	(9)	223
SBT	0	0	0	0	0	4	4	0	0	0	0	0	12	12
SBR	17	1	41	59	0	(1)	58	46	2	85	133	0	(3)	130
EBL	39	2	61	102	0	(3)	99	85	3	89	177	0	(5)	172
EBT	744	30	60	834	64	(30)	868	1,319	53	136	1,508	65	(48)	1,525
EBR	0	0	0	0	64	31	95	0	0	0	0	65	51	116
WBL	0	0	0	0	86	84	172	0	0	0	0	87	67	154
WBT	1,369	55	131	1,555	0	(82)	1,473	1,150	46	92	1,288	0	(62)	1,226
WBR	56	2	41	99	0	(3)	96	92	4	59	155	0	(5)	150
<b>North Leg</b>														
Approach	64	3	69	136	0	0	136	214	9	142	365	0	0	365
Departure	95	4	102	201	0	(1)	200	177	7	148	332	0	(1)	331
Total	159	7	171	337	0	(1)	336	391	16	290	697	0	(1)	696
<b>South Leg</b>														
Approach	0	0	0	0	104	78	185	0	0	0	0	129	72	202
Departure	0	0	0	0	150	119	271	0	0	0	0	152	130	282
Total	0	0	0	0	254	197	456	0	0	0	0	281	202	484
<b>East Leg</b>														
Approach	1,425	57	172	1,654	86	(1)	1,741	1,242	50	151	1,443	87	0	1,530
Departure	791	32	88	911	64	(33)	942	1,487	60	193	1,740	65	(57)	1,748
Total	2,216	89	260	2,565	150	(34)	2,683	2,729	110	344	3,183	152	(57)	3,278
<b>West Leg</b>														
Approach	783	32	121	936	128	(2)	1,062	1,404	56	225	1,685	130	(2)	1,813
Departure	1,386	56	172	1,614	104	(10)	1,711	1,196	48	177	1,421	129	(2)	1,549
Total	2,169	88	293	2,550	232	(12)	2,773	2,600	104	402	3,106	259	(4)	3,362
<b>Total Approaches</b>														
Approach	2,272	92	362	2,726	318	75	3,124	2,860	115	518	3,493	346	70	3,910
Departure	2,272	92	362	2,726	318	75	3,124	2,860	115	518	3,493	346	70	3,910
Total	4,544	184	724	5,452	636	150	6,248	5,720	230	1,036	6,986	692	140	7,820



Table C-2 - Opening Year (2024) Peak Hour PCE Volume Summary

	AM Peak Hour							PM Peak Hour						
	Existing (2,022) PCE	2022- 2,024 Growth	Cumulative Project Trips	OY No Project	Net Project Trips	Pass-by Trips	OY Plus Project	Existing (2,022) PCE	2022- 2,024 Growth	Cumulative Project Trips	OY No Project	Net Project Trips	Pass-by Trips	OY Plus Project
<b>8 Flying Feather Road/Bear Valley Road</b>														
NBL	3	0	0	3	0	0	0	1	0	0	1	0	0	0
NBT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NBR	2	0	0	2	35	29	66	3	0	0	3	43	56	102
SBL	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SBT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SBR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EBL	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EBT	793	32	88	913	35	(35)	913	1,471	59	193	1,723	43	(58)	1,708
EBR	3	0	0	3	0	0	3	1	0	0	1	0	0	1
WBL	2	0	0	2	0	0	0	0	0	0	0	0	0	0
WBT	1,399	56	172	1,627	86	0	1,713	1,211	48	151	1,410	87	0	1,497
WBR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>North Leg</b>														
Approach	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Departure	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
<b>South Leg</b>														
Approach	5	0	0	5	35	29	66	4	0	0	4	43	56	102
Departure	5	0	0	5	0	0	3	1	0	0	1	0	0	1
Total	10	0	0	10	35	29	69	5	0	0	5	43	56	103
<b>East Leg</b>														
Approach	1,401	56	172	1,629	86	0	1,713	1,211	48	151	1,410	87	0	1,497
Departure	795	32	88	915	70	(6)	979	1,474	59	193	1,726	86	(2)	1,810
Total	2,196	88	260	2,544	156	(6)	2,692	2,685	107	344	3,136	173	(2)	3,307
<b>West Leg</b>														
Approach	796	32	88	916	35	(35)	916	1,472	59	193	1,724	43	(58)	1,709
Departure	1,402	56	172	1,630	86	0	1,713	1,212	48	151	1,411	87	0	1,497
Total	2,198	88	260	2,546	121	(35)	2,629	2,684	107	344	3,135	130	(58)	3,206
<b>Total Approaches</b>														
Approach	2,202	88	260	2,550	156	(6)	2,695	2,687	107	344	3,138	173	(2)	3,308
Departure	2,202	88	260	2,550	156	(6)	2,695	2,687	107	344	3,138	173	(2)	3,308
Total	4,404	176	520	5,100	312	(12)	5,390	5,374	214	688	6,276	346	(4)	6,616



Table C-2 - Opening Year (2024) Peak Hour PCE Volume Summary

	AM Peak Hour							PM Peak Hour						
	Existing (2,022) PCE	2022- 2,024 Growth	Cumulative Project Trips	OY No Project	Net Project Trips	Pass-by Trips	OY Plus Project	Existing (2,022) PCE	2022- 2,024 Growth	Cumulative Project Trips	OY No Project	Net Project Trips	Pass-by Trips	OY Plus Project
<b>9 Deep Creek Road/Apple Valley Road</b>														
NBL	133	5	31	169	21	0	190	100	4	36	140	22	0	162
NBT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NBR	59	2	11	72	0	0	72	117	5	7	129	0	0	129
SBL	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SBT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SBR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EBL	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EBT	743	30	81	854	52	0	906	1,381	55	124	1,560	65	0	1,625
EBR	51	2	20	73	17	0	90	93	4	38	135	22	0	157
WBL	105	4	4	113	0	0	113	108	4	12	124	0	0	124
WBT	1,259	50	109	1,418	64	0	1,482	1,133	45	118	1,296	65	0	1,361
WBR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>North Leg</b>														
Approach	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Departure	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
<b>South Leg</b>														
Approach	192	7	42	241	21	0	262	217	9	43	269	22	0	291
Departure	156	6	24	186	17	0	203	201	8	50	259	22	0	281
Total	348	13	66	427	38	0	465	418	17	93	528	44	0	572
<b>East Leg</b>														
Approach	1,364	54	113	1,531	64	0	1,595	1,241	49	130	1,420	65	0	1,485
Departure	802	32	92	926	52	0	978	1,498	60	131	1,689	65	0	1,754
Total	2,166	86	205	2,457	116	0	2,573	2,739	109	261	3,109	130	0	3,239
<b>West Leg</b>														
Approach	794	32	101	927	69	0	996	1,474	59	162	1,695	87	0	1,782
Departure	1,392	55	140	1,587	85	0	1,672	1,233	49	154	1,436	87	0	1,523
Total	2,186	87	241	2,514	154	0	2,668	2,707	108	316	3,131	174	0	3,305
<b>Total Approaches</b>														
Approach	2,350	93	256	2,699	154	0	2,853	2,932	117	335	3,384	174	0	3,558
Departure	2,350	93	256	2,699	154	0	2,853	2,932	117	335	3,384	174	0	3,558
Total	4,700	186	512	5,398	308	0	5,706	5,864	234	670	6,768	348	0	7,116

Table C-2 - Opening Year (2024) Peak Hour PCE Volume Summary

	AM Peak Hour							PM Peak Hour						
	Existing (2,022) PCE	2022- 2,024 Growth	Cumulative Project Trips	OY No Project	Net Project Trips	Pass-by Trips	OY Plus Project	Existing (2,022) PCE	2022- 2,024 Growth	Cumulative Project Trips	OY No Project	Net Project Trips	Pass-by Trips	OY Plus Project
<b>10 Kiowa Road/Bear Valley Road</b>														
NBL	261	10	31	302	11	0	313	209	8	36	253	11	0	264
NBT	139	6	0	145	0	0	145	210	8	0	218	0	0	218
NBR	60	2	0	62	0	0	62	114	5	0	119	0	0	119
SBL	47	2	5	54	0	0	54	65	3	10	78	0	0	78
SBT	139	6	0	145	0	0	145	221	9	0	230	0	0	230
SBR	168	7	32	207	11	0	218	127	5	41	173	11	0	184
EBL	87	3	29	119	9	0	128	155	6	39	200	11	0	211
EBT	492	20	39	551	17	0	568	859	34	59	952	22	0	974
EBR	133	5	25	163	9	0	172	213	9	35	257	11	0	268
WBL	96	4	0	100	0	0	100	123	5	0	128	0	0	128
WBT	781	31	55	867	21	0	888	776	31	58	865	22	0	887
WBR	43	2	10	55	0	0	55	52	2	8	62	0	0	62
<b>North Leg</b>														
Approach	354	15	37	406	11	0	417	413	17	51	481	11	0	492
Departure	269	11	39	319	9	0	328	417	16	47	480	11	0	491
Total	623	26	76	725	20	0	745	830	33	98	961	22	0	983
<b>South Leg</b>														
Approach	460	18	31	509	11	0	520	533	21	36	590	11	0	601
Departure	368	15	25	408	9	0	417	557	23	35	615	11	0	626
Total	828	33	56	917	20	0	937	1,090	44	71	1,205	22	0	1,227
<b>East Leg</b>														
Approach	920	37	65	1,022	21	0	1,043	951	38	66	1,055	22	0	1,077
Departure	599	24	44	667	17	0	684	1,038	42	69	1,149	22	0	1,171
Total	1,519	61	109	1,689	38	0	1,727	1,989	80	135	2,204	44	0	2,248
<b>West Leg</b>														
Approach	712	28	93	833	35	0	868	1,227	49	133	1,409	44	0	1,453
Departure	1,210	48	118	1,376	43	0	1,419	1,112	44	135	1,291	44	0	1,335
Total	1,922	76	211	2,209	78	0	2,287	2,339	93	268	2,700	88	0	2,788
<b>Total Approaches</b>														
Approach	2,446	98	226	2,770	78	0	2,848	3,124	125	286	3,535	88	0	3,623
Departure	2,446	98	226	2,770	78	0	2,848	3,124	125	286	3,535	88	0	3,623
Total	4,892	196	452	5,540	156	0	5,696	6,248	250	572	7,070	176	0	7,246



Table C-2 - Opening Year (2024) Peak Hour PCE Volume Summary

	AM Peak Hour							PM Peak Hour						
	Existing (2,022) PCE	2022- 2,024 Growth	Cumulative Project Trips	OY No Project	Net Project Trips	Pass-by Trips	OY Plus Project	Existing (2,022) PCE	2022- 2,024 Growth	Cumulative Project Trips	OY No Project	Net Project Trips	Pass-by Trips	OY Plus Project
<b>11 Apple Bear Road/Project Driveway 1</b>														
NBL	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NBT	0	0	0	0	9	38	50	0	0	0	0	11	35	47
NBR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SBL	0	0	0	0	139	61	200	0	0	0	0	141	67	208
SBT	0	0	0	0	11	58	71	0	0	0	0	11	64	75
SBR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EBL	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EBT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EBR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WBL	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WBT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WBR	0	0	0	0	96	39	135	0	0	0	0	118	38	156
<b>North Leg</b>														
Approach	0	0	0	0	150	119	271	0	0	0	0	152	131	283
Departure	0	0	0	0	105	77	185	0	0	0	0	129	73	203
Total	0	0	0	0	255	196	456	0	0	0	0	281	204	486
<b>South Leg</b>														
Approach	0	0	0	0	9	38	50	0	0	0	0	11	35	47
Departure	0	0	0	0	11	58	71	0	0	0	0	11	64	75
Total	0	0	0	0	20	96	121	0	0	0	0	22	99	122
<b>East Leg</b>														
Approach	0	0	0	0	96	39	135	0	0	0	0	118	38	156
Departure	0	0	0	0	139	61	200	0	0	0	0	141	67	208
Total	0	0	0	0	235	100	335	0	0	0	0	259	105	364
<b>West Leg</b>														
Approach	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Departure	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
<b>Total Approaches</b>														
Approach	0	0	0	0	255	196	456	0	0	0	0	281	204	486
Departure	0	0	0	0	255	196	456	0	0	0	0	281	204	486
Total	0	0	0	0	510	392	912	0	0	0	0	562	408	972





Table C-2 - Opening Year (2024) Peak Hour PCE Volume Summary

	AM Peak Hour							PM Peak Hour						
	Existing (2,022) PCE	2022- 2,024 Growth	Cumulative Project Trips	OY No Project	Net Project Trips	Pass-by Trips	OY Plus Project	Existing (2,022) PCE	2022- 2,024 Growth	Cumulative Project Trips	OY No Project	Net Project Trips	Pass-by Trips	OY Plus Project
<b>12 Apple Bear Road/Project Driveway 2</b>														
NBL	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NBT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NBR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SBL	0	0	0	0	11	58	71	0	0	0	0	11	64	75
SBT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SBR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EBL	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EBT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EBR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WBL	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WBT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WBR	0	0	0	0	9	38	50	0	0	0	0	11	35	47
<b>North Leg</b>														
Approach	0	0	0	0	11	58	71	0	0	0	0	11	64	75
Departure	0	0	0	0	9	38	50	0	0	0	0	11	35	47
Total	0	0	0	0	20	96	121	0	0	0	0	22	99	122
<b>South Leg</b>														
Approach	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Departure	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
<b>East Leg</b>														
Approach	0	0	0	0	9	38	50	0	0	0	0	11	35	47
Departure	0	0	0	0	11	58	71	0	0	0	0	11	64	75
Total	0	0	0	0	20	96	121	0	0	0	0	22	99	122
<b>West Leg</b>														
Approach	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Departure	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
<b>Total Approaches</b>														
Approach	0	0	0	0	20	96	121	0	0	0	0	22	99	122
Departure	0	0	0	0	20	96	121	0	0	0	0	22	99	122
Total	0	0	0	0	40	192	242	0	0	0	0	44	198	244



Table C-2 - Opening Year (2024) Peak Hour PCE Volume Summary

	AM Peak Hour							PM Peak Hour						
	Existing (2,022) PCE	2022- 2,024 Growth	Cumulative Project Trips	OY No Project	Net Project Trips	Pass-by Trips	OY Plus Project	Existing (2,022) PCE	2022- 2,024 Growth	Cumulative Project Trips	OY No Project	Net Project Trips	Pass-by Trips	OY Plus Project
<b>13 Project Driveway 3/Bear Valley Road</b>														
NBL	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NBT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NBR	0	0	0	0	35	13	48	0	0	0	0	43	23	66
SBL	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SBT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SBR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EBL	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EBT	0	0	88	916	0	(48)	868	0	0	193	1,740	0	(81)	1,659
EBR	0	0	0	0	64	16	80	0	0	0	0	65	25	90
WBL	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WBT	0	0	172	1,654	86	0	1,740	0	0	151	1,443	87	0	1,530
WBR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>North Leg</b>														
Approach	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Departure	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
<b>South Leg</b>														
Approach	0	0	0	0	35	13	48	0	0	0	0	43	23	66
Departure	0	0	0	0	64	16	80	0	0	0	0	65	25	90
Total	0	0	0	0	99	29	128	0	0	0	0	108	48	156
<b>East Leg</b>														
Approach	0	0	172	1,654	86	0	1,740	0	0	151	1,443	87	0	1,530
Departure	0	0	88	916	35	(35)	916	0	0	193	1,740	43	(58)	1,725
Total	0	0	260	2,570	121	(35)	2,656	0	0	344	3,183	130	(58)	3,255
<b>West Leg</b>														
Approach	0	0	88	916	64	(32)	948	0	0	193	1,740	65	(56)	1,749
Departure	0	0	172	1,654	86	0	1,740	0	0	151	1,443	87	0	1,530
Total	0	0	260	2,570	150	(32)	2,688	0	0	344	3,183	152	(56)	3,279
<b>Total Approaches</b>														
Approach	0	0	260	2,570	185	(19)	2,736	0	0	344	3,183	195	(33)	3,345
Departure	0	0	260	2,570	185	(19)	2,736	0	0	344	3,183	195	(33)	3,345
Total	0	0	520	5,140	370	(38)	5,472	0	0	688	6,366	390	(66)	6,690



Table C-2 - Opening Year (2024) Peak Hour PCE Volume Summary

	AM Peak Hour							PM Peak Hour						
	Existing (2,022) PCE	2022- 2,024 Growth	Cumulative Project Trips	OY No Project	Net Project Trips	Pass-by Trips	OY Plus Project	Existing (2,022) PCE	2022- 2,024 Growth	Cumulative Project Trips	OY No Project	Net Project Trips	Pass-by Trips	OY Plus Project
<b>14 Flying Feather Road/Project Driveway 4</b>														
NBL	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NBT	0	0	0	0	9	14	23	0	0	0	0	11	27	38
NBR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SBL	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SBT	0	0	0	0	0	0	3	0	0	0	0	0	0	1
SBR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EBL	0	0	0	0	26	14	40	0	0	0	0	32	29	61
EBT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EBR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WBL	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WBT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WBR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>North Leg</b>														
Approach	0	0	0	0	0	0	3	0	0	0	0	0	0	1
Departure	0	0	0	0	35	28	63	0	0	0	0	43	56	99
Total	0	0	0	0	35	28	66	0	0	0	0	43	56	100
<b>South Leg</b>														
Approach	0	0	0	0	9	14	23	0	0	0	0	11	27	38
Departure	0	0	0	0	0	0	3	0	0	0	0	0	0	1
Total	0	0	0	0	9	14	26	0	0	0	0	11	27	39
<b>East Leg</b>														
Approach	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Departure	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
<b>West Leg</b>														
Approach	0	0	0	0	26	14	40	0	0	0	0	32	29	61
Departure	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	26	14	40	0	0	0	0	32	29	61
<b>Total Approaches</b>														
Approach	0	0	0	0	35	28	66	0	0	0	0	43	56	100
Departure	0	0	0	0	35	28	66	0	0	0	0	43	56	100
Total	0	0	0	0	70	56	132	0	0	0	0	86	112	200



Table C-2 - Opening Year (2024) Peak Hour PCE Volume Summary

	AM Peak Hour							PM Peak Hour						
	Existing (2,022) PCE	2022- 2,024 Growth	Cumulative Project Trips	OY No Project	Net Project Trips	Pass-by Trips	OY Plus Project	Existing (2,022) PCE	2022- 2,024 Growth	Cumulative Project Trips	OY No Project	Net Project Trips	Pass-by Trips	OY Plus Project
<b>15 Flying Feather Road/Project Driveway 5</b>														
NBL	0	0	0	0	0	0	3	0	0	0	0	0	0	1
NBT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NBR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SBL	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SBT	0	0	0	0	0	0	3	0	0	0	0	0	0	1
SBR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EBL	0	0	0	0	9	14	23	0	0	0	0	11	27	38
EBT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EBR	0	0	0	0	0	0	2	0	0	0	0	0	0	0
WBL	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WBT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WBR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>North Leg</b>														
Approach	0	0	0	0	0	0	3	0	0	0	0	0	0	1
Departure	0	0	0	0	9	14	23	0	0	0	0	11	27	38
Total	0	0	0	0	9	14	26	0	0	0	0	11	27	39
<b>South Leg</b>														
Approach	0	0	0	0	0	0	3	0	0	0	0	0	0	1
Departure	0	0	0	0	0	0	5	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	8	0	0	0	0	0	0	2
<b>East Leg</b>														
Approach	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Departure	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
<b>West Leg</b>														
Approach	0	0	0	0	9	14	25	0	0	0	0	11	27	38
Departure	0	0	0	0	0	0	3	0	0	0	0	0	0	1
Total	0	0	0	0	9	14	28	0	0	0	0	11	27	39
<b>Total Approaches</b>														
Approach	0	0	0	0	9	14	31	0	0	0	0	11	27	40
Departure	0	0	0	0	9	14	31	0	0	0	0	11	27	40
Total	0	0	0	0	18	28	62	0	0	0	0	22	54	80

**Table C-3 - Cumulative (2045) Peak Hour Volume Summary**

	AM Peak Hour				PM Peak Hour			
	Cumulative No Project Volumes	Net Project Trips	Pass-by Trips	Cumulative Plus Project	Cumulative No Project Volumes	Net Project Trips	Pass-by Trips	Cumulative Plus Project
<b>1 Jacaranda Avenue/Bear Valley Road</b>								
NBL	85	0	0	85	89	0	0	89
NBT	54	0	0	54	9	0	0	9
NBR	296	11	0	307	444	11	0	455
SBL	17	0	0	17	29	0	0	29
SBT	17	0	0	17	20	0	0	20
SBR	40	0	0	40	39	0	0	39
EBL	137	0	0	137	38	0	0	38
EBT	1,516	21	0	1,537	2,131	22	0	2,153
EBR	69	0	0	69	50	0	0	50
WBL	242	9	0	251	339	11	0	350
WBT	1,842	17	0	1,859	1,874	22	0	1,896
WBR	47	0	0	47	24	0	0	24
North Leg								
Approach	74	0	0	74	88	0	0	88
Departure	238	0	0	238	71	0	0	71
Total	312	0	0	312	159	0	0	159
South Leg								
Approach	435	11	0	446	542	11	0	553
Departure	328	9	0	337	409	11	0	420
Total	763	20	0	783	951	22	0	973
East Leg								
Approach	2,131	26	0	2,157	2,237	33	0	2,270
Departure	1,829	32	0	1,861	2,604	33	0	2,637
Total	3,960	58	0	4,018	4,841	66	0	4,907
West Leg								
Approach	1,722	21	0	1,743	2,219	22	0	2,241
Departure	1,967	17	0	1,984	2,002	22	0	2,024
Total	3,689	38	0	3,727	4,221	44	0	4,265
Total Approaches								
Approach	4,362	58	0	4,420	5,086	66	0	5,152
Departure	4,362	58	0	4,420	5,086	66	0	5,152
Total	8,724	116	0	8,840	10,172	132	0	10,304

**Table C-3 - Cumulative (2045) Peak Hour Volume Summary**

	AM Peak Hour				PM Peak Hour			
	Cumulative No Project Volumes	Net Project Trips	Pass-by Trips	Cumulative Plus Project	Cumulative No Project Volumes	Net Project Trips	Pass-by Trips	Cumulative Plus Project
<b>2 Mojave Fish Hatchery Road/Bear Valley Road</b>								
NBL	46	0	0	46	113	0	0	113
NBT	6	0	0	6	9	0	0	9
NBR	26	0	0	26	70	0	0	70
SBL	108	11	0	119	126	11	0	137
SBT	5	0	0	5	5	0	0	5
SBR	70	0	0	70	91	0	0	91
EBL	173	0	0	173	62	0	0	62
EBT	1,594	32	0	1,626	2,436	33	0	2,469
EBR	62	0	0	62	106	0	0	106
WBL	49	0	0	49	126	0	0	126
WBT	2,015	26	0	2,041	2,033	32	0	2,065
WBR	261	9	0	270	95	11	0	106
North Leg								
Approach	183	11	0	194	222	11	0	233
Departure	440	9	0	449	166	11	0	177
Total	623	20	0	643	388	22	0	410
South Leg								
Approach	78	0	0	78	192	0	0	192
Departure	116	0	0	116	237	0	0	237
Total	194	0	0	194	429	0	0	429
East Leg								
Approach	2,325	35	0	2,360	2,254	43	0	2,297
Departure	1,728	43	0	1,771	2,632	44	0	2,676
Total	4,053	78	0	4,131	4,886	87	0	4,973
West Leg								
Approach	1,829	32	0	1,861	2,604	33	0	2,637
Departure	2,131	26	0	2,157	2,237	32	0	2,269
Total	3,960	58	0	4,018	4,841	65	0	4,906
Total Approaches								
Approach	4,415	78	0	4,493	5,272	87	0	5,359
Departure	4,415	78	0	4,493	5,272	87	0	5,359
Total	8,830	156	0	8,986	10,544	174	0	10,718

**Table C-3 - Cumulative (2045) Peak Hour Volume Summary**

	AM Peak Hour				PM Peak Hour			
	Cumulative No Project Volumes	Net Project Trips	Pass-by Trips	Cumulative Plus Project	Cumulative No Project Volumes	Net Project Trips	Pass-by Trips	Cumulative Plus Project
<b>3 Jess Ranch Parkway/Bear Valley Road</b>								
NBL	306	0	0	306	508	0	0	508
NBT	0	0	0	0	0	0	0	0
NBR	50	11	0	61	196	11	0	207
SBL	0	0	0	0	0	0	0	0
SBT	0	0	0	0	0	0	0	0
SBR	0	0	0	0	0	0	0	0
EBL	0	0	0	0	0	0	0	0
EBT	1,450	43	0	1,493	2,083	43	0	2,126
EBR	192	0	0	192	361	0	0	361
WBL	85	9	0	94	216	11	0	227
WBT	2,019	35	0	2,054	1,746	43	0	1,789
WBR	0	0	0	0	0	0	0	0
North Leg								
Approach	0	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
South Leg								
Approach	356	11	0	367	704	11	0	715
Departure	277	9	0	286	577	11	0	588
Total	633	20	0	653	1,281	22	0	1,303
East Leg								
Approach	2,104	44	0	2,148	1,962	54	0	2,016
Departure	1,500	54	0	1,554	2,279	54	0	2,333
Total	3,604	98	0	3,702	4,241	108	0	4,349
West Leg								
Approach	1,642	43	0	1,685	2,444	43	0	2,487
Departure	2,325	35	0	2,360	2,254	43	0	2,297
Total	3,967	78	0	4,045	4,698	86	0	4,784
Total Approaches								
Approach	4,102	98	0	4,200	5,110	108	0	5,218
Departure	4,102	98	0	4,200	5,110	108	0	5,218
Total	8,204	196	0	8,400	10,220	216	0	10,436

**Table C-3 - Cumulative (2045) Peak Hour Volume Summary**

	AM Peak Hour				PM Peak Hour			
	Cumulative No Project Volumes	Net Project Trips	Pass-by Trips	Cumulative Plus Project	Cumulative No Project Volumes	Net Project Trips	Pass-by Trips	Cumulative Plus Project
<b>4 Reata Road/Bear Valley Road</b>								
NBL	38	0	0	38	219	0	0	219
NBT	26	0	0	26	114	0	0	114
NBR	30	0	0	30	166	0	0	166
SBL	21	11	0	32	30	11	0	41
SBT	43	0	0	43	111	0	0	111
SBR	298	0	0	298	284	0	0	284
EBL	222	0	0	222	320	0	0	320
EBT	1,202	54	0	1,256	1,799	54	0	1,853
EBR	50	0	0	50	139	0	0	139
WBL	64	0	0	64	159	0	0	159
WBT	1,768	44	0	1,812	1,458	54	0	1,512
WBR	17	9	0	26	16	11	0	27
North Leg								
Approach	362	11	0	373	425	11	0	436
Departure	265	9	0	274	450	11	0	461
Total	627	20	0	647	875	22	0	897
South Leg								
Approach	94	0	0	94	499	0	0	499
Departure	157	0	0	157	409	0	0	409
Total	251	0	0	251	908	0	0	908
East Leg								
Approach	1,849	53	0	1,902	1,633	65	0	1,698
Departure	1,253	65	0	1,318	1,995	65	0	2,060
Total	3,102	118	0	3,220	3,628	130	0	3,758
West Leg								
Approach	1,474	54	0	1,528	2,258	54	0	2,312
Departure	2,104	44	0	2,148	1,961	54	0	2,015
Total	3,578	98	0	3,676	4,219	108	0	4,327
Total Approaches								
Approach	3,779	118	0	3,897	4,815	130	0	4,945
Departure	3,779	118	0	3,897	4,815	130	0	4,945
Total	7,558	236	0	7,794	9,630	260	0	9,890



**Table C-3 - Cumulative (2045) Peak Hour Volume Summary**

	AM Peak Hour				PM Peak Hour			
	Cumulative No Project Volumes	Net Project Trips	Pass-by Trips	Cumulative Plus Project	Cumulative No Project Volumes	Net Project Trips	Pass-by Trips	Cumulative Plus Project
<b>5 Apple Valley Road/Pimlico Road - Shopping Center Driveway</b>								
NBL	42	9	0	51	77	11	0	88
NBT	663	17	0	680	824	22	0	846
NBR	38	0	0	38	97	0	0	97
SBL	68	0	0	68	167	0	0	167
SBT	902	21	0	923	908	22	0	930
SBR	208	0	0	208	262	0	0	262
EBL	168	0	0	168	300	0	0	300
EBT	38	0	0	38	58	0	0	58
EBR	16	11	0	27	42	11	0	53
WBL	37	0	0	37	87	0	0	87
WBT	28	0	0	28	49	0	0	49
WBR	41	0	0	41	108	0	0	108
North Leg								
Approach	1,178	21	0	1,199	1,337	22	0	1,359
Departure	872	17	0	889	1,232	22	0	1,254
Total	2,050	38	0	2,088	2,569	44	0	2,613
South Leg								
Approach	743	26	0	769	998	33	0	1,031
Departure	955	32	0	987	1,037	33	0	1,070
Total	1,698	58	0	1,756	2,035	66	0	2,101
East Leg								
Approach	106	0	0	106	244	0	0	244
Departure	144	0	0	144	322	0	0	322
Total	250	0	0	250	566	0	0	566
West Leg								
Approach	222	11	0	233	400	11	0	411
Departure	278	9	0	287	388	11	0	399
Total	500	20	0	520	788	22	0	810
Total Approaches								
Approach	2,249	58	0	2,307	2,979	66	0	3,045
Departure	2,249	58	0	2,307	2,979	66	0	3,045
Total	4,498	116	0	4,614	5,958	132	0	6,090

**Table C-3 - Cumulative (2045) Peak Hour Volume Summary**

	AM Peak Hour				PM Peak Hour			
	Cumulative No Project Volumes	Net Project Trips	Pass-by Trips	Cumulative Plus Project	Cumulative No Project Volumes	Net Project Trips	Pass-by Trips	Cumulative Plus Project
<b>6 Apple Valley Road/Bear Valley Road</b>								
NBL	82	0	0	82	121	0	0	121
NBT	172	0	0	172	250	0	0	250
NBR	58	32	0	90	202	33	0	235
SBL	217	32	0	249	289	33	0	322
SBT	210	0	0	210	386	0	0	386
SBR	464	0	0	464	410	0	0	410
EBL	385	0	0	385	526	0	0	526
EBT	850	64	0	914	1,327	65	0	1,392
EBR	48	0	0	48	68	0	0	68
WBL	151	26	0	177	208	32	0	240
WBT	1,338	52	0	1,390	1,113	65	0	1,178
WBR	236	26	0	262	185	32	0	217
North Leg								
Approach	891	32	0	923	1,085	33	0	1,118
Departure	793	26	0	819	961	32	0	993
Total	1,684	58	0	1,742	2,046	65	0	2,111
South Leg								
Approach	312	32	0	344	573	33	0	606
Departure	409	26	0	435	662	32	0	694
Total	721	58	0	779	1,235	65	0	1,300
East Leg								
Approach	1,725	104	0	1,829	1,506	129	0	1,635
Departure	1,125	128	0	1,253	1,818	131	0	1,949
Total	2,850	232	0	3,082	3,324	260	0	3,584
West Leg								
Approach	1,283	64	0	1,347	1,921	65	0	1,986
Departure	1,884	52	0	1,936	1,644	65	0	1,709
Total	3,167	116	0	3,283	3,565	130	0	3,695
Total Approaches								
Approach	4,211	232	0	4,443	5,085	260	0	5,345
Departure	4,211	232	0	4,443	5,085	260	0	5,345
Total	8,422	464	0	8,886	10,170	520	0	10,690

**Table C-3 - Cumulative (2045) Peak Hour Volume Summary**

	AM Peak Hour				PM Peak Hour			
	Cumulative No Project Volumes	Net Project Trips	Pass-by Trips	Cumulative Plus Project	Cumulative No Project Volumes	Net Project Trips	Pass-by Trips	Cumulative Plus Project
<b>7 Westmont Drive - Apple Bear Road/Bear Valley Road</b>								
NBL	0	104	73	180	0	129	63	193
NBT	0	0	5	5	0	0	9	9
NBR	0	0	0	0	0	0	0	0
SBL	81	0	(3)	78	244	0	(9)	235
SBT	0	0	4	4	0	0	12	12
SBR	62	0	(1)	61	140	0	(3)	137
EBL	107	0	(3)	104	186	0	(5)	181
EBT	975	64	(30)	1,009	1,599	65	(48)	1,616
EBR	0	64	31	95	0	65	51	116
WBL	0	86	84	172	0	87	67	154
WBT	1,629	0	(82)	1,547	1,367	0	(62)	1,305
WBR	104	0	(3)	101	163	0	(5)	158
<b>North Leg</b>								
Approach	143	0	0	143	384	0	0	384
Departure	211	0	(1)	210	349	0	(1)	348
Total	354	0	(1)	353	733	0	(1)	732
<b>South Leg</b>								
Approach	0	104	78	185	0	129	72	202
Departure	0	150	119	271	0	152	130	282
Total	0	254	197	456	0	281	202	484
<b>East Leg</b>								
Approach	1,733	86	(1)	1,820	1,530	87	0	1,617
Departure	1,056	64	(33)	1,087	1,843	65	(57)	1,851
Total	2,789	150	(34)	2,907	3,373	152	(57)	3,468
<b>West Leg</b>								
Approach	1,082	128	(2)	1,208	1,785	130	(2)	1,913
Departure	1,691	104	(10)	1,788	1,507	129	(2)	1,635
Total	2,773	232	(12)	2,996	3,292	259	(4)	3,548
<b>Total Approaches</b>								
Approach	2,958	318	75	3,356	3,699	346	70	4,116
Departure	2,958	318	75	3,356	3,699	346	70	4,116
Total	5,916	636	150	6,712	7,398	692	140	8,232

**Table C-3 - Cumulative (2045) Peak Hour Volume Summary**

	AM Peak Hour				PM Peak Hour			
	Cumulative No Project Volumes	Net Project Trips	Pass-by Trips	Cumulative Plus Project	Cumulative No Project Volumes	Net Project Trips	Pass-by Trips	Cumulative Plus Project
<b>8 Flying Feather Road/Bear Valley Road</b>								
NBL	3	0	0	0	1	0	0	0
NBT	0	0	0	0	0	0	0	0
NBR	2	35	29	66	3	43	56	102
SBL	0	0	0	0	0	0	0	0
SBT	0	0	0	0	0	0	0	0
SBR	0	0	0	0	0	0	0	0
EBL	0	0	0	0	0	0	0	0
EBT	1,024	35	(35)	1,024	1,751	43	(58)	1,736
EBR	3	0	0	3	1	0	0	1
WBL	2	0	0	0	0	0	0	0
WBT	1,659	86	0	1,745	1,428	87	0	1,515
WBR	0	0	0	0	0	0	0	0
<b>North Leg</b>								
Approach	0	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
<b>South Leg</b>								
Approach	5	35	29	66	4	43	56	102
Departure	5	0	0	3	1	0	0	1
Total	10	35	29	69	5	43	56	103
<b>East Leg</b>								
Approach	1,661	86	0	1,745	1,428	87	0	1,515
Departure	1,026	70	(6)	1,090	1,754	86	(2)	1,838
Total	2,687	156	(6)	2,835	3,182	173	(2)	3,353
<b>West Leg</b>								
Approach	1,027	35	(35)	1,027	1,752	43	(58)	1,737
Departure	1,662	86	0	1,745	1,429	87	0	1,515
Total	2,689	121	(35)	2,772	3,181	130	(58)	3,252
<b>Total Approaches</b>								
Approach	2,693	156	(6)	2,838	3,184	173	(2)	3,354
Departure	2,693	156	(6)	2,838	3,184	173	(2)	3,354
Total	5,386	312	(12)	5,676	6,368	346	(4)	6,708

**Table C-3 - Cumulative (2045) Peak Hour Volume Summary**

	AM Peak Hour				PM Peak Hour			
	Cumulative No Project Volumes	Net Project Trips	Pass-by Trips	Cumulative Plus Project	Cumulative No Project Volumes	Net Project Trips	Pass-by Trips	Cumulative Plus Project
<b>9 Deep Creek Road/Apple Valley Road</b>								
NBL	175	21	0	196	147	22	0	169
NBT	51	0	0	51	61	0	0	61
NBR	81	0	0	81	136	0	0	136
SBL	28	0	0	28	55	0	0	55
SBT	28	0	0	28	71	0	0	71
SBR	49	0	0	49	59	0	0	59
EBL	43	0	0	43	64	0	0	64
EBT	903	52	0	955	1,638	65	0	1,703
EBR	84	17	0	101	140	22	0	162
WBL	116	0	0	116	135	0	0	135
WBT	1,489	64	0	1,553	1,361	65	0	1,426
WBR	41	0	0	41	36	0	0	36
North Leg								
Approach	105	0	0	105	185	0	0	185
Departure	135	0	0	135	161	0	0	161
Total	240	0	0	240	346	0	0	346
South Leg								
Approach	307	21	0	328	344	22	0	366
Departure	228	17	0	245	346	22	0	368
Total	535	38	0	573	690	44	0	734
East Leg								
Approach	1,646	64	0	1,710	1,532	65	0	1,597
Departure	1,012	52	0	1,064	1,829	65	0	1,894
Total	2,658	116	0	2,774	3,361	130	0	3,491
West Leg								
Approach	1,030	69	0	1,099	1,842	87	0	1,929
Departure	1,713	85	0	1,798	1,567	87	0	1,654
Total	2,743	154	0	2,897	3,409	174	0	3,583
Total Approaches								
Approach	3,088	154	0	3,242	3,903	174	0	4,077
Departure	3,088	154	0	3,242	3,903	174	0	4,077
Total	6,176	308	0	6,484	7,806	348	0	8,154

**Table C-3 - Cumulative (2045) Peak Hour Volume Summary**

	AM Peak Hour				PM Peak Hour			
	Cumulative No Project Volumes	Net Project Trips	Pass-by Trips	Cumulative Plus Project	Cumulative No Project Volumes	Net Project Trips	Pass-by Trips	Cumulative Plus Project
<b>10 Kiowa Road/Bear Valley Road</b>								
NBL	325	11	0	336	266	11	0	277
NBT	152	0	0	152	229	0	0	229
NBR	78	0	0	78	131	0	0	131
SBL	57	0	0	57	82	0	0	82
SBT	152	0	0	152	242	0	0	242
SBR	217	11	0	228	182	11	0	193
EBL	125	9	0	134	210	11	0	221
EBT	700	17	0	717	1,009	22	0	1,031
EBR	171	9	0	180	270	11	0	281
WBL	105	0	0	105	153	0	0	153
WBT	943	21	0	964	959	22	0	981
WBR	58	0	0	58	65	0	0	65
North Leg								
Approach	426	11	0	437	506	11	0	517
Departure	335	9	0	344	504	11	0	515
Total	761	20	0	781	1,010	22	0	1,032
South Leg								
Approach	555	11	0	566	626	11	0	637
Departure	428	9	0	437	665	11	0	676
Total	983	20	0	1,003	1,291	22	0	1,313
East Leg								
Approach	1,106	21	0	1,127	1,177	22	0	1,199
Departure	835	17	0	852	1,222	22	0	1,244
Total	1,941	38	0	1,979	2,399	44	0	2,443
West Leg								
Approach	996	35	0	1,031	1,489	44	0	1,533
Departure	1,485	43	0	1,528	1,407	44	0	1,451
Total	2,481	78	0	2,559	2,896	88	0	2,984
Total Approaches								
Approach	3,083	78	0	3,161	3,798	88	0	3,886
Departure	3,083	78	0	3,161	3,798	88	0	3,886
Total	6,166	156	0	6,322	7,596	176	0	7,772

**Table C-3 - Cumulative (2045) Peak Hour Volume Summary**

	AM Peak Hour				PM Peak Hour			
	Cumulative No Project Volumes	Net Project Trips	Pass-by Trips	Cumulative Plus Project	Cumulative No Project Volumes	Net Project Trips	Pass-by Trips	Cumulative Plus Project
<b>11 Apple Bear Road/Project Driveway 1</b>								
NBL	0	0	0	0	0	0	0	0
NBT	0	9	38	50	0	11	35	47
NBR	0	0	0	0	0	0	0	0
SBL	0	139	61	200	0	141	67	208
SBT	0	11	58	71	0	11	64	75
SBR	0	0	0	0	0	0	0	0
EBL	0	0	0	0	0	0	0	0
EBT	0	0	0	0	0	0	0	0
EBR	0	0	0	0	0	0	0	0
WBL	0	0	0	0	0	0	0	0
WBT	0	0	0	0	0	0	0	0
WBR	0	96	39	135	0	118	38	156
North Leg								
Approach	0	150	119	271	0	152	131	283
Departure	0	105	77	185	0	129	73	203
Total	0	255	196	456	0	281	204	486
South Leg								
Approach	0	9	38	50	0	11	35	47
Departure	0	11	58	71	0	11	64	75
Total	0	20	96	121	0	22	99	122
East Leg								
Approach	0	96	39	135	0	118	38	156
Departure	0	139	61	200	0	141	67	208
Total	0	235	100	335	0	259	105	364
West Leg								
Approach	0	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
Total Approaches								
Approach	0	255	196	456	0	281	204	486
Departure	0	255	196	456	0	281	204	486
Total	0	510	392	912	0	562	408	972

**Table C-3 - Cumulative (2045) Peak Hour Volume Summary**

	AM Peak Hour				PM Peak Hour			
	Cumulative No Project Volumes	Net Project Trips	Pass-by Trips	Cumulative Plus Project	Cumulative No Project Volumes	Net Project Trips	Pass-by Trips	Cumulative Plus Project
<b>12 Apple Bear Road/Project Driveway 2</b>								
NBL	0	0	0	0	0	0	0	0
NBT	0	0	0	0	0	0	0	0
NBR	0	0	0	0	0	0	0	0
SBL	0	11	58	71	0	11	64	75
SBT	0	0	0	0	0	0	0	0
SBR	0	0	0	0	0	0	0	0
EBL	0	0	0	0	0	0	0	0
EBT	0	0	0	0	0	0	0	0
EBR	0	0	0	0	0	0	0	0
WBL	0	0	0	0	0	0	0	0
WBT	0	0	0	0	0	0	0	0
WBR	0	9	38	50	0	11	35	47
North Leg								
Approach	0	11	58	71	0	11	64	75
Departure	0	9	38	50	0	11	35	47
Total	0	20	96	121	0	22	99	122
South Leg								
Approach	0	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
East Leg								
Approach	0	9	38	50	0	11	35	47
Departure	0	11	58	71	0	11	64	75
Total	0	20	96	121	0	22	99	122
West Leg								
Approach	0	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
Total Approaches								
Approach	0	20	96	121	0	22	99	122
Departure	0	20	96	121	0	22	99	122
Total	0	40	192	242	0	44	198	244



**Table C-3 - Cumulative (2045) Peak Hour Volume Summary**

	AM Peak Hour				PM Peak Hour			
	Cumulative No Project Volumes	Net Project Trips	Pass-by Trips	Cumulative Plus Project	Cumulative No Project Volumes	Net Project Trips	Pass-by Trips	Cumulative Plus Project
<b>13 Project Driveway 3/Bear Valley Road</b>								
NBL	0	0	0	0	0	0	0	0
NBT	0	0	0	0	0	0	0	0
NBR	0	35	13	48	0	43	23	66
SBL	0	0	0	0	0	0	0	0
SBT	0	0	0	0	0	0	0	0
SBR	0	0	0	0	0	0	0	0
EBL	0	0	0	0	0	0	0	0
EBT	1,056	0	(48)	1,008	1,843	0	(81)	1,762
EBR	0	64	16	80	0	65	25	90
WBL	0	0	0	0	0	0	0	0
WBT	1,733	86	0	1,819	1,530	87	0	1,617
WBR	0	0	0	0	0	0	0	0
North Leg								
Approach	0	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
South Leg								
Approach	0	35	13	48	0	43	23	66
Departure	0	64	16	80	0	65	25	90
Total	0	99	29	128	0	108	48	156
East Leg								
Approach	1,733	86	0	1,819	1,530	87	0	1,617
Departure	1,056	35	(35)	1,056	1,843	43	(58)	1,828
Total	2,789	121	(35)	2,875	3,373	130	(58)	3,445
West Leg								
Approach	1,056	64	(32)	1,088	1,843	65	(56)	1,852
Departure	1,733	86	0	1,819	1,530	87	0	1,617
Total	2,789	150	(32)	2,907	3,373	152	(56)	3,469
Total Approaches								
Approach	2,789	185	(19)	2,955	3,373	195	(33)	3,535
Departure	2,789	185	(19)	2,955	3,373	195	(33)	3,535
Total	5,578	370	(38)	5,910	6,746	390	(66)	7,070

**Table C-3 - Cumulative (2045) Peak Hour Volume Summary**

	AM Peak Hour				PM Peak Hour			
	Cumulative No Project Volumes	Net Project Trips	Pass-by Trips	Cumulative Plus Project	Cumulative No Project Volumes	Net Project Trips	Pass-by Trips	Cumulative Plus Project
<b>14 Flying Feather Road/Project Driveway 4</b>								
NBL	0	0	0	0	0	0	0	0
NBT	0	9	14	23	0	11	27	38
NBR	0	0	0	0	0	0	0	0
SBL	0	0	0	0	0	0	0	0
SBT	0	0	0	3	0	0	0	1
SBR	0	0	0	0	0	0	0	0
EBL	0	26	14	40	0	32	29	61
EBT	0	0	0	0	0	0	0	0
EBR	0	0	0	0	0	0	0	0
WBL	0	0	0	0	0	0	0	0
WBT	0	0	0	0	0	0	0	0
WBR	0	0	0	0	0	0	0	0
North Leg								
Approach	0	0	0	3	0	0	0	1
Departure	0	35	28	63	0	43	56	99
Total	0	35	28	66	0	43	56	100
South Leg								
Approach	0	9	14	23	0	11	27	38
Departure	0	0	0	3	0	0	0	1
Total	0	9	14	26	0	11	27	39
East Leg								
Approach	0	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
West Leg								
Approach	0	26	14	40	0	32	29	61
Departure	0	0	0	0	0	0	0	0
Total	0	26	14	40	0	32	29	61
Total Approaches								
Approach	0	35	28	66	0	43	56	100
Departure	0	35	28	66	0	43	56	100
Total	0	70	56	132	0	86	112	200

**Table C-3 - Cumulative (2045) Peak Hour Volume Summary**

	AM Peak Hour				PM Peak Hour			
	Cumulative No Project Volumes	Net Project Trips	Pass-by Trips	Cumulative Plus Project	Cumulative No Project Volumes	Net Project Trips	Pass-by Trips	Cumulative Plus Project
<b>15 Flying Feather Road/Project Driveway 5</b>								
NBL	0	0	0	3	0	0	0	1
NBT	0	0	0	0	0	0	0	0
NBR	0	0	0	0	0	0	0	0
SBL	0	0	0	0	0	0	0	0
SBT	0	0	0	3	0	0	0	1
SBR	0	0	0	0	0	0	0	0
EBL	0	9	14	23	0	11	27	38
EBT	0	0	0	0	0	0	0	0
EBR	0	0	0	2	0	0	0	0
WBL	0	0	0	0	0	0	0	0
WBT	0	0	0	0	0	0	0	0
WBR	0	0	0	0	0	0	0	0
North Leg								
Approach	0	0	0	3	0	0	0	1
Departure	0	9	14	23	0	11	27	38
Total	0	9	14	26	0	11	27	39
South Leg								
Approach	0	0	0	3	0	0	0	1
Departure	0	0	0	5	0	0	0	1
Total	0	0	0	8	0	0	0	2
East Leg								
Approach	0	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
West Leg								
Approach	0	9	14	25	0	11	27	38
Departure	0	0	0	3	0	0	0	1
Total	0	9	14	28	0	11	27	39
Total Approaches								
Approach	0	9	14	31	0	11	27	40
Departure	0	9	14	31	0	11	27	40
Total	0	18	28	62	0	22	54	80

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## APPENDIX D

### INTERSECTION LEVEL OF SERVICE WORKSHEETS

HCM 6th Signalized Intersection Summary  
 1: Jacaranda Avenue/Jacaranda Road & Bear Valley Road

Apple Bear Commercial Project  
 Existing AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑↑		↔	↑↑↑	↔		↔↔		↔	↔	↔
Traffic Volume (veh/h)	127	1273	63	217	1516	43	78	49	264	14	15	36
Future Volume (veh/h)	127	1273	63	217	1516	43	78	49	264	14	15	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	135	1354	67	231	1613	46	83	52	281	15	16	38
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	182	1763	87	253	2281	707	209	131	296	349	367	394
Arrive On Green	0.05	0.35	0.35	0.14	0.44	0.44	0.18	0.18	0.18	0.19	0.19	0.19
Sat Flow, veh/h	3510	5062	251	1810	5187	1608	1133	710	1608	1810	1900	1608
Grp Volume(v), veh/h	135	925	496	231	1613	46	135	0	281	15	16	38
Grp Sat Flow(s),veh/h/ln	1755	1729	1855	1810	1729	1608	1843	0	1608	1810	1900	1608
Q Serve(g_s), s	5.5	34.5	34.5	18.3	36.7	2.4	9.3	0.0	25.1	1.0	1.0	2.7
Cycle Q Clear(g_c), s	5.5	34.5	34.5	18.3	36.7	2.4	9.3	0.0	25.1	1.0	1.0	2.7
Prop In Lane	1.00		0.14	1.00		1.00	0.61		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	182	1205	646	253	2281	707	339	0	296	349	367	394
V/C Ratio(X)	0.74	0.77	0.77	0.91	0.71	0.07	0.40	0.00	0.95	0.04	0.04	0.10
Avail Cap(c_a), veh/h	738	1205	646	312	2281	707	339	0	296	349	367	394
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.8	42.0	42.0	61.5	33.0	23.4	52.1	0.0	58.5	47.6	47.6	42.3
Incr Delay (d2), s/veh	2.2	4.7	8.5	24.0	1.9	0.2	3.5	0.0	40.8	0.2	0.2	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	15.0	16.7	9.9	15.0	0.9	4.6	0.0	13.3	0.5	0.5	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	70.0	46.8	50.5	85.5	34.9	23.6	55.5	0.0	99.3	47.8	47.8	42.8
LnGrp LOS	E	D	D	F	C	C	E	A	F	D	D	D
Approach Vol, veh/h		1556			1890			416				69
Approach Delay, s/veh		50.0			40.8			85.1				45.1
Approach LOS		D			D			F				D
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	25.3	55.7		32.0	12.0	69.0		32.0				
Change Period (Y+Rc), s	5.0	5.2		* 5.3	4.5	5.2		4.0				
Max Green Setting (Gmax), s	25.0	45.8		* 27	30.5	40.8		28.0				
Max Q Clear Time (g_c+I1), s	20.3	36.5		27.1	7.5	38.7		4.7				
Green Ext Time (p_c), s	0.0	2.4		0.0	0.1	1.1		0.0				

Intersection Summary

HCM 6th Ctrl Delay	49.2
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.  
 \* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary  
 2: Bear Valley Road & Mojave Fish Hatchery Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑↑↑	↗	↖↗	↑↑↑	↗	↖	↑	↗	↖	↗	↖
Traffic Volume (veh/h)	160	1335	55	45	1669	239	42	6	24	99	5	64
Future Volume (veh/h)	160	1335	55	45	1669	239	42	6	24	99	5	64
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	162	1348	56	45	1686	241	46	0	24	100	5	65
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	186	2095	650	106	1718	833	807	0	359	336	22	281
Arrive On Green	0.10	0.40	0.40	0.03	0.33	0.33	0.22	0.00	0.22	0.19	0.19	0.19
Sat Flow, veh/h	1810	5187	1610	3510	5187	1610	3619	0	1610	1810	116	1512
Grp Volume(v), veh/h	162	1348	56	45	1686	241	46	0	24	100	0	70
Grp Sat Flow(s),veh/h/ln	1810	1729	1610	1755	1729	1610	1810	0	1610	1810	0	1628
Q Serve(g_s), s	11.9	28.3	2.9	1.7	43.5	11.5	1.4	0.0	1.6	6.4	0.0	4.9
Cycle Q Clear(g_c), s	11.9	28.3	2.9	1.7	43.5	11.5	1.4	0.0	1.6	6.4	0.0	4.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.93
Lane Grp Cap(c), veh/h	186	2095	650	106	1718	833	807	0	359	336	0	303
V/C Ratio(X)	0.87	0.64	0.09	0.42	0.98	0.29	0.06	0.00	0.07	0.30	0.00	0.23
Avail Cap(c_a), veh/h	201	2095	650	390	1718	833	807	0	359	336	0	303
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	59.7	32.4	24.9	64.3	44.7	18.5	41.3	0.0	41.4	47.4	0.0	46.7
Incr Delay (d2), s/veh	28.2	1.5	0.3	1.0	17.7	0.9	0.1	0.0	0.4	2.2	0.0	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.8	11.6	1.1	0.8	20.5	6.2	0.6	0.0	0.7	3.2	0.0	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	87.8	33.9	25.1	65.3	62.4	19.4	41.4	0.0	41.7	49.6	0.0	48.5
LnGrp LOS	F	C	C	E	E	B	D	A	D	D	A	D
Approach Vol, veh/h		1566			1972			70				170
Approach Delay, s/veh		39.2			57.2			41.5				49.2
Approach LOS		D			E			D				D
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.1	60.9		30.0	18.9	51.1		35.0				
Change Period (Y+Rc), s	5.0	6.4		4.9	5.0	6.4		4.9				
Max Green Setting (Gmax), s	15.0	43.6		25.1	15.0	43.6		30.1				
Max Q Clear Time (g_c+1), s	13.7	30.3		8.4	13.9	45.5		3.6				
Green Ext Time (p_c), s	0.0	7.1		0.2	0.0	0.0		0.0				

Intersection Summary

HCM 6th Ctrl Delay	49.1
HCM 6th LOS	D

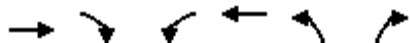
Notes

User approved volume balancing among the lanes for turning movement.

