



## TRAFFIC IMPACT ANALYSIS

NWC Riviera Drive  
and Mesquite Avenue  
Lake Havasu City, Arizona

Prepared for:

**Circle K Stores, Inc.**

**Kimley»Horn**

# TRAFFIC IMPACT ANALYSIS

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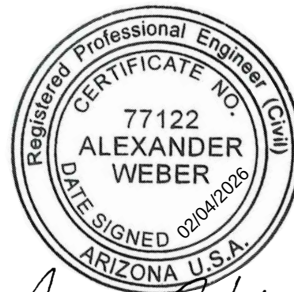
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A handwritten signature in black ink that reads "Alexander Weber".

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# 1 EXECUTIVE SUMMARY

## 1.1 INTRODUCTION

This report documents a traffic impact analysis (TIA) performed for a proposed gas station with convenience store and an automated car wash development located on the northwest corner of the intersection of Riviera Drive and Mesquite Avenue in Lake Havasu City, Arizona. The site is anticipated to be built out by 2026.

## 1.2 REPORT PURPOSE AND OBJECTIVES

Kimley-Horn and Associates, Inc. has been retained by Circle K Stores Inc. to perform the TIA for the proposed development.

The purpose of this study is to address traffic and transportation impacts of the proposed development on surrounding streets and intersections. This traffic impact analysis was prepared based on Mohave County Traffic Impact Analysis Guidelines and on previous coordination between Lake Havasu City and Kimley-Horn. The specific objectives of this study are:

- To evaluate lane requirements on existing roadway links and at the study area intersections;
- To determine future level of service (LOS) for the analyzed study area intersections and recommend any capacity-related improvements;
- To determine necessary lane configurations at all new driveways within the proposed development in order to provide acceptable future levels of service;
- To analyze the most recent 5-years crash history data for the intersection of Riviera Drive and Mesquite Avenue;
- To evaluate the need for auxiliary lanes at all study area intersections; and
- To evaluate the need for future traffic signals.

## 1.3 PRINCIPAL FINDINGS AND RECOMMENDATIONS

The proposed development is expected to generate 1,548 new daily trips, with 156 new AM peak hour trips and 146 new PM peak hour trips. To estimate the maximum traffic impacts that can be expected, it is assumed that the site will be fully built out by 2026.

- The study area intersections are expected to operate at a satisfactory LOS in 2026 total traffic conditions.
- The intersection of Riviera Drive and Mesquite Avenue meets Warrant 7 using crash history data for the last available 5-year period. Therefore, the installation of a traffic signal is recommended at site build out as an alternative to reduce preventable crashes at this location.
- It is recommended that sight triangles be provided at all site access points to give drivers exiting the site a clear view of oncoming traffic. The landscaping within sight triangles must not obstruct drivers' views of the adjacent travel lanes.

## 2 PROPOSED DEVELOPMENT

### 2.1 SITE LOCATION

The proposed development is located on the northwest corner of the intersection of Riviera Boulevard and Mesquite Avenue in Lake Havasu City, Arizona.

### 2.2 LAND USE AND SITE PLAN

The development consists of a gas station with 12 fueling positions and a 5,200 square feet (SF) convenience store and a one tunnel automated car wash. The total site area is approximately 0.94 acres. The layout of the site is illustrated in **Figure 1**.

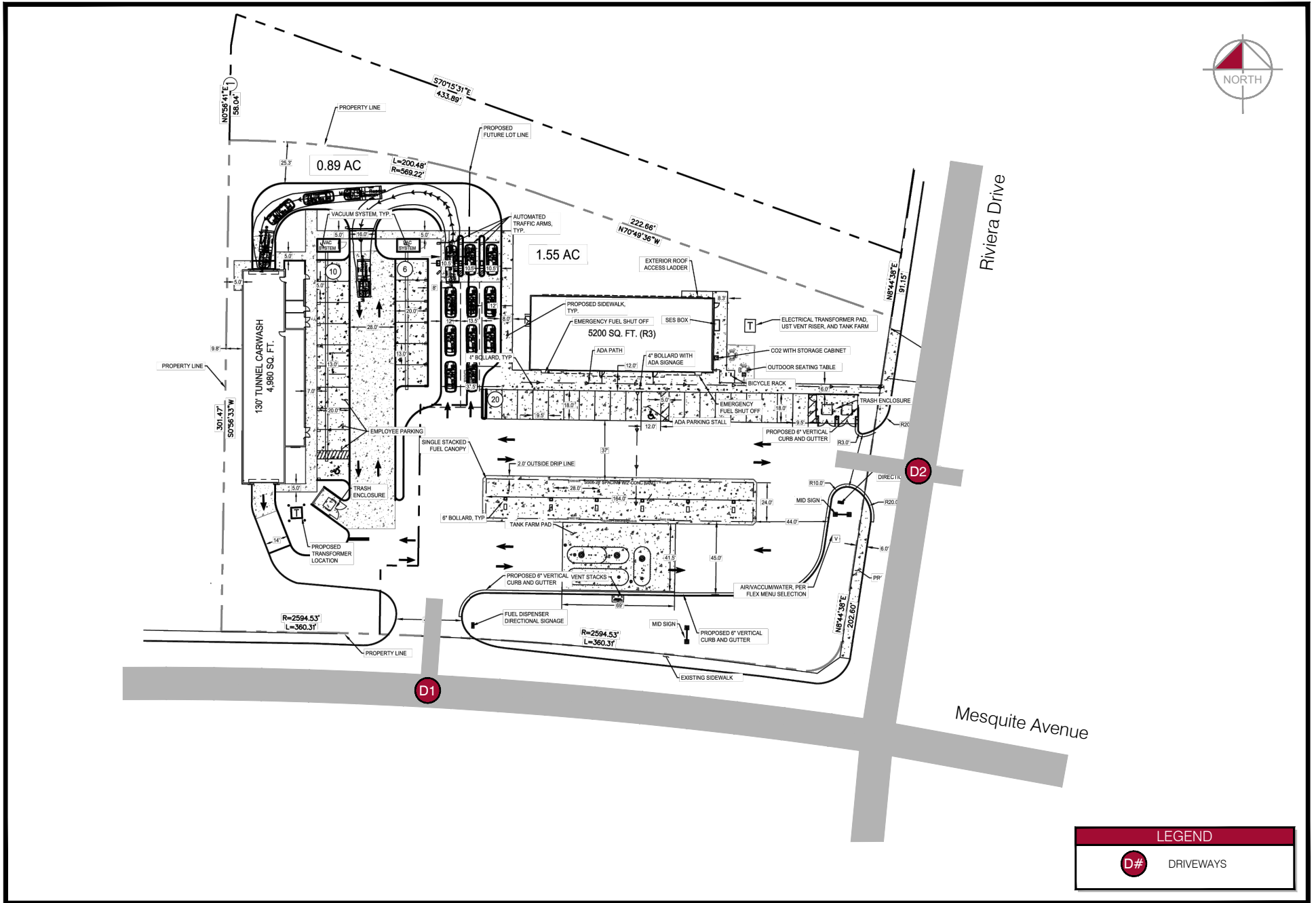
### 2.3 SITE ACCESSIBILITY

The site is accessed locally via Riviera Boulevard and Mesquite Avenue. Regional access is expected to be provided by State Route 95 and by the other arterial streets in the vicinity such as McCulloch Boulevard and Acoma Boulevard.

### 2.4 SITE CIRCULATION

The site plan is shown in previously referenced **Figure 1**. Access to the development is proposed to be provided by two new driveways.

- Driveway D1 is a proposed full access driveway located along the north side of Mesquite Avenue approximately 280 feet west of Riviera Drive.
- Driveway D2 is a proposed right-in/right-out driveway located along the west side of Riviera Drive approximately 170 feet north of Mesquite Avenue.



## 3 STUDY AREA

### 3.1 STUDY AREA

The study area includes the intersection of Riviera Drive and Mesquite Avenue as well as the two proposed site driveways.

### 3.2 ADJACENT LAND USE

The area in the vicinity of the site is primarily composed of commercial and medical land uses with residential zones located further north and south of the site.

## 4 EXISTING CONDITIONS

### 4.1 PHYSICAL CHARACTERISTICS

The existing roadway network within the study area includes Mesquite Avenue and Riviera Drive. **Figure 2** shows the existing lane use and traffic control at the intersection of Mesquite Avenue and Riviera Drive.

**Mesquite Avenue** currently extends east-west with two lanes in the eastbound direction and one lane in the westbound direction with a center two-way left-turn lane. Curb, gutter, and sidewalk are present on both sides of the road. Mesquite Avenue has a 30 miles per hour posted speed limit within the study area.

**Riviera Drive** currently extends north-south with one lane in each direction and a center two-way left-turn lane. Curb, gutter, and sidewalk are present on both sides of the road. Riviera Drive has a 25 miles per hour posted speed limit within the study area.

The existing intersection analyzed in this report, Riviera Drive and Mesquite Avenue, is an all-way stop-controlled intersection.

### 4.2 TRAFFIC VOLUMES

24-hour turning movement counts were collected at the existing study area intersection on Wednesday, March 26, 2025. The results of these counts are shown in **Figure 2**. Copies of the traffic counts are attached in the **Appendix**.

### 4.3 LEVEL OF SERVICE

The LOS at the existing study area intersections was evaluated using the collected traffic counts described previously. Intersection LOS was evaluated using the *Highway Capacity Manual (HCM) 7<sup>th</sup> Edition* methodology for unsignalized intersections using *Synchro 12* analysis software. Due to limitations with HCM methodology for all-way stop-controlled intersections with more than three lanes on one approach, the eastbound approach at the intersection of Riviera Drive and Mesquite Avenue was analyzed with one left turn lane, one through lane, and one right turn lane. For this reason, the level of service analysis may operate better under actual conditions. The existing intersection geometry and control shown in **Figure 2** was used to obtain the LOS. The results of this analysis are shown in **Table 1**. LOS analysis worksheets are included in the **Appendix**.

**Table 1. Existing Level of Service – Unsignalized Intersections**

| Intersection                      | NB |   |   | SB |   |   | EB |   |   | WB |   |   | Intersection<br>LOS |
|-----------------------------------|----|---|---|----|---|---|----|---|---|----|---|---|---------------------|
|                                   | L  | T | R | L  | T | R | L  | T | R | L  | T | R |                     |
| Riviera Drive and Mesquite Avenue |    |   |   |    |   |   |    |   |   |    |   |   |                     |
| AM Peak                           | B  | B | A | B  | B | A | B  | B | A | B  | B |   | B                   |
| PM Peak                           | B  | B | B | B  | B | B | B  | C | A | B  | C |   | C                   |

The existing intersection operates at a satisfactory LOS.

#### 4.4 CRASH HISTORY

Crash data for the existing study area intersection was obtained using the ADOT ACIS database for the latest available 5-year period (2019 to 2023). The crash data is included in the **Appendix**.

**Table 2** summarizes the number of crashes by injury severity and **Table 3** summarizes the number of crashes by crash type.

**Table 2. Crashes by Injury Severity - Riviera Drive and Mesquite Avenue**

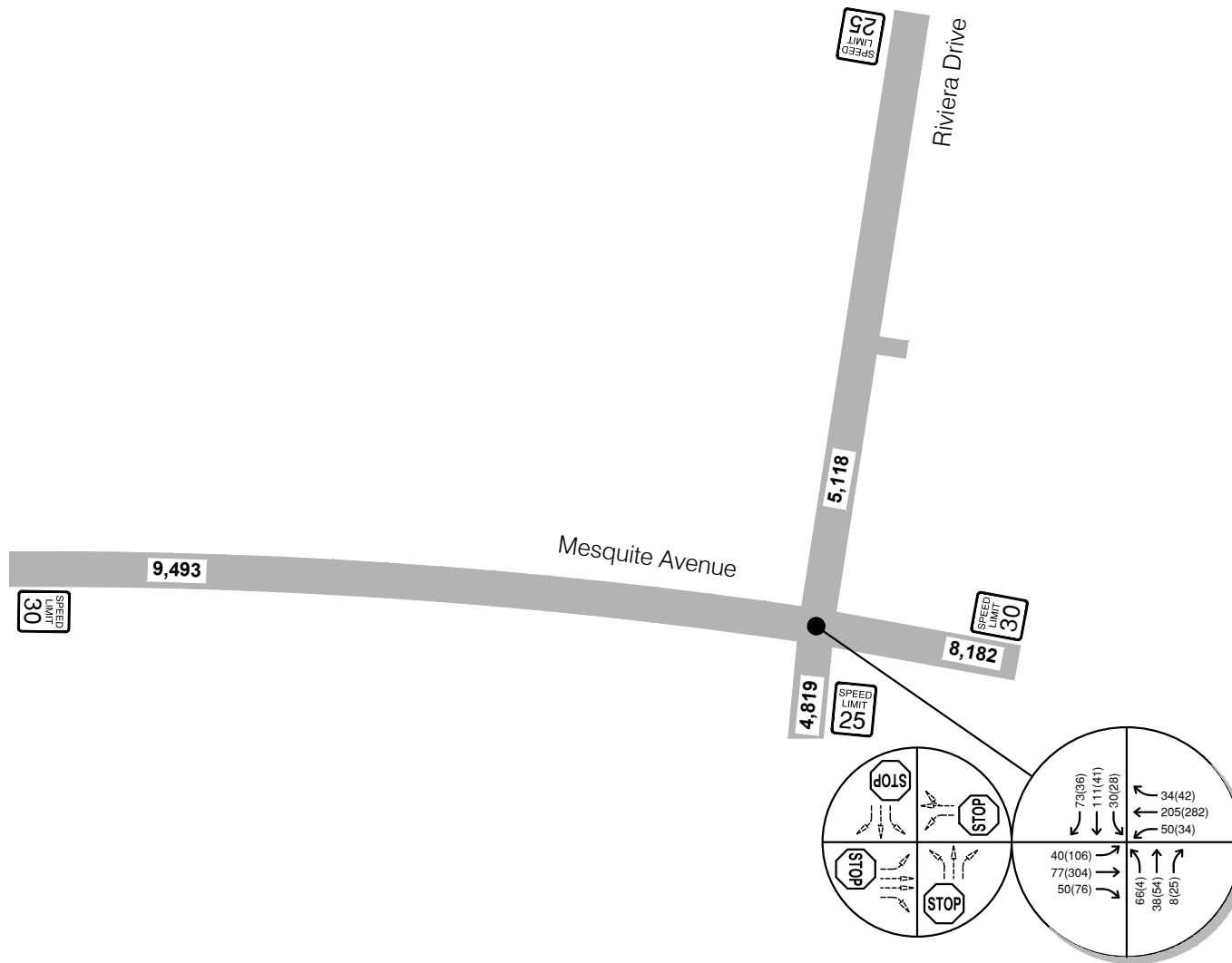
| Year | Injury Severity |                 |                        |                          |              |                      | Total |
|------|-----------------|-----------------|------------------------|--------------------------|--------------|----------------------|-------|
|      | No Injury       | Possible Injury | Suspected Minor Injury | Suspected Serious Injury | Fatal Injury | Not Reported/Unknown |       |
| 2019 | 6               | 0               | 0                      | 1                        | 0            | 0                    | 7     |
| 2020 | 1               | 0               | 0                      | 1                        | 0            | 0                    | 2     |
| 2021 | 0               | 0               | 1                      | 0                        | 0            | 0                    | 1     |
| 2022 | 5               | 1               | 0                      | 0                        | 0            | 0                    | 6     |
| 2023 | 4               | 1               | 0                      | 0                        | 0            | 0                    | 5     |

As shown in **Table 2**, a total of 21 crashes were reported within the intersection in the last 5 years. No crashes resulted in a fatal injury and there was a total of three (3) crashes reported with a suspected minor or serious injury from 2019 to 2023.

**Table 3. Crashes by Crash Type - Riviera Drive and Mesquite Avenue**

| Year | Crash Type     |       |           |          |         |                            |                                |              |              |       |         | Total |
|------|----------------|-------|-----------|----------|---------|----------------------------|--------------------------------|--------------|--------------|-------|---------|-------|
|      | Single Vehicle | Angle | Left Turn | Rear End | Head-on | Sideswipe (same direction) | Sideswipe (opposite direction) | Rear-to-Side | Rear-to-Rear | Other | Unknown |       |
| 2019 | 1              | 2     | 1         | 1        | 1       | 1                          | 0                              | 0            | 0            | 0     | 0       | 7     |
| 2020 | 1              | 1     | 0         | 0        | 0       | 0                          | 0                              | 0            | 0            | 0     | 0       | 2     |
| 2021 | 0              | 1     | 0         | 0        | 0       | 0                          | 0                              | 0            | 0            | 0     | 0       | 1     |
| 2022 | 0              | 4     | 0         | 1        | 0       | 1                          | 0                              | 0            | 0            | 0     | 0       | 6     |
| 2023 | 0              | 2     | 1         | 2        | 0       | 0                          | 0                              | 0            | 0            | 0     | 0       | 5     |

As shown in **Table 3**, angle crashes were the type of crashes with major frequency in the study area with a total of ten (10) crashes recorded at the intersection from 2019 to 2023. Seven (7) of these crashes were recorded in the last three recorded years (2021 to 2023).



| LEGEND         |                                  |
|----------------|----------------------------------|
| ← XX(XX)       | AM(PM) PEAK HOUR TRAFFIC VOLUMES |
| X,XXX          | AVERAGE DAILY TRAFFIC VOLUMES    |
| →              | EXISTING LANE USE                |
| STOP           | EXISTING INTERSECTION CONTROL    |
| SPEED LIMIT XX | SPEED LIMIT                      |

## 5 PROJECTED TRAFFIC

### 5.1 SITE TRAFFIC FORECASTS

#### 5.1.1 TRIP GENERATION

The Institute of Transportation Engineers' (ITE) *Trip Generation, 11<sup>th</sup> Edition* was used to obtain daily and peak hour trip generation rates and inbound/outbound percentages, which were then used to estimate the number of daily and peak hour trips that can be attributed to the proposed development. The trip generation characteristics of the site are summarized in **Table 4**. Trip generation calculations are provided in the **Appendix**.

**Table 4. Project Trip Generation**

| Land Use                                                  | ITE Code | Quantity | Units               | Daily Total | AM Peak |      |       | PM Peak |      |       |
|-----------------------------------------------------------|----------|----------|---------------------|-------------|---------|------|-------|---------|------|-------|
|                                                           |          |          |                     |             | In      | Out  | Total | In      | Out  | Total |
| Gas Station with Convenience Store (4 - 5.5k square feet) | 945      | 12       | Fueling Position(s) | 3,086       | 162     | 162  | 324   | 137     | 136  | 273   |
| Automated Car Wash                                        | 948      | 1        | Tunnel(s)           | 776         | 39      | 39   | 78    | 39      | 39   | 78    |
| Trips Subtotal                                            |          |          |                     | 3,862       | 201     | 201  | 402   | 176     | 175  | 351   |
| Pass-By Trip Reductions                                   |          |          |                     | -2,314      | -123    | -123 | -246  | -103    | -102 | -205  |
| Primary Trips                                             |          |          |                     | 1,548       | 78      | 78   | 156   | 73      | 73   | 146   |

The proposed development is expected to generate 3,862 daily trips, with 402 trips occurring in the AM peak hour and 351 trips occurring in the PM peak hour. Owing to the proposed land uses, trip reductions are anticipated and justified below.

#### 5.1.2 TRIP REDUCTIONS

As documented in the ITE publication *Trip Generation, 11<sup>th</sup> Edition*, gas stations do not typically generate exclusively new traffic on a roadway system. The total traffic generation is a combination of pass-by trips, or traffic drawn directly from the passing traffic flow on the adjacent streets, and primary trips, which represent new traffic drawn to the facility. To assess pass-by trips, the data published in the ITE *Trip Generation Handbook* was used to estimate the pass-by percentages for a Gas Station with Convenience Store land use. Note that pass-by trip reductions do not reduce driveway traffic volumes. Pass-by reductions are shown in the **Appendix**.

Considering pass-by trips, the proposed development is expected to add 1,548 new daily trips, 156 new AM peak hour trips, and 146 new PM peak hour trips to the roadway network.

#### 5.1.3 TRIP DISTRIBUTION

Trips were distributed based on existing patterns observed with traffic collected data, the surrounding roadway network configuration, and development within the area. **Figure 3** illustrates the site trip distribution applied to primary tips.

The trip distribution for pass-by trips was determined by the existing directional traffic passing through the proposed driveway locations and by the type of proposed driveway.

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#### 5.1.4 SITE TRAFFIC ASSIGNMENT

Trips generated by the proposed development were assigned to the roadway network based on the trip distribution and the likely travel patterns to and from the site. **Figure 4** shows the results of the site primary traffic assignment.

Pass-by trips were assigned to the street system based on the anticipated use of the roadway facilities for users accessing the site. **Figure 5** shows the projected pass-by site traffic assignment. The resulting total traffic assignment is shown in **Figure 6**.

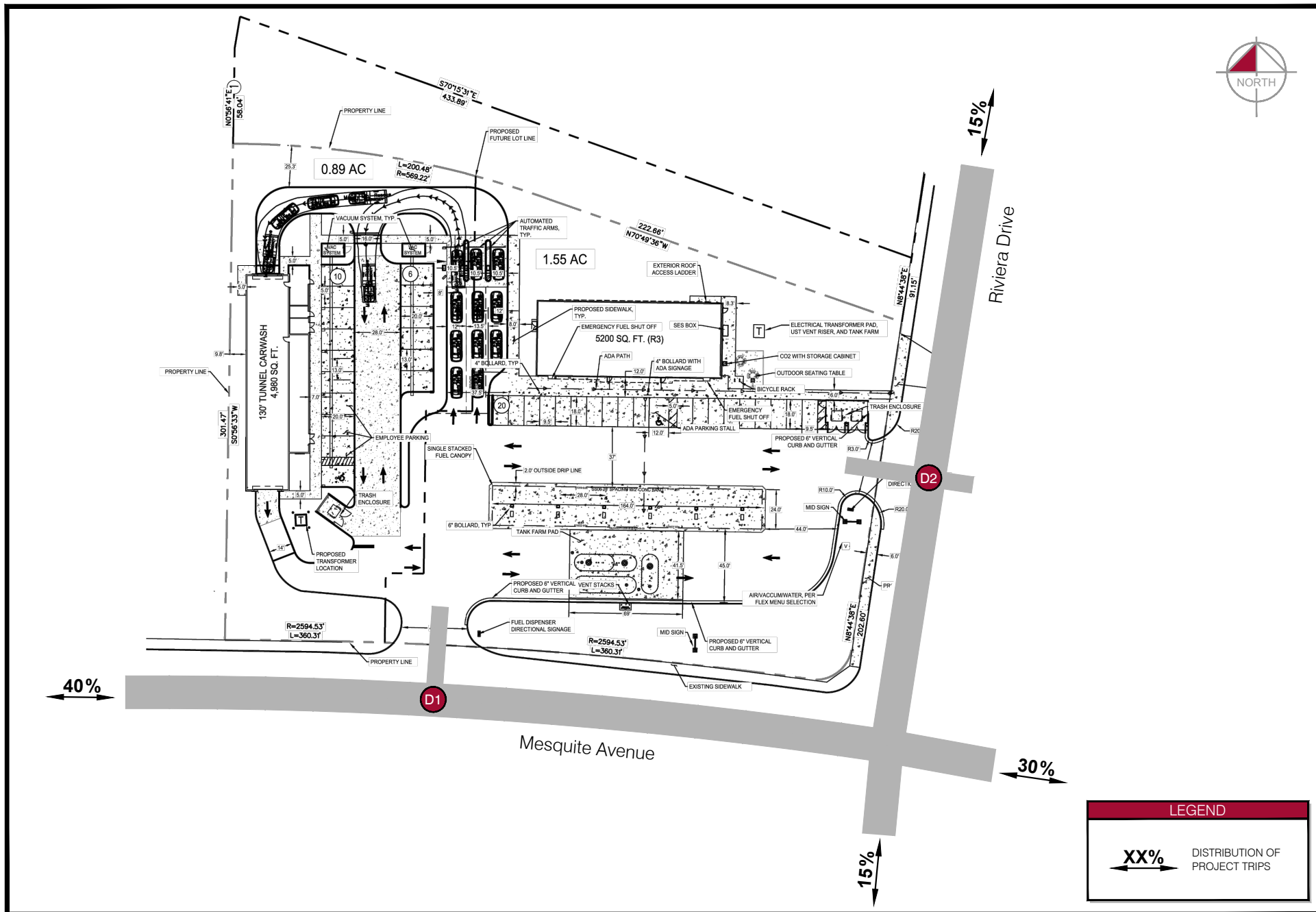
#### 5.2 FUTURE TRAFFIC FORECASTING

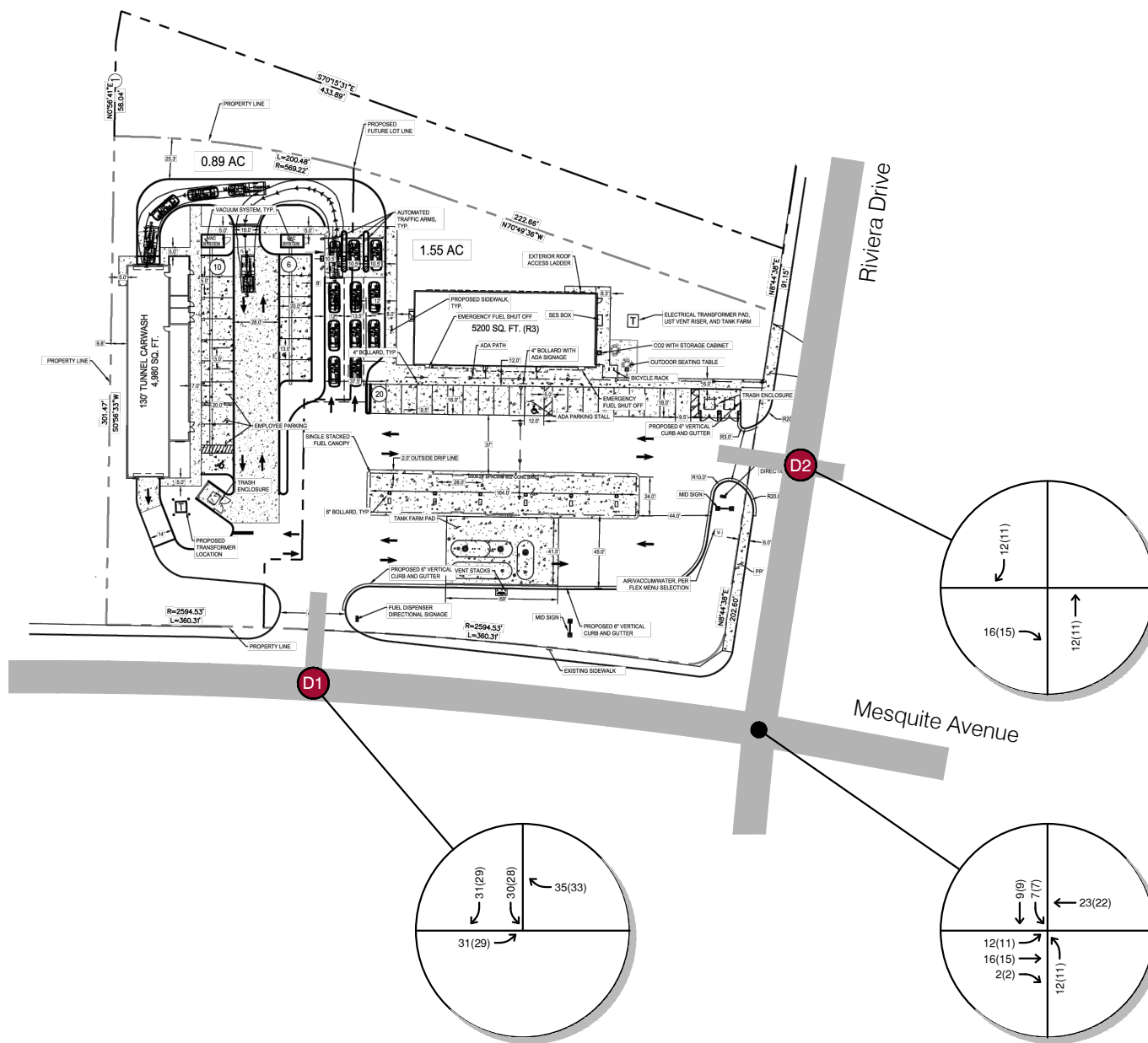
2025 collected average daily traffic volumes are consistent with historical available traffic volume data. To be conservative an annual growth rate of 1.0 percent per year was applied to the existing turning movements to obtain 2026 background traffic volumes.

The resulting 2026 background traffic volumes are shown in **Figure 7**.

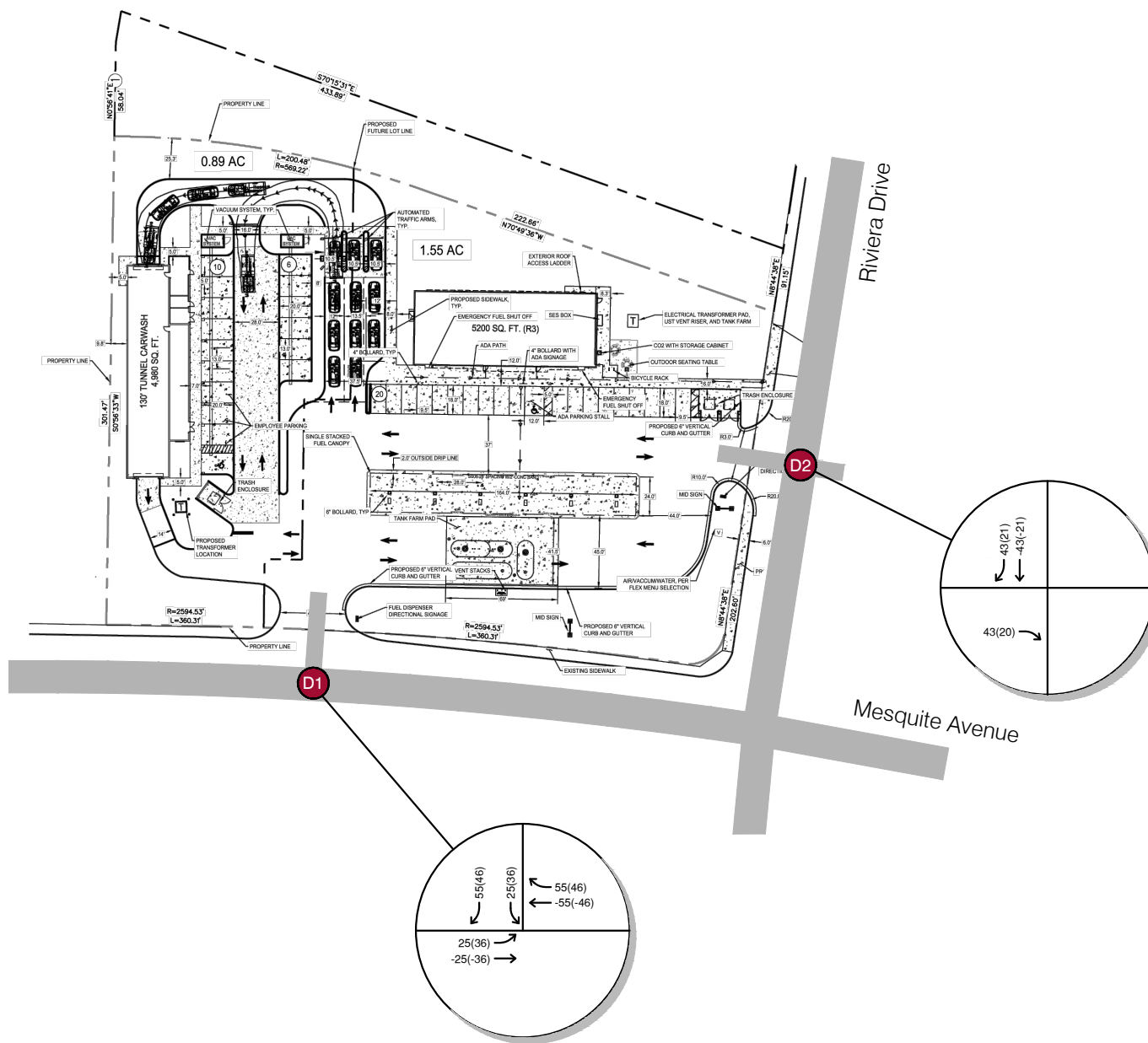
#### 5.3 TOTAL TRAFFIC

The results of the traffic assignment were added to the 2026 background traffic volumes to produce total traffic volumes for the study area. These total traffic volumes are shown in **Figure 8**.

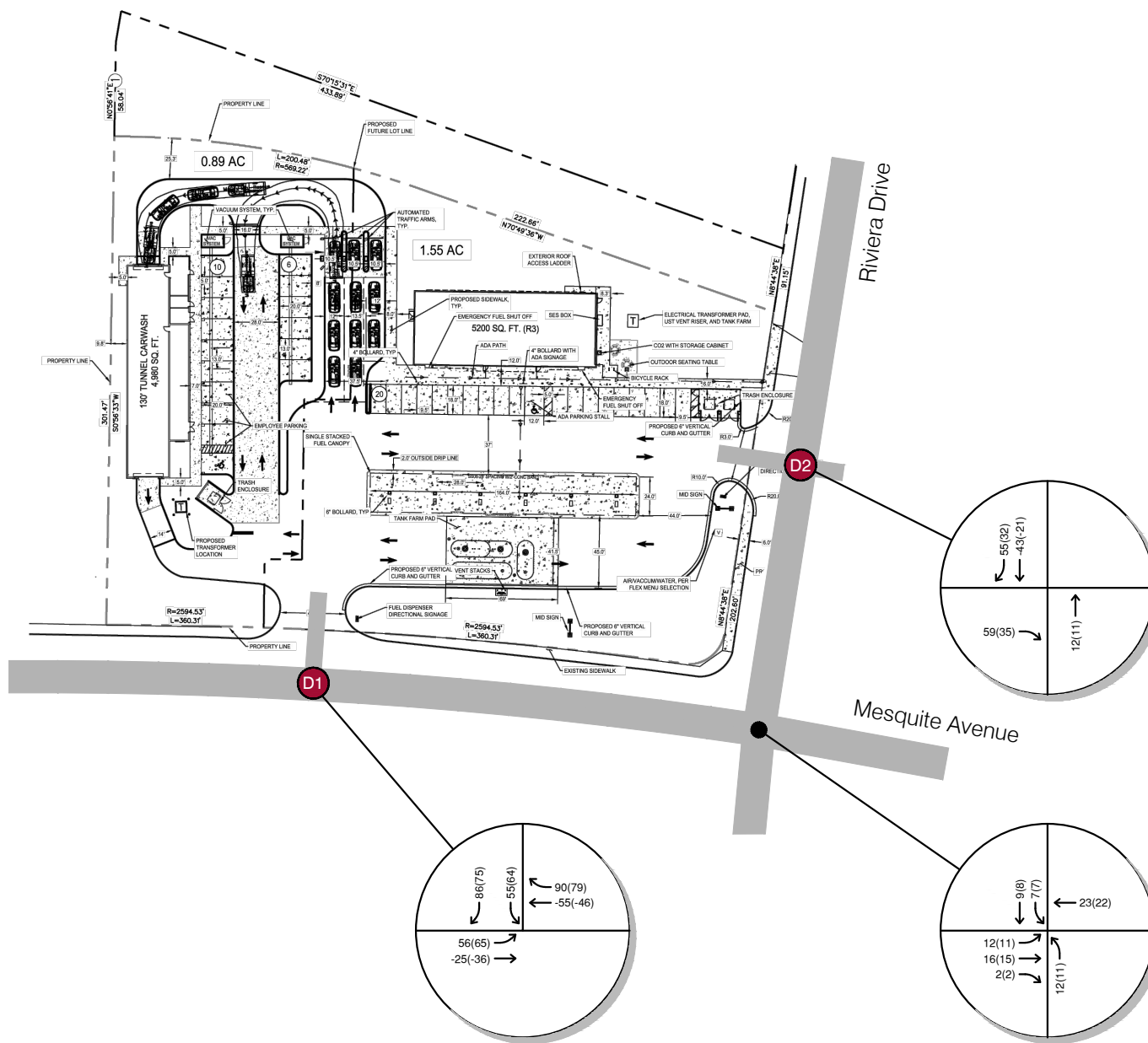




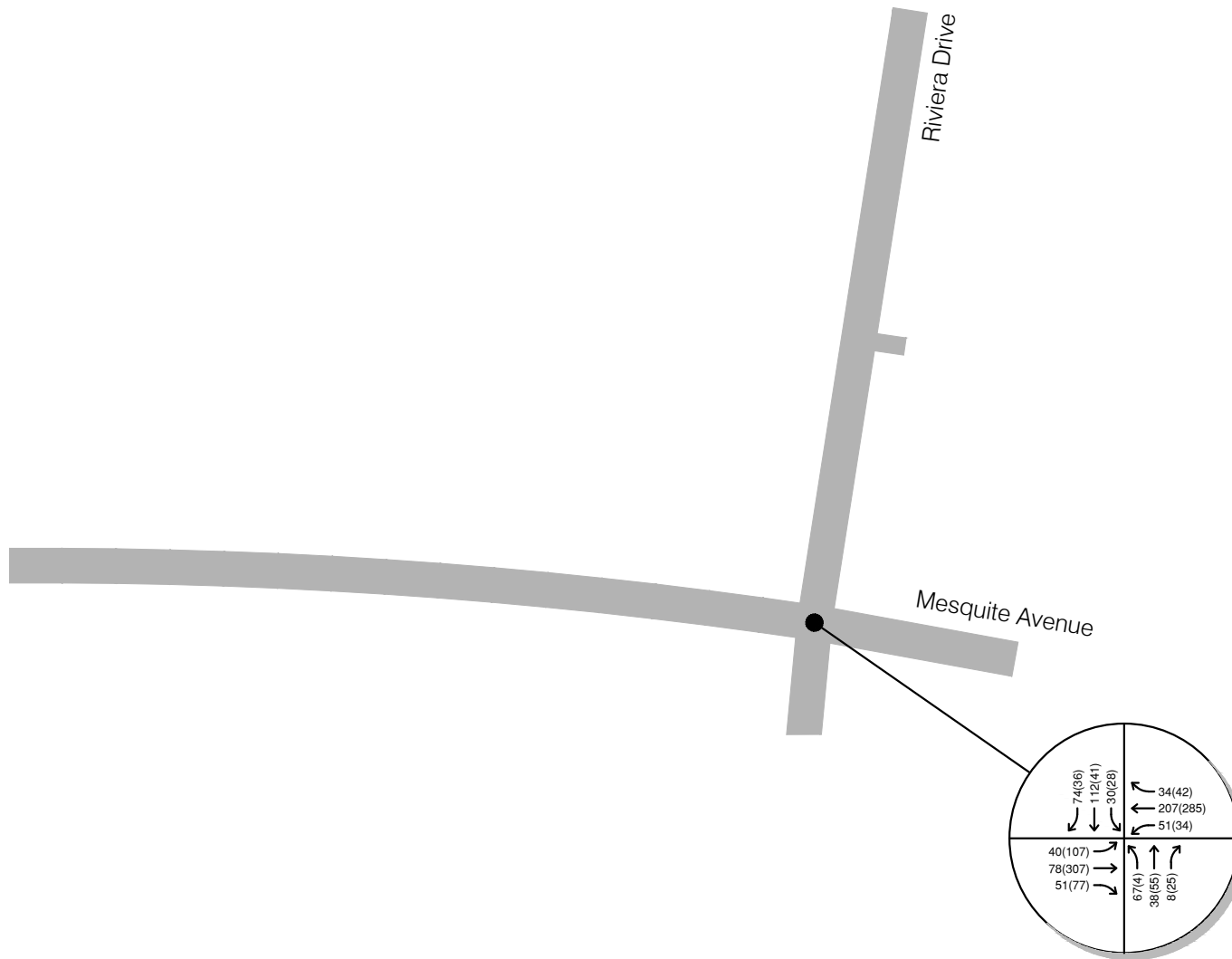
| LEGEND   |                                  |
|----------|----------------------------------|
| ← XX(XX) | AM(PM) PEAK HOUR TRAFFIC VOLUMES |



| LEGEND   |                                  |
|----------|----------------------------------|
| ← XX(XX) | AM(PM) PEAK HOUR TRAFFIC VOLUMES |



| LEGEND   |                                  |
|----------|----------------------------------|
| ← XX(XX) | AM(PM) PEAK HOUR TRAFFIC VOLUMES |



| LEGEND   |                                  |
|----------|----------------------------------|
| ← XX(XX) | AM(PM) PEAK HOUR TRAFFIC VOLUMES |



## 6 TRAFFIC AND IMPROVEMENT ANALYSIS

### 6.1 LEVEL OF SERVICE ANALYSIS

The LOS for the study area intersections for 2026 was evaluated using the *Highway Capacity Manual 7<sup>th</sup> Edition* methodology for unsignalized intersections using *Synchro 12* analysis software. Due to limitations with HCM methodology for all-way stop-controlled intersections with more than three lanes on one approach, the eastbound approach at the intersection of Riviera Drive and Mesquite Avenue was analyzed with one left turn lane, one through lane, and one right turn lane. For this reason, the level of service analysis may operate better under actual conditions. LOS analysis worksheets are included in the **Appendix**.

#### 6.1.1 2026 BACKGROUND TRAFFIC LEVEL OF SERVICE ANALYSIS

The existing study area intersection was evaluated based on the 2026 background traffic volumes shown in **Figure 5** and existing geometry shown in **Figure 2**. The results of this analysis are shown in **Table 5**.

**Table 5. 2026 Background Level of Service – Unsignalized Intersections**

| Intersection                      | NB |   |   | SB |   |   | EB |   |   | WB |   |   | Intersection<br>LOS |
|-----------------------------------|----|---|---|----|---|---|----|---|---|----|---|---|---------------------|
|                                   | L  | T | R | L  | T | R | L  | T | R | L  | T | R |                     |
| Riviera Drive and Mesquite Avenue |    |   |   |    |   |   |    |   |   |    |   |   |                     |
| AM Peak                           | B  | B | A | B  | B | A | B  | B | A | B  | B |   | B                   |
| PM Peak                           | B  | B | B | B  | B | B | B  | C | A | B  | C |   | B                   |

The existing intersection is expected to operate at a satisfactory LOS in 2026 background traffic conditions.

#### 6.1.2 2026 TOTAL TRAFFIC LEVEL OF SERVICE ANALYSIS

The study area intersections were evaluated based on the 2026 total traffic volumes and recommended geometry shown in **Figure 8**. The results of this analysis are shown in **Table 6**.

**Table 6. 2026 Total Traffic Level of Service – Unsignalized Intersections**

| Intersection                      | NB |   |   | SB |   |   | EB |   |   | WB |   |   | Intersection<br>LOS |
|-----------------------------------|----|---|---|----|---|---|----|---|---|----|---|---|---------------------|
|                                   | L  | T | R | L  | T | R | L  | T | R | L  | T | R |                     |
| Riviera Drive and Mesquite Avenue |    |   |   |    |   |   |    |   |   |    |   |   |                     |
| AM Peak                           | B  | B | A | B  | B | B | B  | B | B | B  | C | B |                     |
| PM Peak                           | B  | B | B | B  | B | B | B  | B | B | B  | D | C |                     |
| Driveway D1 and Mesquite Avenue   |    |   |   |    |   |   |    |   |   |    |   |   |                     |
| AM Peak                           |    |   |   | B  |   | B | A  | - |   |    | - |   |                     |
| PM Peak                           |    |   |   | B  |   | B | A  | - |   |    | - |   |                     |
| Riviera Drive and Driveway D2     |    |   |   |    |   |   |    |   |   |    |   |   |                     |
| AM Peak                           |    | - |   |    | - |   |    | A |   |    | A |   |                     |
| PM Peak                           |    | - |   |    | - |   |    | A |   |    | A |   |                     |

The study area intersections are expected to operate at a satisfactory LOS in 2026 total traffic conditions. A signal warrant analysis is conducted later in Section 6.2 of this report at the intersection of Riviera Drive and Mesquite Avenue and the intersection was found to warrant signal control. Therefore, a LOS analysis was completed for the intersection of Riviera Drive and Mesquite Avenue assuming the intersection was signalized and the LOS under these circumstances is shown in **Table 7**.

**Table 7. 2026 Total Traffic Level of Service – Signalized Intersection**

| Intersection                      | NB |   |   | SB |   |   | EB |   |   | WB |   |   | Intersection<br>LOS |
|-----------------------------------|----|---|---|----|---|---|----|---|---|----|---|---|---------------------|
|                                   | L  | T | R | L  | T | R | L  | T | R | L  | T | R |                     |
| Riviera Drive and Mesquite Avenue |    |   |   |    |   |   |    |   |   |    |   |   |                     |
| AM Peak                           | B  | B | B | B  | B | B | B  | B |   | B  | B |   | B                   |
| PM Peak                           | B  | B | B | B  | B | B | A  | B |   | A  | B |   | B                   |

The Riviera Drive and Mesquite Avenue intersection is expected to operate at a satisfactory LOS as a signalized intersection in 2026 total traffic conditions.

## 6.2 SIGNAL WARRANT ANALYSIS

The 2026 total volumes shown in **Figure 8** were analyzed to determine whether the intersection of Riviera Drive and Mesquite Avenue warrants the installation of a traffic signal. The signal warrant analysis was prepared based on the *2023 Manual on Uniform Traffic Control Devices (MUTCD)*, Warrant 1, 2, and 3 (eight-hour, four-hour, and peak-hour volume warrants, respectively). A copy of worksheets documenting the results of the analysis is provided in the **Appendix**. It was determined that the intersection of Riviera Drive and Mesquite Avenue does not meet the volume warrants under 2026 total conditions.