# HCM 6th Signalized Intersection Summary

## 3: Jess Ranch Parkway & Bear Valley Road

Apple Bear Commercial Project  
Existing AM



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↑	↑↑	↑↑↑	↑↑	↑
Traffic Volume (veh/h)	1245	167	75	1688	265	41
Future Volume (veh/h)	1245	167	75	1688	265	41
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	1311	176	79	1777	279	43
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	2570	798	129	2968	1157	590
Arrive On Green	0.50	0.50	0.04	0.57	0.33	0.33
Sat Flow, veh/h	5358	1610	3510	5358	3510	1610
Grp Volume(v), veh/h	1311	176	79	1777	279	43
Grp Sat Flow(s),veh/h/ln	1729	1610	1755	1729	1755	1610
Q Serve(g_s), s	19.6	7.1	2.6	25.6	6.7	2.0
Cycle Q Clear(g_c), s	19.6	7.1	2.6	25.6	6.7	2.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2570	798	129	2968	1157	590
V/C Ratio(X)	0.51	0.22	0.61	0.60	0.24	0.07
Avail Cap(c_a), veh/h	2570	798	317	2968	1157	590
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	0.72	0.72	1.00	1.00
Uniform Delay (d), s/veh	19.6	16.4	54.6	16.0	28.1	23.7
Incr Delay (d2), s/veh	0.7	0.6	1.3	0.6	0.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	2.6	1.1	9.1	2.8	2.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	20.3	17.1	55.9	16.7	28.6	24.0
LnGrp LOS	C	B	E	B	C	C
Approach Vol, veh/h	1487			1856	322	
Approach Delay, s/veh	19.9			18.3	28.0	
Approach LOS	B			B	C	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	8.8	63.2		43.0		72.0
Change Period (Y+Rc), s	4.6	6.2		5.1		6.2
Max Green Setting (Gmax), s	10.4	50.8		37.9		65.8
Max Q Clear Time (g_c+1), s	14.6	21.6		8.7		27.6
Green Ext Time (p_c), s	0.0	18.9		0.6		28.4
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			19.8			
HCM 6th LOS			B			

# HCM 6th Signalized Intersection Summary

## 4: Reata Road & Bear Valley Road

Apple Bear Commercial Project  
Existing AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑↑	↔	↔↔	↑↑↑		↔	↑↑	↔	↔	↑	↔
Traffic Volume (veh/h)	203	994	46	59	1455	15	35	24	28	19	39	273
Future Volume (veh/h)	203	994	46	59	1455	15	35	24	28	19	39	273
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	216	1057	0	63	1548	16	37	26	30	20	41	290
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	273	2631		106	2434	25	390	1181	520	498	622	520
Arrive On Green	0.08	0.51	0.00	0.03	0.46	0.46	0.33	0.33	0.33	0.33	0.33	0.33
Sat Flow, veh/h	3510	5187	1610	3510	5293	55	1065	3610	1588	1368	1900	1588
Grp Volume(v), veh/h	216	1057	0	63	1011	553	37	26	30	20	41	290
Grp Sat Flow(s),veh/h/ln	1755	1729	1610	1755	1729	1890	1065	1805	1588	1368	1900	1588
Q Serve(g_s), s	7.6	15.8	0.0	2.2	27.9	27.9	3.1	0.6	1.6	1.3	1.9	18.8
Cycle Q Clear(g_c), s	7.6	15.8	0.0	2.2	27.9	27.9	4.9	0.6	1.6	1.9	1.9	18.8
Prop In Lane	1.00		1.00	1.00		0.03	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	273	2631		106	1590	869	390	1181	520	498	622	520
V/C Ratio(X)	0.79	0.40		0.59	0.64	0.64	0.09	0.02	0.06	0.04	0.07	0.56
Avail Cap(c_a), veh/h	432	2631		432	1590	869	390	1181	520	498	622	520
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.83	0.83	0.00	0.87	0.87	0.87	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.6	19.1	0.0	59.8	25.8	25.8	30.6	28.5	28.8	29.1	28.9	34.6
Incr Delay (d2), s/veh	1.6	0.4	0.0	1.7	1.7	3.1	0.5	0.0	0.2	0.2	0.2	4.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.3	6.0	0.0	1.0	11.1	12.4	0.9	0.3	0.7	0.4	0.9	8.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.3	19.4	0.0	61.6	27.5	28.9	31.1	28.5	29.0	29.3	29.1	38.9
LnGrp LOS	E	B		E	C	C	C	C	C	C	C	D
Approach Vol, veh/h		1273			1627			93			351	
Approach Delay, s/veh		26.0			29.3			29.7			37.2	
Approach LOS		C			C			C			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.4	69.6		46.0	15.3	63.7		46.0				
Change Period (Y+Rc), s	5.6	6.2		5.1	5.6	6.2		5.1				
Max Green Setting (Gmax), s	15.4	51.8		40.9	15.4	51.8		40.9				
Max Q Clear Time (g_c+1), s	11.2	17.8		20.8	9.6	29.9		6.9				
Green Ext Time (p_c), s	0.0	15.0		0.6	0.2	16.3		0.2				

### Intersection Summary

HCM 6th Ctrl Delay	28.9
HCM 6th LOS	C

### Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.



# HCM 6th Signalized Intersection Summary

## 5: Apple Valley Road & Pimlico Road

Apple Bear Commercial Project  
Existing AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	147	35	14	34	26	31	38	575	35	64	760	190
Future Volume (veh/h)	147	35	14	34	26	31	38	575	35	64	760	190
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	156	37	15	36	28	33	40	612	37	68	809	202
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	233	272	230	229	272	230	52	2469	1088	87	2540	1133
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.03	0.68	0.68	0.05	0.70	0.70
Sat Flow, veh/h	1363	1900	1610	1374	1900	1610	1810	3610	1590	1810	3610	1610
Grp Volume(v), veh/h	156	37	15	36	28	33	40	612	37	68	809	202
Grp Sat Flow(s),veh/h/ln	1363	1900	1610	1374	1900	1610	1810	1805	1590	1810	1805	1610
Q Serve(g_s), s	14.6	2.2	1.0	3.1	1.7	2.3	2.9	8.4	1.0	4.8	11.1	5.5
Cycle Q Clear(g_c), s	16.3	2.2	1.0	5.3	1.7	2.3	2.9	8.4	1.0	4.8	11.1	5.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	233	272	230	229	272	230	52	2469	1088	87	2540	1133
V/C Ratio(X)	0.67	0.14	0.07	0.16	0.10	0.14	0.77	0.25	0.03	0.78	0.32	0.18
Avail Cap(c_a), veh/h	425	539	457	427	547	463	228	2469	1088	367	2540	1133
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.83	0.83	0.83	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.5	48.7	48.2	51.0	48.4	48.7	62.7	7.8	6.6	61.2	7.4	6.5
Incr Delay (d2), s/veh	1.2	0.1	0.0	0.1	0.1	0.1	7.3	0.2	0.0	5.5	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	1.1	0.4	1.1	0.8	1.0	1.4	2.9	0.3	2.3	3.6	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.8	48.8	48.2	51.1	48.5	48.8	70.1	8.0	6.7	66.7	7.7	6.9
LnGrp LOS	E	D	D	D	D	D	E	A	A	E	A	A
Approach Vol, veh/h		208			97			689			1079	
Approach Delay, s/veh		54.7			49.6			11.5			11.2	
Approach LOS		D			D			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.9	95.4		23.7	8.3	98.0		23.7				
Change Period (Y+Rc), s	4.6	6.5		5.1	4.6	6.5		* 5.1				
Max Green Setting (Gmax), s	20.4	50.5		36.9	16.4	60.5		* 37				
Max Q Clear Time (g_c+1), s	10.8	10.4		18.3	4.9	13.1		7.3				
Green Ext Time (p_c), s	0.0	0.6		0.3	0.0	0.6		0.2				

### Intersection Summary

HCM 6th Ctrl Delay	17.5
HCM 6th LOS	B

### Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

# HCM 6th Signalized Intersection Summary

## 6: Apple Valley Road & Bear Valley Road

Apple Bear Commercial Project  
Existing AM

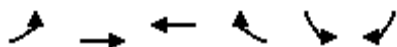


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗	↑ ↑ ↑		↖ ↗	↑ ↑ ↑	↖	↖	↑ ↑ ↑	↖	↖	↑ ↑	↖ ↗
Traffic Volume (veh/h)	332	635	40	100	1101	165	71	154	44	168	188	392
Future Volume (veh/h)	332	635	40	100	1101	165	71	154	44	168	188	392
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	361	690	43	109	1197	179	77	167	48	183	204	426
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	392	2609	162	141	2341	891	93	1205	373	184	1022	1118
Arrive On Green	0.11	0.52	0.52	0.04	0.45	0.45	0.05	0.23	0.23	0.10	0.28	0.28
Sat Flow, veh/h	3510	4993	310	3510	5187	1610	1810	5187	1606	1810	3610	2831
Grp Volume(v), veh/h	361	477	256	109	1197	179	77	167	48	183	204	426
Grp Sat Flow(s),veh/h/ln	1755	1729	1844	1755	1729	1610	1810	1729	1606	1810	1805	1415
Q Serve(g_s), s	21.4	16.0	16.2	6.5	34.6	11.7	8.9	5.4	5.0	21.2	9.0	22.5
Cycle Q Clear(g_c), s	21.4	16.0	16.2	6.5	34.6	11.7	8.9	5.4	5.0	21.2	9.0	22.5
Prop In Lane	1.00		0.17	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	392	1807	964	141	2341	891	93	1205	373	184	1022	1118
V/C Ratio(X)	0.92	0.26	0.27	0.77	0.51	0.20	0.83	0.14	0.13	0.99	0.20	0.38
Avail Cap(c_a), veh/h	776	1807	964	441	2341	891	184	1205	373	184	1022	1118
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.92	0.92	0.92	1.00	1.00	1.00	1.00	1.00	1.00	0.96	0.96	0.96
Uniform Delay (d), s/veh	92.4	27.8	27.8	99.8	41.1	23.6	98.7	63.9	63.8	94.2	57.2	45.3
Incr Delay (d2), s/veh	3.6	0.3	0.6	3.3	0.8	0.5	7.0	0.2	0.7	62.6	0.4	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.9	6.7	7.3	3.0	14.8	4.6	4.3	2.4	2.1	13.1	4.2	8.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	96.0	28.1	28.4	103.1	41.9	24.1	105.8	64.2	64.5	156.8	57.6	46.2
LnGrp LOS	F	C	C	F	D	C	F	E	E	F	E	D
Approach Vol, veh/h		1094			1485			292			813	
Approach Delay, s/veh		50.6			44.2			75.2			74.0	
Approach LOS		D			D			E			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.1	115.9	15.3	65.7	28.0	101.0	26.0	55.0				
Change Period (Y+Rc), s	4.6	6.2	4.6	6.2	4.6	6.2	4.6	6.2				
Max Green Setting (Gmax), s	20.4	91.8	21.4	48.8	46.4	71.8	21.4	48.8				
Max Q Clear Time (g_c+1), s	19.5	18.2	10.9	24.5	23.4	36.6	23.2	7.4				
Green Ext Time (p_c), s	0.0	0.6	0.0	0.2	0.0	1.3	0.0	0.2				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay											55.1	
HCM 6th LOS											E	

# HCM 6th Signalized Intersection Summary

## 7: Bear Valley Road & Westmont Drive

Apple Bear Commercial Project  
Existing AM



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↖	↑↑	↑↑↑	↗	↖	↗
Traffic Volume (veh/h)	39	744	1369	56	47	17
Future Volume (veh/h)	39	744	1369	56	47	17
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	42	800	1472	60	51	18
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	62	2238	2773	861	478	425
Arrive On Green	0.03	0.62	0.53	0.53	0.26	0.26
Sat Flow, veh/h	1810	3705	5358	1610	1810	1610
Grp Volume(v), veh/h	42	800	1472	60	51	18
Grp Sat Flow(s),veh/h/ln	1810	1805	1729	1610	1810	1610
Q Serve(g_s), s	2.3	10.8	18.4	1.8	2.1	0.8
Cycle Q Clear(g_c), s	2.3	10.8	18.4	1.8	2.1	0.8
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	62	2238	2773	861	478	425
V/C Ratio(X)	0.67	0.36	0.53	0.07	0.11	0.04
Avail Cap(c_a), veh/h	288	2238	2773	861	478	425
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.7	9.3	15.1	11.3	27.9	27.4
Incr Delay (d2), s/veh	11.9	0.4	0.7	0.2	0.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	3.6	6.5	0.6	1.0	0.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	59.7	9.7	15.9	11.4	28.3	27.6
LnGrp LOS	E	A	B	B	C	C
Approach Vol, veh/h		842	1532		69	
Approach Delay, s/veh		12.2	15.7		28.1	
Approach LOS		B	B		C	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		69.0		31.0	8.5	60.5
Change Period (Y+Rc), s		7.0		4.6	5.1	* 7
Max Green Setting (Gmax), s		62.0		26.4	15.9	* 42
Max Q Clear Time (g_c+I1), s		12.8		4.1	4.3	20.4
Green Ext Time (p_c), s		5.6		0.1	0.0	10.2

### Intersection Summary

HCM 6th Ctrl Delay	14.8
HCM 6th LOS	B

### Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↖	↑↑	↘	
Traffic Vol, veh/h	793	3	2	1399	3	2
Future Vol, veh/h	793	3	2	1399	3	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	50	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	881	3	2	1554	3	2

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	884	0	1664
Stage 1	-	-	-	-	883
Stage 2	-	-	-	-	781
Critical Hdwy	-	-	4.1	-	6.8
Critical Hdwy Stg 1	-	-	-	-	5.8
Critical Hdwy Stg 2	-	-	-	-	5.8
Follow-up Hdwy	-	-	2.2	-	3.5
Pot Cap-1 Maneuver	-	-	1130	-	143
Stage 1	-	-	-	-	703
Stage 2	-	-	-	-	417
Platoon blocked, %	-	-	1	-	1
Mov Cap-1 Maneuver	-	-	1130	-	143
Mov Cap-2 Maneuver	-	-	-	-	143
Stage 1	-	-	-	-	703
Stage 2	-	-	-	-	416

Approach	EB	WB	NB
HCM Control Delay, s	0	0	22.4
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	212	-	-	1130	-
HCM Lane V/C Ratio	0.026	-	-	0.002	-
HCM Control Delay (s)	22.4	-	-	8.2	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Notes  
 -: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

# HCM 6th Signalized Intersection Summary

## 9: Deep Creek Road & Bear Valley Road

Apple Bear Commercial Project  
Existing AM



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↑	↑↑	↑	↑
Traffic Volume (veh/h)	743	51	105	1259	133	59
Future Volume (veh/h)	743	51	105	1259	133	59
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	790	54	112	1339	141	63
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	1897	846	141	2316	430	508
Arrive On Green	0.53	0.53	0.08	0.64	0.24	0.24
Sat Flow, veh/h	3705	1610	1810	3705	1810	1610
Grp Volume(v), veh/h	790	54	112	1339	141	63
Grp Sat Flow(s),veh/h/ln	1805	1610	1810	1805	1810	1610
Q Serve(g_s), s	15.9	2.0	7.3	25.4	7.7	3.3
Cycle Q Clear(g_c), s	15.9	2.0	7.3	25.4	7.7	3.3
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1897	846	141	2316	430	508
V/C Ratio(X)	0.42	0.06	0.80	0.58	0.33	0.12
Avail Cap(c_a), veh/h	1897	846	232	2316	430	508
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.3	14.0	54.4	12.2	37.8	29.3
Incr Delay (d2), s/veh	0.7	0.1	3.8	0.3	2.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	0.7	3.3	8.5	3.5	1.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	18.0	14.1	58.2	12.6	39.9	29.8
LnGrp LOS	B	B	E	B	D	C
Approach Vol, veh/h	844			1451	204	
Approach Delay, s/veh	17.7			16.1	36.7	
Approach LOS	B			B	D	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	13.9	71.1			85.0	35.0
Change Period (Y+Rc), s	4.6	8.0			8.0	6.5
Max Green Setting (Gmax), s	15.4	57.0			77.0	28.5
Max Q Clear Time (g_c+I1), s	9.3	17.9			27.4	9.7
Green Ext Time (p_c), s	0.0	4.2			10.5	0.2
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			18.3			
HCM 6th LOS			B			

HCM 6th Signalized Intersection Summary  
 10: Kiowa Road & Bear Valley Road

Apple Bear Commercial Project  
 Existing AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	87	492	133	96	781	43	261	139	60	47	139	168
Future Volume (veh/h)	87	492	133	96	781	43	261	139	60	47	139	168
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1976	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	93	523	141	102	831	46	278	148	64	50	148	179
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	115	1452	673	124	1471	656	300	852	352	65	767	340
Arrive On Green	0.06	0.40	0.40	0.07	0.41	0.41	0.17	0.34	0.34	0.04	0.21	0.21
Sat Flow, veh/h	1810	3610	1675	1810	3610	1610	1810	2489	1029	1810	3610	1599
Grp Volume(v), veh/h	93	523	141	102	831	46	278	105	107	50	148	179
Grp Sat Flow(s),veh/h/ln	1810	1805	1675	1810	1805	1610	1810	1805	1713	1810	1805	1599
Q Serve(g_s), s	7.4	14.7	8.0	8.1	25.7	2.5	22.0	5.9	6.3	4.0	4.9	14.4
Cycle Q Clear(g_c), s	7.4	14.7	8.0	8.1	25.7	2.5	22.0	5.9	6.3	4.0	4.9	14.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.60	1.00		1.00
Lane Grp Cap(c), veh/h	115	1452	673	124	1471	656	300	618	586	65	767	340
V/C Ratio(X)	0.81	0.36	0.21	0.82	0.56	0.07	0.93	0.17	0.18	0.77	0.19	0.53
Avail Cap(c_a), veh/h	255	1452	673	255	1471	656	317	618	586	255	767	340
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.0	30.3	28.3	66.6	33.1	26.2	59.6	33.3	33.4	69.3	46.9	50.6
Incr Delay (d2), s/veh	5.1	0.7	0.7	5.0	1.6	0.2	30.6	0.6	0.7	7.0	0.6	5.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.5	6.3	3.3	3.8	11.0	1.0	12.3	2.6	2.7	1.9	2.2	6.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.1	31.0	29.0	71.6	34.6	26.4	90.2	33.9	34.1	76.3	47.5	56.4
LnGrp LOS	E	C	C	E	C	C	F	C	C	E	D	E
Approach Vol, veh/h		757			979			490			377	
Approach Delay, s/veh		35.7			38.1			65.9			55.5	
Approach LOS		D			D			E			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.6	64.8	9.8	55.8	13.8	65.6	28.6	37.0				
Change Period (Y+Rc), s	4.6	6.5	4.6	6.2	4.6	6.5	4.6	6.2				
Max Green Setting (Gmax), s	20.4	46.5	20.4	35.8	20.4	46.5	25.4	30.8				
Max Q Clear Time (g_c+10), s	11.0	16.7	6.0	8.3	9.4	27.7	24.0	16.4				
Green Ext Time (p_c), s	0.1	7.4	0.0	1.0	0.1	8.8	0.1	1.2				

Intersection Summary

HCM 6th Ctrl Delay	45.2
HCM 6th LOS	D

HCM 6th Signalized Intersection Summary  
 1: Jacaranda Avenue/Jacaranda Road & Bear Valley Road

Apple Bear Commercial Project  
 Existing PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑↔		↔	↑↑↑	↔		↔↔		↔	↔	↔
Traffic Volume (veh/h)	35	1762	46	303	1576	22	82	9	398	27	18	36
Future Volume (veh/h)	35	1762	46	303	1576	22	82	9	398	27	18	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	36	1798	47	309	1608	22	84	9	406	23	25	37
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	74	1642	43	312	2441	756	302	32	296	349	367	345
Arrive On Green	0.02	0.32	0.32	0.17	0.47	0.47	0.18	0.18	0.18	0.19	0.19	0.19
Sat Flow, veh/h	3510	5198	136	1810	5187	1607	1642	176	1610	1810	1900	1610
Grp Volume(v), veh/h	36	1196	649	309	1608	22	93	0	406	23	25	37
Grp Sat Flow(s),veh/h/ln	1755	1729	1876	1810	1729	1607	1818	0	1610	1810	1900	1610
Q Serve(g_s), s	1.5	45.8	45.8	24.7	34.5	1.1	6.4	0.0	26.7	1.5	1.6	2.7
Cycle Q Clear(g_c), s	1.5	45.8	45.8	24.7	34.5	1.1	6.4	0.0	26.7	1.5	1.6	2.7
Prop In Lane	1.00		0.07	1.00		1.00	0.90		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	74	1092	592	312	2441	756	335	0	296	349	367	345
V/C Ratio(X)	0.49	1.09	1.10	0.99	0.66	0.03	0.28	0.00	1.37	0.07	0.07	0.11
Avail Cap(c_a), veh/h	738	1092	592	312	2441	756	335	0	296	349	367	345
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	70.2	49.6	49.6	59.9	29.4	20.6	50.9	0.0	59.2	47.8	47.8	45.8
Incr Delay (d2), s/veh	1.8	56.9	65.9	48.2	1.4	0.1	2.1	0.0	186.3	0.4	0.4	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	27.6	31.4	15.2	13.9	0.4	3.1	0.0	26.0	0.7	0.8	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.0	106.5	115.5	108.0	30.9	20.7	52.9	0.0	245.4	48.2	48.2	46.4
LnGrp LOS	E	F	F	F	C	C	D	A	F	D	D	D
Approach Vol, veh/h		1881			1939			499				85
Approach Delay, s/veh		109.0			43.0			209.6				47.4
Approach LOS		F			D			F				D
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	30.0	51.0		32.0	7.6	73.4		32.0				
Change Period (Y+Rc), s	5.0	5.2		* 5.3	4.5	5.2		4.0				
Max Green Setting (Gmax), s	25.0	45.8		* 27	30.5	40.8		28.0				
Max Q Clear Time (g_c+I1), s	26.7	47.8		28.7	3.5	36.5		4.7				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	2.0		0.1				

Intersection Summary

HCM 6th Ctrl Delay	90.1
HCM 6th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.  
 \* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary  
2: Bear Valley Road & Mojave Fish Hatchery Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑↑↑	↗	↖↗	↑↑↑	↗	↖	↑	↗	↖	↗	↖
Traffic Volume (veh/h)	57	2033	97	115	1713	90	104	9	64	115	5	84
Future Volume (veh/h)	57	2033	97	115	1713	90	104	9	64	115	5	84
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	58	2074	99	117	1748	92	112	0	65	117	5	85
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.99
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	75	2006	623	166	2037	929	807	0	357	336	17	285
Arrive On Green	0.04	0.39	0.39	0.05	0.39	0.39	0.22	0.00	0.22	0.19	0.19	0.19
Sat Flow, veh/h	1810	5187	1610	3510	5187	1602	3619	0	1602	1810	90	1534
Grp Volume(v), veh/h	58	2074	99	117	1748	92	112	0	65	117	0	90
Grp Sat Flow(s),veh/h/ln	1810	1729	1610	1755	1729	1602	1810	0	1602	1810	0	1624
Q Serve(g_s), s	4.3	52.2	5.4	4.4	41.7	3.5	3.4	0.0	4.4	7.6	0.0	6.4
Cycle Q Clear(g_c), s	4.3	52.2	5.4	4.4	41.7	3.5	3.4	0.0	4.4	7.6	0.0	6.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.94
Lane Grp Cap(c), veh/h	75	2006	623	166	2037	929	807	0	357	336	0	302
V/C Ratio(X)	0.78	1.03	0.16	0.70	0.86	0.10	0.14	0.00	0.18	0.35	0.00	0.30
Avail Cap(c_a), veh/h	201	2006	623	390	2037	929	807	0	357	336	0	302
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	64.1	41.4	27.1	63.4	37.5	12.7	42.1	0.0	42.5	47.8	0.0	47.4
Incr Delay (d2), s/veh	6.3	29.4	0.5	2.0	5.0	0.2	0.4	0.0	1.1	2.8	0.0	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	26.4	2.1	2.0	17.6	1.9	1.6	0.0	1.9	3.7	0.0	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	70.4	70.8	27.6	65.4	42.5	12.9	42.4	0.0	43.6	50.7	0.0	49.9
LnGrp LOS	E	F	C	E	D	B	D	A	D	D	A	D
Approach Vol, veh/h		2231			1957			177			207	
Approach Delay, s/veh		68.9			42.5			42.9			50.3	
Approach LOS		E			D			D			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.4	58.6		30.0	10.6	59.4		35.0				
Change Period (Y+Rc), s	5.0	6.4		4.9	5.0	6.4		4.9				
Max Green Setting (Gmax), s	15.0	43.6		25.1	15.0	43.6		30.1				
Max Q Clear Time (g_c+10), s	10.4	54.2		9.6	6.3	43.7		6.4				
Green Ext Time (p_c), s	0.0	0.0		0.2	0.0	0.0		0.1				

Intersection Summary

HCM 6th Ctrl Delay	55.7
HCM 6th LOS	E

Notes

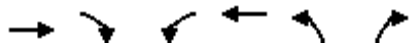
User approved volume balancing among the lanes for turning movement.



# HCM 6th Signalized Intersection Summary

## 3: Jess Ranch Parkway & Bear Valley Road

Apple Bear Commercial Project  
Existing PM



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↑	↔	↑↑↑	↔	↑
Traffic Volume (veh/h)	1732	317	191	1463	455	173
Future Volume (veh/h)	1732	317	191	1463	455	173
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	1786	327	197	1508	469	178
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	2382	736	256	2968	1157	648
Arrive On Green	0.46	0.46	0.07	0.57	0.33	0.33
Sat Flow, veh/h	5358	1603	3510	5358	3510	1610
Grp Volume(v), veh/h	1786	327	197	1508	469	178
Grp Sat Flow(s),veh/h/ln	1729	1603	1755	1729	1755	1610
Q Serve(g_s), s	32.7	15.9	6.3	20.2	11.9	8.5
Cycle Q Clear(g_c), s	32.7	15.9	6.3	20.2	11.9	8.5
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2382	736	256	2968	1157	648
V/C Ratio(X)	0.75	0.44	0.77	0.51	0.41	0.27
Avail Cap(c_a), veh/h	2382	736	317	2968	1157	648
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.83	0.83	1.00	1.00
Uniform Delay (d), s/veh	25.6	21.1	52.4	14.8	29.8	23.1
Incr Delay (d2), s/veh	2.2	1.9	5.6	0.5	1.1	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.7	5.9	2.9	7.1	5.1	9.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	27.9	23.1	57.9	15.4	30.9	24.1
LnGrp LOS	C	C	E	B	C	C
Approach Vol, veh/h	2113			1705	647	
Approach Delay, s/veh	27.1			20.3	29.0	
Approach LOS	C			C	C	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	53.0	59.0		43.0		72.0
Change Period (Y+Rc), s	4.6	6.2		5.1		6.2
Max Green Setting (Gmax), s	40.4	50.8		37.9		65.8
Max Q Clear Time (g_c+10), s	19.3	34.7		13.9		22.2
Green Ext Time (p_c), s	0.1	14.6		1.2		26.2
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			24.8			
HCM 6th LOS			C			

HCM 6th Signalized Intersection Summary  
4: Reata Road & Bear Valley Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑↑	↔	↔↔	↑↑↑		↔	↑↑	↔	↔	↑	↔
Traffic Volume (veh/h)	293	1464	127	150	1193	14	201	105	152	28	102	260
Future Volume (veh/h)	293	1464	127	150	1193	14	201	105	152	28	102	260
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	302	1509	0	155	1230	14	207	108	157	29	105	268
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	358	2476		212	2304	26	353	1181	526	404	622	526
Arrive On Green	0.10	0.48	0.00	0.06	0.44	0.44	0.33	0.33	0.33	0.33	0.33	0.33
Sat Flow, veh/h	3510	5187	1610	3510	5287	60	1025	3610	1609	1131	1900	1609
Grp Volume(v), veh/h	302	1509	0	155	804	440	207	108	157	29	105	268
Grp Sat Flow(s),veh/h/ln	1755	1729	1610	1755	1729	1889	1025	1805	1609	1131	1900	1609
Q Serve(g_s), s	10.6	26.8	0.0	5.4	21.4	21.4	22.5	2.6	9.1	2.3	4.9	16.8
Cycle Q Clear(g_c), s	10.6	26.8	0.0	5.4	21.4	21.4	27.4	2.6	9.1	4.9	4.9	16.8
Prop In Lane	1.00		1.00	1.00		0.03	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	358	2476		212	1507	823	353	1181	526	404	622	526
V/C Ratio(X)	0.84	0.61		0.73	0.53	0.53	0.59	0.09	0.30	0.07	0.17	0.51
Avail Cap(c_a), veh/h	432	2476		432	1507	823	353	1181	526	404	622	526
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.62	0.62	0.00	0.90	0.90	0.90	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.2	24.1	0.0	57.7	25.9	25.9	39.7	29.2	31.4	30.9	29.9	33.9
Incr Delay (d2), s/veh	6.9	0.7	0.0	1.7	1.2	2.2	7.0	0.2	1.4	0.3	0.6	3.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	10.3	0.0	2.4	8.5	9.6	6.4	1.2	3.8	0.7	2.4	7.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.0	24.8	0.0	59.4	27.2	28.2	46.7	29.3	32.8	31.2	30.5	37.4
LnGrp LOS	E	C		E	C	C	D	C	C	C	C	D
Approach Vol, veh/h		1811			1399			472			402	
Approach Delay, s/veh		31.0			31.0			38.1			35.2	
Approach LOS		C			C			D			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	33.1	65.9		46.0	18.3	60.7		46.0				
Change Period (Y+Rc), s	5.6	6.2		5.1	5.6	6.2		5.1				
Max Green Setting (Gmax), s	15.4	51.8		40.9	15.4	51.8		40.9				
Max Q Clear Time (g_c+1), s	17.4	28.8		18.8	12.6	23.4		29.4				
Green Ext Time (p_c), s	0.1	16.8		0.8	0.2	15.8		1.1				

Intersection Summary

HCM 6th Ctrl Delay	32.2
HCM 6th LOS	C

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

# HCM 6th Signalized Intersection Summary

## 5: Apple Valley Road & Pimlico Road

Apple Bear Commercial Project  
Existing PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	275	53	38	80	45	100	70	675	88	142	752	245
Future Volume (veh/h)	275	53	38	80	45	100	70	675	88	142	752	245
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	281	54	39	82	46	102	71	689	90	145	767	250
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	354	486	411	365	486	411	91	1896	845	171	2056	915
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.05	0.53	0.53	0.09	0.57	0.57
Sat Flow, veh/h	1258	1900	1608	1322	1900	1608	1810	3610	1609	1810	3610	1607
Grp Volume(v), veh/h	281	54	39	82	46	102	71	689	90	145	767	250
Grp Sat Flow(s),veh/h/ln	1258	1900	1608	1322	1900	1608	1810	1805	1609	1810	1805	1607
Q Serve(g_s), s	28.5	2.8	2.4	6.6	2.4	6.6	5.0	14.6	3.7	10.3	15.1	10.3
Cycle Q Clear(g_c), s	30.9	2.8	2.4	9.4	2.4	6.6	5.0	14.6	3.7	10.3	15.1	10.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	354	486	411	365	486	411	91	1896	845	171	2056	915
V/C Ratio(X)	0.79	0.11	0.09	0.22	0.09	0.25	0.78	0.36	0.11	0.85	0.37	0.27
Avail Cap(c_a), veh/h	389	539	457	407	547	463	228	1896	845	367	2056	915
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	0.78	0.78	0.78	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.7	37.1	36.9	40.7	36.9	38.4	61.0	18.1	15.5	58.0	15.3	14.3
Incr Delay (d2), s/veh	8.8	0.0	0.0	0.1	0.0	0.1	4.3	0.4	0.2	4.5	0.5	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	19.7	1.3	1.0	2.2	1.1	2.6	2.4	5.8	1.3	4.7	5.8	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.4	37.1	36.9	40.8	36.9	38.6	65.3	18.5	15.7	62.4	15.8	15.0
LnGrp LOS	E	D	D	D	D	D	E	B	B	E	B	B
Approach Vol, veh/h		374			230			850			1162	
Approach Delay, s/veh		52.4			39.0			22.1			21.5	
Approach LOS		D			D			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.9	74.8		38.3	11.1	80.5		38.3				
Change Period (Y+Rc), s	4.6	6.5		5.1	4.6	6.5		* 5.1				
Max Green Setting (Gmax), s	20.4	50.5		36.9	16.4	60.5		* 37				
Max Q Clear Time (g_c+1/2), s	12.3	16.6		32.9	7.0	17.1		11.4				
Green Ext Time (p_c), s	0.1	0.6		0.3	0.0	0.6		0.5				

### Intersection Summary

HCM 6th Ctrl Delay	27.6
HCM 6th LOS	C

### Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary  
6: Apple Valley Road & Bear Valley Road

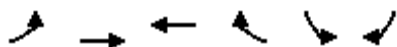


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗	↑ ↑ ↑		↖ ↗	↑ ↑ ↑	↖	↖	↑ ↑ ↑	↖	↖	↑ ↑	↖ ↗
Traffic Volume (veh/h)	449	1067	59	177	926	125	107	225	149	197	350	351
Future Volume (veh/h)	449	1067	59	177	926	125	107	225	149	197	350	351
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	473	1123	62	186	975	132	113	237	157	207	368	369
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	503	2519	139	218	2177	837	129	1205	374	184	949	1148
Arrive On Green	0.14	0.50	0.50	0.06	0.42	0.42	0.07	0.23	0.23	0.10	0.26	0.26
Sat Flow, veh/h	3510	5030	278	3510	5187	1604	1810	5187	1608	1810	3610	2821
Grp Volume(v), veh/h	473	772	413	186	975	132	113	237	157	207	368	369
Grp Sat Flow(s),veh/h/ln	1755	1729	1850	1755	1729	1604	1810	1729	1608	1810	1805	1410
Q Serve(g_s), s	28.0	30.1	30.2	11.0	28.2	9.0	13.0	7.7	17.4	21.4	17.6	18.8
Cycle Q Clear(g_c), s	28.0	30.1	30.2	11.0	28.2	9.0	13.0	7.7	17.4	21.4	17.6	18.8
Prop In Lane	1.00		0.15	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	503	1732	926	218	2177	837	129	1205	374	184	949	1148
V/C Ratio(X)	0.94	0.45	0.45	0.85	0.45	0.16	0.88	0.20	0.42	1.12	0.39	0.32
Avail Cap(c_a), veh/h	776	1732	926	441	2177	837	184	1205	374	184	949	1148
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.76	0.76	0.76	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95
Uniform Delay (d), s/veh	89.1	33.7	33.7	97.5	43.5	26.2	96.6	64.8	68.6	94.3	63.5	42.6
Incr Delay (d2), s/veh	9.1	0.6	1.2	3.6	0.7	0.4	20.6	0.4	3.4	101.4	1.1	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	18.3	12.7	13.8	5.1	12.2	3.6	6.8	3.4	7.5	15.2	8.2	6.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	98.2	34.3	34.9	101.2	44.2	26.6	117.2	65.2	72.0	195.7	64.7	43.3
LnGrp LOS	F	C	C	F	D	C	F	E	E	F	E	D
Approach Vol, veh/h		1658			1293			507			944	
Approach Delay, s/veh		52.7			50.6			78.9			85.0	
Approach LOS		D			D			E			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	17.6	111.4	19.6	61.4	34.7	94.3	26.0	55.0				
Change Period (Y+Rc), s	4.6	6.2	4.6	6.2	4.6	6.2	4.6	6.2				
Max Green Setting (Gmax), s	20.4	91.8	21.4	48.8	46.4	71.8	21.4	48.8				
Max Q Clear Time (g_c+11), s	11.0	32.2	15.0	20.8	30.0	30.2	23.4	19.4				
Green Ext Time (p_c), s	0.0	1.0	0.0	0.4	0.1	1.0	0.0	0.2				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay											62.0	
HCM 6th LOS											E	

# HCM 6th Signalized Intersection Summary

## 7: Bear Valley Road & Westmont Drive

Apple Bear Commercial Project  
Existing PM



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↖	↑↑	↑↑↑	↗	↖	↗
Traffic Volume (veh/h)	85	1319	1150	92	168	46
Future Volume (veh/h)	85	1319	1150	92	168	46
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	88	1360	1186	95	173	47
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	114	2238	2625	815	478	425
Arrive On Green	0.06	0.62	0.51	0.51	0.26	0.26
Sat Flow, veh/h	1810	3705	5358	1610	1810	1610
Grp Volume(v), veh/h	88	1360	1186	95	173	47
Grp Sat Flow(s),veh/h/ln	1810	1805	1729	1610	1810	1610
Q Serve(g_s), s	4.8	23.0	14.6	3.1	7.8	2.2
Cycle Q Clear(g_c), s	4.8	23.0	14.6	3.1	7.8	2.2
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	114	2238	2625	815	478	425
V/C Ratio(X)	0.77	0.61	0.45	0.12	0.36	0.11
Avail Cap(c_a), veh/h	288	2238	2625	815	478	425
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.1	11.6	15.8	13.0	29.9	27.9
Incr Delay (d2), s/veh	10.5	1.2	0.6	0.3	2.1	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	7.8	5.2	1.1	3.7	2.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	56.7	12.8	16.4	13.3	32.1	28.4
LnGrp LOS	E	B	B	B	C	C
Approach Vol, veh/h		1448	1281		220	
Approach Delay, s/veh		15.5	16.1		31.3	
Approach LOS		B	B		C	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		69.0		31.0	11.4	57.6
Change Period (Y+Rc), s		7.0		4.6	5.1	* 7
Max Green Setting (Gmax), s		62.0		26.4	15.9	* 42
Max Q Clear Time (g_c+I1), s		25.0		9.8	6.8	16.6
Green Ext Time (p_c), s		11.7		0.3	0.1	8.6
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			17.0			
HCM 6th LOS			B			
<b>Notes</b>						
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.						

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↖	↑↑	↘	
Traffic Vol, veh/h	1471	1	0	1211	1	3
Future Vol, veh/h	1471	1	0	1211	1	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	50	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1532	1	0	1261	1	3

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	1533	0	2164 767
Stage 1	-	-	-	-	1533 -
Stage 2	-	-	-	-	631 -
Critical Hdwy	-	-	4.1	-	6.8 6.9
Critical Hdwy Stg 1	-	-	-	-	5.8 -
Critical Hdwy Stg 2	-	-	-	-	5.8 -
Follow-up Hdwy	-	-	2.2	-	3.5 3.3
Pot Cap-1 Maneuver	-	-	*757	-	*84 *504
Stage 1	-	-	-	-	*476 -
Stage 2	-	-	-	-	*498 -
Platoon blocked, %	-	-	1	-	1 1
Mov Cap-1 Maneuver	-	-	*757	-	*84 *504
Mov Cap-2 Maneuver	-	-	-	-	*84 -
Stage 1	-	-	-	-	*476 -
Stage 2	-	-	-	-	*498 -

Approach	EB	WB	NB
HCM Control Delay, s	0	0	21.4
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	224	-	-	* 757	-
HCM Lane V/C Ratio	0.019	-	-	-	-
HCM Control Delay (s)	21.4	-	-	0	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Notes  
 -: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

HCM 6th Signalized Intersection Summary  
 9: Deep Creek Road & Bear Valley Road



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↑	↑↑	↑	↑
Traffic Volume (veh/h)	1381	93	108	1133	100	117
Future Volume (veh/h)	1381	93	108	1133	100	117
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	1409	95	110	1156	102	119
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	1901	848	139	2316	430	506
Arrive On Green	0.53	0.53	0.08	0.64	0.24	0.24
Sat Flow, veh/h	3705	1610	1810	3705	1810	1610
Grp Volume(v), veh/h	1409	95	110	1156	102	119
Grp Sat Flow(s),veh/h/ln	1805	1610	1810	1805	1810	1610
Q Serve(g_s), s	36.4	3.6	7.2	20.3	5.5	6.6
Cycle Q Clear(g_c), s	36.4	3.6	7.2	20.3	5.5	6.6
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1901	848	139	2316	430	506
V/C Ratio(X)	0.74	0.11	0.79	0.50	0.24	0.24
Avail Cap(c_a), veh/h	1901	848	232	2316	430	506
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.1	14.3	54.5	11.3	37.0	30.5
Incr Delay (d2), s/veh	2.7	0.3	3.8	0.2	1.3	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.3	1.3	3.3	6.8	2.5	2.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	24.7	14.6	58.3	11.5	38.3	31.6
LnGrp LOS	C	B	E	B	D	C
Approach Vol, veh/h	1504			1266	221	
Approach Delay, s/veh	24.1			15.5	34.7	
Approach LOS	C			B	C	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	13.8	71.2			85.0	35.0
Change Period (Y+Rc), s	4.6	8.0			8.0	6.5
Max Green Setting (Gmax), s	15.4	57.0			77.0	28.5
Max Q Clear Time (g_c+I1), s	9.2	38.4			22.3	8.6
Green Ext Time (p_c), s	0.0	7.7			8.3	0.3
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			21.2			
HCM 6th LOS			C			

HCM 6th Signalized Intersection Summary  
10: Kiowa Road & Bear Valley Road

Apple Bear Commercial Project  
Existing PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	155	859	213	123	776	52	209	210	114	65	221	127
Future Volume (veh/h)	155	859	213	123	776	52	209	210	114	65	221	127
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1976	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	161	895	222	128	808	54	218	219	119	68	230	132
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	184	1514	702	151	1448	645	242	683	357	87	767	341
Arrive On Green	0.10	0.42	0.42	0.08	0.40	0.40	0.13	0.30	0.30	0.05	0.21	0.21
Sat Flow, veh/h	1810	3610	1675	1810	3610	1609	1810	2292	1198	1810	3610	1606
Grp Volume(v), veh/h	161	895	222	128	808	54	218	171	167	68	230	132
Grp Sat Flow(s),veh/h/ln	1810	1805	1675	1810	1805	1609	1810	1805	1684	1810	1805	1606
Q Serve(g_s), s	12.7	27.8	12.9	10.1	25.0	3.0	17.2	10.6	11.2	5.4	7.8	10.2
Cycle Q Clear(g_c), s	12.7	27.8	12.9	10.1	25.0	3.0	17.2	10.6	11.2	5.4	7.8	10.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.71	1.00		1.00
Lane Grp Cap(c), veh/h	184	1514	702	151	1448	645	242	538	502	87	767	341
V/C Ratio(X)	0.87	0.59	0.32	0.85	0.56	0.08	0.90	0.32	0.33	0.78	0.30	0.39
Avail Cap(c_a), veh/h	255	1514	702	255	1448	645	317	538	502	255	767	341
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.2	32.5	28.2	65.5	33.5	26.9	61.9	39.5	39.7	68.3	48.0	49.0
Incr Delay (d2), s/veh	16.8	1.7	1.2	5.2	1.6	0.3	20.1	1.5	1.8	5.7	1.0	3.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	11.9	5.3	4.8	10.8	1.2	9.1	4.8	4.8	2.6	3.6	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	80.9	34.2	29.4	70.7	35.1	27.2	82.0	41.0	41.5	74.0	49.0	52.3
LnGrp LOS	F	C	C	E	D	C	F	D	D	E	D	D
Approach Vol, veh/h		1278			990			556			430	
Approach Delay, s/veh		39.2			39.2			57.2			54.0	
Approach LOS		D			D			E			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	16.7	67.3	11.6	49.4	19.4	64.7	24.0	37.0				
Change Period (Y+Rc), s	4.6	6.5	4.6	6.2	4.6	6.5	4.6	6.2				
Max Green Setting (Gmax), s	20.4	46.5	20.4	35.8	20.4	46.5	25.4	30.8				
Max Q Clear Time (g_c+1/2), s	12.5	29.8	7.4	13.2	14.7	27.0	19.2	12.2				
Green Ext Time (p_c), s	0.1	9.8	0.0	1.7	0.1	8.7	0.1	1.6				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay											44.3	
HCM 6th LOS											D	



HCM 6th Signalized Intersection Summary  
 1: Jacaranda Avenue/Jacaranda Road & Bear Valley Road

Apple Bear Commercial Project  
 Opening Year (2024) NP AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑↑		↔	↑↑↑	↔		↔↔		↔	↔	↔
Traffic Volume (veh/h)	132	1442	66	230	1754	45	81	51	282	15	16	37
Future Volume (veh/h)	132	1442	66	230	1754	45	81	51	282	15	16	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	140	1534	70	245	1866	48	86	54	300	16	17	39
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	188	1732	79	267	2273	705	209	131	296	349	367	396
Arrive On Green	0.05	0.34	0.34	0.15	0.44	0.44	0.18	0.18	0.18	0.19	0.19	0.19
Sat Flow, veh/h	3510	5084	232	1810	5187	1608	1132	711	1608	1810	1900	1608
Grp Volume(v), veh/h	140	1043	561	245	1866	48	140	0	300	16	17	39
Grp Sat Flow(s),veh/h/ln	1755	1729	1858	1810	1729	1608	1843	0	1608	1810	1900	1608
Q Serve(g_s), s	5.7	41.3	41.3	19.4	45.8	2.5	9.7	0.0	26.7	1.0	1.1	2.7
Cycle Q Clear(g_c), s	5.7	41.3	41.3	19.4	45.8	2.5	9.7	0.0	26.7	1.0	1.1	2.7
Prop In Lane	1.00		0.12	1.00		1.00	0.61		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	188	1178	633	267	2273	705	339	0	296	349	367	396
V/C Ratio(X)	0.75	0.89	0.89	0.92	0.82	0.07	0.41	0.00	1.01	0.05	0.05	0.10
Avail Cap(c_a), veh/h	738	1178	633	312	2273	705	339	0	296	349	367	396
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.7	45.1	45.1	60.9	35.7	23.6	52.2	0.0	59.2	47.6	47.6	42.2
Incr Delay (d2), s/veh	2.2	9.9	16.6	26.5	3.5	0.2	3.7	0.0	55.8	0.2	0.2	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	18.6	21.2	10.6	19.0	1.0	4.8	0.0	15.2	0.5	0.5	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.9	55.0	61.8	87.4	39.2	23.8	55.9	0.0	114.9	47.9	47.9	42.7
LnGrp LOS	E	E	E	F	D	C	E	A	F	D	D	D
Approach Vol, veh/h		1744			2159			440			72	
Approach Delay, s/veh		58.4			44.3			96.1			45.1	
Approach LOS		E			D			F			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	26.4	54.6		32.0	12.2	68.8		32.0				
Change Period (Y+Rc), s	5.0	5.2		* 5.3	4.5	5.2		4.0				
Max Green Setting (Gmax), s	25.0	45.8		* 27	30.5	40.8		28.0				
Max Q Clear Time (g_c+I1), s	21.4	43.3		28.7	7.7	47.8		4.7				
Green Ext Time (p_c), s	0.0	1.2		0.0	0.1	0.0		0.0				

Intersection Summary

HCM 6th Ctrl Delay	55.1
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.  
 \* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary  
 2: Bear Valley Road & Mojave Fish Hatchery Road

Apple Bear Commercial Project  
 Opening Year (2024) NP AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑↑↑	↗	↖↗	↑↑↑	↗	↖	↑	↗	↖	↗	↖
Traffic Volume (veh/h)	166	1513	57	47	1917	249	44	6	25	103	5	67
Future Volume (veh/h)	166	1513	57	47	1917	249	44	6	25	103	5	67
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	168	1528	58	47	1936	252	48	0	25	104	5	68
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	192	2092	650	108	1701	827	807	0	359	336	21	282
Arrive On Green	0.11	0.40	0.40	0.03	0.33	0.33	0.22	0.00	0.22	0.19	0.19	0.19
Sat Flow, veh/h	1810	5187	1610	3510	5187	1610	3619	0	1610	1810	111	1516
Grp Volume(v), veh/h	168	1528	58	47	1936	252	48	0	25	104	0	73
Grp Sat Flow(s),veh/h/ln	1810	1729	1610	1755	1729	1610	1810	0	1610	1810	0	1627
Q Serve(g_s), s	12.4	33.6	3.0	1.8	44.3	12.2	1.4	0.0	1.7	6.7	0.0	5.2
Cycle Q Clear(g_c), s	12.4	33.6	3.0	1.8	44.3	12.2	1.4	0.0	1.7	6.7	0.0	5.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.93
Lane Grp Cap(c), veh/h	192	2092	650	108	1701	827	807	0	359	336	0	303
V/C Ratio(X)	0.87	0.73	0.09	0.44	1.14	0.30	0.06	0.00	0.07	0.31	0.00	0.24
Avail Cap(c_a), veh/h	201	2092	650	390	1701	827	807	0	359	336	0	303
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	59.5	34.1	24.9	64.3	45.4	18.9	41.3	0.0	41.4	47.5	0.0	46.8
Incr Delay (d2), s/veh	29.8	2.3	0.3	1.0	69.9	0.9	0.1	0.0	0.4	2.4	0.0	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.1	13.9	1.2	0.8	29.1	6.6	0.7	0.0	0.7	3.3	0.0	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	89.3	36.3	25.2	65.3	115.3	19.9	41.4	0.0	41.8	49.8	0.0	48.7
LnGrp LOS	F	D	C	E	F	B	D	A	D	D	A	D
Approach Vol, veh/h		1754			2235			73				177
Approach Delay, s/veh		41.0			103.5			41.6				49.4
Approach LOS		D			F			D				D
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.1	60.9		30.0	19.3	50.7		35.0				
Change Period (Y+Rc), s	5.0	6.4		4.9	5.0	6.4		4.9				
Max Green Setting (Gmax), s	15.0	43.6		25.1	15.0	43.6		30.1				
Max Q Clear Time (g_c+1), s	13.8	35.6		8.7	14.4	46.3		3.7				
Green Ext Time (p_c), s	0.0	5.4		0.2	0.0	0.0		0.0				

Intersection Summary

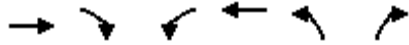
HCM 6th Ctrl Delay	74.3
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th Signalized Intersection Summary  
 3: Jess Ranch Parkway & Bear Valley Road

Apple Bear Commercial Project  
 Opening Year (2024) NP AM



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↗	↖↗	↑↑↑	↖↗	↗
Traffic Volume (veh/h)	1401	183	81	1922	292	48
Future Volume (veh/h)	1401	183	81	1922	292	48
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	1475	193	85	2023	307	51
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	2559	794	136	2968	1157	593
Arrive On Green	0.49	0.49	0.04	0.57	0.33	0.33
Sat Flow, veh/h	5358	1610	3510	5358	3510	1610
Grp Volume(v), veh/h	1475	193	85	2023	307	51
Grp Sat Flow(s),veh/h/ln	1729	1610	1755	1729	1755	1610
Q Serve(g_s), s	23.2	7.9	2.7	31.5	7.4	2.4
Cycle Q Clear(g_c), s	23.2	7.9	2.7	31.5	7.4	2.4
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2559	794	136	2968	1157	593
V/C Ratio(X)	0.58	0.24	0.62	0.68	0.27	0.09
Avail Cap(c_a), veh/h	2559	794	317	2968	1157	593
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.61	0.61	1.00	1.00
Uniform Delay (d), s/veh	20.6	16.8	54.4	17.3	28.3	23.7
Incr Delay (d2), s/veh	1.0	0.7	1.1	0.8	0.6	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.7	2.9	1.2	11.1	3.2	2.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	21.6	17.5	55.5	18.0	28.9	24.0
LnGrp LOS	C	B	E	B	C	C
Approach Vol, veh/h	1668			2108	358	
Approach Delay, s/veh	21.1			19.6	28.2	
Approach LOS	C			B	C	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	9.1	62.9		43.0		72.0
Change Period (Y+Rc), s	4.6	6.2		5.1		6.2
Max Green Setting (Gmax), s	40.4	50.8		37.9		65.8
Max Q Clear Time (g_c+1), s	14.7	25.2		9.4		33.5
Green Ext Time (p_c), s	0.0	19.1		0.6		27.5
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			20.9			
HCM 6th LOS			C			

HCM 6th Signalized Intersection Summary  
4: Reata Road & Bear Valley Road

Apple Bear Commercial Project  
Opening Year (2024) NP AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑↑	↔	↔↔	↑↑↑		↔	↑↑	↔	↔	↑	↔
Traffic Volume (veh/h)	211	1145	48	61	1683	16	36	25	29	20	41	284
Future Volume (veh/h)	211	1145	48	61	1683	16	36	25	29	20	41	284
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	224	1218	0	65	1790	17	38	27	31	21	44	302
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	281	2627		109	2424	23	385	1181	520	497	622	520
Arrive On Green	0.08	0.51	0.00	0.03	0.46	0.46	0.33	0.33	0.33	0.33	0.33	0.33
Sat Flow, veh/h	3510	5187	1610	3510	5299	50	1051	3610	1588	1365	1900	1588
Grp Volume(v), veh/h	224	1218	0	65	1168	639	38	27	31	21	44	302
Grp Sat Flow(s),veh/h/ln	1755	1729	1610	1755	1729	1891	1051	1805	1588	1365	1900	1588
Q Serve(g_s), s	7.8	18.9	0.0	2.3	34.6	34.6	3.2	0.6	1.7	1.3	2.0	19.7
Cycle Q Clear(g_c), s	7.8	18.9	0.0	2.3	34.6	34.6	5.2	0.6	1.7	2.0	2.0	19.7
Prop In Lane	1.00		1.00	1.00		0.03	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	281	2627		109	1582	865	385	1181	520	497	622	520
V/C Ratio(X)	0.80	0.46		0.60	0.74	0.74	0.10	0.02	0.06	0.04	0.07	0.58
Avail Cap(c_a), veh/h	432	2627		432	1582	865	385	1181	520	497	622	520
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.80	0.80	0.00	0.80	0.80	0.80	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.5	19.9	0.0	59.8	27.8	27.8	30.8	28.5	28.9	29.2	29.0	34.9
Incr Delay (d2), s/veh	2.2	0.5	0.0	1.6	2.5	4.5	0.5	0.0	0.2	0.2	0.2	4.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.5	7.2	0.0	1.0	13.8	15.6	0.9	0.3	0.7	0.5	0.9	8.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.7	20.4	0.0	61.3	30.3	32.3	31.3	28.5	29.1	29.3	29.2	39.6
LnGrp LOS	E	C		E	C	C	C	C	C	C	C	D
Approach Vol, veh/h		1442			1872			96			367	
Approach Delay, s/veh		26.3			32.1			29.8			37.8	
Approach LOS		C			C			C			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.5	69.5		46.0	15.6	63.4		46.0				
Change Period (Y+Rc), s	5.6	6.2		5.1	5.6	6.2		5.1				
Max Green Setting (Gmax), s	15.4	51.8		40.9	15.4	51.8		40.9				
Max Q Clear Time (g_c+1), s	11.3	20.9		21.7	9.8	36.6		7.2				
Green Ext Time (p_c), s	0.0	16.7		0.7	0.2	13.1		0.2				

Intersection Summary

HCM 6th Ctrl Delay	30.4
HCM 6th LOS	C

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary  
5: Apple Valley Road & Pimlico Road

Apple Bear Commercial Project  
Opening Year (2024) NP AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	153	36	15	35	27	32	40	660	36	67	859	198
Future Volume (veh/h)	153	36	15	35	27	32	40	660	36	67	859	198
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	163	38	16	37	29	34	43	702	38	71	914	211
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	240	283	240	236	283	240	56	2442	1076	91	2512	1120
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.03	0.68	0.68	0.05	0.70	0.70
Sat Flow, veh/h	1360	1900	1610	1371	1900	1610	1810	3610	1590	1810	3610	1610
Grp Volume(v), veh/h	163	38	16	37	29	34	43	702	38	71	914	211
Grp Sat Flow(s),veh/h/ln	1360	1900	1610	1371	1900	1610	1810	1805	1590	1810	1805	1610
Q Serve(g_s), s	15.3	2.3	1.1	3.1	1.7	2.4	3.1	10.2	1.0	5.0	13.4	6.0
Cycle Q Clear(g_c), s	17.0	2.3	1.1	5.4	1.7	2.4	3.1	10.2	1.0	5.0	13.4	6.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	240	283	240	236	283	240	56	2442	1076	91	2512	1120
V/C Ratio(X)	0.68	0.13	0.07	0.16	0.10	0.14	0.77	0.29	0.04	0.78	0.36	0.19
Avail Cap(c_a), veh/h	424	539	457	426	547	463	228	2442	1076	367	2512	1120
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.83	0.83	0.83	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.2	48.1	47.6	50.4	47.8	48.1	62.5	8.5	7.0	61.0	8.1	6.9
Incr Delay (d2), s/veh	1.3	0.1	0.0	0.1	0.1	0.1	6.8	0.2	0.1	5.4	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	1.1	0.5	1.1	0.8	1.0	1.5	3.5	0.3	2.4	4.4	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.4	48.1	47.6	50.5	47.9	48.2	69.3	8.7	7.0	66.4	8.5	7.3
LnGrp LOS	E	D	D	D	D	D	E	A	A	E	A	A
Approach Vol, veh/h		217			100			783			1196	
Approach Delay, s/veh		54.3			49.0			11.9			11.7	
Approach LOS		D			D			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.1	94.4		24.4	8.6	97.0		24.4				
Change Period (Y+Rc), s	4.6	6.5		5.1	4.6	6.5		* 5.1				
Max Green Setting (Gmax), s	20.4	50.5		36.9	16.4	60.5		* 37				
Max Q Clear Time (g_c+1), s	12.2			19.0	5.1	15.4		7.4				
Green Ext Time (p_c), s	0.0	0.7		0.3	0.0	0.7		0.2				

Intersection Summary

HCM 6th Ctrl Delay	17.4
HCM 6th LOS	B

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary  
6: Apple Valley Road & Bear Valley Road

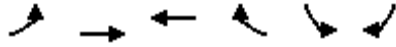
Apple Bear Commercial Project  
Opening Year (2024) NP AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗	↑ ↑ ↑		↖ ↗	↑ ↑ ↑	↖	↖	↑ ↑ ↑	↖	↖	↑ ↑	↖ ↗
Traffic Volume (veh/h)	367	741	46	111	1274	209	78	164	56	207	200	442
Future Volume (veh/h)	367	741	46	111	1274	209	78	164	56	207	200	442
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	399	805	50	121	1385	227	85	178	61	225	217	480
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	429	2592	160	153	2285	873	101	1205	373	184	1006	1135
Arrive On Green	0.12	0.52	0.52	0.04	0.44	0.44	0.06	0.23	0.23	0.10	0.28	0.28
Sat Flow, veh/h	3510	4993	309	3510	5187	1610	1810	5187	1606	1810	3610	2831
Grp Volume(v), veh/h	399	557	298	121	1385	227	85	178	61	225	217	480
Grp Sat Flow(s),veh/h/ln	1755	1729	1844	1755	1729	1610	1810	1729	1606	1810	1805	1415
Q Serve(g_s), s	23.6	19.4	19.5	7.2	42.8	15.8	9.8	5.7	6.4	21.4	9.7	25.7
Cycle Q Clear(g_c), s	23.6	19.4	19.5	7.2	42.8	15.8	9.8	5.7	6.4	21.4	9.7	25.7
Prop In Lane	1.00		0.17	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	429	1795	957	153	2285	873	101	1205	373	184	1006	1135
V/C Ratio(X)	0.93	0.31	0.31	0.79	0.61	0.26	0.84	0.15	0.16	1.22	0.22	0.42
Avail Cap(c_a), veh/h	776	1795	957	441	2285	873	184	1205	373	184	1006	1135
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.89	0.89	0.89	1.00	1.00	1.00	1.00	1.00	1.00	0.94	0.94	0.94
Uniform Delay (d), s/veh	91.3	28.9	29.0	99.5	44.8	25.6	98.2	64.1	64.3	94.3	58.1	45.4
Incr Delay (d2), s/veh	4.6	0.4	0.8	3.4	1.2	0.7	7.0	0.3	0.9	136.1	0.5	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.0	8.1	8.8	3.3	18.4	6.2	4.8	2.5	2.7	16.9	4.5	9.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	95.8	29.3	29.7	102.8	46.0	26.3	105.2	64.3	65.3	230.4	58.6	46.5
LnGrp LOS	F	C	C	F	D	C	F	E	E	F	E	D
Approach Vol, veh/h		1254			1733			324			922	
Approach Delay, s/veh		50.6			47.4			75.2			94.2	
Approach LOS		D			D			E			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.8	115.2	16.3	64.7	30.3	98.7	26.0	55.0				
Change Period (Y+Rc), s	4.6	6.2	4.6	6.2	4.6	6.2	4.6	6.2				
Max Green Setting (Gmax), s	20.4	91.8	21.4	48.8	46.4	71.8	21.4	48.8				
Max Q Clear Time (g_c+19.2), s	19.2	21.5	11.8	27.7	25.6	44.8	23.4	8.4				
Green Ext Time (p_c), s	0.0	0.7	0.0	0.3	0.0	1.5	0.0	0.2				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay											60.7	
HCM 6th LOS											E	

HCM 6th Signalized Intersection Summary  
 7: Bear Valley Road & Westmont Drive

Apple Bear Commercial Project  
 Opening Year (2024) NP AM



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↖	↑↑	↑↑↑	↗	↖	↗
Traffic Volume (veh/h)	102	834	1555	99	77	59
Future Volume (veh/h)	102	834	1555	99	77	59
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	110	897	1672	106	83	63
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	140	2238	2551	792	478	425
Arrive On Green	0.08	0.62	0.49	0.49	0.26	0.26
Sat Flow, veh/h	1810	3705	5358	1610	1810	1610
Grp Volume(v), veh/h	110	897	1672	106	83	63
Grp Sat Flow(s),veh/h/ln	1810	1805	1729	1610	1810	1610
Q Serve(g_s), s	6.0	12.6	24.2	3.6	3.5	3.0
Cycle Q Clear(g_c), s	6.0	12.6	24.2	3.6	3.5	3.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	140	2238	2551	792	478	425
V/C Ratio(X)	0.79	0.40	0.66	0.13	0.17	0.15
Avail Cap(c_a), veh/h	288	2238	2551	792	478	425
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.3	9.6	19.1	13.8	28.4	28.2
Incr Delay (d2), s/veh	9.4	0.5	1.3	0.4	0.8	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	4.2	8.8	1.3	1.6	3.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	54.7	10.1	20.4	14.2	29.2	28.9
LnGrp LOS	D	B	C	B	C	C
Approach Vol, veh/h		1007	1778		146	
Approach Delay, s/veh		15.0	20.0		29.1	
Approach LOS		B	C		C	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		69.0		31.0	12.8	56.2
Change Period (Y+Rc), s		7.0		4.6	5.1	* 7
Max Green Setting (Gmax), s		62.0		26.4	15.9	* 42
Max Q Clear Time (g_c+I1), s		14.6		5.5	8.0	26.2
Green Ext Time (p_c), s		6.6		0.2	0.1	9.7

Intersection Summary

HCM 6th Ctrl Delay	18.7
HCM 6th LOS	B

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↖	↑↑	↘	
Traffic Vol, veh/h	913	3	2	1627	3	2
Future Vol, veh/h	913	3	2	1627	3	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	50	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1014	3	2	1808	3	2

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	1017	0	1924
Stage 1	-	-	-	-	1016
Stage 2	-	-	-	-	908
Critical Hdwy	-	-	4.1	-	6.8
Critical Hdwy Stg 1	-	-	-	-	5.8
Critical Hdwy Stg 2	-	-	-	-	5.8
Follow-up Hdwy	-	-	2.2	-	3.5
Pot Cap-1 Maneuver	-	-	*1078	-	*92
Stage 1	-	-	-	-	*677
Stage 2	-	-	-	-	*359
Platoon blocked, %	-	-	1	-	1
Mov Cap-1 Maneuver	-	-	*1078	-	*92
Mov Cap-2 Maneuver	-	-	-	-	*92
Stage 1	-	-	-	-	*677
Stage 2	-	-	-	-	*358

Approach	EB	WB	NB
HCM Control Delay, s	0	0	31.6
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	141	-	-	* 1078	-
HCM Lane V/C Ratio	0.039	-	-	0.002	-
HCM Control Delay (s)	31.6	-	-	8.3	-
HCM Lane LOS	D	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Notes  
 -: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon



HCM 6th Signalized Intersection Summary  
9: Deep Creek Road & Bear Valley Road

Apple Bear Commercial Project  
Opening Year (2024) NP AM



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↓	↑↑	↓	↑
Traffic Volume (veh/h)	854	73	113	1418	169	72
Future Volume (veh/h)	854	73	113	1418	169	72
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	909	78	120	1509	180	77
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	1881	839	149	2316	430	515
Arrive On Green	0.52	0.52	0.08	0.64	0.24	0.24
Sat Flow, veh/h	3705	1610	1810	3705	1810	1610
Grp Volume(v), veh/h	909	78	120	1509	180	77
Grp Sat Flow(s),veh/h/ln	1805	1610	1810	1805	1810	1610
Q Serve(g_s), s	19.3	2.9	7.8	30.9	10.1	4.1
Cycle Q Clear(g_c), s	19.3	2.9	7.8	30.9	10.1	4.1
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1881	839	149	2316	430	515
V/C Ratio(X)	0.48	0.09	0.81	0.65	0.42	0.15
Avail Cap(c_a), veh/h	1881	839	232	2316	430	515
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.4	14.5	54.1	13.2	38.7	29.2
Incr Delay (d2), s/veh	0.9	0.2	5.3	0.6	3.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.5	1.0	3.6	10.5	4.6	1.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	19.3	14.7	59.4	13.9	41.7	29.8
LnGrp LOS	B	B	E	B	D	C
Approach Vol, veh/h	987			1629	257	
Approach Delay, s/veh	18.9			17.2	38.1	
Approach LOS	B			B	D	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	14.5	70.5			85.0	35.0
Change Period (Y+Rc), s	4.6	8.0			8.0	6.5
Max Green Setting (Gmax), s	15.4	57.0			77.0	28.5
Max Q Clear Time (g_c+I1), s	9.8	21.3			32.9	12.1
Green Ext Time (p_c), s	0.0	5.1			12.6	0.3
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			19.7			
HCM 6th LOS			B			

HCM 6th Signalized Intersection Summary  
 10: Kiowa Road & Bear Valley Road

Apple Bear Commercial Project  
 Opening Year (2024) NP AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	119	551	163	100	867	55	302	145	62	54	145	207
Future Volume (veh/h)	119	551	163	100	867	55	302	145	62	54	145	207
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1976	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	127	586	173	106	922	59	321	154	66	57	154	220
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	150	1409	654	129	1366	609	317	865	355	74	767	340
Arrive On Green	0.08	0.39	0.39	0.07	0.38	0.38	0.18	0.35	0.35	0.04	0.21	0.21
Sat Flow, veh/h	1810	3610	1675	1810	3610	1610	1810	2495	1024	1810	3610	1599
Grp Volume(v), veh/h	127	586	173	106	922	59	321	110	110	57	154	220
Grp Sat Flow(s),veh/h/ln	1810	1805	1675	1810	1805	1610	1810	1805	1714	1810	1805	1599
Q Serve(g_s), s	10.0	17.1	10.2	8.4	30.9	3.4	25.4	6.1	6.5	4.5	5.1	18.2
Cycle Q Clear(g_c), s	10.0	17.1	10.2	8.4	30.9	3.4	25.4	6.1	6.5	4.5	5.1	18.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.60	1.00		1.00
Lane Grp Cap(c), veh/h	150	1409	654	129	1366	609	317	626	594	74	767	340
V/C Ratio(X)	0.84	0.42	0.26	0.82	0.68	0.10	1.01	0.17	0.19	0.77	0.20	0.65
Avail Cap(c_a), veh/h	255	1409	654	255	1366	609	317	626	594	255	767	340
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.6	32.2	30.1	66.5	37.6	29.1	59.8	32.9	33.1	68.9	47.0	52.1
Incr Delay (d2), s/veh	4.9	0.9	1.0	5.0	2.7	0.3	53.8	0.6	0.7	6.3	0.6	9.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	7.4	4.2	3.9	13.5	1.4	16.1	2.7	2.8	2.2	2.3	8.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	70.4	33.1	31.0	71.4	40.3	29.4	113.6	33.5	33.7	75.2	47.6	61.4
LnGrp LOS	E	C	C	E	D	C	F	C	C	E	D	E
Approach Vol, veh/h		886			1087			541			431	
Approach Delay, s/veh		38.0			42.8			81.1			58.3	
Approach LOS		D			D			F			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.9	63.1	10.5	56.5	16.6	61.4	30.0	37.0				
Change Period (Y+Rc), s	4.6	6.5	4.6	6.2	4.6	6.5	4.6	6.2				
Max Green Setting (Gmax), s	20.4	46.5	20.4	35.8	20.4	46.5	25.4	30.8				
Max Q Clear Time (g_c+10), s	10.4	19.1	6.5	8.5	12.0	32.9	27.4	20.2				
Green Ext Time (p_c), s	0.1	8.4	0.0	1.1	0.1	7.8	0.0	1.2				

Intersection Summary

HCM 6th Ctrl Delay	50.6
HCM 6th LOS	D

HCM 6th Signalized Intersection Summary  
 1: Jacaranda Avenue/Jacaranda Road & Bear Valley Road

Apple Bear Commercial Project  
 Opening Year (2024) NP PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑↑		↔	↑↑↑	↔		↔↔		↔	↔	↔
Traffic Volume (veh/h)	36	2030	48	323	1783	23	85	9	423	28	19	37
Future Volume (veh/h)	36	2030	48	323	1783	23	85	9	423	28	19	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	37	2071	49	330	1819	23	87	9	432	24	26	38
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	75	1646	39	312	2440	756	303	31	296	349	367	345
Arrive On Green	0.02	0.32	0.32	0.17	0.47	0.47	0.18	0.18	0.18	0.19	0.19	0.19
Sat Flow, veh/h	3510	5213	123	1810	5187	1607	1647	170	1610	1810	1900	1610
Grp Volume(v), veh/h	37	1373	747	330	1819	23	96	0	432	24	26	38
Grp Sat Flow(s),veh/h/ln	1755	1729	1878	1810	1729	1607	1818	0	1610	1810	1900	1610
Q Serve(g_s), s	1.5	45.8	45.8	25.0	41.5	1.1	6.6	0.0	26.7	1.6	1.6	2.8
Cycle Q Clear(g_c), s	1.5	45.8	45.8	25.0	41.5	1.1	6.6	0.0	26.7	1.6	1.6	2.8
Prop In Lane	1.00		0.07	1.00		1.00	0.91		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	75	1092	593	312	2440	756	335	0	296	349	367	345
V/C Ratio(X)	0.49	1.26	1.26	1.06	0.75	0.03	0.29	0.00	1.46	0.07	0.07	0.11
Avail Cap(c_a), veh/h	738	1092	593	312	2440	756	335	0	296	349	367	345
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	70.2	49.6	49.6	60.0	31.3	20.6	50.9	0.0	59.2	47.8	47.9	45.8
Incr Delay (d2), s/veh	1.9	123.1	130.1	67.0	2.1	0.1	2.1	0.0	223.5	0.4	0.4	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	37.7	42.0	16.9	16.9	0.4	3.2	0.0	29.1	0.8	0.8	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.0	172.7	179.7	127.0	33.4	20.7	53.1	0.0	282.6	48.2	48.2	46.5
LnGrp LOS	E	F	F	F	C	C	D	A	F	D	D	D
Approach Vol, veh/h		2157			2172			528				88
Approach Delay, s/veh		173.4			47.5			240.9				47.5
Approach LOS		F			D			F				D
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	30.0	51.0		32.0	7.6	73.4		32.0				
Change Period (Y+Rc), s	5.0	5.2		* 5.3	4.5	5.2		4.0				
Max Green Setting (Gmax), s	25.0	45.8		* 27	30.5	40.8		28.0				
Max Q Clear Time (g_c+I1), s	27.0	47.8		28.7	3.5	43.5		4.8				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		0.1				

Intersection Summary

HCM 6th Ctrl Delay	123.1
HCM 6th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.  
 \* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary  
 2: Bear Valley Road & Mojave Fish Hatchery Road

Apple Bear Commercial Project  
 Opening Year (2024) NP PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑↑	↗	↘↗	↑↑↑	↗	↘	↑	↗	↘	↗	↘
Traffic Volume (veh/h)	59	2320	101	120	1936	94	108	9	67	120	5	87
Future Volume (veh/h)	59	2320	101	120	1936	94	108	9	67	120	5	87
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	60	2367	103	122	1976	96	116	0	68	122	5	88
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.99
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	77	1998	620	171	2030	926	807	0	357	336	16	286
Arrive On Green	0.04	0.39	0.39	0.05	0.39	0.39	0.22	0.00	0.22	0.19	0.19	0.19
Sat Flow, veh/h	1810	5187	1610	3510	5187	1602	3619	0	1602	1810	87	1536
Grp Volume(v), veh/h	60	2367	103	122	1976	96	116	0	68	122	0	93
Grp Sat Flow(s),veh/h/ln	1810	1729	1610	1755	1729	1602	1810	0	1602	1810	0	1623
Q Serve(g_s), s	4.4	52.0	5.7	4.6	50.6	3.6	3.5	0.0	4.7	7.9	0.0	6.7
Cycle Q Clear(g_c), s	4.4	52.0	5.7	4.6	50.6	3.6	3.5	0.0	4.7	7.9	0.0	6.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.95
Lane Grp Cap(c), veh/h	77	1998	620	171	2030	926	807	0	357	336	0	302
V/C Ratio(X)	0.78	1.18	0.17	0.71	0.97	0.10	0.14	0.00	0.19	0.36	0.00	0.31
Avail Cap(c_a), veh/h	201	1998	620	390	2030	926	807	0	357	336	0	302
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	64.0	41.5	27.3	63.3	40.4	12.8	42.1	0.0	42.6	48.0	0.0	47.5
Incr Delay (d2), s/veh	6.1	88.5	0.6	2.0	14.6	0.2	0.4	0.0	1.2	3.0	0.0	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	37.2	2.2	2.1	23.0	2.0	1.6	0.0	2.0	3.9	0.0	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	70.1	130.0	27.8	65.3	55.0	13.1	42.5	0.0	43.7	51.0	0.0	50.1
LnGrp LOS	E	F	C	E	D	B	D	A	D	D	A	D
Approach Vol, veh/h		2530			2194			184			215	
Approach Delay, s/veh		124.4			53.7			42.9			50.6	
Approach LOS		F			D			D			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.6	58.4		30.0	10.8	59.2		35.0				
Change Period (Y+Rc), s	5.0	6.4		4.9	5.0	6.4		4.9				
Max Green Setting (Gmax), s	15.0	43.6		25.1	15.0	43.6		30.1				
Max Q Clear Time (g_c+10), s	10.6	54.0		9.9	6.4	52.6		6.7				
Green Ext Time (p_c), s	0.0	0.0		0.2	0.0	0.0		0.1				

Intersection Summary

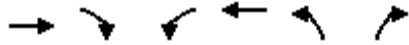
HCM 6th Ctrl Delay	88.1
HCM 6th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th Signalized Intersection Summary  
 3: Jess Ranch Parkway & Bear Valley Road

Apple Bear Commercial Project  
 Opening Year (2024) NP PM



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↑	↔	↑↑↑	↔	↑
Traffic Volume (veh/h)	1984	344	206	1662	484	187
Future Volume (veh/h)	1984	344	206	1662	484	187
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	2045	355	212	1713	499	193
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	2360	729	271	2968	1157	655
Arrive On Green	0.46	0.46	0.08	0.57	0.33	0.33
Sat Flow, veh/h	5358	1603	3510	5358	3510	1610
Grp Volume(v), veh/h	2045	355	212	1713	499	193
Grp Sat Flow(s),veh/h/ln	1729	1603	1755	1729	1755	1610
Q Serve(g_s), s	40.8	17.8	6.8	24.3	12.8	9.3
Cycle Q Clear(g_c), s	40.8	17.8	6.8	24.3	12.8	9.3
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2360	729	271	2968	1157	655
V/C Ratio(X)	0.87	0.49	0.78	0.58	0.43	0.29
Avail Cap(c_a), veh/h	2360	729	317	2968	1157	655
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.76	0.76	1.00	1.00
Uniform Delay (d), s/veh	28.2	21.9	52.1	15.7	30.1	23.0
Incr Delay (d2), s/veh	4.6	2.3	6.6	0.6	1.2	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.3	6.7	3.1	8.6	5.5	10.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	32.8	24.3	58.8	16.3	31.3	24.1
LnGrp LOS	C	C	E	B	C	C
Approach Vol, veh/h	2400			1925	692	
Approach Delay, s/veh	31.5			21.0	29.3	
Approach LOS	C			C	C	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	33.5	58.5		43.0		72.0
Change Period (Y+Rc), s	4.6	6.2		5.1		6.2
Max Green Setting (Gmax), s	40.4	50.8		37.9		65.8
Max Q Clear Time (g_c+10), s	19.8	42.8		14.8		26.3
Green Ext Time (p_c), s	0.1	7.7		1.3		28.2
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			27.2			
HCM 6th LOS			C			

HCM 6th Signalized Intersection Summary  
4: Reata Road & Bear Valley Road

Apple Bear Commercial Project  
Opening Year (2024) NP PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖↗	↑↑↑	↖	↖↗	↑↑↑		↖	↑↑	↖	↖	↑	↖
Traffic Volume (veh/h)	305	1713	132	156	1388	15	209	109	158	29	106	270
Future Volume (veh/h)	305	1713	132	156	1388	15	209	109	158	29	106	270
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	314	1766	0	161	1431	15	215	112	163	30	109	278
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	369	2467		218	2289	24	347	1181	526	400	622	526
Arrive On Green	0.11	0.48	0.00	0.06	0.43	0.43	0.33	0.33	0.33	0.33	0.33	0.33
Sat Flow, veh/h	3510	5187	1610	3510	5292	55	1012	3610	1609	1121	1900	1609
Grp Volume(v), veh/h	314	1766	0	161	935	511	215	112	163	30	109	278
Grp Sat Flow(s),veh/h/ln	1755	1729	1610	1755	1729	1890	1012	1805	1609	1121	1900	1609
Q Serve(g_s), s	11.0	33.8	0.0	5.6	26.3	26.3	24.1	2.7	9.5	2.4	5.1	17.6
Cycle Q Clear(g_c), s	11.0	33.8	0.0	5.6	26.3	26.3	29.2	2.7	9.5	5.1	5.1	17.6
Prop In Lane	1.00		1.00	1.00		0.03	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	369	2467		218	1495	817	347	1181	526	400	622	526
V/C Ratio(X)	0.85	0.72		0.74	0.63	0.63	0.62	0.09	0.31	0.07	0.18	0.53
Avail Cap(c_a), veh/h	432	2467		432	1495	817	347	1181	526	400	622	526
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.45	0.45	0.00	0.84	0.84	0.84	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.0	26.1	0.0	57.6	27.6	27.6	40.4	29.2	31.5	31.0	30.0	34.2
Incr Delay (d2), s/veh	5.7	0.8	0.0	1.6	1.7	3.0	8.0	0.2	1.5	0.4	0.6	3.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.0	13.1	0.0	2.5	10.6	11.8	6.8	1.2	4.0	0.7	2.4	7.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.7	26.9	0.0	59.2	29.3	30.6	48.5	29.4	33.0	31.3	30.6	38.0
LnGrp LOS	E	C		E	C	C	D	C	C	C	C	D
Approach Vol, veh/h		2080			1607			490			417	
Approach Delay, s/veh		32.0			32.7			39.0			35.6	
Approach LOS		C			C			D			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	33.4	65.6		46.0	18.7	60.3		46.0				
Change Period (Y+Rc), s	5.6	6.2		5.1	5.6	6.2		5.1				
Max Green Setting (Gmax), s	15.4	51.8		40.9	15.4	51.8		40.9				
Max Q Clear Time (g_c+1), s	17.6	35.8		19.6	13.0	28.3		31.2				
Green Ext Time (p_c), s	0.1	13.7		0.9	0.2	16.1		1.1				

Intersection Summary

HCM 6th Ctrl Delay	33.3
HCM 6th LOS	C

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary  
5: Apple Valley Road & Pimlico Road

Apple Bear Commercial Project  
Opening Year (2024) NP PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	286	55	40	83	47	104	73	785	92	148	865	255
Future Volume (veh/h)	286	55	40	83	47	104	73	785	92	148	865	255
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	292	56	41	85	48	106	74	801	94	151	883	260
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	364	505	427	376	505	427	94	1848	824	177	2013	896
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.05	0.51	0.51	0.10	0.56	0.56
Sat Flow, veh/h	1251	1900	1608	1318	1900	1608	1810	3610	1609	1810	3610	1607
Grp Volume(v), veh/h	292	56	41	85	48	106	74	801	94	151	883	260
Grp Sat Flow(s),veh/h/ln	1251	1900	1608	1318	1900	1608	1810	1805	1609	1810	1805	1607
Q Serve(g_s), s	29.8	2.9	2.5	6.8	2.5	6.7	5.3	18.1	3.9	10.7	18.6	11.1
Cycle Q Clear(g_c), s	32.3	2.9	2.5	9.7	2.5	6.7	5.3	18.1	3.9	10.7	18.6	11.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	364	505	427	376	505	427	94	1848	824	177	2013	896
V/C Ratio(X)	0.80	0.11	0.10	0.23	0.10	0.25	0.78	0.43	0.11	0.85	0.44	0.29
Avail Cap(c_a), veh/h	387	539	457	405	547	463	228	1848	824	367	2013	896
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.77	0.77	0.77	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.1	36.1	36.0	39.8	36.0	37.5	60.9	19.9	16.4	57.7	16.8	15.2
Incr Delay (d2), s/veh	9.9	0.0	0.0	0.1	0.0	0.1	4.1	0.6	0.2	4.5	0.7	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.2	1.4	1.0	2.3	1.2	2.7	2.5	7.3	1.4	4.9	7.2	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.0	36.2	36.0	39.9	36.0	37.6	65.0	20.5	16.7	62.2	17.5	16.0
LnGrp LOS	E	D	D	D	D	D	E	C	B	E	B	B
Approach Vol, veh/h		389			239			969			1294	
Approach Delay, s/veh		52.6			38.1			23.5			22.4	
Approach LOS		D			D			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.3	73.1		39.6	11.4	79.0		39.6				
Change Period (Y+Rc), s	4.6	6.5		5.1	4.6	6.5		* 5.1				
Max Green Setting (Gmax), s	20.4	50.5		36.9	16.4	60.5		* 37				
Max Q Clear Time (g_c+1/2), s	11.7	20.1		34.3	7.3	20.6		11.7				
Green Ext Time (p_c), s	0.1	0.7		0.3	0.0	0.7		0.5				

Intersection Summary

HCM 6th Ctrl Delay	28.1
HCM 6th LOS	C

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary  
6: Apple Valley Road & Bear Valley Road

Apple Bear Commercial Project  
Opening Year (2024) NP PM

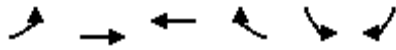


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗	↑ ↑ ↑		↖ ↗	↑ ↑ ↑	↖	↖	↑ ↑ ↑	↖	↖	↑ ↑	↖ ↗
Traffic Volume (veh/h)	501	1264	65	198	1080	176	115	238	170	260	368	390
Future Volume (veh/h)	501	1264	65	198	1080	176	115	238	170	260	368	390
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	527	1331	68	208	1137	185	121	251	179	274	387	411
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	556	2499	128	240	2098	813	137	1205	374	184	933	1178
Arrive On Green	0.16	0.49	0.49	0.07	0.40	0.40	0.08	0.23	0.23	0.10	0.26	0.26
Sat Flow, veh/h	3510	5053	258	3510	5187	1604	1810	5187	1608	1810	3610	2821
Grp Volume(v), veh/h	527	911	488	208	1137	185	121	251	179	274	387	411
Grp Sat Flow(s),veh/h/ln	1755	1729	1853	1755	1729	1604	1810	1729	1608	1810	1805	1410
Q Serve(g_s), s	31.2	38.0	38.0	12.3	35.1	13.5	13.9	8.2	20.2	21.4	18.7	20.9
Cycle Q Clear(g_c), s	31.2	38.0	38.0	12.3	35.1	13.5	13.9	8.2	20.2	21.4	18.7	20.9
Prop In Lane	1.00		0.14	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	556	1710	917	240	2098	813	137	1205	374	184	933	1178
V/C Ratio(X)	0.95	0.53	0.53	0.87	0.54	0.23	0.88	0.21	0.48	1.49	0.41	0.35
Avail Cap(c_a), veh/h	776	1710	917	441	2098	813	184	1205	374	184	933	1178
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.66	0.66	0.66	1.00	1.00	1.00	1.00	1.00	1.00	0.93	0.93	0.93
Uniform Delay (d), s/veh	87.5	36.4	36.4	96.9	47.7	28.9	96.1	65.0	69.6	94.3	64.7	41.8
Incr Delay (d2), s/veh	10.8	0.8	1.5	3.7	1.0	0.7	24.7	0.4	4.3	243.6	1.3	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.9	16.1	17.4	5.7	15.2	5.4	7.4	3.6	8.7	22.4	8.7	7.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	98.3	37.2	37.9	100.6	48.7	29.6	120.8	65.4	74.0	337.9	65.9	42.5
LnGrp LOS	F	D	D	F	D	C	F	E	E	F	E	D
Approach Vol, veh/h		1926			1530			551			1072	
Approach Delay, s/veh		54.1			53.5			80.4			126.5	
Approach LOS		D			D			F			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	18.9	110.1	20.5	60.5	37.9	91.1	26.0	55.0				
Change Period (Y+Rc), s	4.6	6.2	4.6	6.2	4.6	6.2	4.6	6.2				
Max Green Setting (Gmax), s	20.4	91.8	21.4	48.8	46.4	71.8	21.4	48.8				
Max Q Clear Time (g_c+1/3), s	14.3	40.0	15.9	22.9	33.2	37.1	23.4	22.2				
Green Ext Time (p_c), s	0.0	1.2	0.0	0.4	0.1	1.2	0.0	0.2				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay												72.0
HCM 6th LOS												E



HCM 6th Signalized Intersection Summary  
 7: Bear Valley Road & Westmont Drive

Apple Bear Commercial Project  
 Opening Year (2024) NP PM



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↑↑	↑↑↑	↗	↘	↗
Traffic Volume (veh/h)	177	1508	1288	155	232	133
Future Volume (veh/h)	177	1508	1288	155	232	133
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	182	1555	1328	160	239	137
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	216	2238	2332	724	478	425
Arrive On Green	0.12	0.62	0.45	0.45	0.26	0.26
Sat Flow, veh/h	1810	3705	5358	1610	1810	1610
Grp Volume(v), veh/h	182	1555	1328	160	239	137
Grp Sat Flow(s),veh/h/ln	1810	1805	1729	1610	1810	1610
Q Serve(g_s), s	9.8	28.8	18.9	6.1	11.2	6.8
Cycle Q Clear(g_c), s	9.8	28.8	18.9	6.1	11.2	6.8
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	216	2238	2332	724	478	425
V/C Ratio(X)	0.84	0.69	0.57	0.22	0.50	0.32
Avail Cap(c_a), veh/h	288	2238	2332	724	478	425
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.1	12.7	20.4	16.8	31.2	29.6
Incr Delay (d2), s/veh	15.5	1.8	1.0	0.7	3.7	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	9.8	7.1	2.2	5.4	6.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	58.6	14.5	21.4	17.5	34.9	31.6
LnGrp LOS	E	B	C	B	C	C
Approach Vol, veh/h		1737	1488		376	
Approach Delay, s/veh		19.1	21.0		33.7	
Approach LOS		B	C		C	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		69.0		31.0	17.0	52.0
Change Period (Y+Rc), s		7.0		4.6	5.1	* 7
Max Green Setting (Gmax), s		62.0		26.4	15.9	* 42
Max Q Clear Time (g_c+I1), s		30.8		13.2	11.8	20.9
Green Ext Time (p_c), s		13.5		0.5	0.2	9.3

Intersection Summary

HCM 6th Ctrl Delay	21.4
HCM 6th LOS	C

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↖	↑↑	↘	
Traffic Vol, veh/h	1723	1	0	1410	1	3
Future Vol, veh/h	1723	1	0	1410	1	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	50	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1795	1	0	1469	1	3

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	1796	0	2531
Stage 1	-	-	-	-	1796
Stage 2	-	-	-	-	735
Critical Hdwy	-	-	4.1	-	6.8
Critical Hdwy Stg 1	-	-	-	-	5.8
Critical Hdwy Stg 2	-	-	-	-	5.8
Follow-up Hdwy	-	-	2.2	-	3.5
Pot Cap-1 Maneuver	-	-	*574	-	*31
Stage 1	-	-	-	-	*361
Stage 2	-	-	-	-	*440
Platoon blocked, %	-	-	1	-	1
Mov Cap-1 Maneuver	-	-	*574	-	*31
Mov Cap-2 Maneuver	-	-	-	-	*31
Stage 1	-	-	-	-	*361
Stage 2	-	-	-	-	*440

Approach	EB	WB	NB
HCM Control Delay, s	0	0	42.6
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	100	-	-	* 574	-
HCM Lane V/C Ratio	0.042	-	-	-	-
HCM Control Delay (s)	42.6	-	-	0	-
HCM Lane LOS	E	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Notes  
 -: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

HCM 6th Signalized Intersection Summary  
9: Deep Creek Road & Bear Valley Road

Apple Bear Commercial Project  
Opening Year (2024) NP PM



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↑	↑↑	↑	↑
Traffic Volume (veh/h)	1560	135	124	1296	140	129
Future Volume (veh/h)	1560	135	124	1296	140	129
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	1592	138	127	1322	143	132
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	1868	833	156	2316	430	521
Arrive On Green	0.52	0.52	0.09	0.64	0.24	0.24
Sat Flow, veh/h	3705	1610	1810	3705	1810	1610
Grp Volume(v), veh/h	1592	138	127	1322	143	132
Grp Sat Flow(s),veh/h/ln	1805	1610	1810	1805	1810	1610
Q Serve(g_s), s	45.7	5.4	8.3	24.8	7.9	7.2
Cycle Q Clear(g_c), s	45.7	5.4	8.3	24.8	7.9	7.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1868	833	156	2316	430	521
V/C Ratio(X)	0.85	0.17	0.82	0.57	0.33	0.25
Avail Cap(c_a), veh/h	1868	833	232	2316	430	521
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.0	15.3	53.9	12.2	37.9	29.9
Incr Delay (d2), s/veh	5.2	0.4	7.8	0.3	2.1	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	18.6	1.9	4.0	8.4	3.6	2.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	30.2	15.7	61.7	12.5	40.0	31.1
LnGrp LOS	C	B	E	B	D	C
Approach Vol, veh/h	1730			1449	275	
Approach Delay, s/veh	29.0			16.8	35.7	
Approach LOS	C			B	D	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	14.9	70.1			85.0	35.0
Change Period (Y+Rc), s	4.6	8.0			8.0	6.5
Max Green Setting (Gmax), s	15.4	57.0			77.0	28.5
Max Q Clear Time (g_c+I1), s	10.3	47.7			26.8	9.9
Green Ext Time (p_c), s	0.0	5.8			10.3	0.3
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			24.4			
HCM 6th LOS			C			