The *MUTCD* Warrant 7 (crash experience warrant) was included in the analysis at the intersection of Riviera Drive and Mesquite Avenue. As previously shown in **Table 3**, there were seven (7) reported angle crashes at the intersection during a three-year period, which is higher than the threshold (6 crashes) stated in *Table 4C-3* of the *MUTCD*. There are 8 or more hours of an average day where the vehicular volume at the intersection is equal or higher than the 80 percent columns of *Condition A* within *Table 4C-1* of the *MUTCD*. It was determined that the intersection of Riviera Drive and Mesquite Avenue meets Warrant 7. Therefore, the installation of a traffic signal is recommended at site build out as an alternative to reduce preventable crashes at this location. **Table 7** shows the level of service analysis for the intersection with signal control.

## 6.3 LEFT-TURN STORAGE ANALYSIS

The unsignalized intersections in the study area were analyzed to determine the left-turn storage needed to accommodate the expected total traffic volumes in the buildout year 2026. The calculated storage lengths are based on total traffic volumes shown in **Figure 8**.

**Table 8** provides the recommended left-turn storage at the study area intersections. The calculations associated with these conclusions are included in the **Appendix**.

**Table 8. Left-Turn Storage**

| Intersection and Approach                | Existing | HCM 95 <sup>th</sup><br>Percentile Queue | Recommended |
|------------------------------------------|----------|------------------------------------------|-------------|
| <b>Riviera Drive and Mesquite Avenue</b> |          |                                          |             |
| - Northbound Approach                    | 90 feet  | 50 feet                                  | 90 feet*    |
| - Southbound Approach                    | 100 feet | 25 feet                                  | 100 feet*   |
| - Eastbound Approach                     | 100 feet | 25 feet                                  | 100 feet*   |
| - Westbound Approach                     | 80 feet  | 25 feet                                  | 80 feet*    |
| <b>Driveway D1 and Mesquite Avenue</b>   |          |                                          |             |
| - Eastbound Approach                     | TWLT     | 25 feet                                  | TWLT        |

\*Calculated value less than existing.

TWLT = Two-way left-turn lane.

As shown in **Table 8**, the existing left-turn lanes are expected to accommodate the projected queues.

## 6.4 RIGHT-TURN LANES

Right-turn lanes are often recommended on roadways where right-turning vehicles create delays or safety concerns for other traffic movements. The need for a right-turn lane depends on the speed of traffic on the road, the volume of traffic turning right, and the through traffic volume in the same lane as the right-turning traffic.

### 6.4.1 INTERSECTIONS

Right turn lanes are provided on all approaches at the intersection of Riviera Drive and Mesquite Avenue. Review of queues using 2026 total traffic volumes reveals that the existing right turn storage is expected to accommodate the projected queues. The HCM 95<sup>th</sup> percentile queues are included in the **Appendix**.

### 6.4.2 DRIVEWAY

Turn lane warrants were analyzed per ADOT Traffic Guidelines and Processes to determine if right turn lanes were required at the proposed site driveways. Right turn lane warrants are not met at any of the two proposed driveways using 2026 total volumes.

## 6.5 SITE CIRCULATION

To provide smooth ingress and egress to the proposed development, all site driveways should be constructed with appropriate throat lengths. Provision of sufficient throat lengths at all site driveways will prevent entering vehicles from obstructing traffic flow on the adjacent public street system and provide adequate on-site storage for exiting vehicles. Based on the site plan, sufficient throat length is provided to accommodate the projected on-site queueing at each driveway.

## 6.6 SIGHT TRIANGLES

It is recommended that sight triangles be provided at all site access points to give drivers exiting the site a clear view of oncoming traffic. The landscaping within sight triangles must not obstruct drivers' views of the adjacent travel lanes.

## 7 CONCLUSIONS AND RECOMMENDATIONS

The proposed development is expected to generate 1,548 new daily trips, with 156 new AM peak hour trips and 146 new PM peak hour trips. To estimate the maximum traffic impacts that can be expected, it is assumed that the site will be fully built out by 2026.

The study area intersections are expected to operate at a satisfactory LOS in 2026 total traffic conditions.

The intersection of Riviera Drive and Mesquite Avenue meets Warrant 7 using crash history data for the last available 5-year period. Therefore, the installation of a traffic signal is recommended at site build out as an alternative to reduce preventable crashes at this location.

It is recommended that sight triangles be provided at all site access points to give drivers exiting the site a clear view of oncoming traffic. The landscaping within sight triangles must not obstruct drivers' views of the adjacent travel lanes.

## APPENDIX

Appendix A: Traffic Counts

Appendix B: Crash Data

Appendix C: Existing AM Traffic Capacity Analysis

Appendix D: Existing PM Traffic Capacity Analysis

Appendix E: Trip Generation

Appendix F: 2026 Background AM Traffic Capacity Analysis

Appendix G: 2026 Background PM Traffic Capacity Analysis

Appendix H: 2026 Total AM Traffic Capacity Analysis

Appendix I: 2026 Total PM Traffic Capacity Analysis

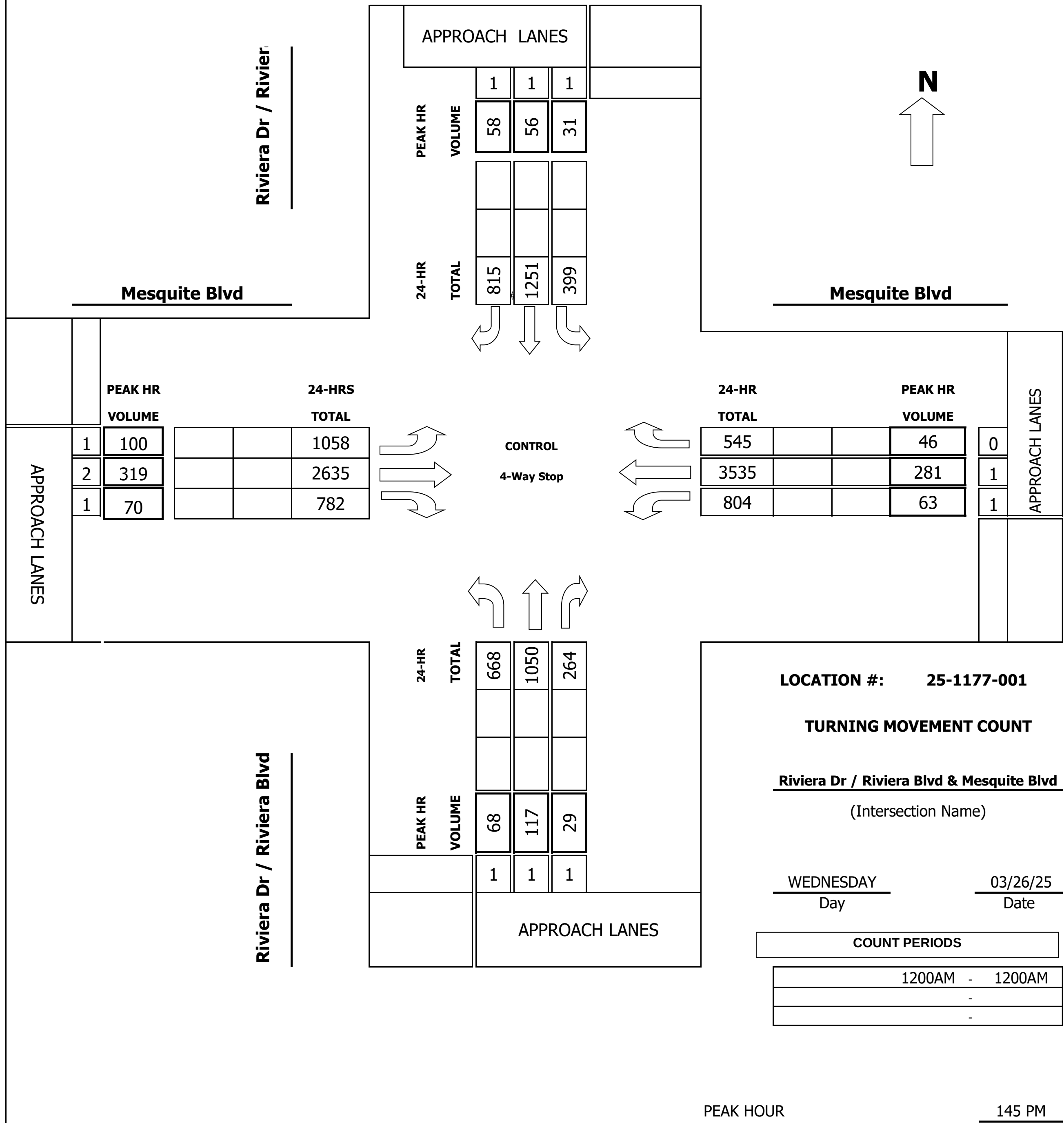
Appendix J: Signal Warrant Analysis

Appendix K: Relevant Standards

## **Appendix A: Traffic Counts**

Project #: 25-1177-001

TMC SUMMARY OF Riviera Dr / Riviera Blvd & Mesquite Blvd



Intersection Turning Movement  
Prepared by:



FIELD DATA SERVICES OF ARIZONA, INC.  
520.316.6745



veracitytrafficgroup

N-S STREET: Riviera Dr / Riviera Blvd

DATE: 03/26/25

LOCATION: Lake Havasu

E-W STREET: Mesquite Blvd

DAY: WEDNESDAY

PROJECT# 25-1177-001

|          | NORTHBOUND |         |         | SOUTHBOUND |         |         | EASTBOUND |         |         | WESTBOUND |         |         |       |
|----------|------------|---------|---------|------------|---------|---------|-----------|---------|---------|-----------|---------|---------|-------|
| LANES:   | NL<br>1    | NT<br>1 | NR<br>1 | SL<br>1    | ST<br>1 | SR<br>1 | EL<br>1   | ET<br>2 | ER<br>1 | WL<br>1   | WT<br>1 | WR<br>0 | TOTAL |
| 12:00 AM | 0          | 0       | 0       | 0          | 0       | 0       | 3         | 5       | 0       | 0         | 1       | 0       | 9     |
| 12:15 AM | 0          | 0       | 0       | 0          | 0       | 0       | 0         | 4       | 0       | 0         | 0       | 0       | 4     |
| 12:30 AM | 0          | 0       | 0       | 0          | 0       | 0       | 4         | 5       | 2       | 0         | 2       | 0       | 13    |
| 12:45 AM | 0          | 0       | 0       | 0          | 2       | 0       | 0         | 2       | 0       | 0         | 2       | 0       | 6     |
| 1:00 AM  | 0          | 0       | 0       | 0          | 1       | 1       | 1         | 1       | 0       | 0         | 1       | 0       | 5     |
| 1:15 AM  | 0          | 1       | 0       | 0          | 0       | 0       | 3         | 0       | 0       | 1         | 0       | 0       | 5     |
| 1:30 AM  | 0          | 0       | 0       | 0          | 0       | 0       | 0         | 0       | 1       | 0         | 0       | 0       | 1     |
| 1:45 AM  | 0          | 0       | 0       | 0          | 0       | 0       | 0         | 1       | 0       | 1         | 0       | 0       | 2     |
| 2:00 AM  | 0          | 0       | 0       | 0          | 4       | 0       | 1         | 1       | 0       | 3         | 1       | 0       | 10    |
| 2:15 AM  | 0          | 0       | 0       | 0          | 1       | 0       | 1         | 2       | 0       | 2         | 1       | 0       | 7     |
| 2:30 AM  | 0          | 0       | 0       | 0          | 0       | 0       | 1         | 0       | 0       | 1         | 0       | 0       | 2     |
| 2:45 AM  | 0          | 0       | 0       | 1          | 3       | 0       | 0         | 2       | 0       | 0         | 0       | 0       | 6     |
| 3:00 AM  | 1          | 0       | 0       | 0          | 1       | 1       | 1         | 3       | 0       | 1         | 3       | 0       | 11    |
| 3:15 AM  | 1          | 1       | 0       | 1          | 0       | 0       | 1         | 2       | 0       | 3         | 1       | 0       | 10    |
| 3:30 AM  | 0          | 0       | 0       | 0          | 1       | 1       | 0         | 1       | 0       | 2         | 1       | 1       | 7     |
| 3:45 AM  | 0          | 0       | 0       | 0          | 2       | 3       | 0         | 0       | 1       | 1         | 3       | 0       | 10    |
| 4:00 AM  | 0          | 0       | 1       | 0          | 1       | 2       | 2         | 2       | 0       | 0         | 2       | 0       | 10    |
| 4:15 AM  | 0          | 0       | 0       | 0          | 1       | 1       | 1         | 1       | 0       | 0         | 4       | 1       | 9     |
| 4:30 AM  | 3          | 1       | 0       | 0          | 4       | 0       | 1         | 0       | 0       | 0         | 1       | 2       | 12    |
| 4:45 AM  | 1          | 0       | 0       | 0          | 7       | 1       | 0         | 2       | 1       | 1         | 3       | 1       | 17    |
| 5:00 AM  | 1          | 0       | 0       | 3          | 6       | 3       | 0         | 1       | 0       | 2         | 8       | 0       | 24    |
| 5:15 AM  | 0          | 1       | 3       | 3          | 8       | 1       | 1         | 6       | 0       | 1         | 8       | 1       | 33    |
| 5:30 AM  | 8          | 2       | 0       | 1          | 5       | 5       | 2         | 4       | 0       | 4         | 12      | 3       | 46    |
| 5:45 AM  | 6          | 1       | 0       | 1          | 9       | 8       | 3         | 1       | 1       | 1         | 17      | 0       | 48    |
| 6:00 AM  | 9          | 11      | 0       | 2          | 6       | 11      | 9         | 7       | 2       | 5         | 20      | 1       | 83    |
| 6:15 AM  | 16         | 4       | 1       | 2          | 8       | 10      | 3         | 11      | 3       | 8         | 24      | 3       | 93    |
| 6:30 AM  | 18         | 7       | 0       | 4          | 11      | 14      | 5         | 10      | 2       | 5         | 41      | 2       | 119   |
| 6:45 AM  | 14         | 4       | 1       | 7          | 10      | 15      | 6         | 14      | 4       | 9         | 45      | 1       | 130   |
| 7:00 AM  | 21         | 8       | 3       | 3          | 14      | 16      | 7         | 15      | 4       | 11        | 59      | 0       | 161   |
| 7:15 AM  | 20         | 11      | 0       | 6          | 18      | 16      | 3         | 16      | 13      | 10        | 66      | 1       | 180   |
| 7:30 AM  | 13         | 10      | 1       | 6          | 16      | 13      | 3         | 13      | 13      | 14        | 60      | 5       | 167   |
| 7:45 AM  | 16         | 14      | 4       | 11         | 20      | 20      | 12        | 9       | 20      | 15        | 65      | 8       | 214   |
| 8:00 AM  | 16         | 8       | 1       | 9          | 21      | 21      | 10        | 11      | 11      | 11        | 58      | 11      | 188   |
| 8:15 AM  | 15         | 5       | 3       | 8          | 25      | 14      | 8         | 20      | 10      | 10        | 52      | 10      | 180   |
| 8:30 AM  | 14         | 9       | 0       | 5          | 24      | 18      | 12        | 21      | 14      | 14        | 45      | 8       | 184   |
| 8:45 AM  | 21         | 16      | 4       | 8          | 41      | 20      | 10        | 25      | 15      | 15        | 50      | 5       | 230   |
| 9:00 AM  | 20         | 16      | 5       | 2          | 43      | 21      | 13        | 24      | 16      | 15        | 56      | 9       | 240   |
| 9:15 AM  | 16         | 13      | 3       | 8          | 39      | 25      | 14        | 21      | 18      | 15        | 60      | 6       | 238   |
| 9:30 AM  | 18         | 20      | 4       | 8          | 30      | 24      | 9         | 25      | 11      | 11        | 64      | 9       | 233   |
| 9:45 AM  | 14         | 21      | 7       | 7          | 32      | 22      | 7         | 24      | 10      | 10        | 70      | 6       | 230   |
| 10:00 AM | 21         | 14      | 5       | 12         | 52      | 20      | 16        | 26      | 8       | 14        | 70      | 8       | 266   |
| 10:15 AM | 20         | 15      | 7       | 6          | 41      | 21      | 19        | 26      | 5       | 18        | 77      | 5       | 260   |
| 10:30 AM | 16         | 19      | 7       | 9          | 43      | 14      | 20        | 23      | 11      | 16        | 71      | 11      | 260   |
| 10:45 AM | 18         | 16      | 6       | 7          | 30      | 18      | 13        | 22      | 13      | 16        | 75      | 10      | 244   |
| 11:00 AM | 14         | 13      | 7       | 9          | 32      | 16      | 23        | 20      | 15      | 13        | 68      | 14      | 244   |
| 11:15 AM | 10         | 20      | 6       | 12         | 25      | 16      | 23        | 21      | 18      | 9         | 70      | 16      | 246   |
| 11:30 AM | 11         | 21      | 7       | 5          | 24      | 13      | 24        | 39      | 16      | 11        | 70      | 16      | 257   |
| 11:45 AM | 8          | 14      | 12      | 9          | 21      | 20      | 20        | 33      | 20      | 10        | 62      | 16      | 245   |
| 12:00 PM | 9          | 18      | 8       | 3          | 14      | 21      | 26        | 30      | 21      | 14        | 74      | 13      | 251   |
| 12:15 PM | 13         | 16      | 7       | 6          | 18      | 14      | 20        | 41      | 14      | 18        | 73      | 8       | 248   |
| 12:30 PM | 16         | 16      | 7       | 5          | 16      | 5       | 15        | 45      | 15      | 16        | 78      | 11      | 245   |
| 12:45 PM | 16         | 20      | 10      | 10         | 20      | 8       | 15        | 50      | 22      | 16        | 89      | 10      | 286   |
| 1:00 PM  | 15         | 21      | 13      | 12         | 21      | 5       | 7         | 55      | 16      | 13        | 66      | 14      | 258   |
| 1:15 PM  | 14         | 25      | 7       | 19         | 14      | 9       | 21        | 59      | 14      | 20        | 69      | 15      | 286   |
| 1:30 PM  | 21         | 24      | 2       | 6          | 18      | 11      | 21        | 65      | 16      | 14        | 70      | 16      | 284   |
| 1:45 PM  | 20         | 29      | 10      | 6          | 16      | 10      | 30        | 73      | 16      | 18        | 71      | 16      | 315   |
| 2:00 PM  | 16         | 26      | 8       | 12         | 16      | 14      | 28        | 82      | 13      | 16        | 72      | 13      | 316   |
| 2:15 PM  | 18         | 30      | 7       | 6          | 13      | 18      | 24        | 84      | 20      | 16        | 60      | 9       | 305   |
| 2:30 PM  | 14         | 32      | 4       | 7          | 11      | 16      | 18        | 80      | 21      | 13        | 78      | 8       | 302   |
| 2:45 PM  | 10         | 25      | 5       | 6          | 10      | 20      | 32        | 65      | 14      | 20        | 78      | 5       | 290   |
| 3:00 PM  | 11         | 21      | 7       | 16         | 14      | 14      | 32        | 67      | 15      | 21        | 69      | 8       | 295   |
| 3:15 PM  | 8          | 14      | 5       | 8          | 15      | 15      | 23        | 75      | 16      | 14        | 77      | 5       | 275   |
| 3:30 PM  | 9          | 18      | 3       | 12         | 16      | 8       | 28        | 64      | 19      | 14        | 67      | 9       | 267   |
| 3:45 PM  | 6          | 16      | 11      | 9          | 16      | 5       | 17        | 64      | 20      | 15        | 92      | 11      | 282   |
| 4:00 PM  | 1          | 16      | 11      | 9          | 9       | 9       | 29        | 65      | 21      | 8         | 64      | 10      | 252   |
| 4:15 PM  | 2          | 13      | 5       | 7          | 6       | 13      | 27        | 66      | 25      | 5         | 82      | 14      | 265   |
| 4:30 PM  | 1          | 11      | 8       | 9          | 11      | 9       | 22        | 76      | 22      | 8         | 63      | 15      | 255   |
| 4:45 PM  | 0          | 10      | 2       | 4          | 10      | 6       | 27        | 80      | 14      | 11        | 60      | 8       | 232   |
| 5:00 PM  | 1          | 20      | 10      | 8          | 14      | 8       | 30        | 82      | 15      | 10        | 77      | 5       | 280   |
| 5:15 PM  | 2          | 21      | 2       | 3          | 18      | 11      | 26        | 68      | 6       | 14        | 74      | 9       | 254   |
| 5:30 PM  | 3          | 41      | 3       | 2          | 22      | 10      | 16        | 47      | 15      | 15        | 60      | 16      | 250   |
| 5:45 PM  | 1          | 42      | 4       | 9          | 20      | 11      | 23        | 39      | 10      | 16        | 39      | 13      | 227   |
| 6:00 PM  | 0          | 20      | 1       | 8          | 21      | 10      | 15        | 62      | 6       | 16        | 37      | 9       | 205   |
| 6:15 PM  | 2          | 21      | 1       | 6          | 14      | 8       | 16        | 47      | 6       | 13        | 40      | 6       | 180   |
| 6:30 PM  | 1          | 14      | 2       | 4          | 16      | 5       | 15        | 54      | 4       | 9         | 33      | 8       | 165   |
| 6:45 PM  | 4          | 18      | 2       | 2          | 16      | 7       | 11        | 44      | 4       | 6         | 33      | 5       | 152   |
| 7:00 PM  | 6          | 18      | 1       | 2          | 16      | 4       | 13        | 48      | 11      | 8         | 19      | 7       | 153   |
| 7:15 PM  | 1          | 8       | 0       | 4          | 13      | 9       | 16        | 41      | 10      | 5         | 29      | 1       | 137   |
| 7:30 PM  | 7          | 11      | 0       | 4          | 11      | 6       | 17        | 28      | 9       | 7         | 24      | 8       | 132   |
| 7:45 PM  | 1          | 10      | 0       | 0          | 10      | 3       | 11        | 34      | 9       | 4         | 17      | 5       | 104   |
| 8:00 PM  | 1          | 14      | 0       | 0          | 14      | 2       | 6         | 32      | 6       | 8         | 20      | 9       | 112   |
| 8:15 PM  | 1          | 8       | 0       | 0          | 15      | 5       | 11        | 24      | 5       | 11        | 15      | 6       | 101   |
| 8:30 PM  | 2          | 5       | 0       | 0          | 8       | 2       | 7         | 22      | 6       | 10        | 20      | 3       | 85    |
| 8:45 PM  | 2          | 9       | 0       | 0          | 7       | 7       | 13        | 16      | 5       | 7         | 13      | 2       | 81    |
| 9:00 PM  | 0          | 6       | 0       | 0          | 4       | 4       | 7         | 16      | 2       | 4         | 8       | 5       | 56    |
| 9:15 PM  | 1          | 3       | 0       | 0          | 8       | 1       | 4         | 21      | 5       | 8         | 13      | 2       | 66    |
| 9:30 PM  | 0          | 2       | 0       | 0          | 5       | 5       | 10        | 24      | 2       | 5         | 7       | 1       | 61    |
| 9:45 PM  | 1          | 5       | 0       | 0          | 9       | 2       | 3         | 12      | 6       | 9         | 8       | 4       | 59    |
| 10:00 PM | 4          | 2       | 0       | 0          | 6       | 6       | 3         | 12      | 2       | 6         | 3       | 1       | 45    |
| 10:15 PM | 1          | 4       | 0       | 0          | 3       | 3       | 2         | 13      | 1       | 3         | 5       | 5       | 40    |
| 10:30 PM | 2          | 7       | 0       | 0          | 2       | 2       | 4         | 16      | 1       | 2         | 7       | 2       | 45    |
| 10:45 PM | 0          | 4       | 0       | 0          | 5       | 5       | 0         | 5       | 0       | 5         | 5       | 1       | 30    |
| 11:00 PM | 2          | 9       | 0       | 0          | 2       | 2       | 0         | 4       | 1       | 2         | 4       | 0       | 26    |
| 11:15 PM | 1          | 6       | 0       | 0          | 1       | 1       | 2         | 5       | 2       | 1         | 1       | 1       | 21    |
| 11:30 PM | 0          | 3       | 0       | 0          | 4       | 0       | 0         | 7       | 0       | 0         | 2       | 3       | 19    |
| 11:45 PM | 1          | 2       | 0       | 0          | 1       | 1       | 0         | 4       | 1       | 1         | 1       | 0       | 12    |

| TOTAL      | NL    | NT    | NR    | SL    | ST    | SR    | EL    | ET    | ER    | WL    | WT    | WR    | TOTAL |
|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Volumes    | 668   | 1050  | 264   | 399   | 1251  | 815   | 1058  | 2635  | 782   | 804   | 3535  | 545   | 13806 |
| Approach % | 33.70 | 52.98 | 13.32 | 16.19 | 50.75 | 33.06 | 23.64 | 58.88 | 17.47 | 16.46 | 72.38 | 11.16 |       |
| App/Depart | 1982  | /     | 2653  | 2465  | /     | 2837  | 4475  | /     | 3298  | 4884  | /     | 5018  |       |