HCM 6th Signalized Intersection Summary  
 10: Kiowa Road & Bear Valley Road

Apple Bear Commercial Project  
 Opening Year (2024) NP PM






























Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	952	257	128	865	62	253	218	119	78	230	173
Future Volume (veh/h)	200	952	257	128	865	62	253	218	119	78	230	173
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1976	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	208	992	268	133	901	65	264	227	124	81	240	180
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	231	1415	656	156	1266	564	286	719	378	102	767	341
Arrive On Green	0.13	0.39	0.39	0.09	0.35	0.35	0.16	0.31	0.31	0.06	0.21	0.21
Sat Flow, veh/h	1810	3610	1675	1810	3610	1609	1810	2286	1203	1810	3610	1606
Grp Volume(v), veh/h	208	992	268	133	901	65	264	177	174	81	240	180
Grp Sat Flow(s),veh/h/ln	1810	1805	1675	1810	1805	1609	1810	1805	1684	1810	1805	1606
Q Serve(g_s), s	16.4	33.4	16.8	10.5	31.3	4.0	20.8	10.8	11.4	6.4	8.1	14.4
Cycle Q Clear(g_c), s	16.4	33.4	16.8	10.5	31.3	4.0	20.8	10.8	11.4	6.4	8.1	14.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.71	1.00		1.00
Lane Grp Cap(c), veh/h	231	1415	656	156	1266	564	286	568	529	102	767	341
V/C Ratio(X)	0.90	0.70	0.41	0.85	0.71	0.12	0.92	0.31	0.33	0.80	0.31	0.53
Avail Cap(c_a), veh/h	255	1415	656	255	1266	564	317	568	529	255	767	341
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.4	37.0	31.9	65.3	40.7	31.8	60.1	37.8	38.0	67.6	48.2	50.6
Incr Delay (d2), s/veh	28.8	2.9	1.9	7.2	3.4	0.4	28.4	1.4	1.6	5.3	1.1	5.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.2	14.6	7.0	5.0	13.9	1.6	11.6	4.9	4.8	3.1	3.7	6.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	91.2	39.9	33.8	72.5	44.1	32.3	88.5	39.2	39.6	72.9	49.2	56.4
LnGrp LOS	F	D	C	E	D	C	F	D	D	E	D	E
Approach Vol, veh/h		1468			1099			615			501	
Approach Delay, s/veh		46.0			46.9			60.5			55.6	
Approach LOS		D			D			E			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	17.1	63.3	12.7	51.8	23.1	57.4	27.5	37.0				
Change Period (Y+Rc), s	4.6	6.5	4.6	6.2	4.6	6.5	4.6	6.2				
Max Green Setting (Gmax), s	20.4	46.5	20.4	35.8	20.4	46.5	25.4	30.8				
Max Q Clear Time (g_c+1), s	12.5	35.4	8.4	13.4	18.4	33.3	22.8	16.4				
Green Ext Time (p_c), s	0.1	7.9	0.1	1.8	0.1	7.6	0.1	1.7				

Intersection Summary

HCM 6th Ctrl Delay	50.0
HCM 6th LOS	D

HCM 6th Signalized Intersection Summary  
 1: Jacaranda Avenue/Jacaranda Road & Bear Valley Road

Apple Bear Commercial Project  
 Opening Year (2024) WP AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	  			  				 		 	
Traffic Volume (veh/h)	132	1463	66	239	1771	45	81	51	293	15	16	37
Future Volume (veh/h)	132	1463	66	239	1771	45	81	51	293	15	16	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	140	1556	70	254	1884	48	86	54	312	16	17	39
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	188	1709	77	276	2273	705	209	131	296	349	367	396
Arrive On Green	0.05	0.34	0.34	0.15	0.44	0.44	0.18	0.18	0.18	0.19	0.19	0.19
Sat Flow, veh/h	3510	5088	229	1810	5187	1608	1132	711	1608	1810	1900	1608
Grp Volume(v), veh/h	140	1057	569	254	1884	48	140	0	312	16	17	39
Grp Sat Flow(s),veh/h/ln	1755	1729	1859	1810	1729	1608	1843	0	1608	1810	1900	1608
Q Serve(g_s), s	5.7	42.4	42.4	20.1	46.5	2.5	9.7	0.0	26.7	1.0	1.1	2.7
Cycle Q Clear(g_c), s	5.7	42.4	42.4	20.1	46.5	2.5	9.7	0.0	26.7	1.0	1.1	2.7
Prop In Lane	1.00		0.12	1.00		1.00	0.61		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	188	1161	624	276	2273	705	339	0	296	349	367	396
V/C Ratio(X)	0.75	0.91	0.91	0.92	0.83	0.07	0.41	0.00	1.05	0.05	0.05	0.10
Avail Cap(c_a), veh/h	738	1161	624	312	2273	705	339	0	296	349	367	396
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.7	46.1	46.1	60.6	35.9	23.6	52.2	0.0	59.2	47.6	47.6	42.2
Incr Delay (d2), s/veh	2.2	12.1	19.7	28.0	3.7	0.2	3.7	0.0	67.2	0.2	0.2	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	19.5	22.2	11.1	19.4	1.0	4.8	0.0	16.2	0.5	0.5	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.9	58.2	65.8	88.6	39.6	23.8	55.9	0.0	126.4	47.9	47.9	42.7
LnGrp LOS	E	E	E	F	D	C	E	A	F	D	D	D
Approach Vol, veh/h		1766			2186			452				72
Approach Delay, s/veh		61.6			44.9			104.5				45.1
Approach LOS		E			D			F				D
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	27.1	53.9		32.0	12.2	68.8		32.0				
Change Period (Y+Rc), s	5.0	5.2		* 5.3	4.5	5.2		4.0				
Max Green Setting (Gmax), s	25.0	45.8		* 27	30.5	40.8		28.0				
Max Q Clear Time (g_c+I1), s	22.1	44.4		28.7	7.7	48.5		4.7				
Green Ext Time (p_c), s	0.0	0.7		0.0	0.1	0.0		0.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				57.5								
HCM 6th LOS				E								
<b>Notes</b>												
User approved volume balancing among the lanes for turning movement.												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

HCM 6th Signalized Intersection Summary  
 2: Bear Valley Road & Mojave Fish Hatchery Road

Apple Bear Commercial Project  
 Opening Year (2024) WP AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑↑↑	↗	↖↗	↑↑↑	↗	↖	↑	↗	↖	↗	↖
Traffic Volume (veh/h)	166	1545	57	47	1943	258	44	6	25	114	5	67
Future Volume (veh/h)	166	1545	57	47	1943	258	44	6	25	114	5	67
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	168	1561	58	47	1963	261	48	0	25	115	5	68
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	192	2092	650	108	1701	827	807	0	359	336	21	282
Arrive On Green	0.11	0.40	0.40	0.03	0.33	0.33	0.22	0.00	0.22	0.19	0.19	0.19
Sat Flow, veh/h	1810	5187	1610	3510	5187	1610	3619	0	1610	1810	111	1516
Grp Volume(v), veh/h	168	1561	58	47	1963	261	48	0	25	115	0	73
Grp Sat Flow(s),veh/h/ln	1810	1729	1610	1755	1729	1610	1810	0	1610	1810	0	1627
Q Serve(g_s), s	12.4	34.7	3.0	1.8	44.3	12.7	1.4	0.0	1.7	7.5	0.0	5.2
Cycle Q Clear(g_c), s	12.4	34.7	3.0	1.8	44.3	12.7	1.4	0.0	1.7	7.5	0.0	5.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.93
Lane Grp Cap(c), veh/h	192	2092	650	108	1701	827	807	0	359	336	0	303
V/C Ratio(X)	0.87	0.75	0.09	0.44	1.15	0.32	0.06	0.00	0.07	0.34	0.00	0.24
Avail Cap(c_a), veh/h	201	2092	650	390	1701	827	807	0	359	336	0	303
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	59.5	34.4	24.9	64.3	45.4	19.0	41.3	0.0	41.4	47.8	0.0	46.8
Incr Delay (d2), s/veh	29.8	2.5	0.3	1.0	76.5	1.0	0.1	0.0	0.4	2.8	0.0	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.1	14.3	1.2	0.8	30.1	6.9	0.7	0.0	0.7	3.7	0.0	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	89.3	36.8	25.2	65.3	121.9	20.0	41.4	0.0	41.8	50.5	0.0	48.7
LnGrp LOS	F	D	C	E	F	C	D	A	D	D	A	D
Approach Vol, veh/h		1787			2271			73			188	
Approach Delay, s/veh		41.4			109.0			41.6			49.8	
Approach LOS		D			F			D			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.1	60.9		30.0	19.3	50.7		35.0				
Change Period (Y+Rc), s	5.0	6.4		4.9	5.0	6.4		4.9				
Max Green Setting (Gmax), s	15.0	43.6		25.1	15.0	43.6		30.1				
Max Q Clear Time (g_c+1), s	13.8	36.7		9.5	14.4	46.3		3.7				
Green Ext Time (p_c), s	0.0	4.9		0.2	0.0	0.0		0.0				

Intersection Summary

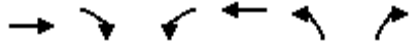
HCM 6th Ctrl Delay	77.3
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th Signalized Intersection Summary  
 3: Jess Ranch Parkway & Bear Valley Road

Apple Bear Commercial Project  
 Opening Year (2024) WP AM



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↑	↔	↑↑↑	↔	↑
Traffic Volume (veh/h)	1444	183	90	1957	292	59
Future Volume (veh/h)	1444	183	90	1957	292	59
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	1520	193	95	2060	307	62
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	2541	789	149	2968	1157	599
Arrive On Green	0.49	0.49	0.04	0.57	0.33	0.33
Sat Flow, veh/h	5358	1610	3510	5358	3510	1610
Grp Volume(v), veh/h	1520	193	95	2060	307	62
Grp Sat Flow(s),veh/h/ln	1729	1610	1755	1729	1755	1610
Q Serve(g_s), s	24.3	8.0	3.1	32.4	7.4	2.9
Cycle Q Clear(g_c), s	24.3	8.0	3.1	32.4	7.4	2.9
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2541	789	149	2968	1157	599
V/C Ratio(X)	0.60	0.24	0.64	0.69	0.27	0.10
Avail Cap(c_a), veh/h	2541	789	317	2968	1157	599
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.57	0.57	1.00	1.00
Uniform Delay (d), s/veh	21.2	17.0	54.2	17.5	28.3	23.6
Incr Delay (d2), s/veh	1.0	0.7	1.0	0.8	0.6	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.2	2.9	1.3	11.4	3.2	3.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	22.2	17.7	55.2	18.2	28.9	23.9
LnGrp LOS	C	B	E	B	C	C
Approach Vol, veh/h	1713			2155	369	
Approach Delay, s/veh	21.7			19.9	28.1	
Approach LOS	C			B	C	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	9.5	62.5		43.0		72.0
Change Period (Y+Rc), s	4.6	6.2		5.1		6.2
Max Green Setting (Gmax), s	10.4	50.8		37.9		65.8
Max Q Clear Time (g_c+1.5), s	11.5	26.3		9.4		34.4
Green Ext Time (p_c), s	0.1	18.8		0.7		27.1
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			21.3			
HCM 6th LOS			C			

HCM 6th Signalized Intersection Summary  
4: Reata Road & Bear Valley Road

Apple Bear Commercial Project  
Opening Year (2024) WP AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖↗	↑↑↑	↖	↖↗	↑↑↑		↖	↑↑	↖	↖	↑	↖
Traffic Volume (veh/h)	211	1199	48	61	1727	25	36	25	29	31	41	284
Future Volume (veh/h)	211	1199	48	61	1727	25	36	25	29	31	41	284
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	224	1276	0	65	1837	27	38	27	31	33	44	302
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	281	2627		109	2409	35	385	1181	520	497	622	520
Arrive On Green	0.08	0.51	0.00	0.03	0.46	0.46	0.33	0.33	0.33	0.33	0.33	0.33
Sat Flow, veh/h	3510	5187	1610	3510	5267	77	1051	3610	1588	1365	1900	1588
Grp Volume(v), veh/h	224	1276	0	65	1206	658	38	27	31	33	44	302
Grp Sat Flow(s),veh/h/ln	1755	1729	1610	1755	1729	1886	1051	1805	1588	1365	1900	1588
Q Serve(g_s), s	7.8	20.1	0.0	2.3	36.3	36.3	3.2	0.6	1.7	2.1	2.0	19.7
Cycle Q Clear(g_c), s	7.8	20.1	0.0	2.3	36.3	36.3	5.2	0.6	1.7	2.7	2.0	19.7
Prop In Lane	1.00		1.00	1.00		0.04	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	281	2627		109	1582	863	385	1181	520	497	622	520
V/C Ratio(X)	0.80	0.49		0.60	0.76	0.76	0.10	0.02	0.06	0.07	0.07	0.58
Avail Cap(c_a), veh/h	432	2627		432	1582	863	385	1181	520	497	622	520
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.76	0.76	0.00	0.78	0.78	0.78	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.5	20.2	0.0	59.8	28.2	28.3	30.8	28.5	28.9	29.4	29.0	34.9
Incr Delay (d2), s/veh	2.1	0.5	0.0	1.5	2.8	5.0	0.5	0.0	0.2	0.3	0.2	4.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.5	7.6	0.0	1.0	14.5	16.4	0.9	0.3	0.7	0.7	0.9	8.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.6	20.7	0.0	61.3	31.0	33.3	31.3	28.5	29.1	29.7	29.2	39.6
LnGrp LOS	E	C		E	C	C	C	C	C	C	C	D
Approach Vol, veh/h		1500			1929			96			379	
Approach Delay, s/veh		26.3			32.8			29.8			37.5	
Approach LOS		C			C			C			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.5	69.5		46.0	15.6	63.4		46.0				
Change Period (Y+Rc), s	5.6	6.2		5.1	5.6	6.2		5.1				
Max Green Setting (Gmax), s	15.4	51.8		40.9	15.4	51.8		40.9				
Max Q Clear Time (g_c+1), s	11.3	22.1		21.7	9.8	38.3		7.2				
Green Ext Time (p_c), s	0.0	17.2		0.7	0.2	11.9		0.2				

Intersection Summary

HCM 6th Ctrl Delay	30.7
HCM 6th LOS	C

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.



HCM 6th Signalized Intersection Summary  
5: Apple Valley Road & Pimlico Road

Apple Bear Commercial Project  
Opening Year (2024) WP AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	153	36	26	35	27	32	49	677	36	67	880	198
Future Volume (veh/h)	153	36	26	35	27	32	49	677	36	67	880	198
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	163	38	28	37	29	34	52	720	38	71	936	211
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	240	283	240	234	283	240	67	2441	1075	91	2488	1110
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.04	0.68	0.68	0.05	0.69	0.69
Sat Flow, veh/h	1360	1900	1610	1357	1900	1610	1810	3610	1590	1810	3610	1610
Grp Volume(v), veh/h	163	38	28	37	29	34	52	720	38	71	936	211
Grp Sat Flow(s),veh/h/ln	1360	1900	1610	1357	1900	1610	1810	1805	1590	1810	1805	1610
Q Serve(g_s), s	15.3	2.3	2.0	3.2	1.7	2.4	3.7	10.5	1.0	5.0	14.1	6.1
Cycle Q Clear(g_c), s	17.0	2.3	2.0	5.4	1.7	2.4	3.7	10.5	1.0	5.0	14.1	6.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	240	283	240	234	283	240	67	2441	1075	91	2488	1110
V/C Ratio(X)	0.68	0.13	0.12	0.16	0.10	0.14	0.77	0.29	0.04	0.78	0.38	0.19
Avail Cap(c_a), veh/h	424	539	457	422	547	463	228	2441	1075	367	2488	1110
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.83	0.83	0.83	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.2	48.0	47.9	50.4	47.8	48.1	62.0	8.5	7.0	61.0	8.5	7.2
Incr Delay (d2), s/veh	1.3	0.1	0.1	0.1	0.1	0.1	5.7	0.3	0.1	5.4	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	1.1	0.8	1.1	0.8	1.0	1.8	3.6	0.3	2.4	4.7	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.4	48.1	48.0	50.5	47.9	48.2	67.7	8.8	7.0	66.4	8.9	7.6
LnGrp LOS	E	D	D	D	D	D	E	A	A	E	A	A
Approach Vol, veh/h		229			100			810			1218	
Approach Delay, s/veh		54.0			49.0			12.5			12.0	
Approach LOS		D			D			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.1	94.4		24.5	9.4	96.1		24.5				
Change Period (Y+Rc), s	4.6	6.5		5.1	4.6	6.5		* 5.1				
Max Green Setting (Gmax), s	20.4	50.5		36.9	16.4	60.5		* 37				
Max Q Clear Time (g_c+1), s	12.5			19.0	5.7	16.1		7.4				
Green Ext Time (p_c), s	0.0	0.7		0.3	0.0	0.8		0.2				

Intersection Summary

HCM 6th Ctrl Delay	17.8
HCM 6th LOS	B

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary  
6: Apple Valley Road & Bear Valley Road

Apple Bear Commercial Project  
Opening Year (2024) WP AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑↑		↔↔	↑↑↑	↔	↔	↑↑↑	↔	↔	↑↑	↔↔
Traffic Volume (veh/h)	367	805	46	137	1326	235	78	164	88	239	200	442
Future Volume (veh/h)	367	805	46	137	1326	235	78	164	88	239	200	442
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	399	875	50	149	1441	255	85	178	96	260	217	480
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	429	2566	146	181	2285	873	101	1205	373	184	1006	1135
Arrive On Green	0.12	0.51	0.51	0.05	0.44	0.44	0.06	0.23	0.23	0.10	0.28	0.28
Sat Flow, veh/h	3510	5020	286	3510	5187	1610	1810	5187	1606	1810	3610	2831
Grp Volume(v), veh/h	399	602	323	149	1441	255	85	178	96	260	217	480
Grp Sat Flow(s),veh/h/ln	1755	1729	1848	1755	1729	1610	1810	1729	1606	1810	1805	1415
Q Serve(g_s), s	23.6	21.6	21.7	8.8	45.2	18.1	9.8	5.7	10.2	21.4	9.7	25.7
Cycle Q Clear(g_c), s	23.6	21.6	21.7	8.8	45.2	18.1	9.8	5.7	10.2	21.4	9.7	25.7
Prop In Lane	1.00		0.15	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	429	1768	945	181	2285	873	101	1205	373	184	1006	1135
V/C Ratio(X)	0.93	0.34	0.34	0.82	0.63	0.29	0.84	0.15	0.26	1.41	0.22	0.42
Avail Cap(c_a), veh/h	776	1768	945	441	2285	873	184	1205	373	184	1006	1135
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.88	0.88	0.88	1.00	1.00	1.00	1.00	1.00	1.00	0.94	0.94	0.94
Uniform Delay (d), s/veh	91.3	30.4	30.4	98.6	45.5	26.1	98.2	64.1	65.8	94.3	58.1	45.4
Incr Delay (d2), s/veh	4.5	0.5	0.9	3.5	1.3	0.8	7.0	0.3	1.7	212.0	0.5	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.9	9.1	9.9	4.1	19.5	7.1	4.8	2.5	4.4	20.8	4.5	9.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	95.8	30.8	31.3	102.1	46.8	27.0	105.2	64.3	67.5	306.3	58.6	46.5
LnGrp LOS	F	C	C	F	D	C	F	E	E	F	E	D
Approach Vol, veh/h		1324			1845			359			957	
Approach Delay, s/veh		50.5			48.6			74.8			119.8	
Approach LOS		D			D			E			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.4	113.6	16.3	64.7	30.3	98.7	26.0	55.0				
Change Period (Y+Rc), s	4.6	6.2	4.6	6.2	4.6	6.2	4.6	6.2				
Max Green Setting (Gmax), s	20.4	91.8	21.4	48.8	46.4	71.8	21.4	48.8				
Max Q Clear Time (g_c+10), s	10.8	23.7	11.8	27.7	25.6	47.2	23.4	12.2				
Green Ext Time (p_c), s	0.0	0.8	0.0	0.3	0.0	1.6	0.0	0.2				

Intersection Summary

HCM 6th Ctrl Delay	66.4
HCM 6th LOS	E

HCM 6th Signalized Intersection Summary  
 7: Apple Bear Road/Westmont Drive & Bear Valley Road

Apple Bear Commercial Project  
 Opening Year (2024) WP AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	868	95	172	1473	96	180	5	0	74	4	58
Future Volume (veh/h)	99	868	95	172	1473	96	180	5	0	74	4	58
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	106	933	102	185	1584	103	194	5	0	80	4	62
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	134	1466	654	280	2623	814	373	9	0	503	25	394
Arrive On Green	0.07	0.41	0.41	0.15	0.51	0.51	0.26	0.26	0.00	0.26	0.26	0.26
Sat Flow, veh/h	1810	3610	1610	1810	5187	1610	1170	34	0	1434	98	1527
Grp Volume(v), veh/h	106	933	102	185	1584	103	199	0	0	80	0	66
Grp Sat Flow(s),veh/h/ln	1810	1805	1610	1810	1729	1610	1204	0	0	1434	0	1625
Q Serve(g_s), s	5.8	20.7	4.0	9.6	21.7	3.4	13.1	0.0	0.0	0.0	0.0	3.1
Cycle Q Clear(g_c), s	5.8	20.7	4.0	9.6	21.7	3.4	16.2	0.0	0.0	3.4	0.0	3.1
Prop In Lane	1.00		1.00	1.00		1.00	0.97		0.00	1.00		0.94
Lane Grp Cap(c), veh/h	134	1466	654	280	2623	814	382	0	0	503	0	419
V/C Ratio(X)	0.79	0.64	0.16	0.66	0.60	0.13	0.52	0.00	0.00	0.16	0.00	0.16
Avail Cap(c_a), veh/h	226	1466	654	326	2623	814	382	0	0	503	0	419
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	45.5	23.8	18.8	39.8	17.6	13.1	34.9	0.0	0.0	28.8	0.0	28.7
Incr Delay (d2), s/veh	9.8	2.1	0.5	3.9	1.0	0.3	0.6	0.0	0.0	0.7	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	8.4	1.5	4.4	7.8	1.2	4.4	0.0	0.0	1.6	0.0	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.3	25.9	19.3	43.7	18.6	13.4	35.5	0.0	0.0	29.5	0.0	29.5
LnGrp LOS	E	C	B	D	B	B	D	A	A	C	A	C
Approach Vol, veh/h		1141			1872			199			146	
Approach Delay, s/veh		28.1			20.8			35.5			29.5	
Approach LOS		C			C			D			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	32.0	47.6		30.4	12.5	57.1		30.4				
Change Period (Y+Rc), s	6.5	* 7		4.6	5.1	6.5		4.6				
Max Green Setting (Gmax), s	13.0	* 41		25.8	12.5	45.5		25.8				
Max Q Clear Time (g_c+M), s	11.6	22.7		5.4	7.8	23.7		18.2				
Green Ext Time (p_c), s	0.2	5.9		0.3	0.1	11.4		0.4				

Intersection Summary

HCM 6th Ctrl Delay	24.5
HCM 6th LOS	C

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection						
Int Delay, s/veh	0.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑		↑↑		↑
Traffic Vol, veh/h	913	3	0	1713	0	66
Future Vol, veh/h	913	3	0	1713	0	66
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1014	3	0	1903	0	73

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	-	-	507
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	3.3
Pot Cap-1 Maneuver	-	-	0	-	*718
Stage 1	-	-	0	-	-
Stage 2	-	-	0	-	-
Platoon blocked, %	-	-	-	-	1
Mov Cap-1 Maneuver	-	-	-	-	*718
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	718	-	-	-
HCM Lane V/C Ratio	0.102	-	-	-
HCM Control Delay (s)	10.6	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0.3	-	-	-

Notes  
 -: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

# HCM 6th Signalized Intersection Summary

## 9: Deep Creek Road & Bear Valley Road

Apple Bear Commercial Project  
Opening Year (2024) WP AM



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↑	↑↑	↑	↑
Traffic Volume (veh/h)	906	90	113	1482	190	72
Future Volume (veh/h)	906	90	113	1482	190	72
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	964	96	120	1577	202	77
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	1881	839	149	2316	430	515
Arrive On Green	0.52	0.52	0.08	0.64	0.24	0.24
Sat Flow, veh/h	3705	1610	1810	3705	1810	1610
Grp Volume(v), veh/h	964	96	120	1577	202	77
Grp Sat Flow(s),veh/h/ln	1805	1610	1810	1805	1810	1610
Q Serve(g_s), s	20.9	3.6	7.8	33.4	11.5	4.1
Cycle Q Clear(g_c), s	20.9	3.6	7.8	33.4	11.5	4.1
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1881	839	149	2316	430	515
V/C Ratio(X)	0.51	0.11	0.81	0.68	0.47	0.15
Avail Cap(c_a), veh/h	1881	839	232	2316	430	515
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.8	14.6	54.1	13.7	39.3	29.2
Incr Delay (d2), s/veh	1.0	0.3	5.3	0.8	3.7	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.1	1.3	3.6	11.3	5.3	1.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	19.8	14.9	59.4	14.5	42.9	29.8
LnGrp LOS	B	B	E	B	D	C
Approach Vol, veh/h	1060			1697	279	
Approach Delay, s/veh	19.3			17.7	39.3	
Approach LOS	B			B	D	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	14.5	70.5			85.0	35.0
Change Period (Y+Rc), s	4.6	8.0			8.0	6.5
Max Green Setting (Gmax), s	15.4	57.0			77.0	28.5
Max Q Clear Time (g_c+I1), s	9.8	22.9			35.4	13.5
Green Ext Time (p_c), s	0.0	5.5			13.5	0.3
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			20.2			
HCM 6th LOS			C			

HCM 6th Signalized Intersection Summary  
 10: Kiowa Road & Bear Valley Road

Apple Bear Commercial Project  
 Opening Year (2024) WP AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	128	568	172	100	888	55	313	145	62	54	145	218
Future Volume (veh/h)	128	568	172	100	888	55	313	145	62	54	145	218
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1976	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	136	604	183	106	945	59	333	154	66	57	154	232
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	159	1409	654	129	1347	601	317	865	355	74	767	340
Arrive On Green	0.09	0.39	0.39	0.07	0.37	0.37	0.18	0.35	0.35	0.04	0.21	0.21
Sat Flow, veh/h	1810	3610	1675	1810	3610	1610	1810	2495	1024	1810	3610	1599
Grp Volume(v), veh/h	136	604	183	106	945	59	333	110	110	57	154	232
Grp Sat Flow(s),veh/h/ln	1810	1805	1675	1810	1805	1610	1810	1805	1714	1810	1805	1599
Q Serve(g_s), s	10.7	17.8	10.8	8.4	32.2	3.5	25.4	6.1	6.5	4.5	5.1	19.4
Cycle Q Clear(g_c), s	10.7	17.8	10.8	8.4	32.2	3.5	25.4	6.1	6.5	4.5	5.1	19.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.60	1.00		1.00
Lane Grp Cap(c), veh/h	159	1409	654	129	1347	601	317	626	594	74	767	340
V/C Ratio(X)	0.85	0.43	0.28	0.82	0.70	0.10	1.05	0.17	0.19	0.77	0.20	0.68
Avail Cap(c_a), veh/h	255	1409	654	255	1347	601	317	626	594	255	767	340
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.2	32.4	30.3	66.5	38.6	29.6	59.8	32.9	33.1	68.9	47.0	52.6
Incr Delay (d2), s/veh	8.3	1.0	1.1	5.0	3.1	0.3	64.4	0.6	0.7	6.3	0.6	10.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.2	7.6	4.5	3.9	14.2	1.4	17.0	2.7	2.8	2.2	2.3	8.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.5	33.3	31.3	71.4	41.6	29.9	124.2	33.5	33.7	75.2	47.6	63.2
LnGrp LOS	E	C	C	E	D	C	F	C	C	E	D	E
Approach Vol, veh/h		923			1110			553			443	
Approach Delay, s/veh		38.8			43.9			88.2			59.3	
Approach LOS		D			D			F			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.9	63.1	10.5	56.5	17.4	60.6	30.0	37.0				
Change Period (Y+Rc), s	4.6	6.5	4.6	6.2	4.6	6.5	4.6	6.2				
Max Green Setting (Gmax), s	20.4	46.5	20.4	35.8	20.4	46.5	25.4	30.8				
Max Q Clear Time (g_c+10), s	10.4	19.8	6.5	8.5	12.7	34.2	27.4	21.4				
Green Ext Time (p_c), s	0.1	8.6	0.0	1.1	0.1	7.4	0.0	1.1				

Intersection Summary

HCM 6th Ctrl Delay	52.7
HCM 6th LOS	D

Intersection						
Int Delay, s/veh	6.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	135	50	0	200	71
Future Vol, veh/h	0	135	50	0	200	71
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	142	53	0	211	75

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	550	53	0	0	53	0
Stage 1	53	-	-	-	-	-
Stage 2	497	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	505	1020	-	-	1566	-
Stage 1	975	-	-	-	-	-
Stage 2	617	-	-	-	-	-
Platoon blocked, %	1	-	-	-	-	-
Mov Cap-1 Maneuver	434	1020	-	-	1566	-
Mov Cap-2 Maneuver	434	-	-	-	-	-
Stage 1	975	-	-	-	-	-
Stage 2	530	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.1	0	5.7
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	1020	1566
HCM Lane V/C Ratio	-	-	0.139	0.134
HCM Control Delay (s)	-	-	9.1	7.7
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0.5

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	50	0	0	71	0
Future Vol, veh/h	0	50	0	0	71	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	53	0	0	75	0

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	150	0	0	0	0	0
Stage 1	0	-	-	-	-	-
Stage 2	150	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	847	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	883	-	-	-	-	-
Platoon blocked, %						
Mov Cap-1 Maneuver	847	-	-	-	-	-
Mov Cap-2 Maneuver	847	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	883	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s		0	
HCM LOS	-		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	-	-
HCM Lane LOS	-	-	-	-
HCM 95th %tile Q(veh)	-	-	-	-



Intersection						
Int Delay, s/veh	0.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑↑		↑
Traffic Vol, veh/h	868	80	0	1740	0	48
Future Vol, veh/h	868	80	0	1740	0	48
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	914	84	0	1832	0	51

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	-	-	499
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	3.9
Pot Cap-1 Maneuver	-	-	0	-	*728
Stage 1	-	-	0	-	-
Stage 2	-	-	0	-	-
Platoon blocked, %	-	-	-	-	1
Mov Cap-1 Maneuver	-	-	-	-	*728
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	10.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	728	-	-	-
HCM Lane V/C Ratio	0.069	-	-	-
HCM Control Delay (s)	10.3	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0.2	-	-	-

Notes  
 -: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Intersection						
Int Delay, s/veh	5.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	40	0	0	23	3	0
Future Vol, veh/h	40	0	0	23	3	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	42	0	0	24	3	0

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	27	3	3	0	0
Stage 1	3	-	-	-	-
Stage 2	24	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-
Pot Cap-1 Maneuver	993	1087	1632	-	-
Stage 1	1025	-	-	-	-
Stage 2	1004	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	993	1087	1632	-	-
Mov Cap-2 Maneuver	993	-	-	-	-
Stage 1	1025	-	-	-	-
Stage 2	1004	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.8	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1632	-	993	-	-
HCM Lane V/C Ratio	-	-	0.042	-	-
HCM Control Delay (s)	0	-	8.8	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection						
Int Delay, s/veh	7.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	23	2	3	0	3	0
Future Vol, veh/h	23	2	3	0	3	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	24	2	3	0	3	0

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	9	3	3	0	0
Stage 1	3	-	-	-	-
Stage 2	6	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-
Pot Cap-1 Maneuver	1017	1087	1632	-	-
Stage 1	1025	-	-	-	-
Stage 2	1022	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	1015	1087	1632	-	-
Mov Cap-2 Maneuver	1015	-	-	-	-
Stage 1	1023	-	-	-	-
Stage 2	1022	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.6	7.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1632	-	1020	-	-
HCM Lane V/C Ratio	0.002	-	0.026	-	-
HCM Control Delay (s)	7.2	0	8.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

HCM 6th Signalized Intersection Summary  
 1: Jacaranda Avenue/Jacaranda Road & Bear Valley Road

Apple Bear Commercial Project  
 Opening Year (2024) WP PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑↔		↔	↑↑↑	↔		↔↔		↔	↔	↔
Traffic Volume (veh/h)	36	2052	48	334	1805	23	85	9	434	28	19	37
Future Volume (veh/h)	36	2052	48	334	1805	23	85	9	434	28	19	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	37	2094	49	341	1842	23	87	9	443	24	26	38
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	75	1647	38	312	2440	756	303	31	296	349	367	345
Arrive On Green	0.02	0.32	0.32	0.17	0.47	0.47	0.18	0.18	0.18	0.19	0.19	0.19
Sat Flow, veh/h	3510	5214	122	1810	5187	1607	1647	170	1610	1810	1900	1610
Grp Volume(v), veh/h	37	1388	755	341	1842	23	96	0	443	24	26	38
Grp Sat Flow(s),veh/h/ln	1755	1729	1878	1810	1729	1607	1818	0	1610	1810	1900	1610
Q Serve(g_s), s	1.5	45.8	45.8	25.0	42.3	1.1	6.6	0.0	26.7	1.6	1.6	2.8
Cycle Q Clear(g_c), s	1.5	45.8	45.8	25.0	42.3	1.1	6.6	0.0	26.7	1.6	1.6	2.8
Prop In Lane	1.00		0.06	1.00		1.00	0.91		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	75	1092	593	312	2440	756	335	0	296	349	367	345
V/C Ratio(X)	0.49	1.27	1.27	1.09	0.76	0.03	0.29	0.00	1.49	0.07	0.07	0.11
Avail Cap(c_a), veh/h	738	1092	593	312	2440	756	335	0	296	349	367	345
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	70.2	49.6	49.6	60.0	31.5	20.6	50.9	0.0	59.2	47.8	47.9	45.8
Incr Delay (d2), s/veh	1.9	129.0	135.9	78.2	2.2	0.1	2.1	0.0	239.4	0.4	0.4	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	38.5	43.0	17.9	17.2	0.4	3.2	0.0	30.4	0.8	0.8	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.0	178.6	185.5	138.2	33.8	20.7	53.1	0.0	298.6	48.2	48.2	46.5
LnGrp LOS	E	F	F	F	C	C	D	A	F	D	D	D
Approach Vol, veh/h		2180			2206			539				88
Approach Delay, s/veh		179.1			49.8			254.8				47.5
Approach LOS		F			D			F				D
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	30.0	51.0		32.0	7.6	73.4		32.0				
Change Period (Y+Rc), s	5.0	5.2		* 5.3	4.5	5.2		4.0				
Max Green Setting (Gmax), s	25.0	45.8		* 27	30.5	40.8		28.0				
Max Q Clear Time (g_c+I1), s	27.0	47.8		28.7	3.5	44.3		4.8				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		0.1				

Intersection Summary

HCM 6th Ctrl Delay	128.0
HCM 6th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.  
 \* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary  
 2: Bear Valley Road & Mojave Fish Hatchery Road

Apple Bear Commercial Project  
 Opening Year (2024) WP PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑↑↑	↗	↖↗	↑↑↑	↗	↖	↑	↗	↖	↗	↖
Traffic Volume (veh/h)	59	2353	101	120	1968	105	108	9	67	131	5	87
Future Volume (veh/h)	59	2353	101	120	1968	105	108	9	67	131	5	87
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	60	2401	103	122	2008	107	116	0	68	134	5	88
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.99
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	77	1998	620	171	2030	926	807	0	357	336	16	286
Arrive On Green	0.04	0.39	0.39	0.05	0.39	0.39	0.22	0.00	0.22	0.19	0.19	0.19
Sat Flow, veh/h	1810	5187	1610	3510	5187	1602	3619	0	1602	1810	87	1536
Grp Volume(v), veh/h	60	2401	103	122	2008	107	116	0	68	134	0	93
Grp Sat Flow(s),veh/h/ln	1810	1729	1610	1755	1729	1602	1810	0	1602	1810	0	1623
Q Serve(g_s), s	4.4	52.0	5.7	4.6	51.9	4.1	3.5	0.0	4.7	8.8	0.0	6.7
Cycle Q Clear(g_c), s	4.4	52.0	5.7	4.6	51.9	4.1	3.5	0.0	4.7	8.8	0.0	6.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.95
Lane Grp Cap(c), veh/h	77	1998	620	171	2030	926	807	0	357	336	0	302
V/C Ratio(X)	0.78	1.20	0.17	0.71	0.99	0.12	0.14	0.00	0.19	0.40	0.00	0.31
Avail Cap(c_a), veh/h	201	1998	620	390	2030	926	807	0	357	336	0	302
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	64.0	41.5	27.3	63.3	40.8	12.9	42.1	0.0	42.6	48.3	0.0	47.5
Incr Delay (d2), s/veh	6.1	95.8	0.6	2.0	17.6	0.3	0.4	0.0	1.2	3.5	0.0	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	38.6	2.2	2.1	24.1	2.2	1.6	0.0	2.0	4.4	0.0	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	70.1	137.3	27.8	65.3	58.4	13.2	42.5	0.0	43.7	51.8	0.0	50.1
LnGrp LOS	E	F	C	E	E	B	D	A	D	D	A	D
Approach Vol, veh/h		2564			2237			184			227	
Approach Delay, s/veh		131.3			56.6			42.9			51.1	
Approach LOS		F			E			D			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.6	58.4		30.0	10.8	59.2		35.0				
Change Period (Y+Rc), s	5.0	6.4		4.9	5.0	6.4		4.9				
Max Green Setting (Gmax), s	15.0	43.6		25.1	15.0	43.6		30.1				
Max Q Clear Time (g_c+1), s	10.6	54.0		10.8	6.4	53.9		6.7				
Green Ext Time (p_c), s	0.0	0.0		0.2	0.0	0.0		0.1				

Intersection Summary

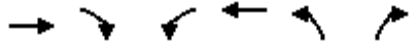
HCM 6th Ctrl Delay	92.6
HCM 6th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th Signalized Intersection Summary  
 3: Jess Ranch Parkway & Bear Valley Road

Apple Bear Commercial Project  
 Opening Year (2024) WP PM



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↑	↔↔	↑↑↑	↔↔	↑
Traffic Volume (veh/h)	2027	344	217	1705	484	198
Future Volume (veh/h)	2027	344	217	1705	484	198
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	2090	355	224	1758	499	204
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	2343	724	282	2968	1157	660
Arrive On Green	0.45	0.45	0.08	0.57	0.33	0.33
Sat Flow, veh/h	5358	1603	3510	5358	3510	1610
Grp Volume(v), veh/h	2090	355	224	1758	499	204
Grp Sat Flow(s),veh/h/ln	1729	1603	1755	1729	1755	1610
Q Serve(g_s), s	42.5	17.9	7.2	25.2	12.8	9.8
Cycle Q Clear(g_c), s	42.5	17.9	7.2	25.2	12.8	9.8
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2343	724	282	2968	1157	660
V/C Ratio(X)	0.89	0.49	0.79	0.59	0.43	0.31
Avail Cap(c_a), veh/h	2343	724	317	2968	1157	660
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.73	0.73	1.00	1.00
Uniform Delay (d), s/veh	28.9	22.2	51.9	15.9	30.1	22.9
Incr Delay (d2), s/veh	5.7	2.4	7.6	0.6	1.2	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	6.7	3.4	8.9	5.5	10.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	34.6	24.6	59.5	16.6	31.3	24.1
LnGrp LOS	C	C	E	B	C	C
Approach Vol, veh/h	2445			1982	703	
Approach Delay, s/veh	33.2			21.4	29.2	
Approach LOS	C			C	C	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	33.9	58.1		43.0		72.0
Change Period (Y+Rc), s	4.6	6.2		5.1		6.2
Max Green Setting (Gmax), s	40.4	50.8		37.9		65.8
Max Q Clear Time (g_c+19.2), s	19.2	44.5		14.8		27.2
Green Ext Time (p_c), s	0.1	6.1		1.3		28.4
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			28.1			
HCM 6th LOS			C			

HCM 6th Signalized Intersection Summary  
4: Reata Road & Bear Valley Road

Apple Bear Commercial Project  
Opening Year (2024) WP PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑↑	↔	↔↔	↑↑↑		↔	↑↑	↔	↔	↑	↔
Traffic Volume (veh/h)	305	1767	132	156	1442	26	209	109	158	40	106	270
Future Volume (veh/h)	305	1767	132	156	1442	26	209	109	158	40	106	270
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	314	1822	0	161	1487	27	215	112	163	41	109	278
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	369	2467		218	2268	41	347	1181	526	400	622	526
Arrive On Green	0.11	0.48	0.00	0.06	0.43	0.43	0.33	0.33	0.33	0.33	0.33	0.33
Sat Flow, veh/h	3510	5187	1610	3510	5245	95	1012	3610	1609	1121	1900	1609
Grp Volume(v), veh/h	314	1822	0	161	980	534	215	112	163	41	109	278
Grp Sat Flow(s),veh/h/ln	1755	1729	1610	1755	1729	1883	1012	1805	1609	1121	1900	1609
Q Serve(g_s), s	11.0	35.5	0.0	5.6	28.1	28.1	24.1	2.7	9.5	3.3	5.1	17.6
Cycle Q Clear(g_c), s	11.0	35.5	0.0	5.6	28.1	28.1	29.2	2.7	9.5	6.0	5.1	17.6
Prop In Lane	1.00		1.00	1.00		0.05	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	369	2467		218	1495	814	347	1181	526	400	622	526
V/C Ratio(X)	0.85	0.74		0.74	0.66	0.66	0.62	0.09	0.31	0.10	0.18	0.53
Avail Cap(c_a), veh/h	432	2467		432	1495	814	347	1181	526	400	622	526
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.41	0.41	0.00	0.82	0.82	0.82	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.0	26.5	0.0	57.6	28.1	28.1	40.4	29.2	31.5	31.3	30.0	34.2
Incr Delay (d2), s/veh	5.2	0.8	0.0	1.5	1.9	3.4	8.0	0.2	1.5	0.5	0.6	3.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.0	13.7	0.0	2.5	11.3	12.6	6.8	1.2	4.0	0.9	2.4	7.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.2	27.3	0.0	59.2	30.0	31.5	48.5	29.4	33.0	31.8	30.6	38.0
LnGrp LOS	E	C		E	C	C	D	C	C	C	C	D
Approach Vol, veh/h		2136			1675			490			428	
Approach Delay, s/veh		32.2			33.2			39.0			35.5	
Approach LOS		C			C			D			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	33.4	65.6		46.0	18.7	60.3		46.0				
Change Period (Y+Rc), s	5.6	6.2		5.1	5.6	6.2		5.1				
Max Green Setting (Gmax), s	15.4	51.8		40.9	15.4	51.8		40.9				
Max Q Clear Time (g_c+1), s	17.6	37.5		19.6	13.0	30.1		31.2				
Green Ext Time (p_c), s	0.1	12.6		0.9	0.2	15.8		1.1				

Intersection Summary

HCM 6th Ctrl Delay	33.6
HCM 6th LOS	C

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary  
5: Apple Valley Road & Pimlico Road

Apple Bear Commercial Project  
Opening Year (2024) WP PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	286	55	51	83	47	104	84	807	92	148	887	255
Future Volume (veh/h)	286	55	51	83	47	104	84	807	92	148	887	255
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	292	56	52	85	48	106	86	823	94	151	905	260
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	364	505	427	373	505	427	108	1848	824	177	1985	884
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.06	0.51	0.51	0.10	0.55	0.55
Sat Flow, veh/h	1251	1900	1608	1305	1900	1608	1810	3610	1609	1810	3610	1607
Grp Volume(v), veh/h	292	56	52	85	48	106	86	823	94	151	905	260
Grp Sat Flow(s),veh/h/ln	1251	1900	1608	1305	1900	1608	1810	1805	1609	1810	1805	1607
Q Serve(g_s), s	29.8	2.9	3.2	6.9	2.5	6.7	6.1	18.7	3.9	10.7	19.6	11.3
Cycle Q Clear(g_c), s	32.3	2.9	3.2	9.8	2.5	6.7	6.1	18.7	3.9	10.7	19.6	11.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	364	505	427	373	505	427	108	1848	824	177	1985	884
V/C Ratio(X)	0.80	0.11	0.12	0.23	0.10	0.25	0.80	0.45	0.11	0.85	0.46	0.29
Avail Cap(c_a), veh/h	387	539	457	402	547	463	228	1848	824	367	1985	884
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.78	0.78	0.78	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.1	36.1	36.2	39.8	36.0	37.5	60.3	20.1	16.4	57.7	17.6	15.7
Incr Delay (d2), s/veh	9.9	0.0	0.0	0.1	0.0	0.1	3.9	0.6	0.2	4.5	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.2	1.4	1.3	2.3	1.2	2.7	2.8	7.5	1.4	4.9	7.6	4.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.0	36.1	36.3	39.9	36.0	37.6	64.2	20.7	16.7	62.2	18.3	16.6
LnGrp LOS	E	D	D	D	D	D	E	C	B	E	B	B
Approach Vol, veh/h		400			239			1003			1316	
Approach Delay, s/veh		52.1			38.1			24.0			23.0	
Approach LOS		D			D			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	73.3	73.1		39.6	12.4	78.0		39.6				
Change Period (Y+Rc), s	4.6	6.5		5.1	4.6	6.5		* 5.1				
Max Green Setting (Gmax), s	20.4	50.5		36.9	16.4	60.5		* 37				
Max Q Clear Time (g_c+1/2), s	11.7	20.7		34.3	8.1	21.6		11.8				
Green Ext Time (p_c), s	0.1	0.8		0.3	0.0	0.7		0.5				

Intersection Summary

HCM 6th Ctrl Delay	28.5
HCM 6th LOS	C

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



HCM 6th Signalized Intersection Summary  
6: Apple Valley Road & Bear Valley Road

Apple Bear Commercial Project  
Opening Year (2024) WP PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗	↑ ↑ ↑		↖ ↗	↑ ↑ ↑	↖	↖	↑ ↑ ↑	↖	↖	↑ ↑	↖ ↗
Traffic Volume (veh/h)	501	1329	65	230	1145	208	115	238	203	293	368	390
Future Volume (veh/h)	501	1329	65	230	1145	208	115	238	203	293	368	390
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	527	1399	68	242	1205	219	121	251	214	308	387	411
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	556	2457	119	273	2098	813	137	1205	374	184	933	1178
Arrive On Green	0.16	0.48	0.48	0.08	0.40	0.40	0.08	0.23	0.23	0.10	0.26	0.26
Sat Flow, veh/h	3510	5067	246	3510	5187	1604	1810	5187	1608	1810	3610	2821
Grp Volume(v), veh/h	527	955	512	242	1205	219	121	251	214	308	387	411
Grp Sat Flow(s),veh/h/ln	1755	1729	1855	1755	1729	1604	1810	1729	1608	1810	1805	1410
Q Serve(g_s), s	31.2	41.3	41.3	14.3	37.8	16.4	13.9	8.2	24.7	21.4	18.7	20.9
Cycle Q Clear(g_c), s	31.2	41.3	41.3	14.3	37.8	16.4	13.9	8.2	24.7	21.4	18.7	20.9
Prop In Lane	1.00		0.13	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	556	1677	900	273	2098	813	137	1205	374	184	933	1178
V/C Ratio(X)	0.95	0.57	0.57	0.88	0.57	0.27	0.88	0.21	0.57	1.67	0.41	0.35
Avail Cap(c_a), veh/h	776	1677	900	441	2098	813	184	1205	374	184	933	1178
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.63	0.63	0.63	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91
Uniform Delay (d), s/veh	87.5	38.5	38.5	95.9	48.5	29.6	96.1	65.0	71.4	94.3	64.7	41.8
Incr Delay (d2), s/veh	10.5	0.9	1.7	7.5	1.2	0.8	24.7	0.4	6.3	322.3	1.2	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.9	17.5	19.0	6.8	16.4	6.5	7.4	3.6	10.8	26.5	8.7	7.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	98.0	39.4	40.1	103.4	49.7	30.5	120.8	65.4	77.6	416.6	65.9	42.5
LnGrp LOS	F	D	D	F	D	C	F	E	E	F	E	D
Approach Vol, veh/h		1994			1666			586			1106	
Approach Delay, s/veh		55.0			54.9			81.3			154.9	
Approach LOS		E			D			F			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	31.0	108.0	20.5	60.5	37.9	91.1	26.0	55.0				
Change Period (Y+Rc), s	4.6	6.2	4.6	6.2	4.6	6.2	4.6	6.2				
Max Green Setting (Gmax), s	20.4	91.8	21.4	48.8	46.4	71.8	21.4	48.8				
Max Q Clear Time (g_c+10), s	10.3	43.3	15.9	22.9	33.2	39.8	23.4	26.7				
Green Ext Time (p_c), s	0.0	1.3	0.0	0.4	0.1	1.3	0.0	0.2				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay											78.5	
HCM 6th LOS											E	