Peak Hr Begins at: 145 PM

|            |       |       |       |       |       |       |       |       |       |       |       |       |      |
|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| PEAK       |       |       |       |       |       |       |       |       |       |       |       |       |      |
| Volumes    | 68    | 117   | 29    | 31    | 56    | 58    | 100   | 319   | 70    | 63    | 281   | 46    | 1238 |
| Approach % | 31.78 | 54.67 | 13.55 | 21.38 | 38.62 | 40.00 | 20.45 | 65.24 | 14.31 | 16.15 | 72.05 | 11.79 |      |

|          |       |  |  |       |  |  |       |  |  |       |  |  |       |
|----------|-------|--|--|-------|--|--|-------|--|--|-------|--|--|-------|
| PEAK HR. |       |  |  |       |  |  |       |  |  |       |  |  |       |
| FACTOR:  | 0.907 |  |  | 0.863 |  |  | 0.955 |  |  | 0.929 |  |  | 0.979 |

CONTROL: 4-Way Stop  
COMMENT 1:  
GPS: 34.479141, -114.335118



N-S STREET: Riviera Dr / Riviera Blvd

DATE: 03/26/25

LOCATION: Lake Havasu

E-W STREET: Mesquite Blvd

DAY: WEDNESDAY

PROJECT# 25-1177-001

| AM PEAK HOUR |    |    |    |            |    |    |           |    |    |           |    |    |       |
|--------------|----|----|----|------------|----|----|-----------|----|----|-----------|----|----|-------|
| NORTHBOUND   |    |    |    | SOUTHBOUND |    |    | EASTBOUND |    |    | WESTBOUND |    |    | TOTAL |
| LANES:       | NL | NT | NR | SL         | ST | SR | EL        | ET | ER | WL        | WT | WR |       |
|              | 1  | 1  | 1  | 1          | 1  | 1  | 1         | 2  | 1  | 1         | 1  | 0  |       |
| 7:00 AM      | 21 | 8  | 3  | 3          | 14 | 16 | 7         | 15 | 4  | 11        | 59 | 0  | 161   |
| 7:15 AM      | 20 | 11 | 0  | 6          | 18 | 16 | 3         | 16 | 13 | 10        | 66 | 1  | 180   |
| 7:30 AM      | 13 | 10 | 1  | 6          | 16 | 13 | 3         | 13 | 13 | 14        | 60 | 5  | 167   |
| 7:45 AM      | 16 | 14 | 4  | 11         | 20 | 20 | 12        | 9  | 20 | 15        | 65 | 8  | 214   |
| 8:00 AM      | 16 | 8  | 1  | 9          | 21 | 21 | 10        | 11 | 11 | 11        | 58 | 11 | 188   |
| 8:15 AM      | 15 | 5  | 3  | 8          | 25 | 14 | 8         | 20 | 10 | 10        | 52 | 10 | 180   |
| 8:30 AM      | 14 | 9  | 0  | 5          | 24 | 18 | 12        | 21 | 14 | 14        | 45 | 8  | 184   |
| 8:45 AM      | 21 | 16 | 4  | 8          | 41 | 20 | 10        | 25 | 15 | 15        | 50 | 5  | 230   |
| 9:00 AM      |    |    |    |            |    |    |           |    |    |           |    |    |       |
| 9:15 AM      |    |    |    |            |    |    |           |    |    |           |    |    |       |
| 9:30 AM      |    |    |    |            |    |    |           |    |    |           |    |    |       |
| 9:45 AM      |    |    |    |            |    |    |           |    |    |           |    |    |       |
| 10:00 AM     |    |    |    |            |    |    |           |    |    |           |    |    |       |
| 10:15 AM     |    |    |    |            |    |    |           |    |    |           |    |    |       |
| 10:30 AM     |    |    |    |            |    |    |           |    |    |           |    |    |       |
| 10:45 AM     |    |    |    |            |    |    |           |    |    |           |    |    |       |
| 11:00 AM     |    |    |    |            |    |    |           |    |    |           |    |    |       |
| 11:15 AM     |    |    |    |            |    |    |           |    |    |           |    |    |       |
| 11:30 AM     |    |    |    |            |    |    |           |    |    |           |    |    |       |
| 11:45 AM     |    |    |    |            |    |    |           |    |    |           |    |    |       |
| 12:00 PM     |    |    |    |            |    |    |           |    |    |           |    |    |       |
| 12:15 PM     |    |    |    |            |    |    |           |    |    |           |    |    |       |
| 12:30 PM     |    |    |    |            |    |    |           |    |    |           |    |    |       |
| 12:45 PM     |    |    |    |            |    |    |           |    |    |           |    |    |       |

| TOTAL                | NL    | NT    | NR   | SL    | ST    | SR    | EL    | ET    | ER    | WL    | WT    | WR    | TOTAL |
|----------------------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Volumes              | 136   | 81    | 16   | 56    | 179   | 138   | 65    | 130   | 100   | 100   | 455   | 48    | 1504  |
| Approach %           | 58.37 | 34.76 | 6.87 | 15.01 | 47.99 | 37.00 | 22.03 | 44.07 | 33.90 | 16.58 | 75.46 | 7.96  |       |
| App/Depart           | 233   | /     | 194  | 373   | /     | 379   | 295   | /     | 202   | 603   | /     | 729   |       |
| AM Peak Hour: 800 AM |       |       |      |       |       |       |       |       |       |       |       |       |       |
| PEAK                 |       |       |      |       |       |       |       |       |       |       |       |       |       |
| Volumes              | 66    | 38    | 8    | 30    | 111   | 73    | 40    | 77    | 50    | 50    | 205   | 34    | 782   |
| Approach %           | 58.93 | 33.93 | 7.14 | 14.02 | 51.87 | 34.11 | 23.95 | 46.11 | 29.94 | 17.30 | 70.93 | 11.76 |       |
| PEAK HR.             |       |       |      |       |       |       |       |       |       |       |       |       |       |
| FACTOR:              |       | 0.683 |      |       | 0.775 |       |       | 0.835 |       |       | 0.903 |       | 0.850 |

N-S STREET: [Riviera Dr / Riviera Blvd](#)

 DATE: [03/26/25](#)

 LOCATION: [Lake Havasu](#)

 E-W STREET: [Mesquite Blvd](#)

 DAY: [WEDNESDAY](#)

 PROJECT# [25-1177-001](#)

| PM PEAK HOUR |                   |                    |                    |                   |                    |                    |                    |                    |                    |                    |                    |                    |       |
|--------------|-------------------|--------------------|--------------------|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------|
|              | NORTHBOUND        |                    |                    | SOUTHBOUND        |                    |                    | EASTBOUND          |                    |                    | WESTBOUND          |                    |                    |       |
| LANES:       | NL                | NT                 | NR                 | SL                | ST                 | SR                 | EL                 | ET                 | ER                 | WL                 | WT                 | WR                 | TOTAL |
|              | <a href="#">1</a> | <a href="#">1</a>  | <a href="#">1</a>  | <a href="#">1</a> | <a href="#">1</a>  | <a href="#">1</a>  | <a href="#">1</a>  | <a href="#">2</a>  | <a href="#">1</a>  | <a href="#">1</a>  | <a href="#">1</a>  | <a href="#">0</a>  |       |
| 1:00 PM      |                   |                    |                    |                   |                    |                    |                    |                    |                    |                    |                    |                    |       |
| 1:15 PM      |                   |                    |                    |                   |                    |                    |                    |                    |                    |                    |                    |                    |       |
| 1:30 PM      |                   |                    |                    |                   |                    |                    |                    |                    |                    |                    |                    |                    |       |
| 1:45 PM      |                   |                    |                    |                   |                    |                    |                    |                    |                    |                    |                    |                    |       |
| 2:00 PM      |                   |                    |                    |                   |                    |                    |                    |                    |                    |                    |                    |                    |       |
| 2:15 PM      |                   |                    |                    |                   |                    |                    |                    |                    |                    |                    |                    |                    |       |
| 2:30 PM      |                   |                    |                    |                   |                    |                    |                    |                    |                    |                    |                    |                    |       |
| 2:45 PM      |                   |                    |                    |                   |                    |                    |                    |                    |                    |                    |                    |                    |       |
| 3:00 PM      |                   |                    |                    |                   |                    |                    |                    |                    |                    |                    |                    |                    |       |
| 3:15 PM      |                   |                    |                    |                   |                    |                    |                    |                    |                    |                    |                    |                    |       |
| 3:30 PM      |                   |                    |                    |                   |                    |                    |                    |                    |                    |                    |                    |                    |       |
| 3:45 PM      |                   |                    |                    |                   |                    |                    |                    |                    |                    |                    |                    |                    |       |
| 4:00 PM      | <a href="#">1</a> | <a href="#">16</a> | <a href="#">11</a> | <a href="#">9</a> | <a href="#">9</a>  | <a href="#">9</a>  | <a href="#">29</a> | <a href="#">65</a> | <a href="#">21</a> | <a href="#">8</a>  | <a href="#">64</a> | <a href="#">10</a> | 252   |
| 4:15 PM      | <a href="#">2</a> | <a href="#">13</a> | <a href="#">5</a>  | <a href="#">7</a> | <a href="#">6</a>  | <a href="#">13</a> | <a href="#">27</a> | <a href="#">66</a> | <a href="#">25</a> | <a href="#">5</a>  | <a href="#">82</a> | <a href="#">14</a> | 265   |
| 4:30 PM      | <a href="#">1</a> | <a href="#">11</a> | <a href="#">8</a>  | <a href="#">9</a> | <a href="#">11</a> | <a href="#">9</a>  | <a href="#">22</a> | <a href="#">76</a> | <a href="#">22</a> | <a href="#">8</a>  | <a href="#">63</a> | <a href="#">15</a> | 255   |
| 4:45 PM      | <a href="#">0</a> | <a href="#">10</a> | <a href="#">2</a>  | <a href="#">4</a> | <a href="#">10</a> | <a href="#">6</a>  | <a href="#">27</a> | <a href="#">80</a> | <a href="#">14</a> | <a href="#">11</a> | <a href="#">60</a> | <a href="#">8</a>  | 232   |
| 5:00 PM      | <a href="#">1</a> | <a href="#">20</a> | <a href="#">10</a> | <a href="#">8</a> | <a href="#">14</a> | <a href="#">8</a>  | <a href="#">30</a> | <a href="#">82</a> | <a href="#">15</a> | <a href="#">10</a> | <a href="#">77</a> | <a href="#">5</a>  | 280   |
| 5:15 PM      | <a href="#">2</a> | <a href="#">21</a> | <a href="#">2</a>  | <a href="#">3</a> | <a href="#">18</a> | <a href="#">11</a> | <a href="#">26</a> | <a href="#">68</a> | <a href="#">6</a>  | <a href="#">14</a> | <a href="#">74</a> | <a href="#">9</a>  | 254   |
| 5:30 PM      | <a href="#">3</a> | <a href="#">41</a> | <a href="#">3</a>  | <a href="#">2</a> | <a href="#">22</a> | <a href="#">10</a> | <a href="#">16</a> | <a href="#">47</a> | <a href="#">15</a> | <a href="#">15</a> | <a href="#">60</a> | <a href="#">16</a> | 250   |
| 5:45 PM      | <a href="#">1</a> | <a href="#">42</a> | <a href="#">4</a>  | <a href="#">9</a> | <a href="#">20</a> | <a href="#">11</a> | <a href="#">23</a> | <a href="#">39</a> | <a href="#">10</a> | <a href="#">16</a> | <a href="#">39</a> | <a href="#">13</a> | 227   |
| 6:00 PM      |                   |                    |                    |                   |                    |                    |                    |                    |                    |                    |                    |                    |       |
| 6:15 PM      |                   |                    |                    |                   |                    |                    |                    |                    |                    |                    |                    |                    |       |
| 6:30 PM      |                   |                    |                    |                   |                    |                    |                    |                    |                    |                    |                    |                    |       |
| 6:45 PM      |                   |                    |                    |                   |                    |                    |                    |                    |                    |                    |                    |                    |       |

| TOTAL      | NL   | NT    | NR    | SL    | ST    | SR    | EL    | ET    | ER    | WL    | WT    | WR    | TOTAL |
|------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Volumes    | 11   | 174   | 45    | 51    | 110   | 77    | 200   | 523   | 128   | 87    | 519   | 90    | 2015  |
| Approach % | 4.78 | 75.65 | 19.57 | 21.43 | 46.22 | 32.35 | 23.50 | 61.46 | 15.04 | 12.50 | 74.57 | 12.93 |       |
| App/Depart | 230  | /     | 464   | 238   | /     | 325   | 851   | /     | 619   | 696   | /     | 607   |       |

PM Peak Hour: 415 PM

|            |      |       |       |       |       |       |       |       |       |      |       |       |      |
|------------|------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|------|
| PEAK       |      |       |       |       |       |       |       |       |       |      |       |       |      |
| Volumes    | 4    | 54    | 25    | 28    | 41    | 36    | 106   | 304   | 76    | 34   | 282   | 42    | 1032 |
| Approach % | 4.82 | 65.06 | 30.12 | 26.67 | 39.05 | 34.29 | 21.81 | 62.55 | 15.64 | 9.50 | 78.77 | 11.73 |      |

|          |  |                       |  |  |                       |  |  |                       |  |  |                       |  |                       |
|----------|--|-----------------------|--|--|-----------------------|--|--|-----------------------|--|--|-----------------------|--|-----------------------|
| PEAK HR. |  |                       |  |  |                       |  |  |                       |  |  |                       |  |                       |
| FACTOR:  |  | <a href="#">0.669</a> |  |  | <a href="#">0.875</a> |  |  | <a href="#">0.957</a> |  |  | <a href="#">0.886</a> |  | <a href="#">0.921</a> |



**FIELD DATA SERVICES OF ARIZONA, INC.**  
520.316.6745



**veracitytrafficgroup**

### Pedestrian & Bicycle Study

**N-S STREET:** Riviera Dr / Riviera Blvd  
**E-W STREET:** Mesquite Blvd

**Date:** 03/26/25  
**Day:** WEDNESDAY

**City:** Lake Havasu  
**Project #:** 25-1177-001

|          | PEDESTRIANS |       |       |       |
|----------|-------------|-------|-------|-------|
|          | N-LEG       | S-LEG | E-LEG | W-LEG |
| 12:00 AM | 0           | 0     | 0     | 0     |
| 12:15 AM | 0           | 0     | 0     | 0     |
| 12:30 AM | 0           | 0     | 0     | 0     |
| 12:45 AM | 0           | 0     | 0     | 0     |
| 1:00 AM  | 0           | 0     | 0     | 0     |
| 1:15 AM  | 0           | 0     | 0     | 0     |
| 1:30 AM  | 0           | 0     | 0     | 0     |
| 1:45 AM  | 0           | 0     | 0     | 0     |
| 2:00 AM  | 0           | 0     | 0     | 0     |
| 2:15 AM  | 0           | 0     | 0     | 0     |
| 2:30 AM  | 0           | 0     | 0     | 0     |
| 2:45 AM  | 0           | 0     | 0     | 0     |
| 3:00 AM  | 0           | 0     | 0     | 0     |
| 3:15 AM  | 0           | 0     | 0     | 0     |
| 3:30 AM  | 0           | 0     | 0     | 0     |
| 3:45 AM  | 0           | 0     | 0     | 0     |
| 4:00 AM  | 0           | 0     | 0     | 0     |
| 4:15 AM  | 0           | 0     | 0     | 0     |
| 4:30 AM  | 0           | 0     | 0     | 0     |
| 4:45 AM  | 0           | 0     | 0     | 0     |
| 5:00 AM  | 1           | 0     | 0     | 0     |
| 5:15 AM  | 0           | 0     | 0     | 0     |
| 5:30 AM  | 0           | 1     | 1     | 0     |
| 5:45 AM  | 1           | 0     | 0     | 0     |
| 6:00 AM  | 0           | 0     | 0     | 0     |
| 6:15 AM  | 0           | 0     | 0     | 0     |
| 6:30 AM  | 0           | 1     | 0     | 0     |
| 6:45 AM  | 1           | 0     | 0     | 1     |
| 7:00 AM  | 0           | 0     | 0     | 0     |
| 7:15 AM  | 0           | 1     | 0     | 0     |
| 7:30 AM  | 0           | 0     | 0     | 0     |
| 7:45 AM  | 0           | 0     | 0     | 0     |
| 8:00 AM  | 0           | 1     | 1     | 0     |
| 8:15 AM  | 0           | 0     | 0     | 0     |
| 8:30 AM  | 1           | 1     | 0     | 0     |
| 8:45 AM  | 0           | 0     | 0     | 0     |
| 9:00 AM  | 0           | 0     | 0     | 0     |
| 9:15 AM  | 0           | 0     | 0     | 0     |
| 9:30 AM  | 0           | 0     | 0     | 0     |
| 9:45 AM  | 0           | 1     | 0     | 0     |
| 10:00 AM | 0           | 0     | 0     | 0     |
| 10:15 AM | 0           | 0     | 0     | 0     |
| 10:30 AM | 0           | 0     | 0     | 0     |
| 10:45 AM | 0           | 2     | 0     | 0     |
| 11:00 AM | 0           | 0     | 0     | 0     |
| 11:15 AM | 0           | 0     | 0     | 0     |
| 11:30 AM | 0           | 0     | 0     | 0     |
| 11:45 AM | 0           | 0     | 0     | 2     |
| 12:00 PM | 0           | 0     | 0     | 0     |
| 12:15 PM | 0           | 0     | 0     | 2     |
| 12:30 PM | 0           | 0     | 0     | 1     |
| 12:45 PM | 0           | 1     | 0     | 1     |
| 1:00 PM  | 0           | 0     | 0     | 0     |
| 1:15 PM  | 0           | 0     | 0     | 0     |
| 1:30 PM  | 0           | 0     | 0     | 0     |
| 1:45 PM  | 0           | 0     | 0     | 2     |
| 2:00 PM  | 0           | 1     | 0     | 0     |
| 2:15 PM  | 0           | 0     | 0     | 0     |
| 2:30 PM  | 0           | 0     | 0     | 0     |
| 2:45 PM  | 0           | 0     | 0     | 0     |
| 3:00 PM  | 0           | 0     | 0     | 0     |
| 3:15 PM  | 0           | 0     | 0     | 0     |
| 3:30 PM  | 0           | 1     | 0     | 1     |
| 3:45 PM  | 0           | 4     | 0     | 0     |
| 4:00 PM  | 0           | 1     | 0     | 0     |
| 4:15 PM  | 1           | 0     | 0     | 0     |
| 4:30 PM  | 0           | 0     | 0     | 0     |
| 4:45 PM  | 0           | 0     | 0     | 0     |
| 5:00 PM  | 0           | 0     | 0     | 0     |
| 5:15 PM  | 0           | 0     | 0     | 0     |
| 5:30 PM  | 0           | 0     | 0     | 0     |
| 5:45 PM  | 0           | 0     | 0     | 0     |
| 6:00 PM  | 0           | 0     | 0     | 1     |
| 6:15 PM  | 0           | 0     | 0     | 0     |
| 6:30 PM  | 0           | 0     | 0     | 0     |
| 6:45 PM  | 0           | 0     | 0     | 0     |
| 7:00 PM  | 0           | 0     | 0     | 0     |
| 7:15 PM  | 0           | 0     | 0     | 0     |
| 7:30 PM  | 0           | 0     | 0     | 0     |
| 7:45 PM  | 0           | 0     | 0     | 0     |
| 8:00 PM  | 0           | 0     | 0     | 0     |
| 8:15 PM  | 0           | 0     | 0     | 0     |
| 8:30 PM  | 0           | 0     | 0     | 0     |
| 8:45 PM  | 0           | 0     | 0     | 0     |
| 9:00 PM  | 0           | 0     | 0     | 0     |
| 9:15 PM  | 0           | 0     | 0     | 0     |
| 9:30 PM  | 0           | 0     | 0     | 0     |
| 9:45 PM  | 0           | 0     | 0     | 0     |
| 10:00 PM | 0           | 0     | 0     | 0     |
| 10:15 PM | 0           | 0     | 0     | 0     |
| 10:30 PM | 0           | 0     | 0     | 0     |
| 10:45 PM | 0           | 0     | 0     | 0     |
| 11:00 PM | 0           | 0     | 0     | 0     |
| 11:15 PM | 0           | 0     | 0     | 0     |
| 11:30 PM | 0           | 0     | 0     | 0     |
| 11:45 PM | 0           | 0     | 0     | 0     |
| TOTAL    | 5           | 16    | 2     | 11    |