HCM 6th Signalized Intersection Summary  
 7: Apple Bear Road/Westmont Drive & Bear Valley Road

Apple Bear Commercial Project  
 Opening Year (2024) WP PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	172	1525	116	154	1226	150	193	9	0	223	12	130
Future Volume (veh/h)	172	1525	116	154	1226	150	193	9	0	223	12	130
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	177	1572	120	159	1264	155	199	9	0	230	12	134
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	207	1895	845	181	2601	807	268	9	0	500	33	367
Arrive On Green	0.11	0.52	0.52	0.10	0.50	0.50	0.25	0.25	0.00	0.25	0.25	0.25
Sat Flow, veh/h	1810	3610	1610	1810	5187	1610	854	39	0	1428	134	1497
Grp Volume(v), veh/h	177	1572	120	159	1264	155	208	0	0	230	0	146
Grp Sat Flow(s),veh/h/ln	1810	1805	1610	1810	1729	1610	892	0	0	1428	0	1631
Q Serve(g_s), s	11.5	44.0	4.6	10.4	19.3	6.4	19.3	0.0	0.0	0.0	0.0	8.9
Cycle Q Clear(g_c), s	11.5	44.0	4.6	10.4	19.3	6.4	28.2	0.0	0.0	13.2	0.0	8.9
Prop In Lane	1.00		1.00	1.00		1.00	0.96		0.00	1.00		0.92
Lane Grp Cap(c), veh/h	207	1895	845	181	2601	807	277	0	0	500	0	400
V/C Ratio(X)	0.85	0.83	0.14	0.88	0.49	0.19	0.75	0.00	0.00	0.46	0.00	0.37
Avail Cap(c_a), veh/h	318	1895	845	181	2601	807	277	0	0	500	0	400
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	52.2	24.0	14.6	53.3	19.7	16.5	49.3	0.0	0.0	39.2	0.0	37.6
Incr Delay (d2), s/veh	13.0	4.4	0.4	35.4	0.7	0.5	9.7	0.0	0.0	3.0	0.0	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	17.9	1.6	6.3	7.3	2.3	7.0	0.0	0.0	6.3	0.0	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	65.1	28.3	15.0	88.7	20.4	17.0	59.0	0.0	0.0	42.2	0.0	40.1
LnGrp LOS	E	C	B	F	C	B	E	A	A	D	A	D
Approach Vol, veh/h		1869			1578			208			376	
Approach Delay, s/veh		31.0			26.9			59.0			41.4	
Approach LOS		C			C			E			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	60.0	70.0		34.0	18.8	67.2		34.0				
Change Period (Y+Rc), s	4.0	7.0		4.6	5.1	* 7		4.6				
Max Green Setting (Gmax), s	12.0	63.0		29.4	21.1	* 53		29.4				
Max Q Clear Time (g_c+I), s	12.0	46.0		15.2	13.5	21.3		30.2				
Green Ext Time (p_c), s	0.0	10.2		0.8	0.2	10.5		0.0				

Intersection Summary

HCM 6th Ctrl Delay	31.8
HCM 6th LOS	C

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection						
Int Delay, s/veh	0.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑		↑↑		↑
Traffic Vol, veh/h	1708	1	0	1497	0	102
Future Vol, veh/h	1708	1	0	1497	0	102
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1779	1	0	1559	0	106

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	-	-	890
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	3.3
Pot Cap-1 Maneuver	-	-	0	-	*399
Stage 1	-	-	0	-	-
Stage 2	-	-	0	-	-
Platoon blocked, %	-	-	-	-	1
Mov Cap-1 Maneuver	-	-	-	-	*399
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

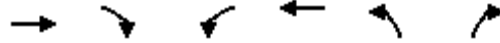
Approach	EB	WB	NB
HCM Control Delay, s	0	0	17.3
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	399	-	-	-
HCM Lane V/C Ratio	0.266	-	-	-
HCM Control Delay (s)	17.3	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q(veh)	1.1	-	-	-

Notes  
 -: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

HCM 6th Signalized Intersection Summary  
 9: Deep Creek Road & Bear Valley Road

Apple Bear Commercial Project  
 Opening Year (2024) WP PM



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↑	↑↑	↑	↑
Traffic Volume (veh/h)	1625	157	124	1361	162	129
Future Volume (veh/h)	1625	157	124	1361	162	129
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	1658	160	127	1389	165	132
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	1868	833	156	2316	430	521
Arrive On Green	0.52	0.52	0.09	0.64	0.24	0.24
Sat Flow, veh/h	3705	1610	1810	3705	1810	1610
Grp Volume(v), veh/h	1658	160	127	1389	165	132
Grp Sat Flow(s),veh/h/ln	1805	1610	1810	1805	1810	1610
Q Serve(g_s), s	49.2	6.4	8.3	26.9	9.2	7.2
Cycle Q Clear(g_c), s	49.2	6.4	8.3	26.9	9.2	7.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1868	833	156	2316	430	521
V/C Ratio(X)	0.89	0.19	0.82	0.60	0.38	0.25
Avail Cap(c_a), veh/h	1868	833	232	2316	430	521
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.8	15.5	53.9	12.5	38.4	29.9
Incr Delay (d2), s/veh	6.7	0.5	7.8	0.4	2.6	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	20.3	2.3	4.0	9.1	4.2	2.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	32.6	16.0	61.7	12.9	41.0	31.1
LnGrp LOS	C	B	E	B	D	C
Approach Vol, veh/h	1818			1516	297	
Approach Delay, s/veh	31.1			17.0	36.6	
Approach LOS	C			B	D	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	14.9	70.1			85.0	35.0
Change Period (Y+Rc), s	4.6	8.0			8.0	6.5
Max Green Setting (Gmax), s	15.4	57.0			77.0	28.5
Max Q Clear Time (g_c+I1), s	10.3	51.2			28.9	11.2
Green Ext Time (p_c), s	0.0	4.2			11.1	0.4
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			25.7			
HCM 6th LOS			C			

HCM 6th Signalized Intersection Summary  
 10: Kiowa Road & Bear Valley Road

Apple Bear Commercial Project  
 Opening Year (2024) WP PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	211	974	268	128	887	62	264	218	119	78	230	184
Future Volume (veh/h)	211	974	268	128	887	62	264	218	119	78	230	184
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1976	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	220	1015	279	133	924	65	275	227	124	81	240	192
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	242	1393	646	156	1222	545	297	732	385	102	767	341
Arrive On Green	0.13	0.39	0.39	0.09	0.34	0.34	0.16	0.32	0.32	0.06	0.21	0.21
Sat Flow, veh/h	1810	3610	1675	1810	3610	1609	1810	2286	1203	1810	3610	1606
Grp Volume(v), veh/h	220	1015	279	133	924	65	275	177	174	81	240	192
Grp Sat Flow(s),veh/h/ln	1810	1805	1675	1810	1805	1609	1810	1805	1684	1810	1805	1606
Q Serve(g_s), s	17.4	34.8	17.8	10.5	33.0	4.0	21.7	10.7	11.3	6.4	8.1	15.5
Cycle Q Clear(g_c), s	17.4	34.8	17.8	10.5	33.0	4.0	21.7	10.7	11.3	6.4	8.1	15.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.71	1.00		1.00
Lane Grp Cap(c), veh/h	242	1393	646	156	1222	545	297	578	539	102	767	341
V/C Ratio(X)	0.91	0.73	0.43	0.85	0.76	0.12	0.93	0.31	0.32	0.80	0.31	0.56
Avail Cap(c_a), veh/h	255	1393	646	255	1222	545	317	578	539	255	767	341
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.9	38.0	32.8	65.3	42.6	33.1	59.7	37.1	37.3	67.6	48.2	51.1
Incr Delay (d2), s/veh	31.3	3.4	2.1	7.2	4.4	0.4	30.1	1.4	1.6	5.3	1.1	6.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	19.8	15.3	7.5	5.0	14.8	1.6	12.2	4.9	4.8	3.1	3.7	6.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	93.3	41.4	34.9	72.5	47.0	33.5	89.9	38.5	38.9	72.9	49.2	57.7
LnGrp LOS	F	D	C	E	D	C	F	D	D	E	D	E
Approach Vol, veh/h	1514			1122			626			513		
Approach Delay, s/veh	47.7			49.3			61.2			56.1		
Approach LOS	D			D			E			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	17.1	62.5	12.7	52.7	24.0	55.6	28.4	37.0				
Change Period (Y+Rc), s	4.6	6.5	4.6	6.2	4.6	6.5	4.6	6.2				
Max Green Setting (Gmax), s	20.4	46.5	20.4	35.8	20.4	46.5	25.4	30.8				
Max Q Clear Time (g_c+1/2), s	12.5	36.8	8.4	13.3	19.4	35.0	23.7	17.5				
Green Ext Time (p_c), s	0.1	7.1	0.1	1.8	0.0	7.0	0.1	1.6				

Intersection Summary

HCM 6th Ctrl Delay	51.6
HCM 6th LOS	D

Intersection						
Int Delay, s/veh	6.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	156	47	0	208	75
Future Vol, veh/h	0	156	47	0	208	75
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	164	49	0	219	79

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	566	49	0	0	49	0
Stage 1	49	-	-	-	-	-
Stage 2	517	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	489	1025	-	-	1571	-
Stage 1	979	-	-	-	-	-
Stage 2	603	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	418	1025	-	-	1571	-
Mov Cap-2 Maneuver	418	-	-	-	-	-
Stage 1	979	-	-	-	-	-
Stage 2	515	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.2	0	5.6
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	1025	1571
HCM Lane V/C Ratio	-	-	0.16	0.139
HCM Control Delay (s)	-	-	9.2	7.7
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.6	0.5

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	47	0	0	75	0
Future Vol, veh/h	0	47	0	0	75	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	49	0	0	79	0

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	158	0	0	0	0	0
Stage 1	0	-	-	-	-	-
Stage 2	158	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	838	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	875	-	-	-	-	-
Platoon blocked, %						
Mov Cap-1 Maneuver	838	-	-	-	-	-
Mov Cap-2 Maneuver	838	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	875	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s		0	
HCM LOS	-		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	-	-
HCM Lane LOS	-	-	-	-
HCM 95th %tile Q(veh)	-	-	-	-

Intersection						
Int Delay, s/veh	0.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑↑		↑
Traffic Vol, veh/h	1659	90	0	1530	0	66
Future Vol, veh/h	1659	90	0	1530	0	66
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1746	95	0	1611	0	69

Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	-	-	-	921
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	-	-	0	-	0	*580
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-	-	-	-	1
Mov Cap-1 Maneuver	-	-	-	-	-	*580
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	12.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	580	-	-	-
HCM Lane V/C Ratio	0.12	-	-	-
HCM Control Delay (s)	12.1	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0.4	-	-	-

Notes  
 -: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon



Intersection						
Int Delay, s/veh	5.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	61	0	0	38	1	0
Future Vol, veh/h	61	0	0	38	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	64	0	0	40	1	0

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	41	1	1	0	0
Stage 1	1	-	-	-	-
Stage 2	40	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-
Pot Cap-1 Maneuver	975	1090	1635	-	-
Stage 1	1028	-	-	-	-
Stage 2	988	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	975	1090	1635	-	-
Mov Cap-2 Maneuver	975	-	-	-	-
Stage 1	1028	-	-	-	-
Stage 2	988	-	-	-	-

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

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1635	-	975	-	-
HCM Lane V/C Ratio	-	-	0.066	-	-
HCM Control Delay (s)	0	-	9	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection						
Int Delay, s/veh	8.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	38	0	1	0	1	0
Future Vol, veh/h	38	0	1	0	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	40	0	1	0	1	0

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	3	1	1	0	-	0
Stage 1	1	-	-	-	-	-
Stage 2	2	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	1025	1090	1635	-	-	-
Stage 1	1028	-	-	-	-	-
Stage 2	1026	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	1024	1090	1635	-	-	-
Mov Cap-2 Maneuver	1024	-	-	-	-	-
Stage 1	1027	-	-	-	-	-
Stage 2	1026	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.7	7.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1635	-	1024	-	-
HCM Lane V/C Ratio	0.001	-	0.039	-	-
HCM Control Delay (s)	7.2	0	8.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

HCM 6th Signalized Intersection Summary  
1: Jacaranda Avenue/Jacaranda Road & Bear Valley Road

Apple Bear Commercial Project  
Cumulative (2045) NP AM

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	137	1516	69	242	1842	47	85	54	296	17	17	40
Future Volume (veh/h)	137	1516	69	242	1842	47	85	54	296	17	17	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	144	1596	73	255	1939	49	89	57	312	18	18	42
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	192	1705	78	277	2267	703	207	133	296	349	367	398
Arrive On Green	0.05	0.34	0.34	0.15	0.44	0.44	0.18	0.18	0.18	0.19	0.19	0.19
Sat Flow, veh/h	3510	5084	232	1810	5187	1608	1124	720	1608	1810	1900	1608
Grp Volume(v), veh/h	144	1085	584	255	1939	49	146	0	312	18	18	42
Grp Sat Flow(s),veh/h/ln	1755	1729	1858	1810	1729	1608	1844	0	1608	1810	1900	1608
Q Serve(g_s), s	5.9	44.1	44.1	20.1	48.7	2.6	10.2	0.0	26.7	1.2	1.1	2.9
Cycle Q Clear(g_c), s	5.9	44.1	44.1	20.1	48.7	2.6	10.2	0.0	26.7	1.2	1.1	2.9
Prop In Lane	1.00		0.13	1.00		1.00	0.61		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	192	1160	623	277	2267	703	340	0	296	349	367	398
V/C Ratio(X)	0.75	0.94	0.94	0.92	0.86	0.07	0.43	0.00	1.05	0.05	0.05	0.11
Avail Cap(c_a), veh/h	738	1160	623	312	2267	703	340	0	296	349	367	398
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.6	46.7	46.7	60.5	36.7	23.7	52.4	0.0	59.2	47.7	47.7	42.1
Incr Delay (d2), s/veh	2.2	15.0	23.4	28.2	4.4	0.2	3.9	0.0	67.2	0.3	0.3	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	20.6	23.6	11.2	20.4	1.0	5.0	0.0	16.2	0.6	0.6	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.8	61.7	70.1	88.7	41.1	23.9	56.3	0.0	126.4	48.0	47.9	42.7
LnGrp LOS	E	E	E	F	D	C	E	A	F	D	D	D
Approach Vol, veh/h		1813			2243			458			78	
Approach Delay, s/veh		65.0			46.1			104.0			45.1	
Approach LOS		E			D			F			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	27.2	53.8		32.0	12.4	68.6		32.0				
Change Period (Y+Rc), s	5.0	5.2		* 5.3	4.5	5.2		4.0				
Max Green Setting (Gmax), s	25.0	45.8		* 27	30.5	40.8		28.0				
Max Q Clear Time (g_c+I1), s	22.1	46.1		28.7	7.9	50.7		4.9				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.1	0.0		0.1				

Intersection Summary

HCM 6th Ctrl Delay	59.3
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.  
\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

## HCM 6th Signalized Intersection Summary 2: Bear Valley Road & Mojave Fish Hatchery Road

Apple Bear Commercial Project  
Cumulative (2045) NP AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	173	1594	62	49	2015	261	46	6	26	108	5	70
Future Volume (veh/h)	173	1594	62	49	2015	261	46	6	26	108	5	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	175	1610	63	49	2035	264	50	0	26	109	5	71
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	199	2090	649	109	1681	821	807	0	359	336	20	283
Arrive On Green	0.11	0.40	0.40	0.03	0.32	0.32	0.22	0.00	0.22	0.19	0.19	0.19
Sat Flow, veh/h	1810	5187	1610	3510	5187	1610	3619	0	1610	1810	107	1519
Grp Volume(v), veh/h	175	1610	63	49	2035	264	50	0	26	109	0	76
Grp Sat Flow(s),veh/h/ln	1810	1729	1610	1755	1729	1610	1810	0	1610	1810	0	1626
Q Serve(g_s), s	12.9	36.3	3.3	1.9	43.8	13.0	1.5	0.0	1.7	7.0	0.0	5.4
Cycle Q Clear(g_c), s	12.9	36.3	3.3	1.9	43.8	13.0	1.5	0.0	1.7	7.0	0.0	5.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.93
Lane Grp Cap(c), veh/h	199	2090	649	109	1681	821	807	0	359	336	0	302
V/C Ratio(X)	0.88	0.77	0.10	0.45	1.21	0.32	0.06	0.00	0.07	0.32	0.00	0.25
Avail Cap(c_a), veh/h	201	2090	649	390	1681	821	807	0	359	336	0	302
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	59.2	34.9	25.0	64.3	45.6	19.4	41.3	0.0	41.4	47.6	0.0	46.9
Incr Delay (d2), s/veh	31.7	2.8	0.3	1.1	100.5	1.0	0.1	0.0	0.4	2.5	0.0	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.5	15.0	1.3	0.8	33.5	7.0	0.7	0.0	0.7	3.5	0.0	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	90.9	37.7	25.3	65.3	146.1	20.4	41.5	0.0	41.8	50.1	0.0	48.9
LnGrp LOS	F	D	C	E	F	C	D	A	D	D	A	D
Approach Vol, veh/h		1848			2348			76			185	
Approach Delay, s/veh		42.3			130.3			41.6			49.6	
Approach LOS		D			F			D			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.2	60.8		30.0	19.8	50.2		35.0				
Change Period (Y+Rc), s	5.0	6.4		4.9	5.0	6.4		4.9				
Max Green Setting (Gmax), s	15.0	43.6		25.1	15.0	43.6		30.1				
Max Q Clear Time (g_c+1), s	13.9	38.3		9.0	14.9	45.8		3.7				
Green Ext Time (p_c), s	0.0	4.0		0.2	0.0	0.0		0.0				

### Intersection Summary

HCM 6th Ctrl Delay	89.0
HCM 6th LOS	F

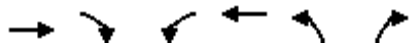
### Notes

User approved volume balancing among the lanes for turning movement.

# HCM 6th Signalized Intersection Summary

## 3: Jess Ranch Parkway & Bear Valley Road

Apple Bear Commercial Project  
Cumulative (2045) NP AM



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↑	↑↑	↑↑↑	↑↑	↑
Traffic Volume (veh/h)	1450	192	85	2019	306	50
Future Volume (veh/h)	1450	192	85	2019	306	50
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	1526	202	89	2125	322	53
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	2551	792	141	2968	1157	596
Arrive On Green	0.49	0.49	0.04	0.57	0.33	0.33
Sat Flow, veh/h	5358	1610	3510	5358	3510	1610
Grp Volume(v), veh/h	1526	202	89	2125	322	53
Grp Sat Flow(s),veh/h/ln	1729	1610	1755	1729	1755	1610
Q Serve(g_s), s	24.4	8.4	2.9	34.1	7.8	2.5
Cycle Q Clear(g_c), s	24.4	8.4	2.9	34.1	7.8	2.5
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2551	792	141	2968	1157	596
V/C Ratio(X)	0.60	0.26	0.63	0.72	0.28	0.09
Avail Cap(c_a), veh/h	2551	792	317	2968	1157	596
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.56	0.56	1.00	1.00
Uniform Delay (d), s/veh	21.0	17.0	54.3	17.8	28.5	23.6
Incr Delay (d2), s/veh	1.0	0.8	1.0	0.9	0.6	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.2	3.0	1.2	12.1	3.3	2.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	22.1	17.8	55.3	18.7	29.1	23.9
LnGrp LOS	C	B	E	B	C	C
Approach Vol, veh/h	1728			2214	375	
Approach Delay, s/veh	21.6			20.2	28.3	
Approach LOS	C			C	C	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	9.2	62.8		43.0		72.0
Change Period (Y+Rc), s	4.6	6.2		5.1		6.2
Max Green Setting (Gmax), s	10.4	50.8		37.9		65.8
Max Q Clear Time (g_c+1), s	11.9	26.4		9.8		36.1
Green Ext Time (p_c), s	0.0	18.9		0.7		26.2
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			21.4			
HCM 6th LOS			C			

# HCM 6th Signalized Intersection Summary

## 4: Reata Road & Bear Valley Road

Apple Bear Commercial Project  
Cumulative (2045) NP AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑↑	↔	↔↔	↑↑↑		↔	↑↑	↔	↔	↑	↔
Traffic Volume (veh/h)	222	1202	50	64	1768	17	38	26	30	21	43	298
Future Volume (veh/h)	222	1202	50	64	1768	17	38	26	30	21	43	298
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	234	1265	0	67	1861	18	40	27	32	22	45	314
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	291	2624		112	2408	23	380	1181	520	497	622	520
Arrive On Green	0.08	0.51	0.00	0.03	0.45	0.45	0.33	0.33	0.33	0.33	0.33	0.33
Sat Flow, veh/h	3510	5187	1610	3510	5298	51	1038	3610	1588	1364	1900	1588
Grp Volume(v), veh/h	234	1265	0	67	1215	664	40	27	32	22	45	314
Grp Sat Flow(s),veh/h/ln	1755	1729	1610	1755	1729	1891	1038	1805	1588	1364	1900	1588
Q Serve(g_s), s	8.2	19.9	0.0	2.4	36.9	36.9	3.5	0.6	1.7	1.4	2.0	20.7
Cycle Q Clear(g_c), s	8.2	19.9	0.0	2.4	36.9	36.9	5.5	0.6	1.7	2.0	2.0	20.7
Prop In Lane	1.00		1.00	1.00		0.03	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	291	2624		112	1572	860	380	1181	520	497	622	520
V/C Ratio(X)	0.80	0.48		0.60	0.77	0.77	0.11	0.02	0.06	0.04	0.07	0.60
Avail Cap(c_a), veh/h	432	2624		432	1572	860	380	1181	520	497	622	520
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.78	0.78	0.00	0.79	0.79	0.79	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.3	20.2	0.0	59.7	28.7	28.7	30.9	28.5	28.9	29.2	29.0	35.3
Incr Delay (d2), s/veh	3.0	0.5	0.0	1.5	3.0	5.4	0.6	0.0	0.2	0.2	0.2	5.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.6	7.6	0.0	1.0	14.8	16.8	0.9	0.3	0.7	0.5	1.0	8.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.3	20.7	0.0	61.2	31.6	34.0	31.4	28.5	29.1	29.4	29.2	40.4
LnGrp LOS	E	C		E	C	C	C	C	C	C	C	D
Approach Vol, veh/h		1499			1946			99			381	
Approach Delay, s/veh		26.7			33.5			29.9			38.4	
Approach LOS		C			C			C			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.6	69.4		46.0	16.0	63.0		46.0				
Change Period (Y+Rc), s	5.6	6.2		5.1	5.6	6.2		5.1				
Max Green Setting (Gmax), s	15.4	51.8		40.9	15.4	51.8		40.9				
Max Q Clear Time (g_c+1), s	11.4	21.9		22.7	10.2	38.9		7.5				
Green Ext Time (p_c), s	0.1	17.1		0.7	0.2	11.5		0.3				

### Intersection Summary

HCM 6th Ctrl Delay	31.3
HCM 6th LOS	C

### Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

# HCM 6th Signalized Intersection Summary

## 5: Apple Valley Road & Pimlico Road

Apple Bear Commercial Project  
Cumulative (2045) NP AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	168	38	16	37	28	41	42	663	38	68	902	208
Future Volume (veh/h)	168	38	16	37	28	41	42	663	38	68	902	208
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	177	40	17	39	29	43	44	698	40	72	949	219
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	254	304	258	249	304	258	57	2399	1057	92	2469	1101
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.03	0.66	0.66	0.05	0.68	0.68
Sat Flow, veh/h	1349	1900	1610	1368	1900	1610	1810	3610	1590	1810	3610	1610
Grp Volume(v), veh/h	177	40	17	39	29	43	44	698	40	72	949	219
Grp Sat Flow(s),veh/h/ln	1349	1900	1610	1368	1900	1610	1810	1805	1590	1810	1805	1610
Q Serve(g_s), s	16.7	2.3	1.2	3.3	1.7	3.0	3.1	10.5	1.1	5.1	14.7	6.5
Cycle Q Clear(g_c), s	18.4	2.3	1.2	5.6	1.7	3.0	3.1	10.5	1.1	5.1	14.7	6.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	254	304	258	249	304	258	57	2399	1057	92	2469	1101
V/C Ratio(X)	0.70	0.13	0.07	0.16	0.10	0.17	0.77	0.29	0.04	0.78	0.38	0.20
Avail Cap(c_a), veh/h	421	539	457	424	547	463	228	2399	1057	367	2469	1101
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.82	0.82	0.82	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.4	46.9	46.4	49.3	46.6	47.1	62.5	9.1	7.5	61.0	8.8	7.5
Incr Delay (d2), s/veh	1.3	0.1	0.0	0.1	0.1	0.1	6.6	0.3	0.1	5.3	0.5	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	1.1	0.5	1.1	0.8	1.2	1.5	3.7	0.4	2.4	4.9	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.7	46.9	46.4	49.4	46.6	47.2	69.0	9.3	7.6	66.3	9.3	7.9
LnGrp LOS	E	D	D	D	D	D	E	A	A	E	A	A
Approach Vol, veh/h		234			111			782			1240	
Approach Delay, s/veh		53.6			47.8			12.6			12.3	
Approach LOS		D			D			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.2	92.9		25.9	8.7	95.4		25.9				
Change Period (Y+Rc), s	4.6	6.5		5.1	4.6	6.5		* 5.1				
Max Green Setting (Gmax), s	20.4	50.5		36.9	16.4	60.5		* 37				
Max Q Clear Time (g_c+1), s	12.5			20.4	5.1	16.7		7.6				
Green Ext Time (p_c), s	0.0	0.6		0.4	0.0	0.8		0.2				

### Intersection Summary

HCM 6th Ctrl Delay	18.2
HCM 6th LOS	B

### Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

# HCM 6th Signalized Intersection Summary

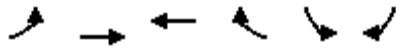
## 6: Apple Valley Road & Bear Valley Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↶ ↷		↶ ↷		↶ ↷		↶ ↷		↶	↶ ↷	↶ ↷	↶ ↷
Traffic Volume (veh/h)	385	850	48	151	1338	236	82	172	58	217	210	464
Future Volume (veh/h)	385	850	48	151	1338	236	82	172	58	217	210	464
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	405	895	51	159	1408	248	86	181	61	228	221	488
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	435	2553	145	191	2276	871	102	1205	373	184	1004	1138
Arrive On Green	0.12	0.51	0.51	0.05	0.44	0.44	0.06	0.23	0.23	0.10	0.28	0.28
Sat Flow, veh/h	3510	5021	285	3510	5187	1610	1810	5187	1606	1810	3610	2831
Grp Volume(v), veh/h	405	616	330	159	1408	248	86	181	61	228	221	488
Grp Sat Flow(s),veh/h/ln	1755	1729	1848	1755	1729	1610	1810	1729	1606	1810	1805	1415
Q Serve(g_s), s	24.0	22.4	22.5	9.4	43.9	17.6	9.9	5.8	6.4	21.4	9.9	26.2
Cycle Q Clear(g_c), s	24.0	22.4	22.5	9.4	43.9	17.6	9.9	5.8	6.4	21.4	9.9	26.2
Prop In Lane	1.00		0.15	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	435	1758	940	191	2276	871	102	1205	373	184	1004	1138
V/C Ratio(X)	0.93	0.35	0.35	0.83	0.62	0.28	0.84	0.15	0.16	1.24	0.22	0.43
Avail Cap(c_a), veh/h	776	1758	940	441	2276	871	184	1205	373	184	1004	1138
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.88	0.88	0.88	1.00	1.00	1.00	1.00	1.00	1.00	0.93	0.93	0.93
Uniform Delay (d), s/veh	91.1	30.9	30.9	98.3	45.4	26.2	98.2	64.1	64.3	94.3	58.3	45.4
Incr Delay (d2), s/veh	5.1	0.5	0.9	3.6	1.3	0.8	7.0	0.3	0.9	142.0	0.5	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.1	9.4	10.3	4.4	18.9	6.9	4.8	2.6	2.7	17.2	4.6	9.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	96.2	31.4	31.8	101.9	46.7	27.0	105.1	64.4	65.3	236.3	58.8	46.5
LnGrp LOS	F	C	C	F	D	C	F	E	E	F	E	D
Approach Vol, veh/h	1351			1815			328			937		
Approach Delay, s/veh	50.9			48.8			75.2			95.6		
Approach LOS	D			D			E			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	60.0	113.0	16.4	64.6	30.6	98.4	26.0	55.0				
Change Period (Y+Rc), s	4.6	6.2	4.6	6.2	4.6	6.2	4.6	6.2				
Max Green Setting (Gmax), s	20.4	91.8	21.4	48.8	46.4	71.8	21.4	48.8				
Max Q Clear Time (g_c+M), s	11.4	24.5	11.9	28.2	26.0	45.9	23.4	8.4				
Green Ext Time (p_c), s	0.0	0.8	0.0	0.3	0.0	1.5	0.0	0.2				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay	61.3											
HCM 6th LOS	E											



HCM 6th Signalized Intersection Summary  
7: Bear Valley Road & Westmont Drive



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↖	↑↑	↑↑↑	↗	↖	↗
Traffic Volume (veh/h)	107	975	1629	104	81	62
Future Volume (veh/h)	107	975	1629	104	81	62
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	113	1026	1715	109	85	65
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	143	2238	2541	789	478	425
Arrive On Green	0.08	0.62	0.49	0.49	0.26	0.26
Sat Flow, veh/h	1810	3705	5358	1610	1810	1610
Grp Volume(v), veh/h	113	1026	1715	109	85	65
Grp Sat Flow(s),veh/h/ln	1810	1805	1729	1610	1810	1610
Q Serve(g_s), s	6.1	15.1	25.2	3.7	3.6	3.1
Cycle Q Clear(g_c), s	6.1	15.1	25.2	3.7	3.6	3.1
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	143	2238	2541	789	478	425
V/C Ratio(X)	0.79	0.46	0.67	0.14	0.18	0.15
Avail Cap(c_a), veh/h	288	2238	2541	789	478	425
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.2	10.1	19.4	14.0	28.4	28.2
Incr Delay (d2), s/veh	9.3	0.7	1.5	0.4	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.0	5.0	9.2	1.3	1.7	3.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	54.5	10.8	20.9	14.3	29.2	29.0
LnGrp LOS	D	B	C	B	C	C
Approach Vol, veh/h		1139	1824		150	
Approach Delay, s/veh		15.1	20.5		29.1	
Approach LOS		B	C		C	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		69.0		31.0	13.0	56.0
Change Period (Y+Rc), s		7.0		4.6	5.1	* 7
Max Green Setting (Gmax), s		62.0		26.4	15.9	* 42
Max Q Clear Time (g_c+I1), s		17.1		5.6	8.1	27.2
Green Ext Time (p_c), s		7.9		0.2	0.1	9.4
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			18.9			
HCM 6th LOS			B			
<b>Notes</b>						
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.						

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↖	↑↑	↘	
Traffic Vol, veh/h	1024	3	2	1659	3	2
Future Vol, veh/h	1024	3	2	1659	3	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	50	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1078	3	2	1746	3	2

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	1081	0	1957 541
Stage 1	-	-	-	-	1080 -
Stage 2	-	-	-	-	877 -
Critical Hdwy	-	-	4.1	-	6.8 6.9
Critical Hdwy Stg 1	-	-	-	-	5.8 -
Critical Hdwy Stg 2	-	-	-	-	5.8 -
Follow-up Hdwy	-	-	2.2	-	3.5 3.3
Pot Cap-1 Maneuver	-	-	*1032	-	*92 *687
Stage 1	-	-	-	-	*648 -
Stage 2	-	-	-	-	*372 -
Platoon blocked, %	-	-	1	-	1 1
Mov Cap-1 Maneuver	-	-	*1032	-	*91 *687
Mov Cap-2 Maneuver	-	-	-	-	*91 -
Stage 1	-	-	-	-	*648 -
Stage 2	-	-	-	-	*371 -

Approach	EB	WB	NB
HCM Control Delay, s	0	0	31.9
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	139	-	-	* 1032	-
HCM Lane V/C Ratio	0.038	-	-	0.002	-
HCM Control Delay (s)	31.9	-	-	8.5	-
HCM Lane LOS	D	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-























Notes  
 -: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

# HCM 6th Signalized Intersection Summary

## 9: Deep Creek Road & Bear Valley Road

Apple Bear Commercial Project

Cumulative (2045) NP AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	903	84	116	1489	41	175	51	81	28	28	49
Future Volume (veh/h)	43	903	84	116	1489	41	175	51	81	28	28	49
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	45	951	88	122	1567	43	184	54	85	29	29	52
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	59	1694	756	151	1867	51	234	166	262	47	77	138
Arrive On Green	0.03	0.47	0.47	0.08	0.52	0.52	0.13	0.25	0.25	0.03	0.13	0.13
Sat Flow, veh/h	1810	3610	1610	1810	3589	98	1810	665	1047	1810	610	1093
Grp Volume(v), veh/h	45	951	88	122	787	823	184	0	139	29	0	81
Grp Sat Flow(s),veh/h/ln	1810	1805	1610	1810	1805	1882	1810	0	1712	1810	0	1703
Q Serve(g_s), s	3.0	22.8	3.7	8.0	44.5	44.8	11.8	0.0	8.0	1.9	0.0	5.2
Cycle Q Clear(g_c), s	3.0	22.8	3.7	8.0	44.5	44.8	11.8	0.0	8.0	1.9	0.0	5.2
Prop In Lane	1.00		1.00	1.00		0.05	1.00		0.61	1.00		0.64
Lane Grp Cap(c), veh/h	59	1694	756	151	939	979	234	0	428	47	0	214
V/C Ratio(X)	0.77	0.56	0.12	0.81	0.84	0.84	0.79	0.00	0.32	0.62	0.00	0.38
Avail Cap(c_a), veh/h	81	1694	756	234	939	979	234	0	428	90	0	255
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	57.6	22.9	17.9	54.1	24.5	24.6	50.7	0.0	36.7	57.9	0.0	48.1
Incr Delay (d2), s/veh	15.7	1.4	0.3	5.7	6.7	6.6	23.0	0.0	2.0	12.7	0.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	9.2	1.3	3.7	18.4	19.3	6.6	0.0	3.4	1.0	0.0	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.3	24.3	18.2	59.8	31.2	31.2	73.6	0.0	38.7	70.6	0.0	49.2
LnGrp LOS	E	C	B	E	C	C	E	A	D	E	A	D
Approach Vol, veh/h		1084			1732			323			110	
Approach Delay, s/veh		25.8			33.2			58.6			54.9	
Approach LOS		C			C			E			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.6	64.3	22.0	19.1	8.5	70.4	7.1	34.0				
Change Period (Y+Rc), s	4.6	8.0	6.5	4.0	4.6	8.0	4.0	4.0				
Max Green Setting (Gmax), s	15.5	47.9	15.5	18.0	5.4	58.0	6.0	30.0				
Max Q Clear Time (g_c+I1), s	10.0	24.8	13.8	7.2	5.0	46.8	3.9	10.0				
Green Ext Time (p_c), s	0.0	5.1	0.0	0.2	0.0	6.7	0.0	0.6				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			34.0									
HCM 6th LOS			C									

HCM 6th Signalized Intersection Summary  
 10: Kiowa Road & Bear Valley Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	125	700	171	105	943	58	325	152	78	57	152	217
Future Volume (veh/h)	125	700	171	105	943	58	325	152	78	57	152	217
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1976	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	132	737	180	111	993	61	342	160	82	60	160	228
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	155	1399	649	134	1356	605	317	810	395	77	767	340
Arrive On Green	0.09	0.39	0.39	0.07	0.38	0.38	0.18	0.34	0.34	0.04	0.21	0.21
Sat Flow, veh/h	1810	3610	1675	1810	3610	1610	1810	2349	1147	1810	3610	1599
Grp Volume(v), veh/h	132	737	180	111	993	61	342	121	121	60	160	228
Grp Sat Flow(s),veh/h/ln	1810	1805	1675	1810	1805	1610	1810	1805	1691	1810	1805	1599
Q Serve(g_s), s	10.4	22.8	10.7	8.8	34.4	3.6	25.4	6.8	7.3	4.8	5.3	19.0
Cycle Q Clear(g_c), s	10.4	22.8	10.7	8.8	34.4	3.6	25.4	6.8	7.3	4.8	5.3	19.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.68	1.00		1.00
Lane Grp Cap(c), veh/h	155	1399	649	134	1356	605	317	622	583	77	767	340
V/C Ratio(X)	0.85	0.53	0.28	0.83	0.73	0.10	1.08	0.19	0.21	0.78	0.21	0.67
Avail Cap(c_a), veh/h	255	1399	649	255	1356	605	317	622	583	255	767	340
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.3	34.2	30.5	66.2	39.0	29.4	59.8	33.4	33.5	68.7	47.1	52.5
Incr Delay (d2), s/veh	6.8	1.4	1.1	4.9	3.5	0.3	73.2	0.7	0.8	6.1	0.6	10.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.0	9.8	4.4	4.1	15.2	1.4	17.8	3.1	3.1	2.3	2.4	8.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.1	35.6	31.5	71.2	42.5	29.7	133.0	34.1	34.3	74.8	47.7	62.6
LnGrp LOS	E	D	C	E	D	C	F	C	C	E	D	E
Approach Vol, veh/h		1049			1165			584			448	
Approach Delay, s/veh		39.5			44.6			92.0			58.9	
Approach LOS		D			D			F			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.3	62.7	10.8	56.2	17.1	60.9	30.0	37.0				
Change Period (Y+Rc), s	4.6	6.5	4.6	6.2	4.6	6.5	4.6	6.2				
Max Green Setting (Gmax), s	20.4	46.5	20.4	35.8	20.4	46.5	25.4	30.8				
Max Q Clear Time (g_c+10), s	10.8	24.8	6.8	9.3	12.4	36.4	27.4	21.0				
Green Ext Time (p_c), s	0.1	9.4	0.0	1.2	0.1	6.7	0.0	1.2				

Intersection Summary

HCM 6th Ctrl Delay	53.5
HCM 6th LOS	D

HCM 6th Signalized Intersection Summary  
 1: Jacaranda Avenue/Jacaranda Road & Bear Valley Road

Apple Bear Commercial Project  
 Cumulative (2045) NP PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑↑		↔	↑↑↑	↔		↔↔		↔	↔	↔
Traffic Volume (veh/h)	38	2131	50	339	1874	24	89	9	444	29	20	39
Future Volume (veh/h)	38	2131	50	339	1874	24	89	9	444	29	20	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	39	2174	51	346	1912	24	91	9	453	25	27	40
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	77	1647	39	312	2437	755	305	30	296	349	367	346
Arrive On Green	0.02	0.32	0.32	0.17	0.47	0.47	0.18	0.18	0.18	0.19	0.19	0.19
Sat Flow, veh/h	3510	5214	122	1810	5187	1607	1654	164	1610	1810	1900	1610
Grp Volume(v), veh/h	39	1440	785	346	1912	24	100	0	453	25	27	40
Grp Sat Flow(s),veh/h/ln	1755	1729	1878	1810	1729	1607	1817	0	1610	1810	1900	1610
Q Serve(g_s), s	1.6	45.8	45.8	25.0	44.9	1.2	6.9	0.0	26.7	1.6	1.7	2.9
Cycle Q Clear(g_c), s	1.6	45.8	45.8	25.0	44.9	1.2	6.9	0.0	26.7	1.6	1.7	2.9
Prop In Lane	1.00		0.06	1.00		1.00	0.91		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	77	1092	593	312	2437	755	335	0	296	349	367	346
V/C Ratio(X)	0.51	1.32	1.32	1.11	0.78	0.03	0.30	0.00	1.53	0.07	0.07	0.12
Avail Cap(c_a), veh/h	738	1092	593	312	2437	755	335	0	296	349	367	346
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	70.1	49.6	49.6	60.0	32.3	20.7	51.1	0.0	59.2	47.9	47.9	45.8
Incr Delay (d2), s/veh	1.9	149.9	156.8	83.5	2.6	0.1	2.3	0.0	254.0	0.4	0.4	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	41.7	46.4	18.4	18.3	0.4	3.3	0.0	31.6	0.8	0.9	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.1	199.5	206.4	143.5	34.9	20.8	53.3	0.0	313.1	48.3	48.3	46.5
LnGrp LOS	E	F	F	F	C	C	D	A	F	D	D	D
Approach Vol, veh/h		2264			2282			553				92
Approach Delay, s/veh		199.7			51.2			266.1				47.5
Approach LOS		F			D			F				D
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	30.0	51.0		32.0	7.7	73.3		32.0				
Change Period (Y+Rc), s	5.0	5.2		* 5.3	4.5	5.2		4.0				
Max Green Setting (Gmax), s	25.0	45.8		* 27	30.5	40.8		28.0				
Max Q Clear Time (g_c+I1), s	27.0	47.8		28.7	3.6	46.9		4.9				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		0.1				

Intersection Summary

HCM 6th Ctrl Delay	138.8
HCM 6th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.  
 \* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary  
 2: Bear Valley Road & Mojave Fish Hatchery Road

Apple Bear Commercial Project  
 Cumulative (2045) NP PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑↑↑	↗	↖↗	↑↑↑	↗	↖	↑	↗	↖	↗	↖
Traffic Volume (veh/h)	62	2436	106	126	2033	95	113	9	70	126	5	91
Future Volume (veh/h)	62	2436	106	126	2033	95	113	9	70	126	5	91
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	63	2486	108	129	2074	97	121	0	71	129	5	92
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.99
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	81	1987	617	179	2020	923	807	0	357	336	16	286
Arrive On Green	0.04	0.38	0.38	0.05	0.39	0.39	0.22	0.00	0.22	0.19	0.19	0.19
Sat Flow, veh/h	1810	5187	1610	3510	5187	1602	3619	0	1602	1810	84	1539
Grp Volume(v), veh/h	63	2486	108	129	2074	97	121	0	71	129	0	97
Grp Sat Flow(s),veh/h/ln	1810	1729	1610	1755	1729	1602	1810	0	1602	1810	0	1623
Q Serve(g_s), s	4.7	51.7	6.0	4.9	52.6	3.7	3.6	0.0	4.9	8.4	0.0	7.0
Cycle Q Clear(g_c), s	4.7	51.7	6.0	4.9	52.6	3.7	3.6	0.0	4.9	8.4	0.0	7.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.95
Lane Grp Cap(c), veh/h	81	1987	617	179	2020	923	807	0	357	336	0	302
V/C Ratio(X)	0.78	1.25	0.18	0.72	1.03	0.11	0.15	0.00	0.20	0.38	0.00	0.32
Avail Cap(c_a), veh/h	201	1987	617	390	2020	923	807	0	357	336	0	302
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	63.8	41.6	27.5	63.1	41.2	13.0	42.2	0.0	42.6	48.2	0.0	47.6
Incr Delay (d2), s/veh	5.9	117.3	0.6	2.1	27.2	0.2	0.4	0.0	1.2	3.3	0.0	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	42.4	2.3	2.2	26.2	2.0	1.7	0.0	2.1	4.2	0.0	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.7	158.9	28.1	65.2	68.4	13.2	42.6	0.0	43.9	51.5	0.0	50.4
LnGrp LOS	E	F	C	E	F	B	D	A	D	D	A	D
Approach Vol, veh/h		2657			2300			192			226	
Approach Delay, s/veh		151.5			65.9			43.1			51.0	
Approach LOS		F			E			D			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.9	58.1		30.0	11.0	59.0		35.0				
Change Period (Y+Rc), s	5.0	6.4		4.9	5.0	6.4		4.9				
Max Green Setting (Gmax), s	15.0	43.6		25.1	15.0	43.6		30.1				
Max Q Clear Time (g_c+10), s	10.0	53.7		10.4	6.7	54.6		6.9				
Green Ext Time (p_c), s	0.0	0.0		0.2	0.0	0.0		0.1				

Intersection Summary

HCM 6th Ctrl Delay	106.8
HCM 6th LOS	F

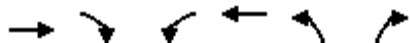
Notes

User approved volume balancing among the lanes for turning movement.

# HCM 6th Signalized Intersection Summary

## 3: Jess Ranch Parkway & Bear Valley Road

Apple Bear Commercial Project  
Cumulative (2045) NP PM



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↑	↔	↑↑↑	↔	↑
Traffic Volume (veh/h)	2083	361	216	1746	508	196
Future Volume (veh/h)	2083	361	216	1746	508	196
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	2147	372	223	1800	524	202
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	2345	725	281	2968	1157	660
Arrive On Green	0.45	0.45	0.08	0.57	0.33	0.33
Sat Flow, veh/h	5358	1603	3510	5358	3510	1610
Grp Volume(v), veh/h	2147	372	223	1800	524	202
Grp Sat Flow(s),veh/h/ln	1729	1603	1755	1729	1755	1610
Q Serve(g_s), s	44.5	19.0	7.2	26.1	13.5	9.7
Cycle Q Clear(g_c), s	44.5	19.0	7.2	26.1	13.5	9.7
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2345	725	281	2968	1157	660
V/C Ratio(X)	0.92	0.51	0.79	0.61	0.45	0.31
Avail Cap(c_a), veh/h	2345	725	317	2968	1157	660
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.73	0.73	1.00	1.00
Uniform Delay (d), s/veh	29.5	22.5	52.0	16.1	30.4	22.9
Incr Delay (d2), s/veh	7.0	2.6	7.5	0.7	1.3	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	18.3	7.2	3.3	9.3	5.8	10.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	36.5	25.1	59.4	16.8	31.7	24.1
LnGrp LOS	D	C	E	B	C	C
Approach Vol, veh/h	2519			2023	726	
Approach Delay, s/veh	34.8			21.5	29.6	
Approach LOS	C			C	C	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	53.8	58.2		43.0		72.0
Change Period (Y+Rc), s	4.6	6.2		5.1		6.2
Max Green Setting (Gmax), s	40.4	50.8		37.9		65.8
Max Q Clear Time (g_c+I), s	19.2	46.5		15.5		28.1
Green Ext Time (p_c), s	0.1	4.2		1.3		28.5
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			29.0			
HCM 6th LOS			C			

# HCM 6th Signalized Intersection Summary

## 4: Reata Road & Bear Valley Road

Apple Bear Commercial Project  
Cumulative (2045) NP PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖↗	↑↑↑	↖	↖↗	↑↑↑		↖	↑↑	↖	↖	↑	↖
Traffic Volume (veh/h)	320	1799	139	159	1458	16	219	114	166	30	111	284
Future Volume (veh/h)	320	1799	139	159	1458	16	219	114	166	30	111	284
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	330	1855	0	164	1503	16	226	118	171	31	114	293
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	384	2462		221	2265	24	340	1181	526	395	622	526
Arrive On Green	0.11	0.47	0.00	0.06	0.43	0.43	0.33	0.33	0.33	0.33	0.33	0.33
Sat Flow, veh/h	3510	5187	1610	3510	5291	56	993	3610	1609	1107	1900	1609
Grp Volume(v), veh/h	330	1855	0	164	982	537	226	118	171	31	114	293
Grp Sat Flow(s),veh/h/ln	1755	1729	1610	1755	1729	1890	993	1805	1609	1107	1900	1609
Q Serve(g_s), s	11.6	36.6	0.0	5.7	28.4	28.4	26.3	2.8	10.0	2.5	5.4	18.7
Cycle Q Clear(g_c), s	11.6	36.6	0.0	5.7	28.4	28.4	31.7	2.8	10.0	5.3	5.4	18.7
Prop In Lane	1.00		1.00	1.00		0.03	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	384	2462		221	1480	809	340	1181	526	395	622	526
V/C Ratio(X)	0.86	0.75		0.74	0.66	0.66	0.66	0.10	0.32	0.08	0.18	0.56
Avail Cap(c_a), veh/h	432	2462		432	1480	809	340	1181	526	395	622	526
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.36	0.36	0.00	0.82	0.82	0.82	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.7	26.8	0.0	57.6	28.5	28.5	41.4	29.2	31.7	31.1	30.1	34.6
Incr Delay (d2), s/veh	5.3	0.8	0.0	1.5	1.9	3.5	9.9	0.2	1.6	0.4	0.6	4.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.2	14.1	0.0	2.5	11.4	12.8	7.4	1.3	4.2	0.7	2.6	8.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.0	27.6	0.0	59.1	30.5	32.1	51.3	29.4	33.3	31.5	30.7	38.8
LnGrp LOS	E	C		E	C	C	D	C	C	C	C	D
Approach Vol, veh/h		2185			1683			515			438	
Approach Delay, s/veh		32.5			33.8			40.3			36.2	
Approach LOS		C			C			D			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	33.5	65.5		46.0	19.3	59.7		46.0				
Change Period (Y+Rc), s	5.6	6.2		5.1	5.6	6.2		5.1				
Max Green Setting (Gmax), s	15.4	51.8		40.9	15.4	51.8		40.9				
Max Q Clear Time (g_c+1), s	17.5	38.6		20.7	13.6	30.4		33.7				
Green Ext Time (p_c), s	0.1	11.8		0.9	0.1	15.7		1.0				

### Intersection Summary

HCM 6th Ctrl Delay	34.1
HCM 6th LOS	C

### Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.