|          | BICYCLES |       |       |       |
|----------|----------|-------|-------|-------|
|          | N-LEG    | S-LEG | E-LEG | W-LEG |
| 12:00 AM | 0        | 0     | 0     | 0     |
| 12:15 AM | 0        | 0     | 0     | 0     |
| 12:30 AM | 0        | 0     | 0     | 0     |
| 12:45 AM | 0        | 0     | 0     | 0     |
| 1:00 AM  | 0        | 0     | 0     | 0     |
| 1:15 AM  | 0        | 0     | 0     | 0     |
| 1:30 AM  | 0        | 0     | 0     | 0     |
| 1:45 AM  | 0        | 0     | 0     | 0     |
| 2:00 AM  | 0        | 0     | 0     | 0     |
| 2:15 AM  | 0        | 0     | 0     | 0     |
| 2:30 AM  | 0        | 0     | 0     | 0     |
| 2:45 AM  | 0        | 0     | 0     | 0     |
| 3:00 AM  | 0        | 0     | 0     | 0     |
| 3:15 AM  | 0        | 0     | 0     | 0     |
| 3:30 AM  | 0        | 0     | 0     | 0     |
| 3:45 AM  | 0        | 0     | 0     | 0     |
| 4:00 AM  | 0        | 0     | 0     | 0     |
| 4:15 AM  | 0        | 0     | 0     | 0     |
| 4:30 AM  | 0        | 0     | 0     | 0     |
| 4:45 AM  | 0        | 0     | 0     | 0     |
| 5:00 AM  | 0        | 0     | 0     | 0     |
| 5:15 AM  | 0        | 0     | 0     | 0     |
| 5:30 AM  | 0        | 0     | 0     | 0     |
| 5:45 AM  | 0        | 0     | 0     | 0     |
| 6:00 AM  | 0        | 0     | 0     | 0     |
| 6:15 AM  | 0        | 0     | 0     | 0     |
| 6:30 AM  | 0        | 0     | 0     | 0     |
| 6:45 AM  | 0        | 0     | 0     | 0     |
| 7:00 AM  | 0        | 0     | 0     | 0     |
| 7:15 AM  | 0        | 0     | 0     | 0     |
| 7:30 AM  | 0        | 0     | 0     | 0     |
| 7:45 AM  | 0        | 0     | 0     | 0     |
| 8:00 AM  | 0        | 0     | 0     | 0     |
| 8:15 AM  | 0        | 0     | 0     | 0     |
| 8:30 AM  | 0        | 0     | 0     | 0     |
| 8:45 AM  | 0        | 0     | 0     | 0     |
| 9:00 AM  | 0        | 0     | 0     | 0     |
| 9:15 AM  | 0        | 0     | 0     | 0     |
| 9:30 AM  | 0        | 0     | 0     | 0     |
| 9:45 AM  | 0        | 0     | 0     | 0     |
| 10:00 AM | 0        | 0     | 0     | 0     |
| 10:15 AM | 0        | 0     | 0     | 0     |
| 10:30 AM | 0        | 0     | 0     | 0     |
| 10:45 AM | 0        | 1     | 0     | 0     |
| 11:00 AM | 0        | 0     | 0     | 0     |
| 11:15 AM | 0        | 0     | 0     | 0     |
| 11:30 AM | 0        | 0     | 0     | 0     |
| 11:45 AM | 0        | 0     | 0     | 0     |
| 12:00 PM | 0        | 0     | 0     | 2     |
| 12:15 PM | 0        | 0     | 0     | 0     |
| 12:30 PM | 0        | 0     | 0     | 0     |
| 12:45 PM | 0        | 0     | 0     | 0     |
| 1:00 PM  | 0        | 0     | 0     | 0     |
| 1:15 PM  | 0        | 0     | 0     | 0     |
| 1:30 PM  | 0        | 0     | 0     | 0     |
| 1:45 PM  | 0        | 0     | 0     | 0     |
| 2:00 PM  | 0        | 0     | 0     | 0     |
| 2:15 PM  | 0        | 0     | 0     | 0     |
| 2:30 PM  | 0        | 0     | 0     | 0     |
| 2:45 PM  | 0        | 0     | 0     | 0     |
| 3:00 PM  | 0        | 0     | 0     | 0     |
| 3:15 PM  | 0        | 0     | 0     | 0     |
| 3:30 PM  | 0        | 0     | 0     | 0     |
| 3:45 PM  | 0        | 0     | 0     | 0     |
| 4:00 PM  | 0        | 0     | 0     | 0     |
| 4:15 PM  | 0        | 0     | 0     | 0     |
| 4:30 PM  | 0        | 0     | 0     | 1     |
| 4:45 PM  | 1        | 0     | 0     | 0     |
| 5:00 PM  | 0        | 0     | 0     | 0     |
| 5:15 PM  | 0        | 0     | 0     | 0     |
| 5:30 PM  | 0        | 1     | 0     | 0     |
| 5:45 PM  | 0        | 0     | 0     | 0     |
| 6:00 PM  | 0        | 0     | 0     | 1     |
| 6:15 PM  | 0        | 0     | 0     | 0     |
| 6:30 PM  | 0        | 0     | 0     | 0     |
| 6:45 PM  | 0        | 0     | 0     | 0     |
| 7:00 PM  | 0        | 0     | 0     | 0     |
| 7:15 PM  | 0        | 0     | 0     | 0     |
| 7:30 PM  | 0        | 0     | 0     | 0     |
| 7:45 PM  | 0        | 0     | 0     | 0     |
| 8:00 PM  | 0        | 0     | 0     | 0     |
| 8:15 PM  | 0        | 0     | 0     | 1     |
| 8:30 PM  | 0        | 0     | 0     | 0     |
| 8:45 PM  | 0        | 0     | 0     | 0     |
| 9:00 PM  | 0        | 0     | 0     | 0     |
| 9:15 PM  | 0        | 0     | 0     | 0     |
| 9:30 PM  | 0        | 0     | 0     | 0     |
| 9:45 PM  | 0        | 0     | 0     | 0     |
| 10:00 PM | 0        | 0     | 0     | 0     |
| 10:15 PM | 0        | 0     | 0     | 0     |
| 10:30 PM | 0        | 0     | 0     | 0     |
| 10:45 PM | 0        | 0     | 0     | 0     |
| 11:00 PM | 0        | 0     | 0     | 0     |
| 11:15 PM | 0        | 0     | 0     | 0     |
| 11:30 PM | 0        | 0     | 0     | 0     |
| 11:45 PM | 0        | 0     | 0     | 0     |
| TOTAL    | 1        | 2     | 0     | 5     |

Prepared by: Field Data Services of Arizona/Veracity Traffic Group (520) 316-6745

Volumes for: Wednesday, March 26, 2025 City: Lake Havasu City Project #: 25-1177-001

Location: Riviera Dr north of Mesquite Ave

| AM Period                   | NB    | SB    | EB | WB    | PM Period | NB           | SB   | EB | WB          |
|-----------------------------|-------|-------|----|-------|-----------|--------------|------|----|-------------|
| 00:00                       | 3     | 0     |    |       | 12:00     | 57           | 38   |    |             |
| 00:15                       | 0     | 0     |    |       | 12:15     | 44           | 38   |    |             |
| 00:30                       | 4     | 0     |    |       | 12:30     | 42           | 26   |    |             |
| 00:45                       | 0     | 7     | 2  | 2     | 12:45     | 45           | 188  | 38 | 140         |
| 01:00                       | 1     | 2     |    |       | 13:00     | 42           | 38   |    |             |
| 01:15                       | 4     | 0     |    |       | 13:15     | 61           | 42   |    |             |
| 01:30                       | 0     | 0     |    |       | 13:30     | 61           | 35   |    |             |
| 01:45                       | 0     | 5     | 0  | 2     | 13:45     | 75           | 239  | 32 | 147         |
| 02:00                       | 1     | 4     |    |       | 14:00     | 67           | 42   |    |             |
| 02:15                       | 1     | 1     |    |       | 14:15     | 63           | 37   |    |             |
| 02:30                       | 1     | 0     |    |       | 14:30     | 58           | 34   |    |             |
| 02:45                       | 0     | 3     | 4  | 9     | 14:45     | 62           | 250  | 36 | 149         |
| 03:00                       | 1     | 2     |    |       | 15:00     | 61           | 44   |    |             |
| 03:15                       | 2     | 1     |    |       | 15:15     | 42           | 38   |    |             |
| 03:30                       | 1     | 2     |    |       | 15:30     | 55           | 36   |    |             |
| 03:45                       | 0     | 4     | 5  | 10    | 15:45     | 44           | 202  | 30 | 148         |
| 04:00                       | 2     | 3     |    |       | 16:00     | 55           | 27   |    |             |
| 04:15                       | 2     | 2     |    |       | 16:15     | 54           | 26   |    |             |
| 04:30                       | 4     | 4     |    |       | 16:30     | 48           | 29   |    |             |
| 04:45                       | 1     | 9     | 8  | 17    | 16:45     | 45           | 202  | 20 | 102         |
| 05:00                       | 0     | 12    |    |       | 17:00     | 55           | 30   |    |             |
| 05:15                       | 3     | 12    |    |       | 17:15     | 56           | 32   |    |             |
| 05:30                       | 7     | 11    |    |       | 17:30     | 73           | 34   |    |             |
| 05:45                       | 4     | 14    | 18 | 53    | 17:45     | 78           | 262  | 40 | 136         |
| 06:00                       | 21    | 19    |    |       | 18:00     | 44           | 39   |    |             |
| 06:15                       | 10    | 20    |    |       | 18:15     | 43           | 28   |    |             |
| 06:30                       | 14    | 29    |    |       | 18:30     | 37           | 25   |    |             |
| 06:45                       | 11    | 56    | 32 | 100   | 18:45     | 34           | 158  | 25 | 117         |
| 07:00                       | 15    | 33    |    |       | 19:00     | 38           | 22   |    |             |
| 07:15                       | 15    | 40    |    |       | 19:15     | 25           | 26   |    |             |
| 07:30                       | 18    | 35    |    |       | 19:30     | 36           | 21   |    |             |
| 07:45                       | 34    | 82    | 51 | 159   | 19:45     | 26           | 125  | 13 | 82          |
| 08:00                       | 29    | 51    |    |       | 20:00     | 29           | 16   |    |             |
| 08:15                       | 23    | 47    |    |       | 20:15     | 25           | 20   |    |             |
| 08:30                       | 29    | 47    |    |       | 20:30     | 15           | 10   |    |             |
| 08:45                       | 31    | 112   | 69 | 214   | 20:45     | 24           | 93   | 14 | 60          |
| 09:00                       | 38    | 66    |    |       | 21:00     | 18           | 8    |    |             |
| 09:15                       | 33    | 72    |    |       | 21:15     | 9            | 9    |    |             |
| 09:30                       | 38    | 62    |    |       | 21:30     | 13           | 10   |    |             |
| 09:45                       | 34    | 143   | 61 | 261   | 21:45     | 12           | 52   | 11 | 38          |
| 10:00                       | 38    | 84    |    |       | 22:00     | 6            | 12   |    |             |
| 10:15                       | 39    | 68    |    |       | 22:15     | 11           | 6    |    |             |
| 10:30                       | 50    | 66    |    |       | 22:30     | 13           | 4    |    |             |
| 10:45                       | 39    | 166   | 55 | 273   | 22:45     | 5            | 35   | 10 | 32          |
| 11:00                       | 50    | 57    |    |       | 23:00     | 9            | 4    |    |             |
| 11:15                       | 59    | 53    |    |       | 23:15     | 9            | 2    |    |             |
| 11:30                       | 61    | 42    |    |       | 23:30     | 6            | 4    |    |             |
| 11:45                       | 50    | 220   | 50 | 202   | 23:45     | 2            | 26   | 2  | 12          |
| Total Vol.                  | 821   | 1302  |    |       | 2123      | 1832         | 1163 |    | 2995        |
| GPS: 34.479141, -114.335118 |       |       |    |       |           | Daily Totals |      |    |             |
|                             |       |       |    |       |           | NB           | SB   | EB | WB Combined |
|                             |       |       |    |       |           | 2653         | 2465 |    | 5118        |
| AM                          |       |       |    |       | PM        |              |      |    |             |
| Split %                     | 38.7% | 61.3% |    | 41.5% | 61.2%     | 38.8%        |      |    | 58.5%       |
| Peak Hour                   | 11:15 | 09:15 |    | 09:45 | 13:30     | 14:45        |      |    | 13:15       |
| Volume                      | 227   | 279   |    | 440   | 266       | 154          |      |    | 415         |
| P.H.F.                      | 0.93  | 0.83  |    | 0.90  | 0.89      | 0.88         |      |    | 0.95        |

Prepared by: Field Data Services of Arizona/Veracity Traffic Group (520) 316-6745

Volumes for: Wednesday, March 26, 2025 City: Lake Havasu City Project #: 25-1177-001

Location: Riviera Blvd south of Mesquite Ave

| AM Period                   | NB    | SB    | EB | WB    | PM Period    | NB    | SB   | EB | WB       |
|-----------------------------|-------|-------|----|-------|--------------|-------|------|----|----------|
| 00:00                       | 0     | 0     |    |       | 12:00        | 35    | 49   |    |          |
| 00:15                       | 0     | 0     |    |       | 12:15        | 36    | 50   |    |          |
| 00:30                       | 0     | 2     |    |       | 12:30        | 39    | 47   |    |          |
| 00:45                       | 0     | 0     | 2  | 4     | 12:45        | 46    | 156  | 58 | 204      |
| 01:00                       | 0     | 1     |    |       | 13:00        | 49    | 50   |    |          |
| 01:15                       | 1     | 1     |    |       | 13:15        | 46    | 48   |    |          |
| 01:30                       | 0     | 1     |    |       | 13:30        | 47    | 48   |    |          |
| 01:45                       | 0     | 1     | 1  | 4     | 13:45        | 59    | 201  | 50 | 196      |
| 02:00                       | 0     | 7     |    |       | 14:00        | 50    | 45   |    |          |
| 02:15                       | 0     | 3     |    |       | 14:15        | 55    | 49   |    |          |
| 02:30                       | 0     | 1     |    |       | 14:30        | 50    | 45   |    |          |
| 02:45                       | 0     | 0     | 3  | 14    | 14:45        | 40    | 195  | 44 | 183      |
| 03:00                       | 1     | 2     |    |       | 15:00        | 39    | 50   |    |          |
| 03:15                       | 2     | 3     |    |       | 15:15        | 27    | 45   |    |          |
| 03:30                       | 0     | 3     |    |       | 15:30        | 30    | 49   |    |          |
| 03:45                       | 0     | 3     | 4  | 12    | 15:45        | 33    | 129  | 51 | 195      |
| 04:00                       | 1     | 1     |    |       | 16:00        | 28    | 38   |    |          |
| 04:15                       | 0     | 1     |    |       | 16:15        | 20    | 36   |    |          |
| 04:30                       | 4     | 4     |    |       | 16:30        | 20    | 41   |    |          |
| 04:45                       | 1     | 6     | 9  | 15    | 16:45        | 12    | 80   | 35 | 150      |
| 05:00                       | 1     | 8     |    |       | 17:00        | 31    | 39   |    |          |
| 05:15                       | 4     | 9     |    |       | 17:15        | 25    | 38   |    |          |
| 05:30                       | 10    | 9     |    |       | 17:30        | 47    | 52   |    |          |
| 05:45                       | 7     | 22    | 11 | 37    | 17:45        | 47    | 150  | 46 | 175      |
| 06:00                       | 20    | 13    |    |       | 18:00        | 21    | 43   |    |          |
| 06:15                       | 21    | 19    |    |       | 18:15        | 24    | 33   |    |          |
| 06:30                       | 25    | 18    |    |       | 18:30        | 17    | 29   |    |          |
| 06:45                       | 19    | 85    | 23 | 73    | 18:45        | 24    | 86   | 26 | 131      |
| 07:00                       | 32    | 29    |    |       | 19:00        | 25    | 35   |    |          |
| 07:15                       | 31    | 41    |    |       | 19:15        | 9     | 28   |    |          |
| 07:30                       | 24    | 43    |    |       | 19:30        | 18    | 27   |    |          |
| 07:45                       | 34    | 121   | 55 | 168   | 19:45        | 11    | 63   | 23 | 113      |
| 08:00                       | 25    | 43    |    |       | 20:00        | 15    | 28   |    |          |
| 08:15                       | 23    | 45    |    |       | 20:15        | 9     | 31   |    |          |
| 08:30                       | 23    | 52    |    |       | 20:30        | 7     | 24   |    |          |
| 08:45                       | 41    | 112   | 71 | 211   | 20:45        | 11    | 42   | 19 | 102      |
| 09:00                       | 41    | 74    |    |       | 21:00        | 6     | 10   |    |          |
| 09:15                       | 32    | 72    |    |       | 21:15        | 4     | 21   |    |          |
| 09:30                       | 42    | 52    |    |       | 21:30        | 2     | 12   |    |          |
| 09:45                       | 42    | 157   | 52 | 250   | 21:45        | 6     | 18   | 24 | 67       |
| 10:00                       | 40    | 74    |    |       | 22:00        | 6     | 14   |    |          |
| 10:15                       | 42    | 64    |    |       | 22:15        | 5     | 7    |    |          |
| 10:30                       | 42    | 70    |    |       | 22:30        | 9     | 5    |    |          |
| 10:45                       | 40    | 164   | 59 | 267   | 22:45        | 4     | 24   | 10 | 36       |
| 11:00                       | 34    | 60    |    |       | 23:00        | 11    | 5    |    |          |
| 11:15                       | 36    | 52    |    |       | 23:15        | 7     | 4    |    |          |
| 11:30                       | 39    | 51    |    |       | 23:30        | 3     | 4    |    |          |
| 11:45                       | 34    | 143   | 51 | 214   | 23:45        | 3     | 24   | 3  | 16       |
| Total Vol.                  | 814   | 1269  |    | 2083  |              | 1168  | 1568 |    | 2736     |
| GPS: 34.479141, -114.335118 |       |       |    |       | Daily Totals |       |      |    |          |
|                             |       |       |    |       | NB           | SB    | EB   | WB | Combined |
|                             |       |       |    |       | 1982         | 2837  |      |    | 4819     |
| AM                          |       |       |    |       | PM           |       |      |    |          |
| Split %                     | 39.1% | 60.9% |    | 43.2% | 42.7%        | 57.3% |      |    | 56.8%    |
| Peak Hour                   | 09:30 | 08:30 |    | 10:00 | 13:45        | 12:15 |      |    | 13:30    |
| Volume                      | 166   | 269   |    | 431   | 214          | 205   |      |    | 403      |
| P.H.F.                      | 0.99  | 0.91  |    | 0.95  | 0.91         | 0.88  |      |    | 0.92     |

Prepared by: Field Data Services of Arizona/Veracity Traffic Group (520) 316-6745

Volumes for: Wednesday, March 26, 2025 City: Lake Havasu City Project #: 25-1177-001

Location: Mesquite Ave east of Riveria Dr / Riviera Blvd

| AM Period | NB | SB | EB | WB  | PM Period | NB  | SB  | EB  | WB  |     |     |     |
|-----------|----|----|----|-----|-----------|-----|-----|-----|-----|-----|-----|-----|
| 00:00     |    |    | 5  | 1   | 12:00     |     |     | 41  | 101 |     |     |     |
| 00:15     |    |    | 4  | 0   | 12:15     |     |     | 54  | 99  |     |     |     |
| 00:30     |    |    | 5  | 2   | 12:30     |     |     | 57  | 105 |     |     |     |
| 00:45     |    |    | 2  | 16  | 2         | 5   | 21  | 70  | 222 | 115 | 420 | 642 |
| 01:00     |    |    | 1  | 1   | 13:00     |     |     | 80  | 93  |     |     |     |
| 01:15     |    |    | 0  | 1   | 13:15     |     |     | 85  | 104 |     |     |     |
| 01:30     |    |    | 0  | 0   | 13:30     |     |     | 73  | 100 |     |     |     |
| 01:45     |    |    | 1  | 2   | 1         | 3   | 5   | 89  | 327 | 105 | 402 | 729 |
| 02:00     |    |    | 1  | 4   | 14:00     |     |     | 102 | 101 |     |     |     |
| 02:15     |    |    | 2  | 3   | 14:15     |     |     | 97  | 85  |     |     |     |
| 02:30     |    |    | 0  | 1   | 14:30     |     |     | 91  | 99  |     |     |     |
| 02:45     |    |    | 3  | 6   | 0         | 8   | 14  | 76  | 366 | 103 | 388 | 754 |
| 03:00     |    |    | 3  | 4   | 15:00     |     |     | 90  | 98  |     |     |     |
| 03:15     |    |    | 3  | 4   | 15:15     |     |     | 88  | 96  |     |     |     |
| 03:30     |    |    | 1  | 4   | 15:30     |     |     | 79  | 90  |     |     |     |
| 03:45     |    |    | 0  | 7   | 4         | 16  | 23  | 84  | 341 | 118 | 402 | 743 |
| 04:00     |    |    | 3  | 2   | 16:00     |     |     | 85  | 82  |     |     |     |
| 04:15     |    |    | 1  | 5   | 16:15     |     |     | 78  | 101 |     |     |     |
| 04:30     |    |    | 0  | 3   | 16:30     |     |     | 93  | 86  |     |     |     |
| 04:45     |    |    | 2  | 6   | 5         | 15  | 21  | 86  | 342 | 79  | 348 | 690 |
| 05:00     |    |    | 4  | 10  | 17:00     |     |     | 100 | 92  |     |     |     |
| 05:15     |    |    | 12 | 10  | 17:15     |     |     | 73  | 97  |     |     |     |
| 05:30     |    |    | 5  | 19  | 17:30     |     |     | 52  | 91  |     |     |     |
| 05:45     |    |    | 2  | 23  | 18        | 57  | 80  | 52  | 277 | 68  | 348 | 625 |
| 06:00     |    |    | 9  | 26  | 18:00     |     |     | 71  | 62  |     |     |     |
| 06:15     |    |    | 14 | 35  | 18:15     |     |     | 54  | 59  |     |     |     |
| 06:30     |    |    | 14 | 48  | 18:30     |     |     | 60  | 50  |     |     |     |
| 06:45     |    |    | 22 | 59  | 55        | 164 | 223 | 48  | 233 | 44  | 215 | 448 |
| 07:00     |    |    | 21 | 70  | 19:00     |     |     | 51  | 34  |     |     |     |
| 07:15     |    |    | 22 | 77  | 19:15     |     |     | 45  | 35  |     |     |     |
| 07:30     |    |    | 20 | 79  | 19:30     |     |     | 32  | 39  |     |     |     |
| 07:45     |    |    | 24 | 87  | 88        | 314 | 401 | 34  | 162 | 26  | 134 | 296 |
| 08:00     |    |    | 21 | 80  | 20:00     |     |     | 32  | 37  |     |     |     |
| 08:15     |    |    | 31 | 72  | 20:15     |     |     | 24  | 32  |     |     |     |
| 08:30     |    |    | 26 | 67  | 20:30     |     |     | 22  | 33  |     |     |     |
| 08:45     |    |    | 37 | 115 | 70        | 289 | 404 | 16  | 94  | 22  | 124 | 218 |
| 09:00     |    |    | 31 | 80  | 21:00     |     |     | 16  | 17  |     |     |     |
| 09:15     |    |    | 32 | 81  | 21:15     |     |     | 21  | 23  |     |     |     |
| 09:30     |    |    | 37 | 84  | 21:30     |     |     | 24  | 13  |     |     |     |
| 09:45     |    |    | 38 | 138 | 86        | 331 | 469 | 12  | 73  | 21  | 74  | 147 |
| 10:00     |    |    | 43 | 92  | 22:00     |     |     | 12  | 10  |     |     |     |
| 10:15     |    |    | 39 | 100 | 22:15     |     |     | 13  | 13  |     |     |     |
| 10:30     |    |    | 39 | 98  | 22:30     |     |     | 16  | 11  |     |     |     |
| 10:45     |    |    | 35 | 156 | 101       | 391 | 547 | 5   | 46  | 11  | 45  | 91  |
| 11:00     |    |    | 36 | 95  | 23:00     |     |     | 4   | 6   |     |     |     |
| 11:15     |    |    | 39 | 95  | 23:15     |     |     | 5   | 3   |     |     |     |
| 11:30     |    |    | 51 | 97  | 23:30     |     |     | 7   | 5   |     |     |     |
| 11:45     |    |    | 54 | 180 | 88        | 375 | 555 | 4   | 20  | 2   | 16  | 36  |

Total Vol. 795 1968 2763 2503 2916 5419

GPS: 34.479141, -114.335118

|                             |       |       |       |              |       |       |       |
|-----------------------------|-------|-------|-------|--------------|-------|-------|-------|
| GPS: 34.479141, -114.335118 |       |       |       | Daily Totals |       |       |       |
|                             |       |       |       | NB           | SB    | EB    | WB    |
|                             |       |       |       |              | 3298  | 4884  | 8182  |
| AM                          |       |       |       | PM           |       |       |       |
| Split %                     | 28.8% | 71.2% | 33.8% |              | 46.2% | 53.8% | 66.2% |
| Peak Hour                   | 11:45 | 10:15 | 11:45 |              | 13:45 | 12:00 | 13:45 |
| Volume                      | 206   | 394   | 599   |              | 379   | 420   | 769   |
| P.H.F.                      | 0.90  | 0.98  | 0.92  |              | 0.93  | 0.91  | 0.95  |

Prepared by: Field Data Services of Arizona/Veracity Traffic Group (520) 316-6745

Volumes for: Wednesday, March 26, 2025 City: Lake Havasu City Project #: 25-1177-001

Location: Mesquite Ave west of Riveria Dr / Riviera Blvd

| AM Period | NB | SB | EB | WB  | PM Period | NB  | SB  | EB  | WB  |     |     |     |
|-----------|----|----|----|-----|-----------|-----|-----|-----|-----|-----|-----|-----|
| 00:00     |    |    | 8  | 1   | 12:00     |     |     | 77  | 104 |     |     |     |
| 00:15     |    |    | 4  | 0   | 12:15     |     |     | 75  | 100 |     |     |     |
| 00:30     |    |    | 11 | 2   | 12:30     |     |     | 75  | 99  |     |     |     |
| 00:45     |    |    | 2  | 25  | 2         | 5   | 30  | 87  | 314 | 113 | 416 | 730 |
| 01:00     |    |    | 2  |     | 2         |     |     | 78  |     | 86  |     |     |
| 01:15     |    |    | 3  |     | 0         |     |     | 94  |     | 92  |     |     |
| 01:30     |    |    | 1  |     | 0         |     |     | 102 |     | 102 |     |     |
| 01:45     |    |    | 1  | 7   | 0         | 2   | 9   | 119 | 393 | 101 | 381 | 774 |
| 02:00     |    |    | 2  |     | 1         |     |     | 123 |     | 102 |     |     |
| 02:15     |    |    | 3  |     | 1         |     |     | 128 |     | 96  |     |     |
| 02:30     |    |    | 1  |     | 0         |     |     | 119 |     | 108 |     |     |
| 02:45     |    |    | 2  | 8   | 0         | 2   | 10  | 111 | 481 | 108 | 414 | 895 |
| 03:00     |    |    | 4  |     | 5         |     |     | 114 |     | 94  |     |     |
| 03:15     |    |    | 3  |     | 2         |     |     | 114 |     | 100 |     |     |
| 03:30     |    |    | 1  |     | 2         |     |     | 111 |     | 84  |     |     |
| 03:45     |    |    | 1  | 9   | 6         | 15  | 24  | 101 | 440 | 103 | 381 | 821 |
| 04:00     |    |    | 4  |     | 4         |     |     | 115 |     | 74  |     |     |
| 04:15     |    |    | 2  |     | 5         |     |     | 118 |     | 97  |     |     |
| 04:30     |    |    | 1  |     | 4         |     |     | 120 |     | 73  |     |     |
| 04:45     |    |    | 3  | 10  | 5         | 18  | 28  | 121 | 474 | 66  | 310 | 784 |
| 05:00     |    |    | 1  |     | 12        |     |     | 127 |     | 86  |     |     |
| 05:15     |    |    | 7  |     | 9         |     |     | 100 |     | 87  |     |     |
| 05:30     |    |    | 6  |     | 25        |     |     | 78  |     | 73  |     |     |
| 05:45     |    |    | 5  | 19  | 31        | 77  | 96  | 72  | 377 | 51  | 297 | 674 |
| 06:00     |    |    | 18 |     | 40        |     |     | 83  |     | 47  |     |     |
| 06:15     |    |    | 17 |     | 50        |     |     | 69  |     | 50  |     |     |
| 06:30     |    |    | 17 |     | 73        |     |     | 73  |     | 39  |     |     |
| 06:45     |    |    | 24 | 76  | 74        | 237 | 313 | 59  | 284 | 44  | 180 | 464 |
| 07:00     |    |    | 26 |     | 96        |     |     | 72  |     | 29  |     |     |
| 07:15     |    |    | 32 |     | 102       |     |     | 67  |     | 39  |     |     |
| 07:30     |    |    | 29 |     | 86        |     |     | 54  |     | 37  |     |     |
| 07:45     |    |    | 41 | 128 | 101       | 385 | 513 | 54  | 247 | 21  | 126 | 373 |
| 08:00     |    |    | 32 |     | 95        |     |     | 44  |     | 23  |     |     |
| 08:15     |    |    | 38 |     | 81        |     |     | 40  |     | 21  |     |     |
| 08:30     |    |    | 47 |     | 77        |     |     | 35  |     | 24  |     |     |
| 08:45     |    |    | 50 | 167 | 91        | 344 | 511 | 34  | 153 | 22  | 90  | 243 |
| 09:00     |    |    | 53 |     | 97        |     |     | 25  |     | 12  |     |     |
| 09:15     |    |    | 53 |     | 101       |     |     | 30  |     | 15  |     |     |
| 09:30     |    |    | 45 |     | 106       |     |     | 36  |     | 12  |     |     |
| 09:45     |    |    | 41 | 192 | 106       | 410 | 602 | 21  | 112 | 11  | 50  | 162 |
| 10:00     |    |    | 50 |     | 111       |     |     | 17  |     | 13  |     |     |
| 10:15     |    |    | 50 |     | 118       |     |     | 16  |     | 9   |     |     |
| 10:30     |    |    | 54 |     | 101       |     |     | 21  |     | 11  |     |     |
| 10:45     |    |    | 48 | 202 | 111       | 441 | 643 | 5   | 59  | 10  | 43  | 102 |
| 11:00     |    |    | 58 |     | 98        |     |     | 5   |     | 8   |     |     |
| 11:15     |    |    | 62 |     | 96        |     |     | 9   |     | 3   |     |     |
| 11:30     |    |    | 79 |     | 94        |     |     | 7   |     | 2   |     |     |
| 11:45     |    |    | 73 | 272 | 90        | 378 | 650 | 5   | 26  | 3   | 16  | 42  |

Total Vol. 1115 2314 3429 3360 2704 6064

GPS: 34.479141, -114.335118

|                             |       |       |       |              |    |       |       |          |
|-----------------------------|-------|-------|-------|--------------|----|-------|-------|----------|
| GPS: 34.479141, -114.335118 |       |       |       | Daily Totals |    |       |       |          |
|                             |       |       |       | NB           | SB | EB    | WB    | Combined |
|                             |       |       |       |              |    | 4475  | 5018  | 9493     |
| AM                          |       |       |       | PM           |    |       |       |          |
| Split %                     | 32.5% | 67.5% | 36.1% |              |    | 55.4% | 44.6% | 63.9%    |
| Peak Hour                   | 11:30 | 09:30 | 11:45 |              |    | 13:45 | 12:00 | 13:45    |
| Volume                      | 304   | 441   | 693   |              |    | 489   | 416   | 896      |
| P.H.F.                      | 0.96  | 0.93  | 0.96  |              |    | 0.96  | 0.92  | 0.99     |

Prepared by: Field Data Services of Arizona/Veracity Traffic Group (520) 316-6745

Volumes for: Wednesday, March 26, 2025 City: Lake Havasu City Project #: 25-1177-001

Location: Riveria Dr / Riviera Blvd & Mesquite Ave

| AM Period                   | NB    |     | SB    |     | EB    |     | WB    |     | PM Period |       | NB |       | SB |                    | EB  |       | WB  |          |      |
|-----------------------------|-------|-----|-------|-----|-------|-----|-------|-----|-----------|-------|----|-------|----|--------------------|-----|-------|-----|----------|------|
| 00:00                       | 0     |     | 0     |     | 8     |     | 1     |     | 12:00     |       | 35 |       | 38 |                    | 77  |       | 101 |          |      |
| 00:15                       | 0     |     | 0     |     | 4     |     | 0     |     | 12:15     |       | 36 |       | 38 |                    | 75  |       | 99  |          |      |
| 00:30                       | 0     |     | 0     |     | 11    |     | 2     |     | 12:30     |       | 39 |       | 26 |                    | 75  |       | 105 |          |      |
| 00:45                       | 0     | 0   | 2     | 2   | 2     | 25  | 2     | 5   | 32        | 12:45 | 46 | 156   | 38 | 140                | 87  | 314   | 115 | 420      | 1030 |
| 01:00                       | 0     |     | 2     |     | 2     |     | 1     |     | 13:00     |       | 49 |       | 38 |                    | 78  |       | 93  |          |      |
| 01:15                       | 1     |     | 0     |     | 3     |     | 1     |     | 13:15     |       | 46 |       | 42 |                    | 94  |       | 104 |          |      |
| 01:30                       | 0     |     | 0     |     | 1     |     | 0     |     | 13:30     |       | 47 |       | 35 |                    | 102 |       | 100 |          |      |
| 01:45                       | 0     | 1   | 0     | 2   | 1     | 7   | 1     | 3   | 13        | 13:45 | 59 | 201   | 32 | 147                | 119 | 393   | 105 | 402      | 1143 |
| 02:00                       | 0     |     | 4     |     | 2     |     | 4     |     | 14:00     |       | 50 |       | 42 |                    | 123 |       | 101 |          |      |
| 02:15                       | 0     |     | 1     |     | 3     |     | 3     |     | 14:15     |       | 55 |       | 37 |                    | 128 |       | 85  |          |      |
| 02:30                       | 0     |     | 0     |     | 1     |     | 1     |     | 14:30     |       | 50 |       | 34 |                    | 119 |       | 99  |          |      |
| 02:45                       | 0     | 0   | 4     | 9   | 2     | 8   | 0     | 8   | 25        | 14:45 | 40 | 195   | 36 | 149                | 111 | 481   | 103 | 388      | 1213 |
| 03:00                       | 1     |     | 2     |     | 4     |     | 4     |     | 15:00     |       | 39 |       | 44 |                    | 114 |       | 98  |          |      |
| 03:15                       | 2     |     | 1     |     | 3     |     | 4     |     | 15:15     |       | 27 |       | 38 |                    | 114 |       | 96  |          |      |
| 03:30                       | 0     |     | 2     |     | 1     |     | 4     |     | 15:30     |       | 30 |       | 36 |                    | 111 |       | 90  |          |      |
| 03:45                       | 0     | 3   | 5     | 10  | 1     | 9   | 4     | 16  | 38        | 15:45 | 33 | 129   | 30 | 148                | 101 | 440   | 118 | 402      | 1119 |
| 04:00                       | 1     |     | 3     |     | 4     |     | 2     |     | 16:00     |       | 28 |       | 27 |                    | 115 |       | 82  |          |      |
| 04:15                       | 0     |     | 2     |     | 2     |     | 5     |     | 16:15     |       | 20 |       | 26 |                    | 118 |       | 101 |          |      |
| 04:30                       | 4     |     | 4     |     | 1     |     | 3     |     | 16:30     |       | 20 |       | 29 |                    | 120 |       | 86  |          |      |
| 04:45                       | 1     | 6   | 8     | 17  | 3     | 10  | 5     | 15  | 48        | 16:45 | 12 | 80    | 20 | 102                | 121 | 474   | 79  | 348      | 1004 |
| 05:00                       | 1     |     | 12    |     | 1     |     | 10    |     | 17:00     |       | 31 |       | 30 |                    | 127 |       | 92  |          |      |
| 05:15                       | 4     |     | 12    |     | 7     |     | 10    |     | 17:15     |       | 25 |       | 32 |                    | 100 |       | 97  |          |      |
| 05:30                       | 10    |     | 11    |     | 6     |     | 19    |     | 17:30     |       | 47 |       | 34 |                    | 78  |       | 91  |          |      |
| 05:45                       | 7     | 22  | 18    | 53  | 5     | 19  | 18    | 57  | 151       | 17:45 | 47 | 150   | 40 | 136                | 72  | 377   | 68  | 348      | 1011 |
| 06:00                       | 20    |     | 19    |     | 18    |     | 26    |     | 18:00     |       | 21 |       | 39 |                    | 83  |       | 62  |          |      |
| 06:15                       | 21    |     | 20    |     | 17    |     | 35    |     | 18:15     |       | 24 |       | 28 |                    | 69  |       | 59  |          |      |
| 06:30                       | 25    |     | 29    |     | 17    |     | 48    |     | 18:30     |       | 17 |       | 25 |                    | 73  |       | 50  |          |      |
| 06:45                       | 19    | 85  | 32    | 100 | 24    | 76  | 55    | 164 | 425       | 18:45 | 24 | 86    | 25 | 117                | 59  | 284   | 44  | 215      | 702  |
| 07:00                       | 32    |     | 33    |     | 26    |     | 70    |     | 19:00     |       | 25 |       | 22 |                    | 72  |       | 34  |          |      |
| 07:15                       | 31    |     | 40    |     | 32    |     | 77    |     | 19:15     |       | 9  |       | 26 |                    | 67  |       | 35  |          |      |
| 07:30                       | 24    |     | 35    |     | 29    |     | 79    |     | 19:30     |       | 18 |       | 21 |                    | 54  |       | 39  |          |      |
| 07:45                       | 34    | 121 | 51    | 159 | 41    | 128 | 88    | 314 | 722       | 19:45 | 11 | 63    | 13 | 82                 | 54  | 247   | 26  | 134      | 526  |
| 08:00                       | 25    |     | 51    |     | 32    |     | 80    |     | 20:00     |       | 15 |       | 16 |                    | 44  |       | 37  |          |      |
| 08:15                       | 23    |     | 47    |     | 38    |     | 72    |     | 20:15     |       | 9  |       | 20 |                    | 40  |       | 32  |          |      |
| 08:30                       | 23    |     | 47    |     | 47    |     | 67    |     | 20:30     |       | 7  |       | 10 |                    | 35  |       | 33  |          |      |
| 08:45                       | 41    | 112 | 69    | 214 | 50    | 167 | 70    | 289 | 782       | 20:45 | 11 | 42    | 14 | 60                 | 34  | 153   | 22  | 124      | 379  |
| 09:00                       | 41    |     | 66    |     | 53    |     | 80    |     | 21:00     |       | 6  |       | 8  |                    | 25  |       | 17  |          |      |
| 09:15                       | 32    |     | 72    |     | 53    |     | 81    |     | 21:15     |       | 4  |       | 9  |                    | 30  |       | 23  |          |      |
| 09:30                       | 42    |     | 62    |     | 45    |     | 84    |     | 21:30     |       | 2  |       | 10 |                    | 36  |       | 13  |          |      |
| 09:45                       | 42    | 157 | 61    | 261 | 41    | 192 | 86    | 331 | 941       | 21:45 | 6  | 18    | 11 | 38                 | 21  | 112   | 21  | 74       | 242  |
| 10:00                       | 40    |     | 84    |     | 50    |     | 92    |     | 22:00     |       | 6  |       | 12 |                    | 17  |       | 10  |          |      |
| 10:15                       | 42    |     | 68    |     | 50    |     | 100   |     | 22:15     |       | 5  |       | 6  |                    | 16  |       | 13  |          |      |
| 10:30                       | 42    |     | 66    |     | 54    |     | 98    |     | 22:30     |       | 9  |       | 4  |                    | 21  |       | 11  |          |      |
| 10:45                       | 40    | 164 | 55    | 273 | 48    | 202 | 101   | 391 | 1030      | 22:45 | 4  | 24    | 10 | 32                 | 5   | 59    | 11  | 45       | 160  |
| 11:00                       | 34    |     | 57    |     | 58    |     | 95    |     | 23:00     |       | 11 |       | 4  |                    | 5   |       | 6   |          |      |
| 11:15                       | 36    |     | 53    |     | 62    |     | 95    |     | 23:15     |       | 7  |       | 2  |                    | 9   |       | 3   |          |      |
| 11:30                       | 39    |     | 42    |     | 79    |     | 97    |     | 23:30     |       | 3  |       | 4  |                    | 7   |       | 5   |          |      |
| 11:45                       | 34    | 143 | 50    | 202 | 73    | 272 | 88    | 375 | 992       | 23:45 | 3  | 24    | 2  | 12                 | 5   | 26    | 2   | 16       | 78   |
| Total Vol.                  | 814   |     | 1302  |     | 1115  |     | 1968  |     | 5199      | 1168  |    | 1163  |    | 3360               |     | 2916  |     | 8607     |      |
| GPS: 34.479141, -114.335118 |       |     |       |     |       |     |       |     |           | NB    |    | SB    |    | Daily Totals<br>EB |     | WB    |     | Combined |      |
|                             |       |     |       |     |       |     |       |     |           | 1982  |    | 2465  |    | 4475               |     | 4884  |     | 13806    |      |
|                             |       |     |       |     |       |     |       |     |           | AM    |    |       |    |                    |     |       |     |          |      |
| Split %                     | 15.7% |     | 25.0% |     | 21.4% |     | 37.9% |     | 37.7%     | 13.6% |    | 13.5% |    | 39.0%              |     | 33.9% |     | 62.3%    |      |
| Peak Hour                   | 09:30 |     | 09:15 |     | 11:30 |     | 10:15 |     | 10:00     | 13:45 |    | 14:45 |    | 13:45              |     | 12:00 |     | 13:45    |      |
| Volume                      | 166   |     | 279   |     | 304   |     | 394   |     | 1030      | 214   |    | 154   |    | 489                |     | 420   |     | 1238     |      |
| P.H.F.                      | 0.99  |     | 0.83  |     | 0.96  |     | 0.98  |     | 0.97      | 0.91  |    | 0.88  |    | 0.96               |     | 0.91  |     | 0.98     |      |