# HCM 6th Signalized Intersection Summary

## 5: Apple Valley Road & Pimlico Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	300	58	42	87	49	108	77	824	97	167	908	262
Future Volume (veh/h)	300	58	42	87	49	108	77	824	97	167	908	262
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	306	59	43	89	50	110	79	841	99	170	927	267
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	377	527	447	389	527	447	100	1767	788	196	1958	872
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.06	0.49	0.49	0.11	0.54	0.54
Sat Flow, veh/h	1245	1900	1608	1312	1900	1608	1810	3610	1609	1810	3610	1607
Grp Volume(v), veh/h	306	59	43	89	50	110	79	841	99	170	927	267
Grp Sat Flow(s),veh/h/ln	1245	1900	1608	1312	1900	1608	1810	1805	1609	1810	1805	1607
Q Serve(g_s), s	31.4	3.0	2.6	7.1	2.5	6.9	5.6	20.2	4.4	12.0	20.6	11.8
Cycle Q Clear(g_c), s	34.0	3.0	2.6	10.1	2.5	6.9	5.6	20.2	4.4	12.0	20.6	11.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	377	527	447	389	527	447	100	1767	788	196	1958	872
V/C Ratio(X)	0.81	0.11	0.10	0.23	0.09	0.25	0.79	0.48	0.13	0.87	0.47	0.31
Avail Cap(c_a), veh/h	384	539	457	402	547	463	228	1767	788	367	1958	872
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.76	0.76	0.76	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.4	35.0	34.9	38.8	34.8	36.4	60.7	22.1	18.1	57.0	18.3	16.3
Incr Delay (d2), s/veh	11.4	0.0	0.0	0.1	0.0	0.1	3.9	0.7	0.2	4.5	0.8	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.8	1.4	1.0	2.3	1.2	2.8	2.6	8.2	1.6	5.5	8.0	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.8	35.0	34.9	38.9	34.9	36.5	64.6	22.8	18.3	61.5	19.1	17.2
LnGrp LOS	E	D	C	D	C	D	E	C	B	E	B	B
Approach Vol, veh/h		408			249			1019			1364	
Approach Delay, s/veh		52.9			37.0			25.6			24.0	
Approach LOS		D			D			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	18.7	70.1		41.2	11.8	77.0		41.2				
Change Period (Y+Rc), s	4.6	6.5		5.1	4.6	6.5		* 5.1				
Max Green Setting (Gmax), s	20.4	50.5		36.9	16.4	60.5		* 37				
Max Q Clear Time (g_c+1/4), s	14.0	22.2		36.0	7.6	22.6		12.1				
Green Ext Time (p_c), s	0.1	0.8		0.1	0.0	0.7		0.5				

### Intersection Summary

HCM 6th Ctrl Delay	29.5
HCM 6th LOS	C

### Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

# HCM 6th Signalized Intersection Summary

## 6: Apple Valley Road & Bear Valley Road

Apple Bear Commercial Project  
Cumulative (2045) NP PM

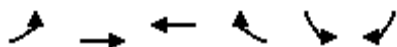


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗		↖ ↗		↖ ↗		↖	↖ ↗	↖	↖ ↗	↖ ↗	↖ ↗
Traffic Volume (veh/h)	526	1327	68	208	1113	185	121	250	202	289	386	410
Future Volume (veh/h)	526	1327	68	208	1113	185	121	250	202	289	386	410
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No		No		No		No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	554	1397	72	219	1172	195	127	263	213	304	406	432
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	583	2482	128	251	2058	801	143	1205	374	184	921	1191
Arrive On Green	0.17	0.49	0.49	0.07	0.40	0.40	0.08	0.23	0.23	0.10	0.26	0.26
Sat Flow, veh/h	3510	5051	260	3510	5187	1604	1810	5187	1608	1810	3610	2821
Grp Volume(v), veh/h	554	956	513	219	1172	195	127	263	213	304	406	432
Grp Sat Flow(s),veh/h/ln	1755	1729	1853	1755	1729	1604	1810	1729	1608	1810	1805	1410
Q Serve(g_s), s	32.8	40.8	40.8	13.0	37.0	14.6	14.6	8.6	24.6	21.4	19.8	22.0
Cycle Q Clear(g_c), s	32.8	40.8	40.8	13.0	37.0	14.6	14.6	8.6	24.6	21.4	19.8	22.0
Prop In Lane	1.00		0.14	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	583	1699	911	251	2058	801	143	1205	374	184	921	1191
V/C Ratio(X)	0.95	0.56	0.56	0.87	0.57	0.24	0.89	0.22	0.57	1.65	0.44	0.36
Avail Cap(c_a), veh/h	776	1699	911	441	2058	801	184	1205	374	184	921	1191
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.61	0.61	0.61	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91
Uniform Delay (d), s/veh	86.7	37.5	37.5	96.6	49.4	30.0	95.8	65.2	71.3	94.3	65.6	41.5
Incr Delay (d2), s/veh	11.3	0.8	1.5	3.7	1.1	0.7	27.5	0.4	6.2	312.9	1.4	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.7	17.3	18.7	6.0	16.1	5.8	7.9	3.8	10.7	26.0	9.3	7.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	98.0	38.4	39.1	100.3	50.5	30.8	123.3	65.6	77.5	407.2	67.0	42.3
LnGrp LOS	F	D	D	F	D	C	F	E	E	F	E	D
Approach Vol, veh/h	2023		1586		603		1142					
Approach Delay, s/veh	54.9		55.0		82.0		148.2					
Approach LOS	D		D		F		F					
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	19.6	109.4	21.2	59.8	39.5	89.5	26.0	55.0				
Change Period (Y+Rc), s	4.6	6.2	4.6	6.2	4.6	6.2	4.6	6.2				
Max Green Setting (Gmax), s	20.4	91.8	21.4	48.8	46.4	71.8	21.4	48.8				
Max Q Clear Time (g_c+1/3), s	11.0	42.8	16.6	24.0	34.8	39.0	23.4	26.6				
Green Ext Time (p_c), s	0.0	1.3	0.0	0.4	0.1	1.2	0.0	0.2				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			77.9									
HCM 6th LOS			E									

# HCM 6th Signalized Intersection Summary

## 7: Bear Valley Road & Westmont Drive

Apple Bear Commercial Project  
Cumulative (2045) NP PM



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↖	↑↑	↑↑↑	↗	↖	↗
Traffic Volume (veh/h)	186	1599	1367	163	244	140
Future Volume (veh/h)	186	1599	1367	163	244	140
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	192	1648	1409	168	252	144
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	226	2238	2304	715	478	425
Arrive On Green	0.12	0.62	0.44	0.44	0.26	0.26
Sat Flow, veh/h	1810	3705	5358	1610	1810	1610
Grp Volume(v), veh/h	192	1648	1409	168	252	144
Grp Sat Flow(s),veh/h/ln	1810	1805	1729	1610	1810	1610
Q Serve(g_s), s	10.4	31.9	20.7	6.5	11.9	7.2
Cycle Q Clear(g_c), s	10.4	31.9	20.7	6.5	11.9	7.2
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	226	2238	2304	715	478	425
V/C Ratio(X)	0.85	0.74	0.61	0.23	0.53	0.34
Avail Cap(c_a), veh/h	288	2238	2304	715	478	425
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.8	13.3	21.2	17.2	31.5	29.7
Incr Delay (d2), s/veh	17.2	2.2	1.2	0.8	4.1	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	10.9	7.8	2.3	5.7	7.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	60.0	15.5	22.4	18.0	35.6	31.9
LnGrp LOS	E	B	C	B	D	C
Approach Vol, veh/h		1840	1577		396	
Approach Delay, s/veh		20.1	22.0		34.3	
Approach LOS		C	C		C	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		69.0		31.0	17.6	51.4
Change Period (Y+Rc), s		7.0		4.6	5.1	* 7
Max Green Setting (Gmax), s		62.0		26.4	15.9	* 42
Max Q Clear Time (g_c+I1), s		33.9		13.9	12.4	22.7
Green Ext Time (p_c), s		14.0		0.5	0.2	9.5
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			22.4			
HCM 6th LOS			C			
<b>Notes</b>						
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.						

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↖	↑↑	↗	
Traffic Vol, veh/h	1751	1	0	1428	1	3
Future Vol, veh/h	1751	1	0	1428	1	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	50	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1824	1	0	1488	1	3

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	1825	0	2569
Stage 1	-	-	-	-	1825
Stage 2	-	-	-	-	744
Critical Hdwy	-	-	4.1	-	6.8
Critical Hdwy Stg 1	-	-	-	-	5.8
Critical Hdwy Stg 2	-	-	-	-	5.8
Follow-up Hdwy	-	-	2.2	-	3.5
Pot Cap-1 Maneuver	-	-	*574	-	*27
Stage 1	-	-	-	-	*361
Stage 2	-	-	-	-	*436
Platoon blocked, %	-	-	1	-	1
Mov Cap-1 Maneuver	-	-	*574	-	*27
Mov Cap-2 Maneuver	-	-	-	-	*27
Stage 1	-	-	-	-	*361
Stage 2	-	-	-	-	*436

Approach	EB	WB	NB
HCM Control Delay, s	0	0	47.4
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	89	-	-	* 574	-
HCM Lane V/C Ratio	0.047	-	-	-	-
HCM Control Delay (s)	47.4	-	-	0	-
HCM Lane LOS	E	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Notes  
 -: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

# HCM 6th Signalized Intersection Summary

## 9: Deep Creek Road & Bear Valley Road

Apple Bear Commercial Project  
Cumulative (2045) NP PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	64	1638	140	135	1361	36	147	61	136	55	71	59
Future Volume (veh/h)	64	1638	140	135	1361	36	147	61	136	55	71	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	65	1671	143	138	1389	37	150	62	139	56	72	60
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	84	3891	1735	146	3996	106	363	122	273	72	90	75
Arrive On Green	0.05	1.00	1.00	0.08	1.00	1.00	0.20	0.23	0.23	0.04	0.09	0.09
Sat Flow, veh/h	1810	3610	1610	1810	3592	96	1810	521	1168	1810	958	798
Grp Volume(v), veh/h	65	1671	143	138	697	729	150	0	201	56	0	132
Grp Sat Flow(s),veh/h/ln	1810	1805	1610	1810	1805	1883	1810	0	1690	1810	0	1756
Q Serve(g_s), s	4.3	0.0	0.0	9.1	0.0	0.0	8.7	0.0	12.4	3.7	0.0	8.8
Cycle Q Clear(g_c), s	4.3	0.0	0.0	9.1	0.0	0.0	8.7	0.0	12.4	3.7	0.0	8.8
Prop In Lane	1.00		1.00	1.00		0.05	1.00		0.69	1.00		0.45
Lane Grp Cap(c), veh/h	84	3891	1735	146	2008	2094	363	0	394	72	0	164
V/C Ratio(X)	0.78	0.43	0.08	0.94	0.35	0.35	0.41	0.00	0.51	0.77	0.00	0.80
Avail Cap(c_a), veh/h	109	3891	1735	146	2008	2094	363	0	394	75	0	284
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	56.6	0.0	0.0	54.9	0.0	0.0	41.8	0.0	40.0	57.1	0.0	53.3
Incr Delay (d2), s/veh	16.8	0.3	0.1	56.9	0.1	0.1	3.4	0.0	4.7	37.1	0.0	8.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.2	0.0	6.3	0.1	0.1	4.0	0.0	5.4	2.4	0.0	4.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.4	0.3	0.1	111.7	0.1	0.1	45.2	0.0	44.7	94.2	0.0	62.1
LnGrp LOS	E	A	A	F	A	A	D	A	D	F	A	E
Approach Vol, veh/h		1879			1564			351			188	
Approach Delay, s/veh		2.9			9.9			44.9			71.7	
Approach LOS		A			A			D			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.3	139.6	30.6	15.2	10.1	143.8	11.3	34.5				
Change Period (Y+Rc), s	4.6	8.0	6.5	4.0	4.6	8.0	6.5	* 6.5				
Max Green Setting (Gmax), s	9.7	54.2	13.6	19.4	7.2	56.7	5.0	* 28				
Max Q Clear Time (g_c+I1), s	11.1	2.0	10.7	10.8	6.3	2.0	5.7	14.4				
Green Ext Time (p_c), s	0.0	14.0	0.0	0.4	0.0	10.2	0.0	0.8				

### Intersection Summary

HCM 6th Ctrl Delay	12.6
HCM 6th LOS	B

### Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary  
 10: Kiowa Road & Bear Valley Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	1009	270	153	959	65	266	229	131	82	242	182
Future Volume (veh/h)	210	1009	270	153	959	65	266	229	131	82	242	182
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1976	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	219	1051	281	159	999	68	277	239	136	85	252	190
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	241	1338	620	182	1220	544	299	717	394	106	767	341
Arrive On Green	0.13	0.37	0.37	0.10	0.34	0.34	0.17	0.32	0.32	0.06	0.21	0.21
Sat Flow, veh/h	1810	3610	1675	1810	3610	1609	1810	2249	1234	1810	3610	1606
Grp Volume(v), veh/h	219	1051	281	159	999	68	277	190	185	85	252	190
Grp Sat Flow(s),veh/h/ln	1810	1805	1675	1810	1805	1609	1810	1805	1678	1810	1805	1606
Q Serve(g_s), s	17.3	37.5	18.4	12.6	36.7	4.2	21.9	11.6	12.2	6.7	8.6	15.3
Cycle Q Clear(g_c), s	17.3	37.5	18.4	12.6	36.7	4.2	21.9	11.6	12.2	6.7	8.6	15.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.74	1.00		1.00
Lane Grp Cap(c), veh/h	241	1338	620	182	1220	544	299	576	535	106	767	341
V/C Ratio(X)	0.91	0.79	0.45	0.87	0.82	0.13	0.93	0.33	0.35	0.80	0.33	0.56
Avail Cap(c_a), veh/h	255	1338	620	255	1220	544	317	576	535	255	767	341
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.0	40.5	34.5	64.3	43.9	33.2	59.7	37.6	37.8	67.4	48.3	51.0
Incr Delay (d2), s/veh	31.1	4.7	2.4	16.1	6.2	0.5	30.4	1.5	1.8	5.2	1.1	6.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	19.8	16.7	7.8	6.4	16.7	1.7	12.3	5.3	5.2	3.2	3.9	6.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	93.1	45.2	36.9	80.4	50.1	33.6	90.1	39.1	39.6	72.6	49.5	57.4
LnGrp LOS	F	D	D	F	D	C	F	D	D	E	D	E
Approach Vol, veh/h		1551			1226			652			527	
Approach Delay, s/veh		50.5			53.1			60.9			56.1	
Approach LOS		D			D			E			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	19.2	60.2	13.1	52.4	23.9	55.5	28.5	37.0				
Change Period (Y+Rc), s	4.6	6.5	4.6	6.2	4.6	6.5	4.6	6.2				
Max Green Setting (Gmax), s	20.4	46.5	20.4	35.8	20.4	46.5	25.4	30.8				
Max Q Clear Time (g_c+1), s	14.6	39.5	8.7	14.2	19.3	38.7	23.9	17.3				
Green Ext Time (p_c), s	0.1	5.5	0.1	1.9	0.0	5.4	0.1	1.7				

Intersection Summary

HCM 6th Ctrl Delay	53.8
HCM 6th LOS	D

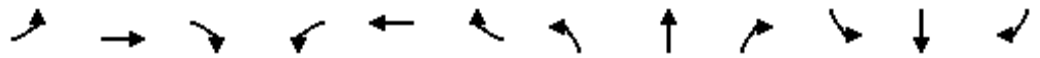


# HCM 6th Signalized Intersection Summary

## 1: Jacaranda Avenue/Jacaranda Road & Bear Valley Road

Apple Bear Commercial Project

Cumulative (2045) WP AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	137	1537	69	251	1859	47	85	54	307	17	17	40
Future Volume (veh/h)	137	1537	69	251	1859	47	85	54	307	17	17	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	144	1618	73	264	1957	49	89	57	323	18	18	42
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	192	1681	76	286	2267	703	207	133	296	349	367	398
Arrive On Green	0.05	0.33	0.33	0.16	0.44	0.44	0.18	0.18	0.18	0.19	0.19	0.19
Sat Flow, veh/h	3510	5087	229	1810	5187	1608	1124	720	1608	1810	1900	1608
Grp Volume(v), veh/h	144	1100	591	264	1957	49	146	0	323	18	18	42
Grp Sat Flow(s),veh/h/ln	1755	1729	1859	1810	1729	1608	1844	0	1608	1810	1900	1608
Q Serve(g_s), s	5.9	45.3	45.3	20.9	49.4	2.6	10.2	0.0	26.7	1.2	1.1	2.9
Cycle Q Clear(g_c), s	5.9	45.3	45.3	20.9	49.4	2.6	10.2	0.0	26.7	1.2	1.1	2.9
Prop In Lane	1.00		0.12	1.00		1.00	0.61		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	192	1143	614	286	2267	703	340	0	296	349	367	398
V/C Ratio(X)	0.75	0.96	0.96	0.92	0.86	0.07	0.43	0.00	1.09	0.05	0.05	0.11
Avail Cap(c_a), veh/h	738	1143	614	312	2267	703	340	0	296	349	367	398
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.6	47.7	47.7	60.2	36.9	23.7	52.4	0.0	59.2	47.7	47.7	42.1
Incr Delay (d2), s/veh	2.2	19.0	28.2	29.6	4.7	0.2	3.9	0.0	78.9	0.3	0.3	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	21.7	24.9	11.7	20.8	1.0	5.0	0.0	17.1	0.6	0.6	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.8	66.6	75.9	89.8	41.5	23.9	56.3	0.0	138.0	48.0	47.9	42.7
LnGrp LOS	E	E	E	F	D	C	E	A	F	D	D	D
Approach Vol, veh/h		1835			2270			469			78	
Approach Delay, s/veh		69.9			46.8			112.6			45.1	
Approach LOS		E			D			F			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	27.9	53.1		32.0	12.4	68.6		32.0				
Change Period (Y+Rc), s	5.0	5.2		* 5.3	4.5	5.2		4.0				
Max Green Setting (Gmax), s	25.0	45.8		* 27	30.5	40.8		28.0				
Max Q Clear Time (g_c+I1), s	22.9	47.3		28.7	7.9	51.4		4.9				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.1	0.0		0.1				

### Intersection Summary

HCM 6th Ctrl Delay	62.5
HCM 6th LOS	E

### Notes

- User approved volume balancing among the lanes for turning movement.
- \* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



HCM 6th Signalized Intersection Summary  
 2: Bear Valley Road & Mojave Fish Hatchery Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑↑↑	↗	↖↗	↑↑↑	↗	↖	↑	↗	↖	↗	↖
Traffic Volume (veh/h)	173	1626	62	49	2041	270	46	6	26	119	5	70
Future Volume (veh/h)	173	1626	62	49	2041	270	46	6	26	119	5	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	175	1642	63	49	2062	273	50	0	26	120	5	71
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	199	2090	649	109	1681	821	807	0	359	336	20	283
Arrive On Green	0.11	0.40	0.40	0.03	0.32	0.32	0.22	0.00	0.22	0.19	0.19	0.19
Sat Flow, veh/h	1810	5187	1610	3510	5187	1610	3619	0	1610	1810	107	1519
Grp Volume(v), veh/h	175	1642	63	49	2062	273	50	0	26	120	0	76
Grp Sat Flow(s),veh/h/ln	1810	1729	1610	1755	1729	1610	1810	0	1610	1810	0	1626
Q Serve(g_s), s	12.9	37.3	3.3	1.9	43.8	13.5	1.5	0.0	1.7	7.8	0.0	5.4
Cycle Q Clear(g_c), s	12.9	37.3	3.3	1.9	43.8	13.5	1.5	0.0	1.7	7.8	0.0	5.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.93
Lane Grp Cap(c), veh/h	199	2090	649	109	1681	821	807	0	359	336	0	302
V/C Ratio(X)	0.88	0.79	0.10	0.45	1.23	0.33	0.06	0.00	0.07	0.36	0.00	0.25
Avail Cap(c_a), veh/h	201	2090	649	390	1681	821	807	0	359	336	0	302
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	59.2	35.2	25.0	64.3	45.6	19.5	41.3	0.0	41.4	47.9	0.0	46.9
Incr Delay (d2), s/veh	31.7	3.1	0.3	1.1	107.4	1.1	0.1	0.0	0.4	2.9	0.0	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.5	15.5	1.3	0.8	34.6	7.3	0.7	0.0	0.7	3.9	0.0	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	90.9	38.3	25.3	65.3	153.1	20.6	41.5	0.0	41.8	50.8	0.0	48.9
LnGrp LOS	F	D	C	E	F	C	D	A	D	D	A	D
Approach Vol, veh/h		1880			2384			76			196	
Approach Delay, s/veh		42.7			136.1			41.6			50.1	
Approach LOS		D			F			D			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.2	60.8		30.0	19.8	50.2		35.0				
Change Period (Y+Rc), s	5.0	6.4		4.9	5.0	6.4		4.9				
Max Green Setting (Gmax), s	15.0	43.6		25.1	15.0	43.6		30.1				
Max Q Clear Time (g_c+1), s	13.9	39.3		9.8	14.9	45.8		3.7				
Green Ext Time (p_c), s	0.0	3.3		0.2	0.0	0.0		0.0				

Intersection Summary

HCM 6th Ctrl Delay	92.1
HCM 6th LOS	F

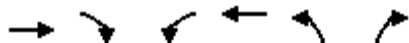
Notes

User approved volume balancing among the lanes for turning movement.

# HCM 6th Signalized Intersection Summary

## 3: Jess Ranch Parkway & Bear Valley Road

Apple Bear Commercial Project  
Cumulative (2045) WP AM



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↑	↔	↑↑↑	↔	↑
Traffic Volume (veh/h)	1493	192	94	2054	306	61
Future Volume (veh/h)	1493	192	94	2054	306	61
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	1572	202	99	2162	322	64
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	2534	787	153	2968	1157	601
Arrive On Green	0.49	0.49	0.04	0.57	0.33	0.33
Sat Flow, veh/h	5358	1610	3510	5358	3510	1610
Grp Volume(v), veh/h	1572	202	99	2162	322	64
Grp Sat Flow(s),veh/h/ln	1729	1610	1755	1729	1755	1610
Q Serve(g_s), s	25.6	8.4	3.2	35.2	7.8	3.0
Cycle Q Clear(g_c), s	25.6	8.4	3.2	35.2	7.8	3.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2534	787	153	2968	1157	601
V/C Ratio(X)	0.62	0.26	0.65	0.73	0.28	0.11
Avail Cap(c_a), veh/h	2534	787	317	2968	1157	601
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.52	0.52	1.00	1.00
Uniform Delay (d), s/veh	21.6	17.2	54.1	18.0	28.5	23.5
Incr Delay (d2), s/veh	1.2	0.8	0.9	0.8	0.6	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.7	3.1	1.4	12.4	3.3	3.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	22.7	18.0	55.0	18.9	29.1	23.9
LnGrp LOS	C	B	E	B	C	C
Approach Vol, veh/h	1774			2261	386	
Approach Delay, s/veh	22.2			20.5	28.2	
Approach LOS	C			C	C	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	9.6	62.4		43.0		72.0
Change Period (Y+Rc), s	4.6	6.2		5.1		6.2
Max Green Setting (Gmax), s	40.4	50.8		37.9		65.8
Max Q Clear Time (g_c+1), s	17.2	27.6		9.8		37.2
Green Ext Time (p_c), s	0.1	18.5		0.7		25.6
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			21.8			
HCM 6th LOS			C			

HCM 6th Signalized Intersection Summary  
4: Reata Road & Bear Valley Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗	↑ ↑ ↑	↖	↖ ↗	↑ ↑ ↑		↖	↑ ↑	↖	↖	↑	↖
Traffic Volume (veh/h)	222	1256	50	64	1812	26	38	26	30	32	43	298
Future Volume (veh/h)	222	1256	50	64	1812	26	38	26	30	32	43	298
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	234	1322	0	67	1907	27	40	27	32	34	45	314
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	291	2624		112	2396	34	380	1181	520	497	622	520
Arrive On Green	0.08	0.51	0.00	0.03	0.45	0.45	0.33	0.33	0.33	0.33	0.33	0.33
Sat Flow, veh/h	3510	5187	1610	3510	5270	75	1038	3610	1588	1364	1900	1588
Grp Volume(v), veh/h	234	1322	0	67	1251	683	40	27	32	34	45	314
Grp Sat Flow(s),veh/h/ln	1755	1729	1610	1755	1729	1887	1038	1805	1588	1364	1900	1588
Q Serve(g_s), s	8.2	21.1	0.0	2.4	38.6	38.7	3.5	0.6	1.7	2.2	2.0	20.7
Cycle Q Clear(g_c), s	8.2	21.1	0.0	2.4	38.6	38.7	5.5	0.6	1.7	2.8	2.0	20.7
Prop In Lane	1.00		1.00	1.00		0.04	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	291	2624		112	1572	858	380	1181	520	497	622	520
V/C Ratio(X)	0.80	0.50		0.60	0.80	0.80	0.11	0.02	0.06	0.07	0.07	0.60
Avail Cap(c_a), veh/h	432	2624		432	1572	858	380	1181	520	497	622	520
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.74	0.74	0.00	0.77	0.77	0.77	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.3	20.5	0.0	59.7	29.1	29.1	30.9	28.5	28.9	29.5	29.0	35.3
Incr Delay (d2), s/veh	2.8	0.5	0.0	1.5	3.3	5.9	0.6	0.0	0.2	0.3	0.2	5.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.6	8.0	0.0	1.0	15.6	17.6	0.9	0.3	0.7	0.7	1.0	8.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.1	21.0	0.0	61.2	32.4	35.1	31.4	28.5	29.1	29.7	29.2	40.4
LnGrp LOS	E	C		E	C	D	C	C	C	C	C	D
Approach Vol, veh/h		1556			2001			99			393	
Approach Delay, s/veh		26.7			34.3			29.9			38.2	
Approach LOS		C			C			C			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.6	69.4		46.0	16.0	63.0		46.0				
Change Period (Y+Rc), s	5.6	6.2		5.1	5.6	6.2		5.1				
Max Green Setting (Gmax), s	15.4	51.8		40.9	15.4	51.8		40.9				
Max Q Clear Time (g_c+1), s	11.4	23.1		22.7	10.2	40.7		7.5				
Green Ext Time (p_c), s	0.1	17.4		0.7	0.2	10.1		0.3				

Intersection Summary

HCM 6th Ctrl Delay	31.7
HCM 6th LOS	C

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary  
5: Apple Valley Road & Pimlico Road

Apple Bear Commercial Project  
Cumulative (2045) WP AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	168	38	27	37	28	41	51	680	38	68	923	208
Future Volume (veh/h)	168	38	27	37	28	41	51	680	38	68	923	208
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	177	40	28	39	29	43	54	716	40	72	972	219
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	254	304	258	248	304	258	70	2399	1057	92	2443	1090
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.04	0.66	0.66	0.05	0.68	0.68
Sat Flow, veh/h	1349	1900	1610	1354	1900	1610	1810	3610	1590	1810	3610	1610
Grp Volume(v), veh/h	177	40	28	39	29	43	54	716	40	72	972	219
Grp Sat Flow(s),veh/h/ln	1349	1900	1610	1354	1900	1610	1810	1805	1590	1810	1805	1610
Q Serve(g_s), s	16.7	2.3	1.9	3.3	1.7	3.0	3.8	10.8	1.1	5.1	15.5	6.6
Cycle Q Clear(g_c), s	18.4	2.3	1.9	5.7	1.7	3.0	3.8	10.8	1.1	5.1	15.5	6.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	254	304	258	248	304	258	70	2399	1057	92	2443	1090
V/C Ratio(X)	0.70	0.13	0.11	0.16	0.10	0.17	0.77	0.30	0.04	0.78	0.40	0.20
Avail Cap(c_a), veh/h	421	539	457	420	547	463	228	2399	1057	367	2443	1090
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.82	0.82	0.82	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.4	46.8	46.7	49.3	46.6	47.1	61.9	9.1	7.5	61.0	9.3	7.9
Incr Delay (d2), s/veh	1.3	0.1	0.1	0.1	0.1	0.1	5.4	0.3	0.1	5.3	0.5	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	1.1	0.8	1.1	0.8	1.2	1.8	3.8	0.4	2.4	5.3	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.7	46.9	46.7	49.4	46.6	47.2	67.3	9.4	7.6	66.3	9.8	8.3
LnGrp LOS	E	D	D	D	D	D	E	A	A	E	A	A
Approach Vol, veh/h		245			111			810			1263	
Approach Delay, s/veh		53.3			47.8			13.2			12.7	
Approach LOS		D			D			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.2	92.9		25.9	9.6	94.5		25.9				
Change Period (Y+Rc), s	4.6	6.5		5.1	4.6	6.5		* 5.1				
Max Green Setting (Gmax), s	20.4	50.5		36.9	16.4	60.5		* 37				
Max Q Clear Time (g_c+1), s	12.8			20.4	5.8	17.5		7.7				
Green Ext Time (p_c), s	0.0	0.7		0.4	0.0	0.8		0.2				

Intersection Summary

HCM 6th Ctrl Delay	18.6
HCM 6th LOS	B

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary  
6: Apple Valley Road & Bear Valley Road

Apple Bear Commercial Project  
Cumulative (2045) WP AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗	↑ ↑ ↑		↖ ↗	↑ ↑ ↑	↖	↖	↑ ↑ ↑	↖	↖	↑ ↑	↖ ↗
Traffic Volume (veh/h)	385	914	48	177	1390	262	82	172	90	249	210	464
Future Volume (veh/h)	385	914	48	177	1390	262	82	172	90	249	210	464
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	405	962	51	186	1463	276	86	181	95	262	221	488
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	435	2525	134	218	2276	871	102	1205	373	184	1004	1138
Arrive On Green	0.12	0.50	0.50	0.06	0.44	0.44	0.06	0.23	0.23	0.10	0.28	0.28
Sat Flow, veh/h	3510	5043	267	3510	5187	1610	1810	5187	1606	1810	3610	2831
Grp Volume(v), veh/h	405	659	354	186	1463	276	86	181	95	262	221	488
Grp Sat Flow(s),veh/h/ln	1755	1729	1852	1755	1729	1610	1810	1729	1606	1810	1805	1415
Q Serve(g_s), s	24.0	24.7	24.8	11.0	46.3	19.9	9.9	5.8	10.1	21.4	9.9	26.2
Cycle Q Clear(g_c), s	24.0	24.7	24.8	11.0	46.3	19.9	9.9	5.8	10.1	21.4	9.9	26.2
Prop In Lane	1.00		0.14	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	435	1732	927	218	2276	871	102	1205	373	184	1004	1138
V/C Ratio(X)	0.93	0.38	0.38	0.85	0.64	0.32	0.84	0.15	0.25	1.42	0.22	0.43
Avail Cap(c_a), veh/h	776	1732	927	441	2276	871	184	1205	373	184	1004	1138
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.87	0.87	0.87	1.00	1.00	1.00	1.00	1.00	1.00	0.93	0.93	0.93
Uniform Delay (d), s/veh	91.1	32.3	32.4	97.5	46.0	26.7	98.2	64.1	65.8	94.3	58.3	45.4
Incr Delay (d2), s/veh	5.0	0.6	1.0	3.6	1.4	1.0	7.0	0.3	1.6	216.2	0.5	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.1	10.5	11.4	5.1	20.0	7.9	4.8	2.6	4.3	21.0	4.6	9.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	96.1	32.9	33.4	101.2	47.5	27.7	105.1	64.4	67.4	310.5	58.8	46.5
LnGrp LOS	F	C	C	F	D	C	F	E	E	F	E	D
Approach Vol, veh/h		1418			1925			362			971	
Approach Delay, s/veh		51.1			49.8			74.9			120.5	
Approach LOS		D			D			E			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	17.6	111.4	16.4	64.6	30.6	98.4	26.0	55.0				
Change Period (Y+Rc), s	4.6	6.2	4.6	6.2	4.6	6.2	4.6	6.2				
Max Green Setting (Gmax), s	20.4	91.8	21.4	48.8	46.4	71.8	21.4	48.8				
Max Q Clear Time (g_c+M), s	11.0	26.8	11.9	28.2	26.0	48.3	23.4	12.1				
Green Ext Time (p_c), s	0.0	0.8	0.0	0.3	0.0	1.6	0.0	0.2				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay											66.8	
HCM 6th LOS											E	

HCM 6th Signalized Intersection Summary  
 7: Apple Bear Road/Westmont Drive & Bear Valley Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	104	1009	95	172	1547	101	180	5	0	78	4	61
Future Volume (veh/h)	104	1009	95	172	1547	101	180	5	0	78	4	61
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	109	1062	100	181	1628	106	189	5	0	82	4	64
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	138	1466	654	280	2613	811	371	9	0	502	25	395
Arrive On Green	0.08	0.41	0.41	0.15	0.50	0.50	0.26	0.26	0.00	0.26	0.26	0.26
Sat Flow, veh/h	1810	3610	1610	1810	5187	1610	1162	35	0	1434	96	1529
Grp Volume(v), veh/h	109	1062	100	181	1628	106	194	0	0	82	0	68
Grp Sat Flow(s),veh/h/ln	1810	1805	1610	1810	1729	1610	1197	0	0	1434	0	1625
Q Serve(g_s), s	5.9	24.8	3.9	9.4	22.7	3.5	12.8	0.0	0.0	0.0	0.0	3.2
Cycle Q Clear(g_c), s	5.9	24.8	3.9	9.4	22.7	3.5	16.0	0.0	0.0	3.5	0.0	3.2
Prop In Lane	1.00		1.00	1.00		1.00	0.97		0.00	1.00		0.94
Lane Grp Cap(c), veh/h	138	1466	654	280	2613	811	380	0	0	502	0	419
V/C Ratio(X)	0.79	0.72	0.15	0.65	0.62	0.13	0.51	0.00	0.00	0.16	0.00	0.16
Avail Cap(c_a), veh/h	226	1466	654	326	2613	811	380	0	0	502	0	419
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	45.4	25.0	18.8	39.7	17.9	13.2	34.9	0.0	0.0	28.8	0.0	28.7
Incr Delay (d2), s/veh	9.7	3.2	0.5	3.5	1.1	0.3	0.5	0.0	0.0	0.7	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	10.2	1.4	4.2	8.2	1.2	4.3	0.0	0.0	1.6	0.0	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.1	28.1	19.3	43.1	19.1	13.5	35.4	0.0	0.0	29.5	0.0	29.6
LnGrp LOS	E	C	B	D	B	B	D	A	A	C	A	C
Approach Vol, veh/h		1271			1915			194			150	
Approach Delay, s/veh		29.8			21.0			35.4			29.5	
Approach LOS		C			C			D			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	32.0	47.6		30.4	12.7	56.9		30.4				
Change Period (Y+Rc), s	6.5	* 7		4.6	5.1	6.5		4.6				
Max Green Setting (Gmax), s	13.0	* 41		25.8	12.5	45.5		25.8				
Max Q Clear Time (g_c+I), s	11.4	26.8		5.5	7.9	24.7		18.0				
Green Ext Time (p_c), s	0.2	5.9		0.3	0.1	11.5		0.4				

Intersection Summary

HCM 6th Ctrl Delay	25.3
HCM 6th LOS	C

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection						
Int Delay, s/veh	0.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑		↑↑		↑
Traffic Vol, veh/h	1024	3	0	1745	0	66
Future Vol, veh/h	1024	3	0	1745	0	66
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1078	3	0	1837	0	69

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	-	-	539
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	3.3
Pot Cap-1 Maneuver	-	-	0	-	*687
Stage 1	-	-	0	-	-
Stage 2	-	-	0	-	-
Platoon blocked, %	-	-	-	-	1
Mov Cap-1 Maneuver	-	-	-	-	*687
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-























Approach	EB	WB	NB
HCM Control Delay, s	0	0	10.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	687	-	-	-
HCM Lane V/C Ratio	0.101	-	-	-
HCM Control Delay (s)	10.8	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0.3	-	-	-

Notes  
 -: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

HCM 6th Signalized Intersection Summary  
9: Deep Creek Road & Bear Valley Road

Apple Bear Commercial Project  
Cumulative (2045) WP AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	955	101	116	1553	41	196	51	81	28	28	49
Future Volume (veh/h)	43	955	101	116	1553	41	196	51	81	28	28	49
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	45	1005	106	122	1635	43	206	54	85	29	29	52
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	59	1694	756	151	1869	49	324	166	262	47	46	83
Arrive On Green	0.03	0.47	0.47	0.08	0.52	0.52	0.18	0.25	0.25	0.03	0.08	0.08
Sat Flow, veh/h	1810	3610	1610	1810	3594	94	1810	665	1047	1810	610	1093
Grp Volume(v), veh/h	45	1005	106	122	819	859	206	0	139	29	0	81
Grp Sat Flow(s),veh/h/ln	1810	1805	1610	1810	1805	1883	1810	0	1712	1810	0	1703
Q Serve(g_s), s	3.0	24.6	4.5	8.0	47.9	48.3	12.7	0.0	8.0	1.9	0.0	5.5
Cycle Q Clear(g_c), s	3.0	24.6	4.5	8.0	47.9	48.3	12.7	0.0	8.0	1.9	0.0	5.5
Prop In Lane	1.00		1.00	1.00		0.05	1.00		0.61	1.00		0.64
Lane Grp Cap(c), veh/h	59	1694	756	151	939	979	324	0	428	47	0	129
V/C Ratio(X)	0.77	0.59	0.14	0.81	0.87	0.88	0.64	0.00	0.32	0.62	0.00	0.63
Avail Cap(c_a), veh/h	81	1694	756	232	939	979	324	0	428	181	0	255
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	57.6	23.4	18.1	54.1	25.3	25.4	45.6	0.0	36.7	57.9	0.0	53.8
Incr Delay (d2), s/veh	15.7	1.5	0.4	6.0	9.0	9.0	9.2	0.0	2.0	12.7	0.0	4.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	9.9	1.6	3.7	20.4	21.4	6.2	0.0	3.4	1.0	0.0	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.3	25.0	18.5	60.1	34.3	34.4	54.8	0.0	38.7	70.6	0.0	58.7
LnGrp LOS	E	C	B	E	C	C	D	A	D	E	A	E
Approach Vol, veh/h		1156			1800			345			110	
Approach Delay, s/veh		26.2			36.1			48.3			61.8	
Approach LOS		C			D			D			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.6	64.3	28.0	13.1	8.5	70.4	7.1	34.0				
Change Period (Y+Rc), s	4.6	8.0	6.5	4.0	4.6	8.0	4.0	4.0				
Max Green Setting (Gmax), s	15.4	42.0	21.5	18.0	5.4	52.0	12.0	30.0				
Max Q Clear Time (g_c+I1), s	10.0	26.6	14.7	7.5	5.0	50.3	3.9	10.0				
Green Ext Time (p_c), s	0.0	4.8	0.1	0.2	0.0	1.4	0.0	0.6				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			34.8									
HCM 6th LOS			C									



HCM 6th Signalized Intersection Summary  
 10: Kiowa Road & Bear Valley Road

Apple Bear Commercial Project  
 Cumulative (2045) WP AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	134	717	180	105	964	58	336	152	78	57	152	228
Future Volume (veh/h)	134	717	180	105	964	58	336	152	78	57	152	228
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1976	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	141	755	189	111	1015	61	354	160	82	60	160	240
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	164	1399	649	134	1337	597	317	810	395	77	767	340
Arrive On Green	0.09	0.39	0.39	0.07	0.37	0.37	0.18	0.34	0.34	0.04	0.21	0.21
Sat Flow, veh/h	1810	3610	1675	1810	3610	1610	1810	2349	1147	1810	3610	1599
Grp Volume(v), veh/h	141	755	189	111	1015	61	354	121	121	60	160	240
Grp Sat Flow(s),veh/h/ln	1810	1805	1675	1810	1805	1610	1810	1805	1691	1810	1805	1599
Q Serve(g_s), s	11.1	23.5	11.3	8.8	35.7	3.6	25.4	6.8	7.3	4.8	5.3	20.2
Cycle Q Clear(g_c), s	11.1	23.5	11.3	8.8	35.7	3.6	25.4	6.8	7.3	4.8	5.3	20.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.68	1.00		1.00
Lane Grp Cap(c), veh/h	164	1399	649	134	1337	597	317	622	583	77	767	340
V/C Ratio(X)	0.86	0.54	0.29	0.83	0.76	0.10	1.12	0.19	0.21	0.78	0.21	0.71
Avail Cap(c_a), veh/h	255	1399	649	255	1337	597	317	622	583	255	767	340
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.0	34.4	30.7	66.2	40.0	29.9	59.8	33.4	33.5	68.7	47.1	52.9
Incr Delay (d2), s/veh	10.2	1.5	1.1	4.9	4.1	0.3	85.8	0.7	0.8	6.1	0.6	11.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	10.2	4.7	4.1	15.8	1.4	18.9	3.1	3.1	2.3	2.4	9.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.1	35.9	31.8	71.2	44.1	30.2	145.6	34.1	34.3	74.8	47.7	64.6
LnGrp LOS	E	D	C	E	D	C	F	C	C	E	D	E
Approach Vol, veh/h	1085			1187			596			460		
Approach Delay, s/veh	40.3			45.9			100.4			60.1		
Approach LOS	D			D			F			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.3	62.7	10.8	56.2	17.8	60.2	30.0	37.0				
Change Period (Y+Rc), s	4.6	6.5	4.6	6.2	4.6	6.5	4.6	6.2				
Max Green Setting (Gmax), s	20.4	46.5	20.4	35.8	20.4	46.5	25.4	30.8				
Max Q Clear Time (g_c+10), s	10.8	25.5	6.8	9.3	13.1	37.7	27.4	22.2				
Green Ext Time (p_c), s	0.1	9.5	0.0	1.2	0.1	6.0	0.0	1.1				

Intersection Summary

HCM 6th Ctrl Delay	55.8
HCM 6th LOS	E

Intersection						
Int Delay, s/veh	6.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	135	50	0	200	71
Future Vol, veh/h	0	135	50	0	200	71
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	142	53	0	211	75

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	550	53	0	0	53	0
Stage 1	53	-	-	-	-	-
Stage 2	497	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	505	1020	-	-	1566	-
Stage 1	975	-	-	-	-	-
Stage 2	617	-	-	-	-	-
Platoon blocked, %	1	-	-	-	-	-
Mov Cap-1 Maneuver	434	1020	-	-	1566	-
Mov Cap-2 Maneuver	434	-	-	-	-	-
Stage 1	975	-	-	-	-	-
Stage 2	530	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.1	0	5.7
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	1020	1566
HCM Lane V/C Ratio	-	-	0.139	0.134
HCM Control Delay (s)	-	-	9.1	7.7
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0.5

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	0	50	0	0	71	0
Future Vol, veh/h	0	50	0	0	71	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	53	0	0	75	0

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	150	0	0	0	0	0
Stage 1	0	-	-	-	-	-
Stage 2	150	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	847	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	883	-	-	-	-	-
Platoon blocked, %						
Mov Cap-1 Maneuver	847	-	-	-	-	-
Mov Cap-2 Maneuver	847	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	883	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s		0	
HCM LOS	-		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	-	-
HCM Lane LOS	-	-	-	-
HCM 95th %tile Q(veh)	-	-	-	-

Intersection						
Int Delay, s/veh	0.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑↑		↑
Traffic Vol, veh/h	1008	80	0	1819	0	48
Future Vol, veh/h	1008	80	0	1819	0	48
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1061	84	0	1915	0	51

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	-	-	573
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	3.9
Pot Cap-1 Maneuver	-	-	0	-	*701
Stage 1	-	-	0	-	0
Stage 2	-	-	0	-	0
Platoon blocked, %	-	-	-	-	1
Mov Cap-1 Maneuver	-	-	-	-	*701
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	10.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	701	-	-	-
HCM Lane V/C Ratio	0.072	-	-	-
HCM Control Delay (s)	10.5	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0.2	-	-	-

Notes  
 -: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Intersection						
Int Delay, s/veh	5.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	40	0	0	23	3	0
Future Vol, veh/h	40	0	0	23	3	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	42	0	0	24	3	0

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	27	3	3	0	0
Stage 1	3	-	-	-	-
Stage 2	24	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-
Pot Cap-1 Maneuver	993	1087	1632	-	-
Stage 1	1025	-	-	-	-
Stage 2	1004	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	993	1087	1632	-	-
Mov Cap-2 Maneuver	993	-	-	-	-
Stage 1	1025	-	-	-	-
Stage 2	1004	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.8	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1632	-	993	-	-
HCM Lane V/C Ratio	-	-	0.042	-	-
HCM Control Delay (s)	0	-	8.8	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection						
Int Delay, s/veh	7.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T		T		T	
Traffic Vol, veh/h	23	2	3	0	3	0
Future Vol, veh/h	23	2	3	0	3	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	24	2	3	0	3	0

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	9	3	3	0	0
Stage 1	3	-	-	-	-
Stage 2	6	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-
Pot Cap-1 Maneuver	1017	1087	1632	-	-
Stage 1	1025	-	-	-	-
Stage 2	1022	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	1015	1087	1632	-	-
Mov Cap-2 Maneuver	1015	-	-	-	-
Stage 1	1023	-	-	-	-
Stage 2	1022	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.6	7.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1632	-	1020	-	-
HCM Lane V/C Ratio	0.002	-	0.026	-	-
HCM Control Delay (s)	7.2	0	8.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

# HCM 6th Signalized Intersection Summary

## 1: Jacaranda Avenue/Jacaranda Road & Bear Valley Road

Apple Bear Commercial Project  
Cumulative (2045) WP PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑↔		↔	↑↑↑	↔		↔↔		↔	↔	↔
Traffic Volume (veh/h)	38	2153	50	350	1896	24	89	9	455	29	20	39
Future Volume (veh/h)	38	2153	50	350	1896	24	89	9	455	29	20	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	39	2197	51	357	1935	24	91	9	464	25	27	40
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	77	1647	38	312	2437	755	305	30	296	349	367	346
Arrive On Green	0.02	0.32	0.32	0.17	0.47	0.47	0.18	0.18	0.18	0.19	0.19	0.19
Sat Flow, veh/h	3510	5215	121	1810	5187	1607	1654	164	1610	1810	1900	1610
Grp Volume(v), veh/h	39	1455	793	357	1935	24	100	0	464	25	27	40
Grp Sat Flow(s),veh/h/ln	1755	1729	1878	1810	1729	1607	1817	0	1610	1810	1900	1610
Q Serve(g_s), s	1.6	45.8	45.8	25.0	45.7	1.2	6.9	0.0	26.7	1.6	1.7	2.9
Cycle Q Clear(g_c), s	1.6	45.8	45.8	25.0	45.7	1.2	6.9	0.0	26.7	1.6	1.7	2.9
Prop In Lane	1.00		0.06	1.00		1.00	0.91		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	77	1092	593	312	2437	755	335	0	296	349	367	346
V/C Ratio(X)	0.51	1.33	1.34	1.14	0.79	0.03	0.30	0.00	1.56	0.07	0.07	0.12
Avail Cap(c_a), veh/h	738	1092	593	312	2437	755	335	0	296	349	367	346
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	70.1	49.6	49.6	60.0	32.5	20.7	51.1	0.0	59.2	47.9	47.9	45.8
Incr Delay (d2), s/veh	1.9	155.8	162.7	95.9	2.8	0.1	2.3	0.0	270.1	0.4	0.4	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	42.6	47.4	19.4	18.7	0.4	3.3	0.0	32.9	0.8	0.9	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.1	205.4	212.3	155.9	35.3	20.8	53.3	0.0	329.2	48.3	48.3	46.5
LnGrp LOS	E	F	F	F	D	C	D	A	F	D	D	D
Approach Vol, veh/h		2287			2316			564				92
Approach Delay, s/veh		205.5			53.7			280.3				47.5
Approach LOS		F			D			F				D
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	30.0	51.0		32.0	7.7	73.3		32.0				
Change Period (Y+Rc), s	5.0	5.2		* 5.3	4.5	5.2		4.0				
Max Green Setting (Gmax), s	25.0	45.8		* 27	30.5	40.8		28.0				
Max Q Clear Time (g_c+I1), s	27.0	47.8		28.7	3.6	47.7		4.9				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		0.1				

### Intersection Summary

HCM 6th Ctrl Delay 143.9  
HCM 6th LOS F

### Notes

User approved volume balancing among the lanes for turning movement.  
\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

# HCM 6th Signalized Intersection Summary

## 2: Bear Valley Road & Mojave Fish Hatchery Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	62	2469	106	126	2065	106	113	9	70	137	5	91
Future Volume (veh/h)	62	2469	106	126	2065	106	113	9	70	137	5	91
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	63	2519	108	129	2107	108	121	0	71	140	5	92
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.99
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	81	1987	617	179	2020	923	807	0	357	336	16	286
Arrive On Green	0.04	0.38	0.38	0.05	0.39	0.39	0.22	0.00	0.22	0.19	0.19	0.19
Sat Flow, veh/h	1810	5187	1610	3510	5187	1602	3619	0	1602	1810	84	1539
Grp Volume(v), veh/h	63	2519	108	129	2107	108	121	0	71	140	0	97
Grp Sat Flow(s),veh/h/ln	1810	1729	1610	1755	1729	1602	1810	0	1602	1810	0	1623
Q Serve(g_s), s	4.7	51.7	6.0	4.9	52.6	4.1	3.6	0.0	4.9	9.2	0.0	7.0
Cycle Q Clear(g_c), s	4.7	51.7	6.0	4.9	52.6	4.1	3.6	0.0	4.9	9.2	0.0	7.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.95
Lane Grp Cap(c), veh/h	81	1987	617	179	2020	923	807	0	357	336	0	302
V/C Ratio(X)	0.78	1.27	0.18	0.72	1.04	0.12	0.15	0.00	0.20	0.42	0.00	0.32
Avail Cap(c_a), veh/h	201	1987	617	390	2020	923	807	0	357	336	0	302
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	63.8	41.6	27.5	63.1	41.2	13.1	42.2	0.0	42.6	48.5	0.0	47.6
Incr Delay (d2), s/veh	5.9	124.5	0.6	2.1	32.4	0.3	0.4	0.0	1.2	3.8	0.0	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	43.7	2.3	2.2	27.1	2.3	1.7	0.0	2.1	4.6	0.0	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.7	166.2	28.1	65.2	73.6	13.3	42.6	0.0	43.9	52.2	0.0	50.4
LnGrp LOS	E	F	C	E	F	B	D	A	D	D	A	D
Approach Vol, veh/h		2690			2344			192			237	
Approach Delay, s/veh		158.4			70.3			43.1			51.5	
Approach LOS		F			E			D			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.9	58.1		30.0	11.0	59.0		35.0				
Change Period (Y+Rc), s	5.0	6.4		4.9	5.0	6.4		4.9				
Max Green Setting (Gmax), s	15.0	43.6		25.1	15.0	43.6		30.1				
Max Q Clear Time (g_c+10), s	10.0	53.7		11.2	6.7	54.6		6.9				
Green Ext Time (p_c), s	0.0	0.0		0.2	0.0	0.0		0.1				

### Intersection Summary

HCM 6th Ctrl Delay	111.9
HCM 6th LOS	F

### Notes

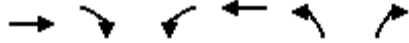
User approved volume balancing among the lanes for turning movement.