## **Appendix B: Crash Data**

| OBJECTID | IncidentID | ADOTReceivedDate   | Status | IncidentDate       | IncidentDateTime    | IncidentYear | IncidentMonth | IncidentDayOfWeek | IncidentHour | OfficerNcic | OfficerId | FileNumber | ExtendedNcic | CollisionManner                                 | CollisionManner |
|----------|------------|--------------------|--------|--------------------|---------------------|--------------|---------------|-------------------|--------------|-------------|-----------|------------|--------------|-------------------------------------------------|-----------------|
| 1        | 3458838    | 2019-01-15 0:00:00 | 200    | 2019-01-10 0:00:00 | 2019-01-10 18:45:00 | 2019         | 1             | 5                 | 18 804       |             |           | 1900188    |              | 804 Angle (Front To Side)(Other Than Left Turn) | 2               |
| 2        | 3469706    | 2019-02-12 0:00:00 | 200    | 2019-02-05 0:00:00 | 2019-02-05 15:35:00 | 2019         | 2             | 3                 | 15 804       |             |           | 1900773    |              | 804 Left Turn                                   | 3               |
| 3        | 3486078    | 2019-03-20 0:00:00 | 200    | 2019-03-13 0:00:00 | 2019-03-13 13:31:00 | 2019         | 3             | 4                 | 13 804       |             |           | 1901626    |              | 804 Rear End                                    | 4               |
| 4        | 3501817    | 2019-04-30 0:00:00 | 200    | 2019-04-25 0:00:00 | 2019-04-25 14:45:00 | 2019         | 4             | 5                 | 14 804       |             |           | 1902622    |              | 804 Angle (Front To Side)(Other Than Left Turn) | 2               |
| 5        | 3506979    | 2019-05-09 0:00:00 | 200    | 2019-05-06 0:00:00 | 2019-05-06 7:59:00  | 2019         | 5             | 2                 | 7 804        |             |           | 1902894    |              | 804 Single Vehicle                              | 1               |
| 6        | 3525970    | 2019-06-28 0:00:00 | 200    | 2019-06-27 0:00:00 | 2019-06-27 9:16:00  | 2019         | 6             | 5                 | 9 804        |             |           | 1904109    |              | 804 Head On                                     | 5               |
| 7        | 3598748    | 2019-12-20 0:00:00 | 200    | 2019-12-16 0:00:00 | 2019-12-16 15:52:00 | 2019         | 12            | 2                 | 15 804       |             |           | 1907507    |              | 804 Sideswipe Same Direction                    | 6               |
| 8        | 3643558    | 2020-04-24 0:00:00 | 200    | 2020-04-22 0:00:00 | 2020-04-22 11:20:00 | 2020         | 4             | 4                 | 11 804       |             |           | 2002198    |              | 804 Angle (Front To Side)(Other Than Left Turn) | 2               |
| 9        | 3648335    | 2020-05-19 0:00:00 | 200    | 2020-05-16 0:00:00 | 2020-05-16 13:21:00 | 2020         | 5             | 7                 | 13 804       |             |           | 2002620    |              | 804 Single Vehicle                              | 1               |
| 10       | 3829611    | 2021-11-02 7:01:00 | 200    | 2021-10-30 0:00:00 | 2021-10-30 12:32:00 | 2021         | 10            | 7                 | 12 804       |             |           | 2106132    |              | 804 Angle (Front To Side)(Other Than Left Turn) | 2               |
| 11       | 3860628    | 2022-01-25 0:00:00 | 200    | 2022-01-21 0:00:00 | 2022-01-21 7:55:00  | 2022         | 1             | 6                 | 7 804        |             |           | 2200405    |              | 804 Angle (Front To Side)(Other Than Left Turn) | 2               |
| 12       | 3865691    | 2022-02-08 0:00:00 | 200    | 2022-02-04 0:00:00 | 2022-02-04 15:25:00 | 2022         | 2             | 6                 | 15 804       |             |           | 2200648    |              | 804 Rear End                                    | 4               |
| 13       | 3878854    | 2022-03-15 7:02:00 | 200    | 2022-03-11 0:00:00 | 2022-03-11 19:55:00 | 2022         | 3             | 6                 | 19 804       |             |           | 2201321    |              | 804 Angle (Front To Side)(Other Than Left Turn) | 2               |
| 14       | 3891514    | 2022-04-13 7:01:00 | 200    | 2022-04-07 0:00:00 | 2022-04-07 11:33:00 | 2022         | 4             | 5                 | 11 804       |             |           | 2201939    |              | 804 Sideswipe Same Direction                    | 6               |
| 15       | 3937207    | 2022-08-31 0:00:00 | 200    | 2022-08-29 0:00:00 | 2022-08-29 11:21:00 | 2022         | 8             | 2                 | 11 804       |             |           | 2204869    |              | 804 Angle (Front To Side)(Other Than Left Turn) | 2               |
| 16       | 3946335    | 2022-09-27 0:00:00 | 200    | 2022-09-21 0:00:00 | 2022-09-21 6:50:00  | 2022         | 9             | 4                 | 6 804        |             |           | 2205375    |              | 804 Angle (Front To Side)(Other Than Left Turn) | 2               |
| 17       | 4028574    | 2023-04-13 0:00:00 | 200    | 2023-04-11 0:00:00 | 2023-04-11 14:45:00 | 2023         | 4             | 3                 | 14 804       |             |           | 2301936    |              | 804 Rear End                                    | 4               |
| 18       | 4036879    | 2023-05-04 0:00:00 | 200    | 2023-05-03 0:00:00 | 2023-05-03 10:15:00 | 2023         | 5             | 4                 | 10 804       |             |           | 2302417    |              | 804 Angle (Front To Side)(Other Than Left Turn) | 2               |
| 19       | 4049692    | 2023-06-07 7:01:00 | 200    | 2023-06-06 0:00:00 | 2023-06-06 12:17:00 | 2023         | 6             | 3                 | 12 804       |             |           | 2303217    |              | 804 Left Turn                                   | 3               |
| 20       | 4061378    | 2023-07-12 0:00:00 | 200    | 2023-07-10 0:00:00 | 2023-07-10 10:19:00 | 2023         | 7             | 2                 | 10 804       |             |           | 2303980    |              | 804 Angle (Front To Side)(Other Than Left Turn) | 2               |
| 21       | 4079831    | 2023-09-04 0:00:00 | 200    | 2023-09-02 0:00:00 | 2023-09-02 16:21:00 | 2023         | 9             | 7                 | 16 804       |             |           | 2305046    |              | 804 Rear End                                    | 4               |

| LightCondition   | LightCondition | FirstHarmfulEvent            | FirstHarmfulEvent | TotalUnits | TotalMotorists | TotalNonMotorists | TotalInjuries | TotalFatalities | TotalMotoristsInjuries | TotalNonMotoristsInjuries | TotalMotoristsFatalities | TotalNonMotoristsFatalities |
|------------------|----------------|------------------------------|-------------------|------------|----------------|-------------------|---------------|-----------------|------------------------|---------------------------|--------------------------|-----------------------------|
| Dark Not Lighted |                | 5 Motor Vehicle In Transport | 16                | 2          | 4              | 0                 | 0             | 0               | 0                      | 0                         | 0                        | 0                           |
| Daylight         |                | 1 Motor Vehicle In Transport | 16                | 2          | 2              | 0                 | 0             | 0               | 0                      | 0                         | 0                        | 0                           |
| Daylight         |                | 1 Motor Vehicle In Transport | 16                | 2          | 3              | 0                 | 0             | 0               | 0                      | 0                         | 0                        | 0                           |
| Daylight         |                | 1 Motor Vehicle In Transport | 16                | 2          | 4              | 0                 | 2             | 0               | 2                      | 0                         | 0                        | 0                           |
| Daylight         |                | 1 Curb                       | 33                | 1          | 1              | 0                 | 0             | 0               | 0                      | 0                         | 0                        | 0                           |
| Daylight         |                | 1 Motor Vehicle In Transport | 16                | 2          | 2              | 0                 | 0             | 0               | 0                      | 0                         | 0                        | 0                           |
| Daylight         |                | 1 Motor Vehicle In Transport | 16                | 2          | 2              | 0                 | 0             | 0               | 0                      | 0                         | 0                        | 0                           |
| Daylight         |                | 1 Motor Vehicle In Transport | 16                | 2          | 2              | 0                 | 0             | 0               | 0                      | 0                         | 0                        | 0                           |
| Daylight         |                | 1 Other Fixed Object         | 49                | 1          | 1              | 0                 | 1             | 0               | 1                      | 0                         | 0                        | 0                           |
| Daylight         |                | 1 Motor Vehicle In Transport | 16                | 2          | 4              | 0                 | 1             | 0               | 1                      | 0                         | 0                        | 0                           |
| Daylight         |                | 1 Motor Vehicle In Transport | 16                | 2          | 2              | 0                 | 1             | 0               | 1                      | 0                         | 0                        | 0                           |
| Daylight         |                | 1 Motor Vehicle In Transport | 16                | 2          | 4              | 0                 | 0             | 0               | 0                      | 0                         | 0                        | 0                           |
| Dark Not Lighted |                | 5 Motor Vehicle In Transport | 16                | 2          | 3              | 0                 | 0             | 0               | 0                      | 0                         | 0                        | 0                           |
| Daylight         |                | 1 Motor Vehicle In Transport | 16                | 2          | 2              | 0                 | 0             | 0               | 0                      | 0                         | 0                        | 0                           |
| Daylight         |                | 1 Motor Vehicle In Transport | 16                | 2          | 3              | 0                 | 0             | 0               | 0                      | 0                         | 0                        | 0                           |
| Daylight         |                | 1 Motor Vehicle In Transport | 16                | 2          | 2              | 0                 | 0             | 0               | 0                      | 0                         | 0                        | 0                           |
| Daylight         |                | 1 Motor Vehicle In Transport | 16                | 2          | 2              | 0                 | 0             | 0               | 0                      | 0                         | 0                        | 0                           |
| Daylight         |                | 1 Motor Vehicle In Transport | 16                | 2          | 3              | 0                 | 0             | 0               | 0                      | 0                         | 0                        | 0                           |
| Daylight         |                | 1 Motor Vehicle In Transport | 16                | 2          | 2              | 0                 | 0             | 0               | 0                      | 0                         | 0                        | 0                           |
| Daylight         |                | 1 Motor Vehicle In Transport | 16                | 2          | 2              | 0                 | 0             | 0               | 0                      | 0                         | 0                        | 0                           |
| Daylight         |                | 1 Motor Vehicle In Transport | 16                | 2          | 2              | 0                 | 0             | 0               | 0                      | 0                         | 0                        | 0                           |
| Daylight         |                | 1 Motor Vehicle In Transport | 16                | 2          | 3              | 0                 | 1             | 0               | 1                      | 0                         | 0                        | 0                           |

| InjurySeverity           | InjurySeverity | FatalAccidentFlag | TowAwayFlag | SchoolBusRelatedFlag | WorkZoneRelatedFlag | WorkersPresentFlag | AlcoholInvolvementFlag | DrugInvolvementFlag | HitAndRunFlag | RouteName         | CrossingFeatureName | Offset |
|--------------------------|----------------|-------------------|-------------|----------------------|---------------------|--------------------|------------------------|---------------------|---------------|-------------------|---------------------|--------|
| No Injury                | 1              | 0                 | 1           | 0                    | 0                   | 0                  | 0                      | 0                   | 0             | 0 08 MESQUITE AVE | Riviera Dr          | 0      |
| No Injury                | 1              | 0                 | 1           | 0                    | 0                   | 0                  | 0                      | 0                   | 0             | 0 08 MESQUITE AVE | Riviera Blvd        | 0      |
| No Injury                | 1              | 0                 | 0           | 0                    | 0                   | 0                  | 0                      | 0                   | 0             | 0 08 MESQUITE AVE | Riviera Blvd        | 0      |
| Suspected Serious Injury | 4              | 0                 | 1           | 0                    | 0                   | 0                  | 0                      | 0                   | 0             | 0 08 RIVIERA BLVD | Mesquite Ave        | -75    |
| No Injury                | 1              | 0                 | 1           | 0                    | 0                   | 0                  | 0                      | 0                   | 0             | 0 08 RIVIERA BLVD | Mesquite Ave        | 0      |
| No Injury                | 1              | 0                 | 1           | 0                    | 0                   | 0                  | 0                      | 0                   | 0             | 0 08 MESQUITE AVE | Riviera Blvd        | 0      |
| No Injury                | 1              | 0                 | 0           | 0                    | 0                   | 0                  | 0                      | 0                   | 0             | 0 08 MESQUITE AVE | Riviera Blvd        | 20     |
| No Injury                | 1              | 0                 | 1           | 0                    | 0                   | 0                  | 0                      | 0                   | 0             | 0 08 MESQUITE AVE | Riviera Blvd        | 0      |
| Suspected Serious Injury | 4              | 0                 | 1           | 0                    | 0                   | 0                  | 0                      | 0                   | 0             | 0 08 MESQUITE AVE | Riviera Blvd        | 10     |
| Suspected Minor Injury   | 3              | -1                | 1           | 0                    | 0                   | 0                  | 0                      | 0                   | 0             | 0 08 RIVIERA BLVD | Mesquite Ave        | 25     |
| Possible Injury          | 2              | 0                 | 1           | 0                    | 0                   | 0                  | 0                      | 0                   | 0             | 0 08 RIVIERA BLVD | Mesquite Ave        | 0      |
| No Injury                | 1              | 0                 | 0           | 0                    | 0                   | 0                  | 0                      | 0                   | 0             | 0 08 MESQUITE AVE | Riviera Blvd        | 20     |
| No Injury                | 1              | -1                | 1           | 0                    | 0                   | 0                  | 0                      | 0                   | 0             | 0 08 MESQUITE AVE | Riviera Blvd        | 0      |
| No Injury                | 1              | -1                | 0           | 0                    | 0                   | 0                  | 0                      | 0                   | 0             | 0 08 RIVIERA BLVD | Mesquite Ave        | 163    |
| No Injury                | 1              | 0                 | 1           | 0                    | 0                   | 0                  | 0                      | 0                   | 0             | 0 08 MESQUITE AVE | Riviera Dr          | 0      |
| No Injury                | 1              | 0                 | 1           | 0                    | 0                   | 0                  | 0                      | 0                   | 0             | 1 08 MESQUITE AVE | Riviera Blvd        | 0      |
| No Injury                | 1              | 0                 | 1           | 0                    | 0                   | 0                  | 0                      | 0                   | 0             | 0 08 MESQUITE AVE | Moyo Dr             | -36    |
| No Injury                | 1              | 0                 | 1           | 0                    | 0                   | 0                  | 0                      | 0                   | 0             | 0 08 RIVIERA DR   | Mesquite Ave        | 0      |
| No Injury                | 1              | -1                | 0           | 0                    | 0                   | 0                  | 0                      | 0                   | 0             | 0 08 MESQUITE AVE | Riviera Blvd        | 0      |
| No Injury                | 1              | 0                 | 1           | 0                    | 0                   | 0                  | 0                      | 0                   | 0             | 0 08 MESQUITE AVE | Riviera Blvd        | 0      |
| Possible Injury          | 2              | 0                 | 1           | 0                    | 0                   | 0                  | 0                      | 1                   | 0             | 0 08 MESQUITE AVE | Riviera Blvd        | 10     |

| OffsetMeasuredFlag | OffsetUnit | MPNum | MPOffset | CityId | CountyId   | CountyId | StateId | StateCode | CountryCode | Latitude    | Longitude    | ValidLocationFlag | IntersectionFlag | TrafficWayType                                       | TrafficWayType | IntersectionType |
|--------------------|------------|-------|----------|--------|------------|----------|---------|-----------|-------------|-------------|--------------|-------------------|------------------|------------------------------------------------------|----------------|------------------|
|                    | 0          | 0     | 0        | 0      | 149 Mohave | 15       | 3 AZ    |           |             | 34.47914687 | -114.3351402 | 1                 |                  | 1 Two Way Not Divided With Continuous Left Turn Lane | 3 Not Reported |                  |
|                    | 0          | 0     | 0        | 0      | 149 Mohave | 15       | 3 AZ    |           |             | 34.47914687 | -114.3351402 | 1                 |                  | 1 Two Way Not Divided With Continuous Left Turn Lane | 3 Not Reported |                  |
|                    | 0          | 0     | 0        | 0      | 149 Mohave | 15       | 3 AZ    |           |             | 34.47914687 | -114.3351402 | 1                 |                  | 1 Two Way Not Divided With Continuous Left Turn Lane | 3 Not Reported |                  |
|                    | 0          | 0     | 0        | 0      | 149 Mohave | 15       | 3 AZ    |           |             | 34.47894309 | -114.3351744 | 1                 |                  | 0 Two Way Not Divided With Continuous Left Turn Lane | 3 Not Reported |                  |
|                    | 0          | 0     | 0        | 0      | 149 Mohave | 15       | 3 AZ    |           |             | 34.47901496 | -114.3351624 | 1                 |                  | 1 Two Way Not Divided                                | 2 Not Reported |                  |
|                    | 0          | 0     | 0        | 0      | 149 Mohave | 15       | 3 AZ    |           |             | 34.47914687 | -114.3351402 | 1                 |                  | 1 Two Way Not Divided With Continuous Left Turn Lane | 3 Not Reported |                  |
|                    | 0          | 0     | 0        | 0      | 149 Mohave | 15       | 3 AZ    |           |             | 34.47913801 | -114.3350749 | 1                 |                  | 1 Two Way Not Divided                                | 2 Not Reported |                  |
|                    | 0          | 0     | 0        | 0      | 149 Mohave | 15       | 3 AZ    |           |             | 34.47914687 | -114.3351402 | 1                 |                  | 1 Two Way Not Divided With Continuous Left Turn Lane | 3 Not Reported |                  |
|                    | 0          | 0     | 0        | 0      | 149 Mohave | 15       | 3 AZ    |           |             | 34.47914244 | -114.3351076 | 1                 |                  | 1 Two Way Not Divided                                | 2 Not Reported |                  |
|                    | 0          | 0     | 0        | 0      | 149 Mohave | 15       | 3 AZ    |           |             | 34.47908437 | -114.3351507 | 1                 |                  | 1 Two Way Divided Unprotected Painted 4 Feet Median  | 4 Not Reported |                  |
|                    | 0          | 0     | 0        | 0      | 149 Mohave | 15       | 3 AZ    |           |             | 34.47914687 | -114.3351402 | 1                 |                  | 1 Two Way Not Divided With Continuous Left Turn Lane | 3 Not Reported |                  |
|                    | 0          | 0     | 0        | 0      | 149 Mohave | 15       | 3 AZ    |           |             | 34.47913801 | -114.3350749 | 1                 |                  | 1 Two Way Divided Unprotected Painted 4 Feet Median  | 4 Not Reported |                  |
|                    | 0          | 0     | 0        | 0      | 149 Mohave | 15       | 3 AZ    |           |             | 34.47915229 | -114.3351802 | 1                 |                  | 1 Two Way Not Divided                                | 2 Not Reported |                  |
|                    | 0          | 0     | 0        | 0      | 149 Mohave | 15       | 3 AZ    |           |             | 34.47856607 | -114.3352376 | 1                 |                  | 0 Two Way Not Divided                                | 2              |                  |
|                    | 0          | 0     | 0        | 0      | 149 Mohave | 15       | 3 AZ    |           |             | 34.47914687 | -114.3351402 | 1                 |                  | 1 Two Way Divided Unprotected Painted 4 Feet Median  | 4 Not Reported |                  |
|                    | 0          | 0     | 0        | 0      | 149 Mohave | 15       | 3 AZ    |           |             | 34.47914687 | -114.3351402 | 1                 |                  | 1 Two Way Not Divided With Continuous Left Turn Lane | 3 Not Reported |                  |
|                    | 0          | 0     | 0        | 0      | 149 Mohave | 15       | 3 AZ    |           |             | 34.47902297 | -114.3343094 | 1                 |                  | 1 Two Way Not Divided With Continuous Left Turn Lane | 3 Not Reported |                  |
|                    | 0          | 0     | 0        | 0      | 149 Mohave | 15       | 3 AZ    |           |             | 34.47914687 | -114.3351402 | 1                 |                  | 1 Two Way Not Divided With Continuous Left Turn Lane | 3 Not Reported |                  |
|                    | 0          | 0     | 0        | 0      | 149 Mohave | 15       | 3 AZ    |           |             | 34.47915229 | -114.3351802 | 1                 |                  | 1 Two Way Not Divided                                | 2 Not Reported |                  |
|                    | 0          | 0     | 0        | 0      | 149 Mohave | 15       | 3 AZ    |           |             | 34.47914687 | -114.3351402 | 1                 |                  | 1 Two Way Not Divided                                | 2 Not Reported |                  |
|                    | 0          | 0     | 0        | 0      | 149 Mohave | 15       | 3 AZ    |           |             | 34.47914244 | -114.3351076 | 1                 |                  | 1 Two Way Not Divided                                | 2 Not Reported |                  |

| IntersectionType | JunctionRelation         | JunctionRelation | Weather | Weather | OffsetDirection | SecondaryCrashFlag | GeocodeOnRoad  | GeocodeCrossingFeatureName | GeocodeOffsetInMiles | X            | Y           | GeocodeOnRoadRouteId | CrossingFeature   |
|------------------|--------------------------|------------------|---------|---------|-----------------|--------------------|----------------|----------------------------|----------------------|--------------|-------------|----------------------|-------------------|
|                  | 255 Intersection         | 201 Clear        | 1       |         | 0               |                    | 0 Mesquite Ave | Riviera Dr                 | 0                    | -28899.20898 | 1274453.741 | 08 MESQUITE AVE      | 08 RIVIERA DR     |
|                  | 255 Intersection         | 201 Clear        | 1       |         | 0               |                    | 0 Mesquite Ave | Riviera Blvd               | 0                    | -28899.20898 | 1274453.741 | 08 MESQUITE AVE      | 08 RIVIERA BLVD   |
|                  | 255 Intersection Related | 206 Clear        | 1       |         | 0               |                    | 0 Mesquite Ave | Riviera Blvd               | 0                    | -28899.20898 | 1274453.741 | 08 MESQUITE AVE      | 08 RIVIERA BLVD   |
|                  | 255 Driveway Or Alley    | 7 Clear          | 1       |         | 3               |                    | 0 Riviera Blvd | Mesquite Ave               | -0.014204545         | -28911.27559 | 1274379.806 | 08 RIVIERA BLVD      | 08 MESQUITE AVE   |
|                  | 255 Intersection         | 201 Clear        | 1       |         | 0               |                    | 0 Riviera Blvd | Mesquite Ave               | 0                    | -28907.01988 | 1274405.882 | 08 RIVIERA BLVD      | 08 MESQUITE AVE   |
|                  | 255 Intersection         | 201 Clear        | 1       |         | 0               |                    | 0 Mesquite Ave | Riviera Blvd               | 0                    | -28899.20898 | 1274453.741 | 08 MESQUITE AVE      | 08 RIVIERA BLVD   |
|                  | 255 Intersection 4 Way   | 202 Clear        | 1       |         | 2               |                    | 0 Mesquite Ave | Riviera Blvd               | 0.003787879          | -28879.58158 | 1274450.045 | 08 MESQUITE AVE      | 08 RIVIERA BLVD   |
|                  | 255 Intersection 4 Way   | 202 Clear        | 1       |         | 0               |                    | 0 Mesquite Ave | Riviera Blvd               | 0                    | -28899.20898 | 1274453.741 | 08 MESQUITE AVE      | 08 RIVIERA BLVD   |
|                  | 255 Intersection Related | 206 Clear        | 1       |         | 2               |                    | 0 Mesquite Ave | Riviera Blvd               | 0.001893939          | -28889.39954 | 1274451.894 | 08 MESQUITE AVE      | 08 RIVIERA BLVD   |
|                  | 255 Intersection 4 Way   | 202 Clear        | 1       |         | 1               |                    | 0 Riviera Blvd | Mesquite Ave               | 0.004734848          | -28902.90957 | 1274431.067 | 08 RIVIERA BLVD      | 08 MESQUITE AVE   |
|                  | 255 Intersection         | 201 Clear        | 1       |         | 0               |                    | 0 Riviera Blvd | Mesquite Ave               | 0                    | -28899.20898 | 1274453.741 | 08 RIVIERA BLVD      | 08 MESQUITE AVE   |
|                  | 255 Intersection 4 Way   | 202 Clear        | 1       |         | 2               |                    | 0 Mesquite Ave | Riviera Blvd               | 0.003787879          | -28879.58158 | 1274450.045 | 08 MESQUITE AVE      | 08 RIVIERA BLVD   |
|                  | 255 Intersection         | 201 Clear        | 1       |         | 0               |                    | 0 Mesquite Ave | Riviera Blvd               | 0                    | -28911.21195 | 1274456.005 | 08 MESQUITE AVE      | 08 RIVIERA BLVD 1 |
|                  | 0 Not Junction Related   | 0 Clear          | 1       |         | 3               |                    | 0 Riviera Blvd | Mesquite Ave               | 0.030871212          | -28933.59999 | 1274243.017 | 08 RIVIERA BLVD      | 08 MESQUITE AVE   |
|                  | 255 Intersection         | 201 Clear        | 1       |         | 0               |                    | 0 Mesquite Ave | Riviera Dr                 | 0                    | -28899.20898 | 1274453.741 | 08 MESQUITE AVE      | 08 RIVIERA DR     |
|                  | 255 Intersection         | 201 Cloudy       | 2       |         | 0               |                    | 0 Mesquite Ave | Riviera Blvd               | 0                    | -28899.20898 | 1274453.741 | 08 MESQUITE AVE      | 08 RIVIERA BLVD   |
|                  | 255 Intersection         | 201 Clear        | 1       |         | 4               |                    | 0 Mesquite Ave | Moyo Dr                    | -0.006818182         | -28649.8109  | 1274402.651 | 08 MESQUITE AVE      | 08 MOYO DR        |
|                  | 255 Intersection 4 Way   | 202 Clear        | 1       |         | 0               |                    | 0 Riviera Dr   | Mesquite Ave               | 0                    | -28899.20898 | 1274453.741 | 08 RIVIERA DR        | 08 MESQUITE AVE   |
|                  | 255 Intersection Related | 206 Clear        | 1       |         | 0               |                    | 0 Mesquite Ave | Riviera Blvd               | 0                    | -28911.21195 | 1274456.005 | 08 MESQUITE AVE      | 08 RIVIERA BLVD 1 |
|                  | 255 Intersection 4 Way   | 202 Clear        | 1       |         | 0               |                    | 0 Mesquite Ave | Riviera Blvd               | 0                    | -28899.20898 | 1274453.741 | 08 MESQUITE AVE      | 08 RIVIERA BLVD   |
|                  | 255 Intersection Related | 206 Cloudy       | 2       |         | 2               |                    | 0 Mesquite Ave | Riviera Blvd               | 0.001893939          | -28889.39954 | 1274451.894 | 08 MESQUITE AVE      | 08 RIVIERA BLVD   |