# HCM 6th Signalized Intersection Summary

## 3: Jess Ranch Parkway & Bear Valley Road

Apple Bear Commercial Project  
Cumulative (2045) WP PM



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↑	↔	↑↑↑	↔	↑
Traffic Volume (veh/h)	2126	361	227	1789	508	207
Future Volume (veh/h)	2126	361	227	1789	508	207
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	2192	372	234	1844	524	213
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	2329	720	292	2968	1157	665
Arrive On Green	0.45	0.45	0.08	0.57	0.33	0.33
Sat Flow, veh/h	5358	1603	3510	5358	3510	1610
Grp Volume(v), veh/h	2192	372	234	1844	524	213
Grp Sat Flow(s),veh/h/ln	1729	1603	1755	1729	1755	1610
Q Serve(g_s), s	46.4	19.1	7.5	27.1	13.5	10.3
Cycle Q Clear(g_c), s	46.4	19.1	7.5	27.1	13.5	10.3
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2329	720	292	2968	1157	665
V/C Ratio(X)	0.94	0.52	0.80	0.62	0.45	0.32
Avail Cap(c_a), veh/h	2329	720	317	2968	1157	665
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	0.69	0.69	1.00	1.00
Uniform Delay (d), s/veh	30.2	22.7	51.8	16.3	30.4	22.9
Incr Delay (d2), s/veh	9.2	2.6	8.1	0.7	1.3	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	19.5	7.2	3.5	9.6	5.8	11.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	39.4	25.4	59.9	17.0	31.7	24.1
LnGrp LOS	D	C	E	B	C	C
Approach Vol, veh/h	2564			2078	737	
Approach Delay, s/veh	37.4			21.8	29.5	
Approach LOS	D			C	C	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	34.2	57.8		43.0		72.0
Change Period (Y+Rc), s	4.6	6.2		5.1		6.2
Max Green Setting (Gmax), s	40.4	50.8		37.9		65.8
Max Q Clear Time (g_c+19.5), s	19.5	48.4		15.5		29.1
Green Ext Time (p_c), s	0.0	2.4		1.4		28.5
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			30.3			
HCM 6th LOS			C			

HCM 6th Signalized Intersection Summary  
4: Reata Road & Bear Valley Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗	↑ ↑ ↑	↖	↖ ↗	↑ ↑ ↑		↖	↑ ↑	↖	↖	↑	↖
Traffic Volume (veh/h)	320	1853	139	159	1512	27	219	114	166	41	111	284
Future Volume (veh/h)	320	1853	139	159	1512	27	219	114	166	41	111	284
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	330	1910	0	164	1559	28	226	118	171	42	114	293
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	384	2462		221	2246	40	340	1181	526	395	622	526
Arrive On Green	0.11	0.47	0.00	0.06	0.43	0.43	0.33	0.33	0.33	0.33	0.33	0.33
Sat Flow, veh/h	3510	5187	1610	3510	5247	94	993	3610	1609	1107	1900	1609
Grp Volume(v), veh/h	330	1910	0	164	1027	560	226	118	171	42	114	293
Grp Sat Flow(s),veh/h/ln	1755	1729	1610	1755	1729	1883	993	1805	1609	1107	1900	1609
Q Serve(g_s), s	11.6	38.3	0.0	5.7	30.2	30.2	26.3	2.8	10.0	3.4	5.4	18.7
Cycle Q Clear(g_c), s	11.6	38.3	0.0	5.7	30.2	30.2	31.7	2.8	10.0	6.3	5.4	18.7
Prop In Lane	1.00		1.00	1.00		0.05	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	384	2462		221	1480	806	340	1181	526	395	622	526
V/C Ratio(X)	0.86	0.78		0.74	0.69	0.69	0.66	0.10	0.32	0.11	0.18	0.56
Avail Cap(c_a), veh/h	432	2462		432	1480	806	340	1181	526	395	622	526
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.33	0.33	0.00	0.80	0.80	0.80	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.7	27.3	0.0	57.6	29.1	29.1	41.4	29.2	31.7	31.4	30.1	34.6
Incr Delay (d2), s/veh	4.9	0.8	0.0	1.5	2.2	3.9	9.9	0.2	1.6	0.5	0.6	4.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.2	14.7	0.0	2.5	12.2	13.7	7.4	1.3	4.2	1.0	2.6	8.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.6	28.1	0.0	59.1	31.3	33.0	51.3	29.4	33.3	32.0	30.7	38.8
LnGrp LOS	E	C		E	C	C	D	C	C	C	C	D
Approach Vol, veh/h		2240			1751			515			449	
Approach Delay, s/veh		32.8			34.4			40.3			36.1	
Approach LOS		C			C			D			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	33.5	65.5		46.0	19.3	59.7		46.0				
Change Period (Y+Rc), s	5.6	6.2		5.1	5.6	6.2		5.1				
Max Green Setting (Gmax), s	15.4	51.8		40.9	15.4	51.8		40.9				
Max Q Clear Time (g_c+1), s	17.5	40.3		20.7	13.6	32.2		33.7				
Green Ext Time (p_c), s	0.1	10.5		0.9	0.1	15.1		1.0				

Intersection Summary

HCM 6th Ctrl Delay	34.4
HCM 6th LOS	C

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary  
5: Apple Valley Road & Pimlico Road

Apple Bear Commercial Project  
Cumulative (2045) WP PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	300	58	53	87	49	108	88	846	97	167	930	262
Future Volume (veh/h)	300	58	53	87	49	108	88	846	97	167	930	262
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	306	59	54	89	50	110	90	863	99	170	949	267
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	377	527	447	386	527	447	113	1767	788	196	1933	861
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.06	0.49	0.49	0.11	0.54	0.54
Sat Flow, veh/h	1245	1900	1608	1299	1900	1608	1810	3610	1609	1810	3610	1607
Grp Volume(v), veh/h	306	59	54	89	50	110	90	863	99	170	949	267
Grp Sat Flow(s),veh/h/ln	1245	1900	1608	1299	1900	1608	1810	1805	1609	1810	1805	1607
Q Serve(g_s), s	31.4	3.0	3.3	7.1	2.5	6.9	6.4	20.9	4.4	12.0	21.5	12.0
Cycle Q Clear(g_c), s	34.0	3.0	3.3	10.1	2.5	6.9	6.4	20.9	4.4	12.0	21.5	12.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	377	527	447	386	527	447	113	1767	788	196	1933	861
V/C Ratio(X)	0.81	0.11	0.12	0.23	0.09	0.25	0.80	0.49	0.13	0.87	0.49	0.31
Avail Cap(c_a), veh/h	384	539	457	399	547	463	228	1767	788	367	1933	861
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.77	0.77	0.77	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.4	35.0	35.1	38.8	34.8	36.4	60.2	22.3	18.1	57.0	19.0	16.8
Incr Delay (d2), s/veh	11.4	0.0	0.0	0.1	0.0	0.1	3.8	0.7	0.3	4.5	0.9	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.8	1.4	1.3	2.3	1.2	2.8	3.0	8.5	1.6	5.5	8.5	4.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.8	35.0	35.1	38.9	34.9	36.5	63.9	23.0	18.3	61.5	19.9	17.8
LnGrp LOS	E	D	D	D	C	D	E	C	B	E	B	B
Approach Vol, veh/h		419			249			1052			1386	
Approach Delay, s/veh		52.4			37.0			26.1			24.6	
Approach LOS		D			D			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	18.7	70.1		41.2	12.7	76.1		41.2				
Change Period (Y+Rc), s	4.6	6.5		5.1	4.6	6.5		* 5.1				
Max Green Setting (Gmax), s	20.4	50.5		36.9	16.4	60.5		* 37				
Max Q Clear Time (g_c+M), s	14.0	22.9		36.0	8.4	23.5		12.1				
Green Ext Time (p_c), s	0.1	0.8		0.1	0.0	0.8		0.5				

Intersection Summary

HCM 6th Ctrl Delay	29.8
HCM 6th LOS	C

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary  
6: Apple Valley Road & Bear Valley Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗	↑ ↑ ↑		↖ ↗	↑ ↑ ↑	↖	↖	↑ ↑ ↑	↖	↖	↑ ↑	↖ ↗
Traffic Volume (veh/h)	526	1392	68	240	1178	217	121	250	235	322	386	410
Future Volume (veh/h)	526	1392	68	240	1178	217	121	250	235	322	386	410
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	554	1465	72	253	1240	228	127	263	247	339	406	432
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	583	2440	120	284	2058	801	143	1205	374	184	921	1191
Arrive On Green	0.17	0.48	0.48	0.08	0.40	0.40	0.08	0.23	0.23	0.10	0.26	0.26
Sat Flow, veh/h	3510	5064	249	3510	5187	1604	1810	5187	1608	1810	3610	2821
Grp Volume(v), veh/h	554	1000	537	253	1240	228	127	263	247	339	406	432
Grp Sat Flow(s),veh/h/ln	1755	1729	1855	1755	1729	1604	1810	1729	1608	1810	1805	1410
Q Serve(g_s), s	32.8	44.3	44.3	15.0	39.8	17.4	14.6	8.6	29.3	21.4	19.8	22.0
Cycle Q Clear(g_c), s	32.8	44.3	44.3	15.0	39.8	17.4	14.6	8.6	29.3	21.4	19.8	22.0
Prop In Lane	1.00		0.13	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	583	1666	894	284	2058	801	143	1205	374	184	921	1191
V/C Ratio(X)	0.95	0.60	0.60	0.89	0.60	0.28	0.89	0.22	0.66	1.84	0.44	0.36
Avail Cap(c_a), veh/h	776	1666	894	441	2058	801	184	1205	374	184	921	1191
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.58	0.58	0.58	1.00	1.00	1.00	1.00	1.00	1.00	0.90	0.90	0.90
Uniform Delay (d), s/veh	86.7	39.7	39.7	95.6	50.2	30.8	95.8	65.2	73.1	94.3	65.6	41.5
Incr Delay (d2), s/veh	10.9	0.9	1.7	9.2	1.3	0.9	27.5	0.4	8.9	395.7	1.4	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.6	18.8	20.4	7.2	17.3	7.0	7.9	3.8	12.9	30.2	9.3	7.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	97.6	40.6	41.4	104.8	51.5	31.7	123.3	65.6	82.0	490.0	67.0	42.3
LnGrp LOS	F	D	D	F	D	C	F	E	F	F	E	D
Approach Vol, veh/h		2091			1721			637			1177	
Approach Delay, s/veh		55.9			56.7			83.5			179.8	
Approach LOS		E			E			F			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	31.6	107.4	21.2	59.8	39.5	89.5	26.0	55.0				
Change Period (Y+Rc), s	4.6	6.2	4.6	6.2	4.6	6.2	4.6	6.2				
Max Green Setting (Gmax), s	20.4	91.8	21.4	48.8	46.4	71.8	21.4	48.8				
Max Q Clear Time (g_c+11), s	17.0	46.3	16.6	24.0	34.8	41.8	23.4	31.3				
Green Ext Time (p_c), s	0.0	1.4	0.0	0.4	0.1	1.3	0.0	0.2				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay											85.2	
HCM 6th LOS											F	

HCM 6th Signalized Intersection Summary  
 7: Apple Bear Road/Westmont Drive & Bear Valley Road

Apple Bear Commercial Project  
 Cumulative (2045) WP PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	181	1616	116	154	1305	158	193	9	0	235	12	137
Future Volume (veh/h)	181	1616	116	154	1305	158	193	9	0	235	12	137
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	187	1666	120	159	1345	163	199	9	0	242	12	141
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	217	1895	845	181	2572	798	262	9	0	502	31	368
Arrive On Green	0.12	0.53	0.53	0.10	0.50	0.50	0.25	0.25	0.00	0.25	0.25	0.25
Sat Flow, veh/h	1810	3610	1610	1810	5187	1610	829	37	0	1428	128	1502
Grp Volume(v), veh/h	187	1666	120	159	1345	163	208	0	0	242	0	153
Grp Sat Flow(s),veh/h/ln	1810	1805	1610	1810	1729	1610	866	0	0	1428	0	1630
Q Serve(g_s), s	12.2	48.8	4.6	10.4	21.2	6.8	19.5	0.0	0.0	0.0	0.0	9.4
Cycle Q Clear(g_c), s	12.2	48.8	4.6	10.4	21.2	6.8	28.9	0.0	0.0	14.0	0.0	9.4
Prop In Lane	1.00		1.00	1.00		1.00	0.96		0.00	1.00		0.92
Lane Grp Cap(c), veh/h	217	1895	845	181	2572	798	271	0	0	502	0	399
V/C Ratio(X)	0.86	0.88	0.14	0.88	0.52	0.20	0.77	0.00	0.00	0.48	0.00	0.38
Avail Cap(c_a), veh/h	318	1895	845	181	2572	798	271	0	0	502	0	399
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	51.8	25.1	14.6	53.3	20.6	17.0	49.8	0.0	0.0	39.5	0.0	37.7
Incr Delay (d2), s/veh	14.7	6.2	0.4	35.4	0.8	0.6	11.4	0.0	0.0	3.3	0.0	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	20.2	1.6	6.3	8.1	2.5	7.1	0.0	0.0	6.7	0.0	4.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	66.6	31.3	15.0	88.7	21.4	17.5	61.2	0.0	0.0	42.8	0.0	40.5
LnGrp LOS	E	C	B	F	C	B	E	A	A	D	A	D
Approach Vol, veh/h		1973			1667			208			395	
Approach Delay, s/veh		33.7			27.4			61.2			41.9	
Approach LOS		C			C			E			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	60.0	70.0		34.0	19.5	66.5		34.0				
Change Period (Y+Rc), s	4.0	7.0		4.6	5.1	* 7		4.6				
Max Green Setting (Gmax), s	12.0	63.0		29.4	21.1	* 53		29.4				
Max Q Clear Time (g_c+12), s	12.0	50.8		16.0	14.2	23.2		30.9				
Green Ext Time (p_c), s	0.0	8.5		0.8	0.3	11.1		0.0				

Intersection Summary

HCM 6th Ctrl Delay	33.3
HCM 6th LOS	C

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection						
Int Delay, s/veh	0.6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑		↑↑		↑
Traffic Vol, veh/h	1736	1	0	1515	0	102
Future Vol, veh/h	1736	1	0	1515	0	102
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1808	1	0	1578	0	106

Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	-	-	-	904
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	-	-	0	-	0	*373
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-	-	-	-	1
Mov Cap-1 Maneuver	-	-	-	-	-	*373
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	18.5
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	373	-	-	-
HCM Lane V/C Ratio	0.285	-	-	-
HCM Control Delay (s)	18.5	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q(veh)	1.2	-	-	-

Notes			
-:	Volume exceeds capacity	⋄:	Delay exceeds 300s
+	Computation Not Defined	*	All major volume in platoon

HCM 6th Signalized Intersection Summary  
 9: Deep Creek Road & Bear Valley Road

Apple Bear Commercial Project  
 Cumulative (2045) WP PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	64	1703	162	135	1426	36	169	61	136	55	71	59
Future Volume (veh/h)	64	1703	162	135	1426	36	169	61	136	55	71	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	65	1738	165	138	1455	37	172	62	139	56	72	60
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	84	2500	1115	166	2654	67	327	122	273	72	89	74
Arrive On Green	0.05	0.69	0.69	0.09	0.74	0.74	0.18	0.23	0.23	0.04	0.09	0.09
Sat Flow, veh/h	1810	3610	1610	1810	3597	91	1810	521	1168	1810	958	798
Grp Volume(v), veh/h	65	1738	165	138	729	763	172	0	201	56	0	132
Grp Sat Flow(s),veh/h/ln	1810	1805	1610	1810	1805	1884	1810	0	1690	1810	0	1756
Q Serve(g_s), s	4.3	34.3	3.5	9.0	21.3	21.4	10.3	0.0	12.4	3.7	0.0	8.8
Cycle Q Clear(g_c), s	4.3	34.3	3.5	9.0	21.3	21.4	10.3	0.0	12.4	3.7	0.0	8.8
Prop In Lane	1.00		1.00	1.00		0.05	1.00		0.69	1.00		0.45
Lane Grp Cap(c), veh/h	84	2500	1115	166	1332	1390	327	0	394	72	0	163
V/C Ratio(X)	0.78	0.70	0.15	0.83	0.55	0.55	0.53	0.00	0.51	0.77	0.00	0.81
Avail Cap(c_a), veh/h	109	2500	1115	187	1332	1390	327	0	394	75	0	265
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	56.6	10.9	4.4	53.6	6.9	6.9	44.5	0.0	40.0	57.1	0.0	53.4
Incr Delay (d2), s/veh	16.8	1.6	0.3	21.5	0.4	0.4	6.0	0.0	4.7	37.1	0.0	9.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	11.1	1.2	4.9	6.0	6.2	5.0	0.0	5.4	2.4	0.0	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.4	12.6	4.7	75.1	7.4	7.4	50.5	0.0	44.7	94.2	0.0	62.6
LnGrp LOS	E	B	A	E	A	A	D	A	D	F	A	E
Approach Vol, veh/h		1968			1630			373				188
Approach Delay, s/veh		13.9			13.1			47.3				72.0
Approach LOS		B			B			D				E
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.6	92.0	28.2	15.1	10.1	97.5	11.3	32.0				
Change Period (Y+Rc), s	4.6	8.0	6.5	4.0	4.6	8.0	6.5	* 4				
Max Green Setting (Gmax), s	12.4	54.0	12.4	18.1	7.2	59.2	5.0	* 28				
Max Q Clear Time (g_c+I1), s	11.0	36.3	12.3	10.8	6.3	23.4	5.7	14.4				
Green Ext Time (p_c), s	0.0	9.9	0.0	0.3	0.0	10.5	0.0	0.8				

Intersection Summary

HCM 6th Ctrl Delay	19.2
HCM 6th LOS	B

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary  
 10: Kiowa Road & Bear Valley Road

Apple Bear Commercial Project  
 Cumulative (2045) WP PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	221	1031	281	153	981	65	277	229	131	82	242	193
Future Volume (veh/h)	221	1031	281	153	981	65	277	229	131	82	242	193
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1976	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	230	1074	293	159	1022	68	289	239	136	85	252	201
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	252	1315	610	182	1176	524	310	731	401	106	767	341
Arrive On Green	0.14	0.36	0.36	0.10	0.33	0.33	0.17	0.33	0.33	0.06	0.21	0.21
Sat Flow, veh/h	1810	3610	1675	1810	3610	1609	1810	2249	1234	1810	3610	1606
Grp Volume(v), veh/h	230	1074	293	159	1022	68	289	190	185	85	252	201
Grp Sat Flow(s),veh/h/ln	1810	1805	1675	1810	1805	1609	1810	1805	1678	1810	1805	1606
Q Serve(g_s), s	18.2	39.0	19.6	12.6	38.6	4.3	22.8	11.5	12.1	6.7	8.6	16.3
Cycle Q Clear(g_c), s	18.2	39.0	19.6	12.6	38.6	4.3	22.8	11.5	12.1	6.7	8.6	16.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.74	1.00		1.00
Lane Grp Cap(c), veh/h	252	1315	610	182	1176	524	310	587	546	106	767	341
V/C Ratio(X)	0.91	0.82	0.48	0.87	0.87	0.13	0.93	0.32	0.34	0.80	0.33	0.59
Avail Cap(c_a), veh/h	255	1315	610	255	1176	524	317	587	546	255	767	341
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.5	41.7	35.5	64.3	46.0	34.4	59.2	36.9	37.1	67.4	48.3	51.4
Incr Delay (d2), s/veh	33.4	5.7	2.7	16.1	8.8	0.5	32.3	1.5	1.7	5.2	1.1	7.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.4	17.6	8.3	6.4	17.9	1.7	13.0	5.2	5.1	3.2	3.9	7.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	94.9	47.4	38.2	80.4	54.8	34.9	91.5	38.4	38.8	72.6	49.5	58.7
LnGrp LOS	F	D	D	F	D	C	F	D	D	E	D	E
Approach Vol, veh/h		1597			1249			664			538	
Approach Delay, s/veh		52.6			56.9			61.6			56.6	
Approach LOS		D			E			E			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	19.2	59.3	13.1	53.4	24.8	53.8	29.5	37.0				
Change Period (Y+Rc), s	4.6	6.5	4.6	6.2	4.6	6.5	4.6	6.2				
Max Green Setting (Gmax), s	20.4	46.5	20.4	35.8	20.4	46.5	25.4	30.8				
Max Q Clear Time (g_c+1), s	14.6	41.0	8.7	14.1	20.2	40.6	24.8	18.3				
Green Ext Time (p_c), s	0.1	4.4	0.1	1.9	0.0	4.3	0.0	1.7				

Intersection Summary

HCM 6th Ctrl Delay	55.9
HCM 6th LOS	E



Intersection						
Int Delay, s/veh	6.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	156	47	0	208	75
Future Vol, veh/h	0	156	47	0	208	75
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	164	49	0	219	79

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	566	49	0	0	49	0
Stage 1	49	-	-	-	-	-
Stage 2	517	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	489	1025	-	-	1571	-
Stage 1	979	-	-	-	-	-
Stage 2	603	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	418	1025	-	-	1571	-
Mov Cap-2 Maneuver	418	-	-	-	-	-
Stage 1	979	-	-	-	-	-
Stage 2	515	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.2	0	5.6
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	1025	1571
HCM Lane V/C Ratio	-	-	0.16	0.139
HCM Control Delay (s)	-	-	9.2	7.7
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.6	0.5

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	47	0	0	75	0
Future Vol, veh/h	0	47	0	0	75	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	49	0	0	79	0

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	158	0	0	0	0	0
Stage 1	0	-	-	-	-	-
Stage 2	158	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	838	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	875	-	-	-	-	-
Platoon blocked, %						
Mov Cap-1 Maneuver	838	-	-	-	-	-
Mov Cap-2 Maneuver	838	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	875	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s		0	
HCM LOS	-		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	-	-
HCM Lane LOS	-	-	-	-
HCM 95th %tile Q(veh)	-	-	-	-

Intersection						
Int Delay, s/veh	0.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑↑		↑
Traffic Vol, veh/h	1762	90	0	1617	0	66
Future Vol, veh/h	1762	90	0	1617	0	66
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1855	95	0	1702	0	69

Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	-	-	-	975
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	-	-	0	-	0	*540
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-	-	-	-	1
Mov Cap-1 Maneuver	-	-	-	-	-	*540
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	12.6
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	540	-	-	-
HCM Lane V/C Ratio	0.129	-	-	-
HCM Control Delay (s)	12.6	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0.4	-	-	-

Notes  
 -: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Intersection						
Int Delay, s/veh	5.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		T
Traffic Vol, veh/h	61	0	0	38	1	0
Future Vol, veh/h	61	0	0	38	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	64	0	0	40	1	0

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	41	1	1	0	0
Stage 1	1	-	-	-	-
Stage 2	40	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-
Pot Cap-1 Maneuver	975	1090	1635	-	-
Stage 1	1028	-	-	-	-
Stage 2	988	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	975	1090	1635	-	-
Mov Cap-2 Maneuver	975	-	-	-	-
Stage 1	1028	-	-	-	-
Stage 2	988	-	-	-	-

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

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1635	-	975	-	-
HCM Lane V/C Ratio	-	-	0.066	-	-
HCM Control Delay (s)	0	-	9	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection						
Int Delay, s/veh	8.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		
Traffic Vol, veh/h	38	0	1	0	1	0
Future Vol, veh/h	38	0	1	0	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	40	0	1	0	1	0

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	3	1	1	0	0
Stage 1	1	-	-	-	-
Stage 2	2	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-
Pot Cap-1 Maneuver	1025	1090	1635	-	-
Stage 1	1028	-	-	-	-
Stage 2	1026	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	1024	1090	1635	-	-
Mov Cap-2 Maneuver	1024	-	-	-	-
Stage 1	1027	-	-	-	-
Stage 2	1026	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.7	7.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1635	-	1024	-	-
HCM Lane V/C Ratio	0.001	-	0.039	-	-
HCM Control Delay (s)	7.2	0	8.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

HCM 6th Signalized Intersection Summary  
 1: Jacaranda Avenue/Jacaranda Road & Bear Valley Road

Apple Bear Commercial Project  
 Opening Year (2024) WP AM MIT



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	132	1463	66	239	1771	45	81	51	293	15	16	37
Future Volume (veh/h)	132	1463	66	239	1771	45	81	51	293	15	16	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	140	1556	70	254	1884	48	86	54	312	16	17	39
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	186	2059	93	276	2633	817	130	82	431	349	367	396
Arrive On Green	0.05	0.40	0.40	0.15	0.51	0.51	0.12	0.12	0.12	0.19	0.19	0.19
Sat Flow, veh/h	3510	5088	229	1810	5187	1609	1132	711	1606	1810	1900	1608
Grp Volume(v), veh/h	140	1057	569	254	1884	48	140	0	312	16	17	39
Grp Sat Flow(s),veh/h/ln	1755	1729	1859	1810	1729	1609	1843	0	1606	1810	1900	1608
Q Serve(g_s), s	5.7	38.0	38.0	20.1	40.7	2.2	10.5	0.0	16.7	1.0	1.1	2.7
Cycle Q Clear(g_c), s	5.7	38.0	38.0	20.1	40.7	2.2	10.5	0.0	16.7	1.0	1.1	2.7
Prop In Lane	1.00		0.12	1.00		1.00	0.61		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	186	1400	752	276	2633	817	212	0	431	349	367	396
V/C Ratio(X)	0.75	0.76	0.76	0.92	0.72	0.06	0.66	0.00	0.72	0.05	0.05	0.10
Avail Cap(c_a), veh/h	259	1400	752	337	2633	817	212	0	431	349	367	396
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.7	37.0	37.0	60.6	27.6	18.1	61.4	0.0	48.3	47.6	47.6	42.2
Incr Delay (d2), s/veh	4.3	3.8	7.0	24.5	1.7	0.1	15.0	0.0	10.2	0.2	0.2	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	16.1	18.0	10.8	16.2	0.8	5.7	0.0	11.6	0.5	0.5	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.0	40.8	44.0	85.1	29.3	18.3	76.4	0.0	58.4	47.9	47.9	42.7
LnGrp LOS	E	D	D	F	C	B	E	A	E	D	D	D
Approach Vol, veh/h		1766			2186			452				72
Approach Delay, s/veh		44.3			35.5			64.0				45.1
Approach LOS		D			D			E				D
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	27.1	63.9		22.0	12.2	78.8		32.0				
Change Period (Y+Rc), s	5.0	5.2		* 5.3	4.5	5.2		4.0				
Max Green Setting (Gmax), s	27.0	53.8		* 17	10.7	70.6		28.0				
Max Q Clear Time (g_c+I1), s	22.1	40.0		12.5	7.7	42.7		4.7				
Green Ext Time (p_c), s	0.0	3.2		0.1	0.0	5.3		0.0				

Intersection Summary

HCM 6th Ctrl Delay	42.0
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.  
 \* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary  
 2: Bear Valley Road & Mojave Fish Hatchery Road

Apple Bear Commercial Project  
 Opening Year (2024) WP AM MIT



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑↑↑	↗	↖↗	↑↑↑	↗	↖	↑	↗	↖	↗	↖
Traffic Volume (veh/h)	166	1545	57	47	1943	258	44	6	25	114	5	67
Future Volume (veh/h)	166	1545	57	47	1943	258	44	6	25	114	5	67
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	168	1561	58	47	1963	261	44	6	25	115	5	68
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	192	2634	818	108	2243	841	389	408	346	162	10	136
Arrive On Green	0.11	0.51	0.51	0.03	0.43	0.43	0.21	0.21	0.21	0.09	0.09	0.09
Sat Flow, veh/h	1810	5187	1610	3510	5187	1610	1810	1900	1610	1810	111	1516
Grp Volume(v), veh/h	168	1561	58	47	1963	261	44	6	25	115	0	73
Grp Sat Flow(s),veh/h/ln	1810	1729	1610	1755	1729	1610	1810	1900	1610	1810	0	1627
Q Serve(g_s), s	12.4	28.6	2.5	1.8	46.7	12.5	2.6	0.3	1.7	8.3	0.0	5.8
Cycle Q Clear(g_c), s	12.4	28.6	2.5	1.8	46.7	12.5	2.6	0.3	1.7	8.3	0.0	5.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.93
Lane Grp Cap(c), veh/h	192	2634	818	108	2243	841	389	408	346	162	0	146
V/C Ratio(X)	0.87	0.59	0.07	0.44	0.88	0.31	0.11	0.01	0.07	0.71	0.00	0.50
Avail Cap(c_a), veh/h	201	2634	818	130	2243	841	389	408	346	162	0	146
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	59.5	23.4	17.0	64.3	35.0	18.4	42.7	41.7	42.3	59.7	0.0	58.6
Incr Delay (d2), s/veh	29.8	1.0	0.2	1.0	5.2	1.0	0.6	0.1	0.4	23.0	0.0	11.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.1	11.2	1.0	0.8	19.5	5.0	1.3	0.2	0.7	4.9	0.0	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	89.3	24.4	17.1	65.3	40.1	19.4	43.2	41.8	42.7	82.7	0.0	70.3
LnGrp LOS	F	C	B	E	D	B	D	D	D	F	A	E
Approach Vol, veh/h		1787			2271			75			188	
Approach Delay, s/veh		30.2			38.3			42.9			77.9	
Approach LOS		C			D			D			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.1	75.0	33.9	17.0	19.3	64.8	17.0	33.9				
Change Period (Y+Rc), s	5.0	6.4	4.9	4.9	5.0	6.4	4.9	4.9				
Max Green Setting (Gmax), s	5.0	67.7	29.0	12.1	15.0	57.7	12.1	29.0				
Max Q Clear Time (g_c+1), s	5.0	30.6	4.6	7.8	14.4	48.7	10.3	3.7				
Green Ext Time (p_c), s	0.0	14.0	0.0	0.0	0.0	7.4	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay	36.8
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th Signalized Intersection Summary  
6: Apple Valley Road & Bear Valley Road

Apple Bear Commercial Project  
Opening Year (2024) WP AM MIT



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↶ ↷ ↸	↶ ↷ ↸		↶ ↷ ↸	↶ ↷ ↸	↶ ↷ ↸	↶ ↷ ↸	↶ ↷ ↸	↶ ↷ ↸	↶ ↷ ↸	↶ ↷ ↸	↶ ↷ ↸
Traffic Volume (veh/h)	367	805	46	137	1326	235	78	164	88	239	200	442
Future Volume (veh/h)	367	805	46	137	1326	235	78	164	88	239	200	442
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	399	875	50	149	1441	255	85	178	96	260	217	480
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	429	2280	130	181	1989	862	101	1242	468	275	1212	1297
Arrive On Green	0.12	0.45	0.45	0.05	0.38	0.38	0.06	0.24	0.24	0.15	0.34	0.34
Sat Flow, veh/h	3510	5020	286	3510	5187	1610	1810	5187	1606	1810	3610	2831
Grp Volume(v), veh/h	399	602	323	149	1441	255	85	178	96	260	217	480
Grp Sat Flow(s),veh/h/ln	1755	1729	1848	1755	1729	1610	1810	1729	1606	1810	1805	1416
Q Serve(g_s), s	23.6	24.2	24.3	8.8	49.8	18.4	9.8	5.7	9.5	29.9	8.9	23.2
Cycle Q Clear(g_c), s	23.6	24.2	24.3	8.8	49.8	18.4	9.8	5.7	9.5	29.9	8.9	23.2
Prop In Lane	1.00		0.15	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	429	1570	839	181	1989	862	101	1242	468	275	1212	1297
V/C Ratio(X)	0.93	0.38	0.38	0.82	0.72	0.30	0.84	0.14	0.21	0.95	0.18	0.37
Avail Cap(c_a), veh/h	525	1570	839	249	1989	862	154	1242	468	357	1212	1297
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.88	0.88	0.88	1.00	1.00	1.00	1.00	1.00	1.00	0.94	0.94	0.94
Uniform Delay (d), s/veh	91.3	37.9	37.9	98.6	55.3	26.9	98.2	62.9	56.1	88.2	49.3	37.1
Incr Delay (d2), s/veh	17.5	0.6	1.2	10.6	2.3	0.9	13.9	0.2	1.0	25.9	0.3	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.7	10.4	11.3	4.3	21.8	7.3	5.0	2.5	4.0	15.8	4.1	8.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	108.8	38.5	39.1	109.2	57.6	27.8	112.2	63.1	57.1	114.1	49.6	37.9
LnGrp LOS	F	D	D	F	E	C	F	E	E	F	D	D
Approach Vol, veh/h		1324			1845			359			957	
Approach Delay, s/veh		59.8			57.7			73.2			61.2	
Approach LOS		E			E			E			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.4	101.6	16.3	76.7	30.3	86.7	36.5	56.5				
Change Period (Y+Rc), s	4.6	6.2	4.6	6.2	4.6	6.2	4.6	6.2				
Max Green Setting (Gmax), s	11.9	85.1	17.9	70.5	31.4	68.6	41.4	47.0				
Max Q Clear Time (g_c+10), s	11.9	26.3	11.8	25.2	25.6	51.8	31.9	11.5				
Green Ext Time (p_c), s	0.0	0.8	0.0	0.3	0.0	1.6	0.0	0.2				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay											60.3	
HCM 6th LOS											E	



HCM 6th Signalized Intersection Summary  
 10: Kiowa Road & Bear Valley Road

Apple Bear Commercial Project  
 Opening Year (2024) WP AM MIT































Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	128	568	172	100	888	55	313	145	62	54	145	218
Future Volume (veh/h)	128	568	172	100	888	55	313	145	62	54	145	218
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1976	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	136	604	183	106	945	59	333	154	66	57	154	232
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	159	1360	960	128	1299	580	356	900	369	73	739	468
Arrive On Green	0.09	0.38	0.38	0.07	0.36	0.36	0.20	0.36	0.36	0.04	0.20	0.20
Sat Flow, veh/h	1810	3610	1675	1810	3610	1610	1810	2495	1024	1810	3610	1598
Grp Volume(v), veh/h	136	604	183	106	945	59	333	110	110	57	154	232
Grp Sat Flow(s),veh/h/ln	1810	1805	1675	1810	1805	1610	1810	1805	1714	1810	1805	1598
Q Serve(g_s), s	10.7	18.2	7.6	8.4	32.9	3.5	26.3	6.0	6.4	4.5	5.1	17.4
Cycle Q Clear(g_c), s	10.7	18.2	7.6	8.4	32.9	3.5	26.3	6.0	6.4	4.5	5.1	17.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.60	1.00		1.00
Lane Grp Cap(c), veh/h	159	1360	960	128	1299	580	356	651	618	73	739	468
V/C Ratio(X)	0.86	0.44	0.19	0.83	0.73	0.10	0.94	0.17	0.18	0.78	0.21	0.50
Avail Cap(c_a), veh/h	192	1360	960	198	1299	580	417	651	618	126	739	468
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.2	33.8	14.8	66.5	40.2	30.8	57.3	31.5	31.7	68.9	47.9	42.5
Incr Delay (d2), s/veh	23.0	1.1	0.4	8.6	3.6	0.4	25.0	0.6	0.6	6.4	0.6	3.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	7.8	2.9	4.1	14.6	1.4	14.1	2.7	2.7	2.2	2.4	7.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	88.2	34.9	15.3	75.1	43.8	31.2	82.3	32.1	32.3	75.4	48.6	46.2
LnGrp LOS	F	C	B	E	D	C	F	C	C	E	D	D
Approach Vol, veh/h		923			1110			553			443	
Approach Delay, s/veh		38.8			46.1			62.4			50.8	
Approach LOS		D			D			E			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.9	61.1	10.5	58.5	17.3	58.7	33.1	35.9				
Change Period (Y+Rc), s	4.6	6.5	4.6	6.2	4.6	6.5	4.6	6.2				
Max Green Setting (Gmax), s	15.9	44.8	10.1	52.3	15.4	45.3	33.4	29.0				
Max Q Clear Time (g_c+10), s	10.4	20.2	6.5	8.4	12.7	34.9	28.3	19.4				
Green Ext Time (p_c), s	0.0	8.3	0.0	1.2	0.0	6.5	0.2	1.1				

Intersection Summary

HCM 6th Ctrl Delay	47.6
HCM 6th LOS	D

HCM 6th Signalized Intersection Summary  
 1: Jacaranda Avenue/Jacaranda Road & Bear Valley Road

Apple Bear Commercial Project  
 Opening Year (2024) WP PM MIT

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	  			  						 	
Traffic Volume (veh/h)	36	2052	48	334	1805	23	85	9	434	28	19	37
Future Volume (veh/h)	36	2052	48	334	1805	23	85	9	434	28	19	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	37	2094	49	341	1842	23	87	9	443	24	26	38
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	75	2219	52	337	3080	955	100	10	398	349	367	345
Arrive On Green	0.02	0.43	0.43	0.19	0.59	0.59	0.06	0.06	0.06	0.19	0.19	0.19
Sat Flow, veh/h	3510	5214	122	1810	5187	1607	1647	170	1610	1810	1900	1610
Grp Volume(v), veh/h	37	1388	755	341	1842	23	96	0	443	24	26	38
Grp Sat Flow(s),veh/h/ln	1755	1729	1878	1810	1729	1607	1818	0	1610	1810	1900	1610
Q Serve(g_s), s	1.5	55.8	56.1	27.0	32.4	0.9	7.6	0.0	8.8	1.6	1.6	2.8
Cycle Q Clear(g_c), s	1.5	55.8	56.1	27.0	32.4	0.9	7.6	0.0	8.8	1.6	1.6	2.8
Prop In Lane	1.00		0.06	1.00		1.00	0.91		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	75	1471	799	337	3080	955	110	0	398	349	367	345
V/C Ratio(X)	0.49	0.94	0.95	1.01	0.60	0.02	0.87	0.00	1.11	0.07	0.07	0.11
Avail Cap(c_a), veh/h	104	1471	799	337	3080	955	110	0	398	349	367	345
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	70.2	40.0	40.0	59.0	18.5	12.1	67.5	0.0	54.6	47.8	47.9	45.8
Incr Delay (d2), s/veh	1.9	13.3	21.0	52.1	0.9	0.0	55.9	0.0	79.9	0.4	0.4	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	25.2	29.1	16.9	12.2	0.3	5.2	0.0	23.4	0.8	0.8	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.0	53.3	61.0	111.1	19.4	12.2	123.4	0.0	134.5	48.2	48.2	46.5
LnGrp LOS	E	D	E	F	B	B	F	A	F	D	D	D
Approach Vol, veh/h		2180			2206			539				88
Approach Delay, s/veh		56.3			33.5			132.5				47.5
Approach LOS		E			C			F				D
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	32.0	66.9		14.1	7.6	91.3		32.0				
Change Period (Y+Rc), s	5.0	5.2		* 5.3	4.5	5.2		4.0				
Max Green Setting (Gmax), s	27.0	61.7		* 8.8	4.3	84.9		28.0				
Max Q Clear Time (g_c+I1), s	29.0	58.1		9.6	3.5	34.4		4.8				
Green Ext Time (p_c), s	0.0	2.1		0.0	0.0	5.3		0.1				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				54.3								
HCM 6th LOS				D								
<b>Notes</b>												
User approved volume balancing among the lanes for turning movement.												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

HCM 6th Signalized Intersection Summary  
 2: Bear Valley Road & Mojave Fish Hatchery Road

Apple Bear Commercial Project  
 Opening Year (2024) WP PM MIT



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑↑↑	↗	↖↗	↑↑↑	↗	↖	↑	↗	↖	↗	↖
Traffic Volume (veh/h)	59	2353	101	120	1968	105	108	9	67	131	5	87
Future Volume (veh/h)	59	2353	101	120	1968	105	108	9	67	131	5	87
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	60	2401	103	122	2008	107	110	9	68	134	5	88
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.99
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	77	2601	807	130	2572	940	389	408	344	162	8	138
Arrive On Green	0.04	0.50	0.50	0.04	0.50	0.50	0.21	0.21	0.21	0.09	0.09	0.09
Sat Flow, veh/h	1810	5187	1610	3510	5187	1604	1810	1900	1601	1810	87	1536
Grp Volume(v), veh/h	60	2401	103	122	2008	107	110	9	68	134	0	93
Grp Sat Flow(s),veh/h/ln	1810	1729	1610	1755	1729	1604	1810	1900	1601	1810	0	1623
Q Serve(g_s), s	4.4	58.0	4.6	4.7	43.0	4.0	6.9	0.5	4.7	9.8	0.0	7.5
Cycle Q Clear(g_c), s	4.4	58.0	4.6	4.7	43.0	4.0	6.9	0.5	4.7	9.8	0.0	7.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.95
Lane Grp Cap(c), veh/h	77	2601	807	130	2572	940	389	408	344	162	0	146
V/C Ratio(X)	0.78	0.92	0.13	0.94	0.78	0.11	0.28	0.02	0.20	0.83	0.00	0.64
Avail Cap(c_a), veh/h	94	2601	807	130	2572	940	389	408	344	162	0	146
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	64.0	31.2	17.9	64.8	28.0	12.4	44.3	41.8	43.5	60.4	0.0	59.3
Incr Delay (d2), s/veh	22.5	6.9	0.3	59.4	2.4	0.2	1.8	0.1	1.3	36.1	0.0	19.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	23.9	1.8	3.1	17.1	1.5	3.3	0.3	2.0	6.2	0.0	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	86.4	38.1	18.2	124.3	30.4	12.7	46.1	41.9	44.7	96.5	0.0	78.9
LnGrp LOS	F	D	B	F	C	B	D	D	D	F	A	E
Approach Vol, veh/h		2564			2237			187			227	
Approach Delay, s/veh		38.5			34.7			45.4			89.3	
Approach LOS		D			C			D			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.0	74.1	33.9	17.0	10.8	73.3	17.0	33.9				
Change Period (Y+Rc), s	5.0	6.4	4.9	4.9	5.0	6.4	4.9	4.9				
Max Green Setting (Gmax), s	5.0	67.7	29.0	12.1	7.0	65.7	12.1	29.0				
Max Q Clear Time (g_c+1), s	5.0	60.0	8.9	9.5	6.4	45.0	11.8	6.7				
Green Ext Time (p_c), s	0.0	6.9	0.0	0.0	0.0	14.2	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay	39.3
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th Signalized Intersection Summary  
6: Apple Valley Road & Bear Valley Road

Apple Bear Commercial Project  
Opening Year (2024) WP PM MIT



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗	↑ ↑ ↑		↖ ↗	↑ ↑ ↑	↖	↖	↑ ↑ ↑	↖	↖	↑ ↑	↖ ↗
Traffic Volume (veh/h)	501	1329	65	230	1145	208	115	238	203	293	368	390
Future Volume (veh/h)	501	1329	65	230	1145	208	115	238	203	293	368	390
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	527	1399	68	242	1205	219	121	251	214	308	387	411
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	556	2100	102	273	1732	822	137	1175	490	323	1188	1378
Arrive On Green	0.16	0.41	0.41	0.08	0.33	0.33	0.08	0.23	0.23	0.18	0.33	0.33
Sat Flow, veh/h	3510	5067	246	3510	5187	1603	1810	5187	1608	1810	3610	2824
Grp Volume(v), veh/h	527	955	512	242	1205	219	121	251	214	308	387	411
Grp Sat Flow(s),veh/h/ln	1755	1729	1855	1755	1729	1603	1810	1729	1608	1810	1805	1412
Q Serve(g_s), s	31.2	46.9	46.9	14.3	42.3	16.2	13.9	8.3	22.4	35.4	16.9	18.3
Cycle Q Clear(g_c), s	31.2	46.9	46.9	14.3	42.3	16.2	13.9	8.3	22.4	35.4	16.9	18.3
Prop In Lane	1.00		0.13	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	556	1433	769	273	1732	822	137	1175	490	323	1188	1378
V/C Ratio(X)	0.95	0.67	0.67	0.89	0.70	0.27	0.88	0.21	0.44	0.95	0.33	0.30
Avail Cap(c_a), veh/h	642	1433	769	363	1732	822	201	1175	490	391	1188	1378
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.63	0.63	0.63	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91
Uniform Delay (d), s/veh	87.5	49.7	49.7	95.9	60.7	28.9	96.1	66.0	58.6	85.4	52.9	32.3
Incr Delay (d2), s/veh	15.1	1.6	2.9	15.2	2.3	0.8	19.4	0.4	2.8	27.6	0.7	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh	15.2	20.3	22.1	7.1	18.7	6.4	7.2	3.7	9.5	18.9	7.8	6.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	102.6	51.3	52.6	111.1	63.0	29.7	115.5	66.4	61.4	113.0	53.6	32.8
LnGrp LOS	F	D	D	F	E	C	F	E	E	F	D	C
Approach Vol, veh/h		1994			1666			586			1106	
Approach Delay, s/veh		65.2			65.6			74.7			62.4	
Approach LOS		E			E			E			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	31.0	93.2	20.5	75.3	37.9	76.3	42.1	53.8				
Change Period (Y+Rc), s	4.6	6.2	4.6	6.2	4.6	6.2	4.6	6.2				
Max Green Setting (Gmax), s	74.3	74.3	23.3	69.1	38.4	57.6	45.4	47.0				
Max Q Clear Time (g_c+10), s	48.9	48.9	15.9	20.3	33.2	44.3	37.4	24.4				
Green Ext Time (p_c), s	0.0	1.3	0.0	0.4	0.0	1.2	0.1	0.2				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay											65.8	
HCM 6th LOS											E	

HCM 6th Signalized Intersection Summary  
 10: Kiowa Road & Bear Valley Road

Apple Bear Commercial Project  
 Opening Year (2024) WP PM MIT






























Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	211	974	268	128	887	62	264	218	119	78	230	184
Future Volume (veh/h)	211	974	268	128	887	62	264	218	119	78	230	184
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1976	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	220	1015	279	133	924	65	275	227	124	81	240	192
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	243	1438	943	156	1264	563	298	705	371	101	722	537
Arrive On Green	0.13	0.40	0.40	0.09	0.35	0.35	0.16	0.31	0.31	0.06	0.20	0.20
Sat Flow, veh/h	1810	3610	1675	1810	3610	1609	1810	2286	1203	1810	3610	1605
Grp Volume(v), veh/h	220	1015	279	133	924	65	275	177	174	81	240	192
Grp Sat Flow(s),veh/h/ln	1810	1805	1675	1810	1805	1609	1810	1805	1684	1810	1805	1605
Q Serve(g_s), s	17.4	34.1	12.7	10.5	32.4	4.0	21.7	10.9	11.5	6.4	8.3	13.1
Cycle Q Clear(g_c), s	17.4	34.1	12.7	10.5	32.4	4.0	21.7	10.9	11.5	6.4	8.3	13.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.71	1.00		1.00
Lane Grp Cap(c), veh/h	243	1438	943	156	1264	563	298	557	519	101	722	537
V/C Ratio(X)	0.91	0.71	0.30	0.85	0.73	0.12	0.92	0.32	0.33	0.80	0.33	0.36
Avail Cap(c_a), veh/h	280	1438	943	180	1264	563	342	557	519	162	722	537
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.9	36.5	16.6	65.4	41.1	31.9	59.7	38.4	38.7	67.6	49.7	36.5
Incr Delay (d2), s/veh	26.6	2.9	0.8	25.4	3.7	0.4	26.5	1.5	1.7	5.4	1.2	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	19.5	14.9	4.9	5.8	14.4	1.6	11.9	5.0	4.9	3.1	3.8	5.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	88.5	39.4	17.4	90.8	44.9	32.3	86.2	39.9	40.4	73.0	50.9	38.4
LnGrp LOS	F	D	B	F	D	C	F	D	D	E	D	D
Approach Vol, veh/h		1514			1122			626			513	
Approach Delay, s/veh		42.5			49.6			60.4			49.7	
Approach LOS		D			D			E			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	17.1	64.3	12.7	50.9	24.1	57.3	28.5	35.2				
Change Period (Y+Rc), s	4.6	6.5	4.6	6.2	4.6	6.5	4.6	6.2				
Max Green Setting (Gmax), s	11.4	52.3	13.0	43.4	22.4	44.3	27.4	29.0				
Max Q Clear Time (g_c+1/2), s	11.5	36.1	8.4	13.5	19.4	34.4	23.7	15.1				
Green Ext Time (p_c), s	0.0	10.8	0.0	1.9	0.1	6.2	0.1	1.7				

Intersection Summary

HCM 6th Ctrl Delay	48.6
HCM 6th LOS	D

HCM 6th Signalized Intersection Summary  
 1: Jacaranda Avenue/Jacaranda Road & Bear Valley Road

Apple Bear Commercial Project  
 Cumulative (2045) WP AM MIT

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	  			  							
Traffic Volume (veh/h)	137	1537	69	251	1859	47	85	54	307	17	17	40
Future Volume (veh/h)	137	1537	69	251	1859	47	85	54	307	17	17	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	144	1618	73	264	1957	49	89	57	323	18	18	42
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	190	2056	93	286	2652	822	124	79	431	349	367	398
Arrive On Green	0.05	0.40	0.40	0.16	0.51	0.51	0.11	0.11	0.11	0.19	0.19	0.19
Sat Flow, veh/h	3510	5087	229	1810	5187	1609	1124	720	1606	1810	1900	1608
Grp Volume(v), veh/h	144	1100	591	264	1957	49	146	0	323	18	18	42
Grp Sat Flow(s),veh/h/ln	1755	1729	1859	1810	1729	1609	1844	0	1606	1810	1900	1608
Q Serve(g_s), s	5.9	40.3	40.3	20.9	42.9	2.2	11.1	0.0	16.0	1.2	1.1	2.9
Cycle Q Clear(g_c), s	5.9	40.3	40.3	20.9	42.9	2.2	11.1	0.0	16.0	1.2	1.1	2.9
Prop In Lane	1.00		0.12	1.00		1.00	0.61		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	190	1398	751	286	2652	822	203	0	431	349	367	398
V/C Ratio(X)	0.76	0.79	0.79	0.92	0.74	0.06	0.72	0.00	0.75	0.05	0.05	0.11
Avail Cap(c_a), veh/h	264	1398	751	324	2652	822	203	0	431	349	367	398
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.6	37.7	37.7	60.2	27.8	17.9	62.3	0.0	48.6	47.7	47.7	42.2
Incr Delay (d2), s/veh	4.6	4.5	8.2	27.8	1.9	0.1	19.5	0.0	11.3	0.3	0.3	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	17.2	19.2	11.5	17.1	0.8	6.2	0.0	12.2	0.6	0.6	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.2	42.3	45.9	88.0	29.7	18.0	81.8	0.0	59.9	48.0	47.9	42.7
LnGrp LOS	E	D	D	F	C	B	F	A	E	D	D	D
Approach Vol, veh/h		1835			2270			469			78	
Approach Delay, s/veh		45.8			36.2			66.7			45.1	
Approach LOS		D			D			E			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	27.9	63.8		21.3	12.4	79.3		32.0				
Change Period (Y+Rc), s	5.0	5.2		* 5.3	4.5	5.2		4.0				
Max Green Setting (Gmax), s	26.0	55.5		* 16	10.9	71.1		28.0				
Max Q Clear Time (g_c+I1), s	22.9	42.3		13.1	7.9	44.9		4.9				
Green Ext Time (p_c), s	0.0	3.3		0.1	0.0	5.6		0.1				

Intersection Summary

HCM 6th Ctrl Delay	43.2
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.  
 \* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary  
 2: Bear Valley Road & Mojave Fish Hatchery Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑↑↑	↗	↖↗	↑↑↑	↗	↖	↑	↗	↖	↗	↖
Traffic Volume (veh/h)	173	1626	62	49	2041	270	46	6	26	119	5	70
Future Volume (veh/h)	173	1626	62	49	2041	270	46	6	26	119	5	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	175	1642	63	49	2062	273	46	6	26	120	5	71
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	199	2670	829	109	2261	834	389	408	346	149	9	125
Arrive On Green	0.11	0.51	0.51	0.03	0.44	0.44	0.21	0.21	0.21	0.08	0.08	0.08
Sat Flow, veh/h	1810	5187	1610	3510	5187	1610	1810	1900	1610	1810	107	1519
Grp Volume(v), veh/h	175	1642	63	49	2062	273	46	6	26	120	0	76
Grp Sat Flow(s),veh/h/ln	1810	1729	1610	1755	1729	1610	1810	1900	1610	1810	0	1626
Q Serve(g_s), s	12.9	30.3	2.7	1.9	50.2	13.3	2.8	0.3	1.7	8.8	0.0	6.1
Cycle Q Clear(g_c), s	12.9	30.3	2.7	1.9	50.2	13.3	2.8	0.3	1.7	8.8	0.0	6.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.93
Lane Grp Cap(c), veh/h	199	2670	829	109	2261	834	389	408	346	149	0	134
V/C Ratio(X)	0.88	0.61	0.08	0.45	0.91	0.33	0.12	0.01	0.08	0.81	0.00	0.57
Avail Cap(c_a), veh/h	201	2670	829	130	2261	834	389	408	346	149	0	134
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	59.2	23.3	16.5	64.3	35.6	18.9	42.7	41.7	42.3	60.9	0.0	59.6
Incr Delay (d2), s/veh	31.7	1.1	0.2	1.1	7.0	1.0	0.6	0.1	0.4	35.8	0.0	16.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.5	11.8	1.1	0.8	21.3	5.3	1.3	0.2	0.7	5.6	0.0	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	90.9	24.3	16.7	65.3	42.6	19.9	43.3	41.8	42.7	96.6	0.0	76.0
LnGrp LOS	F	C	B	E	D	B	D	D	D	F	A	E
Approach Vol, veh/h		1880			2384			78			196	
Approach Delay, s/veh		30.3			40.5			43.0			88.6	
Approach LOS		C			D			D			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.2	75.9	33.9	16.0	19.8	65.3	16.0	33.9				
Change Period (Y+Rc), s	5.0	6.4	4.9	4.9	5.0	6.4	4.9	4.9				
Max Green Setting (Gmax), s	5.0	68.7	29.0	11.1	15.0	58.7	11.1	29.0				
Max Q Clear Time (g_c+1), s	5.0	32.3	4.8	8.1	14.9	52.2	10.8	3.7				
Green Ext Time (p_c), s	0.0	15.0	0.0	0.0	0.0	5.6	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay	38.4
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th Signalized Intersection Summary  
6: Apple Valley Road & Bear Valley Road

Apple Bear Commercial Project  
Cumulative (2045) WP AM MIT



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔ ↑↑↔			↔↔ ↑↑↑		↔	↔ ↑↑↑		↔	↔	↑↑	↔↔
Traffic Volume (veh/h)	385	914	48	177	1390	262	82	172	90	249	210	464
Future Volume (veh/h)	385	914	48	177	1390	262	82	172	90	249	210	464
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	405	962	51	186	1463	276	86	181	95	262	221	488
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	435	2261	120	218	2004	869	102	1212	475	277	1193	1287
Arrive On Green	0.12	0.45	0.45	0.06	0.39	0.39	0.06	0.23	0.23	0.15	0.33	0.33
Sat Flow, veh/h	3510	5043	267	3510	5187	1610	1810	5187	1606	1810	3610	2831
Grp Volume(v), veh/h	405	659	354	186	1463	276	86	181	95	262	221	488
Grp Sat Flow(s),veh/h/ln	1755	1729	1852	1755	1729	1610	1810	1729	1606	1810	1805	1416
Q Serve(g_s), s	24.0	27.3	27.4	11.0	50.6	20.0	9.9	5.8	9.3	30.1	9.2	23.9
Cycle Q Clear(g_c), s	24.0	27.3	27.4	11.0	50.6	20.0	9.9	5.8	9.3	30.1	9.2	23.9
Prop In Lane	1.00		0.14	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	435	1550	830	218	2004	869	102	1212	475	277	1193	1287
V/C Ratio(X)	0.93	0.43	0.43	0.85	0.73	0.32	0.84	0.15	0.20	0.95	0.19	0.38
Avail Cap(c_a), veh/h	525	1550	830	294	2004	869	155	1212	475	348	1193	1287
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.87	0.87	0.87	1.00	1.00	1.00	1.00	1.00	1.00	0.93	0.93	0.93
Uniform Delay (d), s/veh	91.1	39.5	39.5	97.5	55.1	26.9	98.2	63.9	55.4	88.1	50.1	37.8
Incr Delay (d2), s/veh	17.8	0.7	1.4	13.0	2.4	1.0	14.4	0.3	0.9	27.1	0.3	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.9	11.7	12.7	5.4	22.2	7.9	5.0	2.6	3.9	16.1	4.2	8.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	108.9	40.2	40.9	110.6	57.4	27.8	112.5	64.2	56.3	115.2	50.5	38.6
LnGrp LOS	F	D	D	F	E	C	F	E	E	F	D	D
Approach Vol, veh/h		1418			1925			362			971	
Approach Delay, s/veh		60.0			58.3			73.6			61.9	
Approach LOS		E			E			E			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.6	100.4	16.4	75.6	30.6	87.4	36.8	55.3				
Change Period (Y+Rc), s	4.6	6.2	4.6	6.2	4.6	6.2	4.6	6.2				
Max Green Setting (Gmax), s	7.6	83.4	18.0	69.4	31.4	69.6	40.4	47.0				
Max Q Clear Time (g_c+M3), s	7.6	29.4	11.9	25.9	26.0	52.6	32.1	11.3				
Green Ext Time (p_c), s	0.0	0.8	0.0	0.3	0.0	1.6	0.0	0.2				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay											60.8	
HCM 6th LOS											E	



HCM 6th Signalized Intersection Summary  
 10: Kiowa Road & Bear Valley Road

Apple Bear Commercial Project  
 Cumulative (2045) WP AM MIT






























Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	134	717	180	105	964	58	336	152	78	57	152	228
Future Volume (veh/h)	134	717	180	105	964	58	336	152	78	57	152	228
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1976	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	141	755	189	111	1015	61	354	160	82	60	160	240
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	164	1326	963	134	1266	565	376	858	419	77	722	465
Arrive On Green	0.09	0.37	0.37	0.07	0.35	0.35	0.21	0.37	0.37	0.04	0.20	0.20
Sat Flow, veh/h	1810	3610	1675	1810	3610	1610	1810	2350	1147	1810	3610	1598
Grp Volume(v), veh/h	141	755	189	111	1015	61	354	121	121	60	160	240
Grp Sat Flow(s),veh/h/ln	1810	1805	1675	1810	1805	1610	1810	1805	1691	1810	1805	1598
Q Serve(g_s), s	11.1	24.3	7.8	8.8	36.8	3.7	27.9	6.6	7.1	4.8	5.4	18.2
Cycle Q Clear(g_c), s	11.1	24.3	7.8	8.8	36.8	3.7	27.9	6.6	7.1	4.8	5.4	18.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.68	1.00		1.00
Lane Grp Cap(c), veh/h	164	1326	963	134	1266	565	376	659	618	77	722	465
V/C Ratio(X)	0.86	0.57	0.20	0.83	0.80	0.11	0.94	0.18	0.20	0.78	0.22	0.52
Avail Cap(c_a), veh/h	180	1326	963	203	1266	565	417	659	618	129	722	465
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.0	36.7	14.8	66.3	42.5	31.8	56.6	31.3	31.5	68.7	48.6	42.9
Incr Delay (d2), s/veh	28.3	1.8	0.5	9.7	5.4	0.4	27.3	0.6	0.7	6.2	0.7	4.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.3	10.6	3.0	4.3	16.6	1.5	15.2	2.9	3.0	2.3	2.5	7.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	93.4	38.5	15.2	75.9	47.9	32.2	83.9	31.9	32.2	75.0	49.3	47.0
LnGrp LOS	F	D	B	E	D	C	F	C	C	E	D	D
Approach Vol, veh/h		1085			1187			596			460	
Approach Delay, s/veh		41.6			49.8			62.8			51.4	
Approach LOS		D			D			E			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.3	59.8	10.8	59.2	17.7	57.3	34.7	35.2				
Change Period (Y+Rc), s	4.6	6.5	4.6	6.2	4.6	6.5	4.6	6.2				
Max Green Setting (Gmax), s	44.4	44.4	10.3	52.1	14.4	46.3	33.4	29.0				
Max Q Clear Time (g_c+10), s	10.8	26.3	6.8	9.1	13.1	38.8	29.9	20.2				
Green Ext Time (p_c), s	0.0	8.7	0.0	1.3	0.0	5.3	0.2	1.1				

Intersection Summary

HCM 6th Ctrl Delay	49.7
HCM 6th LOS	D

HCM 6th Signalized Intersection Summary  
 1: Jacaranda Avenue/Jacaranda Road & Bear Valley Road

Apple Bear Commercial Project  
 Cumulative (2045) WP PM MIT

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	  			  							
Traffic Volume (veh/h)	38	2153	50	350	1896	24	89	9	455	29	20	39
Future Volume (veh/h)	38	2153	50	350	1896	24	89	9	455	29	20	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	39	2197	51	357	1935	24	91	9	464	25	27	40
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	77	2173	50	432	3310	1026	104	10	485	349	367	346
Arrive On Green	0.02	0.42	0.42	0.24	0.64	0.64	0.06	0.06	0.06	0.19	0.19	0.19
Sat Flow, veh/h	3510	5215	121	1810	5187	1608	1654	164	1610	1810	1900	1610
Grp Volume(v), veh/h	39	1455	793	357	1935	24	100	0	464	25	27	40
Grp Sat Flow(s),veh/h/ln	1755	1729	1878	1810	1729	1608	1817	0	1610	1810	1900	1610
Q Serve(g_s), s	1.6	60.4	60.4	27.1	31.2	0.8	7.9	0.0	6.4	1.6	1.7	2.9
Cycle Q Clear(g_c), s	1.6	60.4	60.4	27.1	31.2	0.8	7.9	0.0	6.4	1.6	1.7	2.9
Prop In Lane	1.00		0.06	1.00		1.00	0.91		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	77	1440	782	432	3310	1026	114	0	485	349	367	346
V/C Ratio(X)	0.51	1.01	1.01	0.83	0.58	0.02	0.88	0.00	0.96	0.07	0.07	0.12
Avail Cap(c_a), veh/h	121	1440	782	432	3310	1026	114	0	485	349	367	346
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	70.1	42.3	42.3	52.4	15.1	9.6	67.4	0.0	49.7	47.9	47.9	45.8
Incr Delay (d2), s/veh	1.9	26.2	35.6	11.8	0.8	0.0	55.9	0.0	31.3	0.4	0.4	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	29.6	34.2	13.4	11.3	0.3	5.4	0.0	20.8	0.8	0.9	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.1	68.5	77.9	64.1	15.9	9.7	123.3	0.0	81.0	48.3	48.3	46.5
LnGrp LOS	E	F	F	E	B	A	F	A	F	D	D	D
Approach Vol, veh/h		2287			2316			564			92	
Approach Delay, s/veh		71.8			23.3			88.5			47.5	
Approach LOS		E			C			F			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	40.0	65.6		14.4	7.7	97.9		32.0				
Change Period (Y+Rc), s	5.2	* 5.2		* 5.3	4.5	5.2		4.0				
Max Green Setting (Gmax), s	28.0	* 60		* 9.1	5.0	83.9		28.0				
Max Q Clear Time (g_c+I1), s	29.1	62.4		9.9	3.6	33.2		4.9				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	5.7		0.1				

Intersection Summary

HCM 6th Ctrl Delay	51.8
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.  
 \* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary  
 2: Bear Valley Road & Mojave Fish Hatchery Road

Apple Bear Commercial Project  
 Cumulative (2045) WP PM MIT



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑↑↑	↗	↖↗	↑↑↑	↗	↖	↑	↗	↖	↗	↖
Traffic Volume (veh/h)	62	2469	106	126	2065	106	113	9	70	137	5	91
Future Volume (veh/h)	62	2469	106	126	2065	106	113	9	70	137	5	91
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	63	2519	108	129	2107	108	115	9	71	140	5	92
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.99
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	81	2586	803	156	2585	936	389	408	344	154	7	131
Arrive On Green	0.04	0.50	0.50	0.04	0.50	0.50	0.21	0.21	0.21	0.09	0.09	0.09
Sat Flow, veh/h	1810	5187	1610	3510	5187	1604	1810	1900	1601	1810	84	1539
Grp Volume(v), veh/h	63	2519	108	129	2107	108	115	9	71	140	0	97
Grp Sat Flow(s),veh/h/ln	1810	1729	1610	1755	1729	1604	1810	1900	1601	1810	0	1623
Q Serve(g_s), s	4.7	63.9	4.9	4.9	46.3	4.1	7.2	0.5	4.9	10.4	0.0	7.9
Cycle Q Clear(g_c), s	4.7	63.9	4.9	4.9	46.3	4.1	7.2	0.5	4.9	10.4	0.0	7.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.95
Lane Grp Cap(c), veh/h	81	2586	803	156	2585	936	389	408	344	154	0	138
V/C Ratio(X)	0.78	0.97	0.13	0.83	0.82	0.12	0.30	0.02	0.21	0.91	0.00	0.70
Avail Cap(c_a), veh/h	94	2586	803	156	2585	936	389	408	344	154	0	138
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	63.8	33.0	18.2	64.0	28.6	12.6	44.4	41.8	43.5	61.2	0.0	60.1
Incr Delay (d2), s/veh	24.9	12.6	0.3	27.7	3.0	0.3	1.9	0.1	1.4	51.5	0.0	25.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	27.6	1.9	2.7	18.5	1.6	3.5	0.3	2.1	7.0	0.0	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	88.8	45.6	18.5	91.7	31.6	12.8	46.4	41.9	44.9	112.7	0.0	85.8
LnGrp LOS	F	D	B	F	C	B	D	D	D	F	A	F
Approach Vol, veh/h		2690			2344			195			237	
Approach Delay, s/veh		45.5			34.0			45.6			101.7	
Approach LOS		D			C			D			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	1.0	73.7	33.9	16.4	11.0	73.7	16.4	33.9				
Change Period (Y+Rc), s	5.0	6.4	4.9	4.9	5.0	6.4	4.9	4.9				
Max Green Setting (Gmax), s	67.3	29.0	11.5	7.0	66.3	11.5	29.0					
Max Q Clear Time (g_c+1), s	65.9	9.2	9.9	6.7	48.3	12.4	6.9					
Green Ext Time (p_c), s	0.0	1.3	0.0	0.0	0.0	13.4	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay	43.0
HCM 6th LOS	D

HCM 6th Signalized Intersection Summary  
6: Apple Valley Road & Bear Valley Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗	↑ ↑ ↑		↖ ↗	↑ ↑ ↑	↖	↖	↑ ↑ ↑	↖	↖	↑ ↑	↖ ↗
Traffic Volume (veh/h)	526	1392	68	240	1178	217	121	250	235	322	386	410
Future Volume (veh/h)	526	1392	68	240	1178	217	121	250	235	322	386	410
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	554	1465	72	253	1240	228	127	263	247	339	406	432
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	454	1600	79	271	1369	663	149	1625	629	270	1373	1441
Arrive On Green	0.13	0.32	0.32	0.08	0.26	0.26	0.08	0.31	0.31	0.15	0.38	0.38
Sat Flow, veh/h	3510	5064	249	3510	5187	1601	1810	5187	1609	1810	3610	2825
Grp Volume(v), veh/h	554	1000	537	253	1240	228	127	263	247	339	406	432
Grp Sat Flow(s),veh/h/ln	1755	1729	1855	1755	1729	1601	1810	1729	1609	1810	1805	1412
Q Serve(g_s), s	19.4	41.8	41.8	10.7	34.7	14.6	10.4	5.5	16.6	22.4	11.8	13.3
Cycle Q Clear(g_c), s	19.4	41.8	41.8	10.7	34.7	14.6	10.4	5.5	16.6	22.4	11.8	13.3
Prop In Lane	1.00		0.13	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	454	1093	586	271	1369	663	149	1625	629	270	1373	1441
V/C Ratio(X)	1.22	0.92	0.92	0.93	0.91	0.34	0.85	0.16	0.39	1.25	0.30	0.30
Avail Cap(c_a), veh/h	454	1093	586	271	1369	663	223	1625	629	270	1373	1441
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.58	0.58	0.58	1.00	1.00	1.00	1.00	1.00	1.00	0.90	0.90	0.90
Uniform Delay (d), s/veh	65.3	49.4	49.4	68.8	53.4	30.1	67.9	37.3	32.9	63.8	32.4	21.3
Incr Delay (d2), s/veh	110.5	8.5	14.1	36.3	10.2	1.4	12.2	0.2	1.8	138.9	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.4	18.7	20.9	6.1	15.9	5.8	5.2	2.3	6.6	20.5	5.1	4.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	175.8	57.8	63.5	105.1	63.6	31.5	80.2	37.5	34.7	202.7	32.9	21.8
LnGrp LOS	F	E	E	F	E	C	F	D	C	F	C	C
Approach Vol, veh/h		2091			1721			637			1177	
Approach Delay, s/veh		90.5			65.4			44.9			77.7	
Approach LOS		F			E			D			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	66.2	53.6	16.9	63.3	24.0	45.8	27.0	53.2				
Change Period (Y+Rc), s	4.6	6.2	4.6	6.2	4.6	6.2	4.6	6.2				
Max Green Setting (Gmax), s	47.4	47.4	18.5	50.9	19.4	39.6	22.4	47.0				
Max Q Clear Time (g_c+M2), s	43.8	43.8	12.4	15.3	21.4	36.7	24.4	18.6				
Green Ext Time (p_c), s	0.0	0.9	0.0	0.4	0.0	0.7	0.0	0.2				

Intersection Summary

HCM 6th Ctrl Delay				75.0								
HCM 6th LOS				E								

HCM 6th Signalized Intersection Summary  
 10: Kiowa Road & Bear Valley Road

Apple Bear Commercial Project  
 Cumulative (2045) WP PM MIT



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	221	1031	281	153	981	65	277	229	131	82	242	193
Future Volume (veh/h)	221	1031	281	153	981	65	277	229	131	82	242	193
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1976	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	230	1074	293	159	1022	68	289	239	136	85	252	201
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	252	1360	918	182	1220	543	311	705	387	106	722	546
Arrive On Green	0.14	0.38	0.38	0.10	0.34	0.34	0.17	0.31	0.31	0.06	0.20	0.20
Sat Flow, veh/h	1810	3610	1675	1810	3610	1609	1810	2249	1234	1810	3610	1605
Grp Volume(v), veh/h	230	1074	293	159	1022	68	289	190	185	85	252	201
Grp Sat Flow(s),veh/h/ln	1810	1805	1675	1810	1805	1609	1810	1805	1678	1810	1805	1605
Q Serve(g_s), s	18.2	38.3	13.9	12.6	37.9	4.2	22.8	11.7	12.3	6.7	8.7	13.7
Cycle Q Clear(g_c), s	18.2	38.3	13.9	12.6	37.9	4.2	22.8	11.7	12.3	6.7	8.7	13.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.74	1.00		1.00
Lane Grp Cap(c), veh/h	252	1360	918	182	1220	543	311	566	526	106	722	546
V/C Ratio(X)	0.91	0.79	0.32	0.87	0.84	0.13	0.93	0.34	0.35	0.80	0.35	0.37
Avail Cap(c_a), veh/h	267	1360	918	208	1220	543	329	566	526	166	722	546
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.5	40.1	17.9	64.3	44.3	33.2	59.2	38.2	38.4	67.4	49.9	36.2
Incr Delay (d2), s/veh	30.9	4.7	0.9	26.4	7.0	0.5	30.3	1.6	1.8	6.7	1.3	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.2	17.0	5.4	6.9	17.3	1.7	12.8	5.3	5.2	3.3	4.0	5.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	92.4	44.8	18.8	90.7	51.3	33.7	89.5	39.8	40.3	74.1	51.2	38.1
LnGrp LOS	F	D	B	F	D	C	F	D	D	E	D	D
Approach Vol, veh/h		1597			1249			664			538	
Approach Delay, s/veh		46.9			55.4			61.6			49.9	
Approach LOS		D			E			E			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	19.2	61.1	13.1	51.6	24.8	55.5	29.5	35.2				
Change Period (Y+Rc), s	4.6	6.5	4.6	6.2	4.6	6.5	4.6	6.2				
Max Green Setting (Gmax), s	10.7	51.0	13.3	42.1	21.4	46.3	26.4	29.0				
Max Q Clear Time (g_c+M), s	14.6	40.3	8.7	14.3	20.2	39.9	24.8	15.7				
Green Ext Time (p_c), s	0.0	8.1	0.0	2.0	0.0	4.6	0.1	1.7				

Intersection Summary

HCM 6th Ctrl Delay	52.3
HCM 6th LOS	D

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## APPENDIX E

# TRAFFIC COLLISION TIMS REPORTS

# CRASH DIAGRAM

Primary Street:  
 Bear Valley Road

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Secondary Street:  
 Apple Valley Road

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Time Period:  
 Jan 2015 - Dec 2021

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Agency Name:  
 LSA

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Mapping Summary:

Fatal Crash	5
Injury Crash	44
Mapped	49
Not Drawn	15
Total	64

→ Straight	🚶 Pedestrian
↶ Left Turn	🚲 Bicycle
↷ Right Turn	☒ Object
↶ U-Turn	● Fatal Crash
↶ Overturned	○ Injury Crash
↷ Ran Off Road	
⊞ Stopped	
☒ Parked	



Keyboard shortcuts Map data ©2023 Terms of Use Report a map error

Date Created: 02/21/2023

Created by TIMS (<https://tims.berkeley.edu>) © UC Regents, 2014-2023

# ATP Maps & Summary Data

The tool is designed to support the California Active Transportation Program (ATP), as well as active transportation users and practitioners throughout California. The tool utilizes interactive crash maps to allow users to track and document pedestrian and bicycle crashes and generate data summaries within specified project and/or community limits.

## Step 1: Select a County/City, Bike/Ped, Severity, and Years

County: San Bernardino

City: Apple Valley

Include 1 mile buffer outside of selected County/City: No

Include State Highway Related Crashes: Yes

Involved With: Pedestrian and Bicycle

Crash Severity: Fatal, Severe Injury, Other Visible Injury, and Complaint of Pain

Year: 2015 - 2021

Crash Summary for initial parameters defined above:

Number of Crashes by Crash Severity

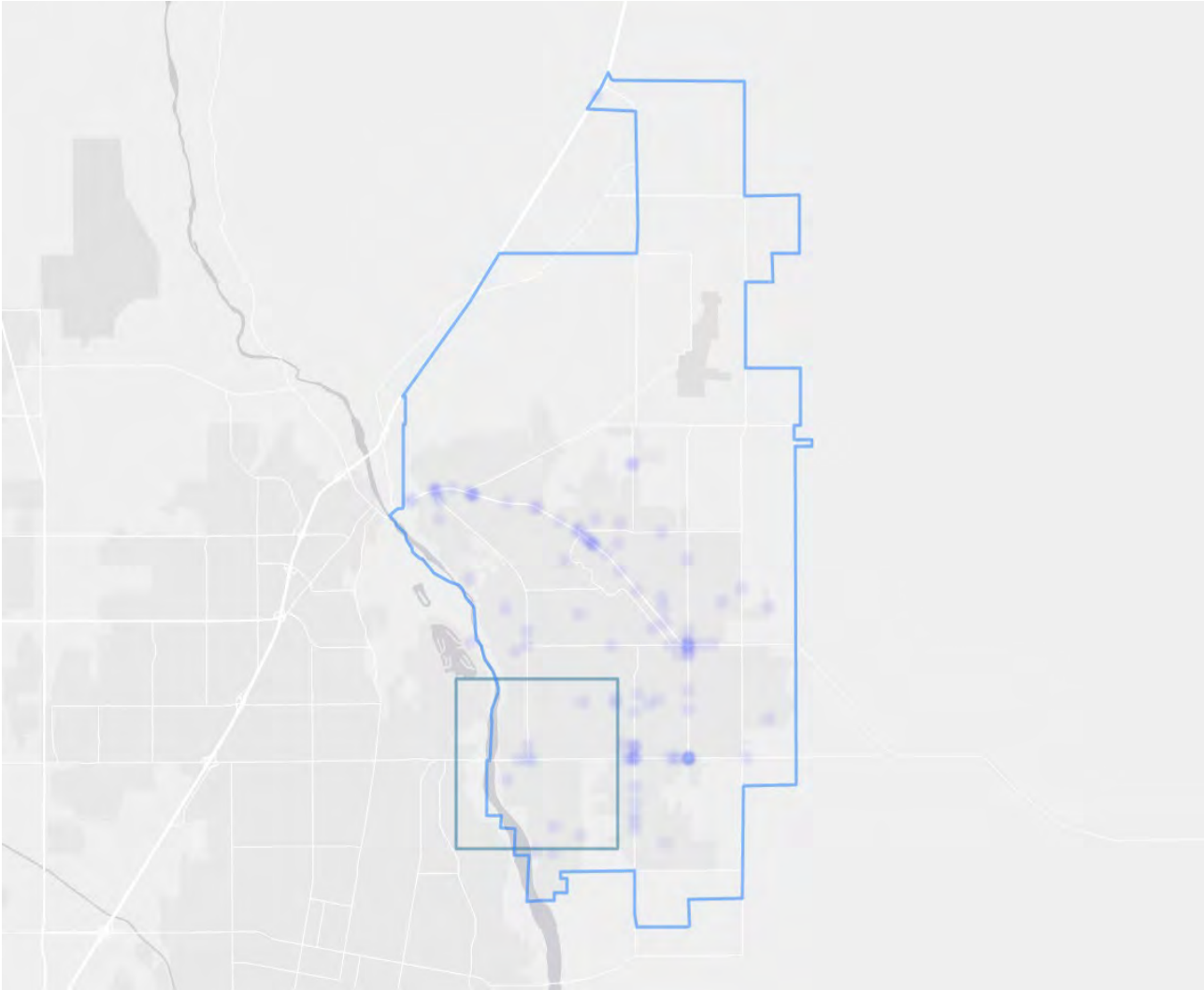
Involved With	Fatal	Severe Injury	Visible Injury	Complaint of Pain	Total
Bicycle	1	3	13	12	29
Pedestrian	24	17	31	20	92



County/City Heat Map:

**Step 2: Identify your project area to develop a more localized Community Heat Map**

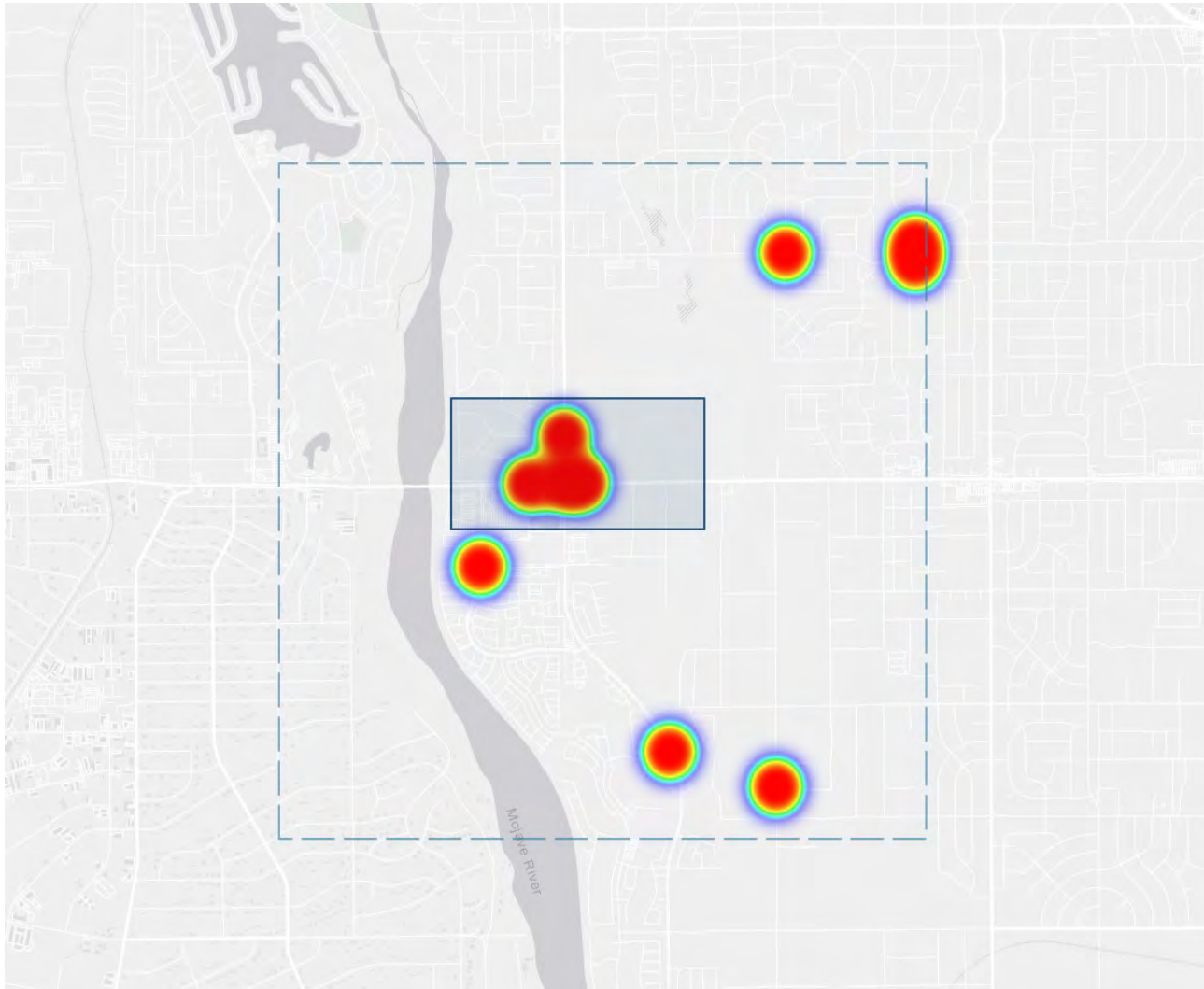
Select the size of your proposed project limits: Less than 3 miles across.



*The heat map intensity scale is constant throughout the state.*

## Community Heat Map:

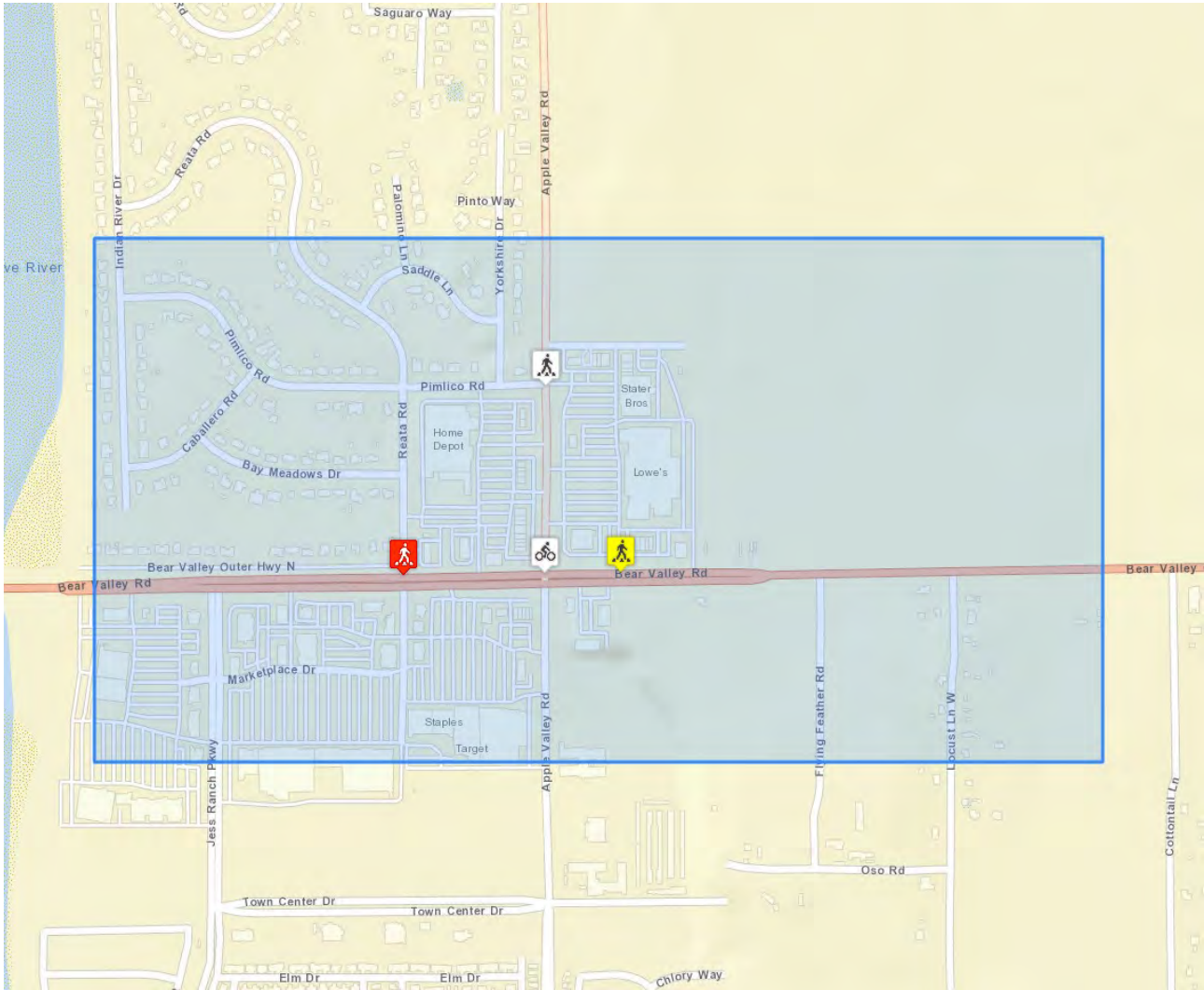
### Step 3: Draw the project boundaries to get detailed crash data summaries and map



*The heat map intensity scale is custom generated for the selected community.*

Project Area Crash Map: 4 total crashes.

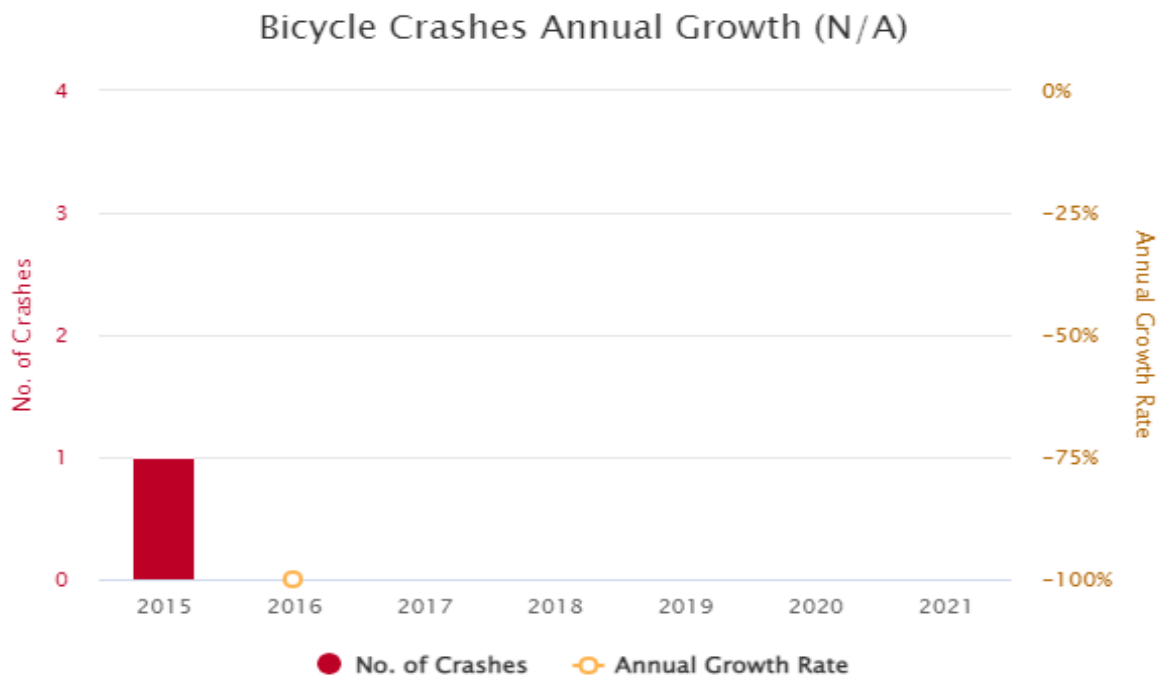
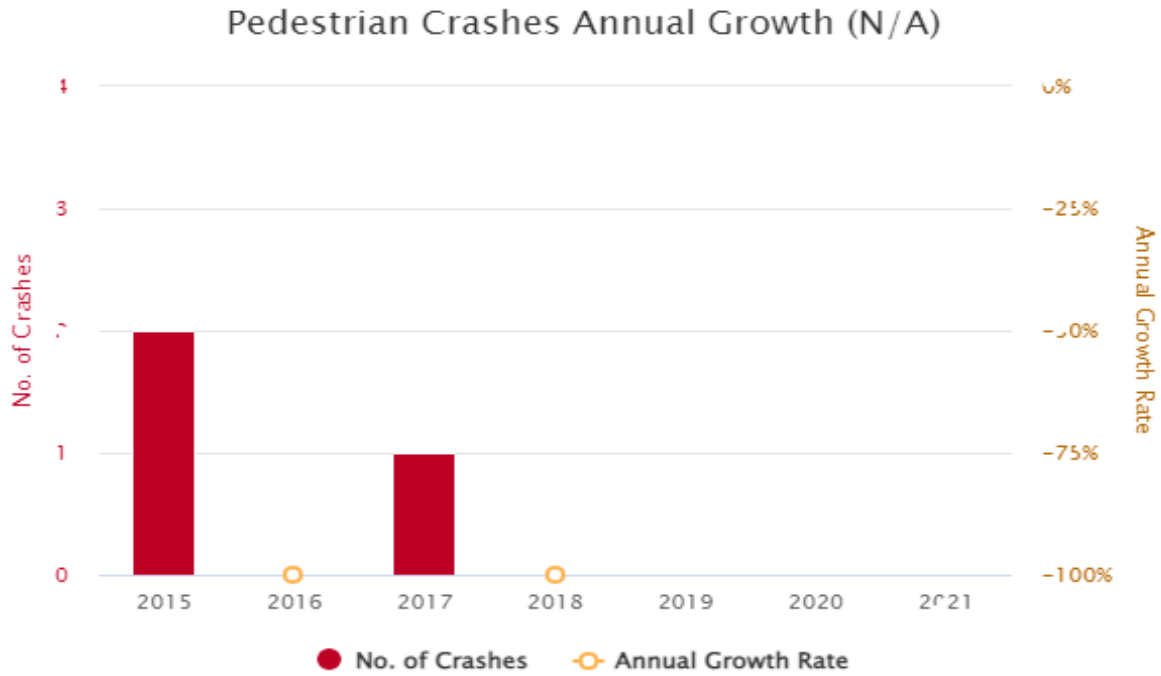
**Step 4: Review the project-specific crash map**



### Step 5: Review the crash summary data, graphs and tables provided.

#### Summary Results

Involved With	Fatal	Severe Injury	Visible Injury	Complaint of Pain	Total
Bicycle	0	0	0	1	1
Pedestrian	1	0	1	1	3



## Crash List

<b>CASE ID</b>	<b>Date</b>	<b>Time</b>	<b>Primary Rd</b>	<b>Secondary Rd</b>	<b>Dist &amp; Dir from Int.</b>	<b>Bike</b>	<b>Ped</b>	<b>Killed</b>	<b>Injured</b>
6996856	02/06/2015	18:40	Bear Valley Rd	Apple Valley Rd	465 ft East	No	Yes	0	1
7052917	08/20/2015	17:11	Bear Vally Rd	Apple Valley Rd	At Int	Yes	No	0	1
7199538	10/19/2015	07:39	Bear Valley Rd	Reata Rd	At Int	No	Yes	1	0
8313323	01/24/2017	19:16	Apple Valley Rd	Pimlico Rd	At Int	No	Yes	0	1