## **Appendix C: Existing AM Traffic Capacity Analysis**

| Intersection              |      |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|------|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 11.9 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | B    |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR  | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
|---------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Configurations |  |  |  |  |  |      |  |  |  |  |  |  |
| Traffic Vol, veh/h  | 40                                                                                | 77                                                                                | 50                                                                                | 50                                                                                | 205                                                                               | 34   | 66                                                                                  | 38                                                                                  | 8                                                                                   | 30                                                                                  | 111                                                                                 | 73                                                                                  |
| Future Vol, veh/h   | 40                                                                                | 77                                                                                | 50                                                                                | 50                                                                                | 205                                                                               | 34   | 66                                                                                  | 38                                                                                  | 8                                                                                   | 30                                                                                  | 111                                                                                 | 73                                                                                  |
| Peak Hour Factor    | 0.84                                                                              | 0.84                                                                              | 0.84                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90 | 0.68                                                                                | 0.68                                                                                | 0.68                                                                                | 0.78                                                                                | 0.78                                                                                | 0.78                                                                                |
| Heavy Vehicles, %   | 2                                                                                 | 2                                                                                 | 2                                                                                 | 2                                                                                 | 2                                                                                 | 2    | 2                                                                                   | 2                                                                                   | 2                                                                                   | 2                                                                                   | 2                                                                                   | 2                                                                                   |
| Mvmt Flow           | 48                                                                                | 92                                                                                | 60                                                                                | 56                                                                                | 228                                                                               | 38   | 97                                                                                  | 56                                                                                  | 12                                                                                  | 38                                                                                  | 142                                                                                 | 94                                                                                  |
| Number of Lanes     | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 0    | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   |

| Approach                   | EB   | WB   | NB   | SB |
|----------------------------|------|------|------|----|
| Opposing Approach          | WB   | EB   | SB   | NB |
| Opposing Lanes             | 2    | 3    | 3    | 3  |
| Conflicting Approach Left  | SB   | NB   | EB   | WB |
| Conflicting Lanes Left     | 3    | 3    | 3    | 2  |
| Conflicting Approach Right | NB   | SB   | WB   | EB |
| Conflicting Lanes Right    | 3    | 3    | 2    | 3  |
| HCM Control Delay, s/veh   | 10.5 | 13.9 | 11.3 | 11 |
| HCM LOS                    | B    | B    | B    | B  |

| Lane                     | NBLn1 | NBLn2 | NBLn3 | EBLn1 | EBLn2 | EBLn3 | WBLn1 | WBLn2 | SBLn1 | SBLn2 | SBLn3 |
|--------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Vol Left, %              | 100%  | 0%    | 0%    | 100%  | 0%    | 0%    | 100%  | 0%    | 100%  | 0%    | 0%    |
| Vol Thru, %              | 0%    | 100%  | 0%    | 0%    | 100%  | 0%    | 0%    | 86%   | 0%    | 100%  | 0%    |
| Vol Right, %             | 0%    | 0%    | 100%  | 0%    | 0%    | 100%  | 0%    | 14%   | 0%    | 0%    | 100%  |
| Sign Control             | Stop  | Stop  | Stop  | Stop  | Stop  | Stop  | Stop  | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane      | 66    | 38    | 8     | 40    | 77    | 50    | 50    | 239   | 30    | 111   | 73    |
| LT Vol                   | 66    | 0     | 0     | 40    | 0     | 0     | 50    | 0     | 30    | 0     | 0     |
| Through Vol              | 0     | 38    | 0     | 0     | 77    | 0     | 0     | 205   | 0     | 111   | 0     |
| RT Vol                   | 0     | 0     | 8     | 0     | 0     | 50    | 0     | 34    | 0     | 0     | 73    |
| Lane Flow Rate           | 97    | 56    | 12    | 48    | 92    | 60    | 56    | 266   | 38    | 142   | 94    |
| Geometry Grp             | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 6     |
| Degree of Util (X)       | 0.2   | 0.107 | 0.02  | 0.096 | 0.173 | 0.1   | 0.107 | 0.467 | 0.077 | 0.265 | 0.156 |
| Departure Headway (Hd)   | 7.426 | 6.92  | 6.212 | 7.284 | 6.781 | 6.078 | 6.927 | 6.327 | 7.202 | 6.696 | 5.989 |
| Convergence, Y/N         | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |
| Cap                      | 481   | 515   | 572   | 490   | 526   | 586   | 516   | 568   | 495   | 534   | 595   |
| Service Time             | 5.208 | 4.702 | 3.993 | 5.063 | 4.56  | 3.856 | 4.692 | 4.093 | 4.975 | 4.469 | 3.762 |
| HCM Lane V/C Ratio       | 0.202 | 0.109 | 0.021 | 0.098 | 0.175 | 0.102 | 0.109 | 0.468 | 0.077 | 0.266 | 0.158 |
| HCM Control Delay, s/veh | 12.1  | 10.5  | 9.1   | 10.8  | 11    | 9.5   | 10.5  | 14.6  | 10.6  | 11.9  | 9.9   |
| HCM Lane LOS             | B     | B     | A     | B     | B     | A     | B     | B     | B     | B     | A     |
| HCM 95th-tile Q          | 0.7   | 0.4   | 0.1   | 0.3   | 0.6   | 0.3   | 0.4   | 2.5   | 0.2   | 1.1   | 0.5   |

## **Appendix D: Existing PM Traffic Capacity Analysis**

| Intersection              |      |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|------|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 15.9 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | C    |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR  | NBL                                                                               | NBT                                                                               | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
|---------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Configurations |  |  |  |  |  |      |  |  |  |  |  |  |
| Traffic Vol, veh/h  | 106                                                                               | 304                                                                               | 76                                                                                | 34                                                                                | 282                                                                               | 42   | 4                                                                                 | 54                                                                                | 25                                                                                  | 28                                                                                  | 41                                                                                  | 36                                                                                  |
| Future Vol, veh/h   | 106                                                                               | 304                                                                               | 76                                                                                | 34                                                                                | 282                                                                               | 42   | 4                                                                                 | 54                                                                                | 25                                                                                  | 28                                                                                  | 41                                                                                  | 36                                                                                  |
| Peak Hour Factor    | 0.96                                                                              | 0.96                                                                              | 0.96                                                                              | 0.89                                                                              | 0.89                                                                              | 0.89 | 0.67                                                                              | 0.67                                                                              | 0.67                                                                                | 0.88                                                                                | 0.88                                                                                | 0.88                                                                                |
| Heavy Vehicles, %   | 2                                                                                 | 2                                                                                 | 2                                                                                 | 2                                                                                 | 2                                                                                 | 2    | 2                                                                                 | 2                                                                                 | 2                                                                                   | 2                                                                                   | 2                                                                                   | 2                                                                                   |
| Mvmt Flow           | 110                                                                               | 317                                                                               | 79                                                                                | 38                                                                                | 317                                                                               | 47   | 6                                                                                 | 81                                                                                | 37                                                                                  | 32                                                                                  | 47                                                                                  | 41                                                                                  |
| Number of Lanes     | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 0    | 1                                                                                 | 1                                                                                 | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   |

| Approach                   | EB | WB   | NB   | SB   |
|----------------------------|----|------|------|------|
| Opposing Approach          | WB | EB   | SB   | NB   |
| Opposing Lanes             | 2  | 3    | 3    | 3    |
| Conflicting Approach Left  | SB | NB   | EB   | WB   |
| Conflicting Lanes Left     | 3  | 3    | 3    | 2    |
| Conflicting Approach Right | NB | SB   | WB   | EB   |
| Conflicting Lanes Right    | 3  | 3    | 2    | 3    |
| HCM Control Delay, s/veh   | 15 | 19.9 | 11.5 | 11.1 |
| HCM LOS                    | B  | C    | B    | B    |

| Lane                     | NBLn1 | NBLn2 | NBLn3 | EBLn1 | EBLn2 | EBLn3 | WBLn1 | WBLn2 | SBLn1 | SBLn2 | SBLn3 |
|--------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Vol Left, %              | 100%  | 0%    | 0%    | 100%  | 0%    | 0%    | 100%  | 0%    | 100%  | 0%    | 0%    |
| Vol Thru, %              | 0%    | 100%  | 0%    | 0%    | 100%  | 0%    | 0%    | 87%   | 0%    | 100%  | 0%    |
| Vol Right, %             | 0%    | 0%    | 100%  | 0%    | 0%    | 100%  | 0%    | 13%   | 0%    | 0%    | 100%  |
| Sign Control             | Stop  | Stop  | Stop  | Stop  | Stop  | Stop  | Stop  | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane      | 4     | 54    | 25    | 106   | 304   | 76    | 34    | 324   | 28    | 41    | 36    |
| LT Vol                   | 4     | 0     | 0     | 106   | 0     | 0     | 34    | 0     | 28    | 0     | 0     |
| Through Vol              | 0     | 54    | 0     | 0     | 304   | 0     | 0     | 282   | 0     | 41    | 0     |
| RT Vol                   | 0     | 0     | 25    | 0     | 0     | 76    | 0     | 42    | 0     | 0     | 36    |
| Lane Flow Rate           | 6     | 81    | 37    | 110   | 317   | 79    | 38    | 364   | 32    | 47    | 41    |
| Geometry Grp             | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 6     |
| Degree of Util (X)       | 0.014 | 0.173 | 0.073 | 0.214 | 0.57  | 0.127 | 0.075 | 0.655 | 0.073 | 0.1   | 0.08  |
| Departure Headway (Hd)   | 8.246 | 7.737 | 7.025 | 6.982 | 6.479 | 5.776 | 7.063 | 6.473 | 8.261 | 7.752 | 7.04  |
| Convergence, Y/N         | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |
| Cap                      | 436   | 466   | 513   | 510   | 551   | 614   | 504   | 553   | 436   | 465   | 511   |
| Service Time             | 5.951 | 5.442 | 4.73  | 4.776 | 4.273 | 3.569 | 4.855 | 4.264 | 5.967 | 5.459 | 4.746 |
| HCM Lane V/C Ratio       | 0.014 | 0.174 | 0.072 | 0.216 | 0.575 | 0.129 | 0.075 | 0.658 | 0.073 | 0.101 | 0.08  |
| HCM Control Delay, s/veh | 11.1  | 12.1  | 10.3  | 11.7  | 17.6  | 9.4   | 10.4  | 20.9  | 11.6  | 11.3  | 10.4  |
| HCM Lane LOS             | B     | B     | B     | B     | C     | A     | B     | C     | B     | B     | B     |
| HCM 95th-tile Q          | 0     | 0.6   | 0.2   | 0.8   | 3.5   | 0.4   | 0.2   | 4.7   | 0.2   | 0.3   | 0.3   |

## **Appendix E: Trip Generation**

# Trip Generation Planner (ITE 11th Edition) - Summary Report



**Weekday Trip Generation**      **Project Name**   Circle K - Mesquite & Riviera  
**Trips Based on Average Rates**   **Project Number**   192331058

| ITE Code           | Land Use Description          | Independent Variable | Setting/Location       | No. of Units | Avg Rate or Eq | Rates      |         |         | Total Trips       |             |              |                |             |              |                | Net Trips after Pass-By |             |              |                |             |              |                |
|--------------------|-------------------------------|----------------------|------------------------|--------------|----------------|------------|---------|---------|-------------------|-------------|--------------|----------------|-------------|--------------|----------------|-------------------------|-------------|--------------|----------------|-------------|--------------|----------------|
|                    |                               |                      |                        |              |                | Daily Rate | AM Rate | PM Rate | Daily Trips Total | AM Trips In | AM Trips Out | AM Trips Total | PM Trips In | PM Trips Out | PM Trips Total | Daily Trips Total       | AM Trips In | AM Trips Out | AM Trips Total | PM Trips In | PM Trips Out | PM Trips Total |
| 945                | Convenience Store/Gas Station | Fueling Position(s)  | General Urban/Suburban | 12           | Avg            | 257.13     | 27.04   | 22.76   | 3,086             | 162         | 162          | 324            | 137         | 136          | 273            | 772                     | 39          | 39           | 78             | 34          | 34           | 68             |
| 948                | Automated Car Wash            | Car Wash Tunnel(s)   | General Urban/Suburban | 1            | Avg            | 775.00     | 77.50   | 77.50   | 776               | 39          | 39           | 78             | 39          | 39           | 78             | 776                     | 39          | 39           | 78             | 39          | 39           | 78             |
| <b>Grand Total</b> |                               |                      |                        |              |                |            |         |         | <b>3,862</b>      | <b>201</b>  | <b>201</b>   | <b>402</b>     | <b>176</b>  | <b>175</b>   | <b>351</b>     | <b>1,548</b>            | <b>78</b>   | <b>78</b>    | <b>156</b>     | <b>73</b>   | <b>73</b>    | <b>146</b>     |

Notes: Land use 945: Daily pass-by trip percentage assumed to be the same as PM peak-hour pass-by percentage.  
Land use 948: AM peak-hour average rate and in/out trip percentages are assumed to be the same as PM peak-hour.  
Land use 948: Daily average rate was obtained assuming that PM peak-hour average rate represents 10% of daily rate.

## **Appendix F: 2026 Background AM Traffic Capacity Analysis**

| Intersection              |    |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|----|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 12 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | B  |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR  | NBL                                                                               | NBT                                                                                | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
|---------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Configurations |  |  |  |  |  |      |  |  |  |  |  |  |
| Traffic Vol, veh/h  | 40                                                                                | 78                                                                                | 51                                                                                | 51                                                                                | 207                                                                               | 34   | 67                                                                                | 38                                                                                 | 8                                                                                   | 30                                                                                  | 112                                                                                 | 74                                                                                  |
| Future Vol, veh/h   | 40                                                                                | 78                                                                                | 51                                                                                | 51                                                                                | 207                                                                               | 34   | 67                                                                                | 38                                                                                 | 8                                                                                   | 30                                                                                  | 112                                                                                 | 74                                                                                  |
| Peak Hour Factor    | 0.84                                                                              | 0.84                                                                              | 0.84                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90 | 0.68                                                                              | 0.68                                                                               | 0.68                                                                                | 0.78                                                                                | 0.78                                                                                | 0.78                                                                                |
| Heavy Vehicles, %   | 2                                                                                 | 2                                                                                 | 2                                                                                 | 2                                                                                 | 2                                                                                 | 2    | 2                                                                                 | 2                                                                                  | 2                                                                                   | 2                                                                                   | 2                                                                                   | 2                                                                                   |
| Mvmt Flow           | 48                                                                                | 93                                                                                | 61                                                                                | 57                                                                                | 230                                                                               | 38   | 99                                                                                | 56                                                                                 | 12                                                                                  | 38                                                                                  | 144                                                                                 | 95                                                                                  |
| Number of Lanes     | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 0    | 1                                                                                 | 1                                                                                  | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   |

| Approach                   | EB   | WB | NB   | SB   |
|----------------------------|------|----|------|------|
| Opposing Approach          | WB   | EB | SB   | NB   |
| Opposing Lanes             | 2    | 3  | 3    | 3    |
| Conflicting Approach Left  | SB   | NB | EB   | WB   |
| Conflicting Lanes Left     | 3    | 3  | 3    | 2    |
| Conflicting Approach Right | NB   | SB | WB   | EB   |
| Conflicting Lanes Right    | 3    | 3  | 2    | 3    |
| HCM Control Delay, s/veh   | 10.6 | 14 | 11.4 | 11.1 |
| HCM LOS                    | B    | B  | B    | B    |

| Lane                     | NBLn1 | NBLn2 | NBLn3 | EBLn1 | EBLn2 | EBLn3 | WBLn1 | WBLn2 | SBLn1 | SBLn2 | SBLn3 |
|--------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Vol Left, %              | 100%  | 0%    | 0%    | 100%  | 0%    | 0%    | 100%  | 0%    | 100%  | 0%    | 0%    |
| Vol Thru, %              | 0%    | 100%  | 0%    | 0%    | 100%  | 0%    | 0%    | 86%   | 0%    | 100%  | 0%    |
| Vol Right, %             | 0%    | 0%    | 100%  | 0%    | 0%    | 100%  | 0%    | 14%   | 0%    | 0%    | 100%  |
| Sign Control             | Stop  | Stop  | Stop  | Stop  | Stop  | Stop  | Stop  | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane      | 67    | 38    | 8     | 40    | 78    | 51    | 51    | 241   | 30    | 112   | 74    |
| LT Vol                   | 67    | 0     | 0     | 40    | 0     | 0     | 51    | 0     | 30    | 0     | 0     |
| Through Vol              | 0     | 38    | 0     | 0     | 78    | 0     | 0     | 207   | 0     | 112   | 0     |
| RT Vol                   | 0     | 0     | 8     | 0     | 0     | 51    | 0     | 34    | 0     | 0     | 74    |
| Lane Flow Rate           | 99    | 56    | 12    | 48    | 93    | 61    | 57    | 268   | 38    | 144   | 95    |
| Geometry Grp             | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 6     |
| Degree of Util (X)       | 0.204 | 0.108 | 0.02  | 0.097 | 0.176 | 0.103 | 0.109 | 0.473 | 0.077 | 0.268 | 0.159 |
| Departure Headway (Hd)   | 7.456 | 6.95  | 6.241 | 7.314 | 6.811 | 6.107 | 6.953 | 6.354 | 7.232 | 6.727 | 6.019 |
| Convergence, Y/N         | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |
| Cap                      | 479   | 512   | 569   | 488   | 524   | 583   | 514   | 565   | 493   | 531   | 592   |
| Service Time             | 5.241 | 4.735 | 4.026 | 5.092 | 4.589 | 3.885 | 4.718 | 4.12  | 5.007 | 4.501 | 3.794 |
| HCM Lane V/C Ratio       | 0.207 | 0.109 | 0.021 | 0.098 | 0.177 | 0.105 | 0.111 | 0.474 | 0.077 | 0.271 | 0.16  |
| HCM Control Delay, s/veh | 12.2  | 10.6  | 9.2   | 10.9  | 11.1  | 9.6   | 10.6  | 14.7  | 10.6  | 12    | 9.9   |
| HCM Lane LOS             | B     | B     | A     | B     | B     | A     | B     | B     | B     | B     | A     |
| HCM 95th-tile Q          | 0.8   | 0.4   | 0.1   | 0.3   | 0.6   | 0.3   | 0.4   | 2.5   | 0.2   | 1.1   | 0.6   |

## **Appendix G: 2026 Background PM Traffic Capacity Analysis**

| Intersection              |      |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|------|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 16.2 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | C    |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR  | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
|---------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Configurations |  |  |  |  |  |      |  |  |  |  |  |  |
| Traffic Vol, veh/h  | 107                                                                               | 307                                                                               | 77                                                                                | 34                                                                                | 285                                                                               | 42   | 4                                                                                   | 55                                                                                  | 25                                                                                  | 28                                                                                  | 41                                                                                  | 36                                                                                  |
| Future Vol, veh/h   | 107                                                                               | 307                                                                               | 77                                                                                | 34                                                                                | 285                                                                               | 42   | 4                                                                                   | 55                                                                                  | 25                                                                                  | 28                                                                                  | 41                                                                                  | 36                                                                                  |
| Peak Hour Factor    | 0.96                                                                              | 0.96                                                                              | 0.96                                                                              | 0.89                                                                              | 0.89                                                                              | 0.89 | 0.67                                                                                | 0.67                                                                                | 0.67                                                                                | 0.88                                                                                | 0.88                                                                                | 0.88                                                                                |
| Heavy Vehicles, %   | 2                                                                                 | 2                                                                                 | 2                                                                                 | 2                                                                                 | 2                                                                                 | 2    | 2                                                                                   | 2                                                                                   | 2                                                                                   | 2                                                                                   | 2                                                                                   | 2                                                                                   |
| Mvmt Flow           | 111                                                                               | 320                                                                               | 80                                                                                | 38                                                                                | 320                                                                               | 47   | 6                                                                                   | 82                                                                                  | 37                                                                                  | 32                                                                                  | 47                                                                                  | 41                                                                                  |
| Number of Lanes     | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 0    | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   |

| Approach                   | EB   | WB   | NB   | SB   |
|----------------------------|------|------|------|------|
| Opposing Approach          | WB   | EB   | SB   | NB   |
| Opposing Lanes             | 2    | 3    | 3    | 3    |
| Conflicting Approach Left  | SB   | NB   | EB   | WB   |
| Conflicting Lanes Left     | 3    | 3    | 3    | 2    |
| Conflicting Approach Right | NB   | SB   | WB   | EB   |
| Conflicting Lanes Right    | 3    | 3    | 2    | 3    |
| HCM Control Delay, s/veh   | 15.3 | 20.3 | 11.5 | 11.1 |
| HCM LOS                    | C    | C    | B    | B    |

| Lane                     | NBLn1 | NBLn2 | NBLn3 | EBLn1 | EBLn2 | EBLn3 | WBLn1 | WBLn2 | SBLn1 | SBLn2 | SBLn3 |
|--------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Vol Left, %              | 100%  | 0%    | 0%    | 100%  | 0%    | 0%    | 100%  | 0%    | 100%  | 0%    | 0%    |
| Vol Thru, %              | 0%    | 100%  | 0%    | 0%    | 100%  | 0%    | 0%    | 87%   | 0%    | 100%  | 0%    |
| Vol Right, %             | 0%    | 0%    | 100%  | 0%    | 0%    | 100%  | 0%    | 13%   | 0%    | 0%    | 100%  |
| Sign Control             | Stop  | Stop  | Stop  | Stop  | Stop  | Stop  | Stop  | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane      | 4     | 55    | 25    | 107   | 307   | 77    | 34    | 327   | 28    | 41    | 36    |
| LT Vol                   | 4     | 0     | 0     | 107   | 0     | 0     | 34    | 0     | 28    | 0     | 0     |
| Through Vol              | 0     | 55    | 0     | 0     | 307   | 0     | 0     | 285   | 0     | 41    | 0     |
| RT Vol                   | 0     | 0     | 25    | 0     | 0     | 77    | 0     | 42    | 0     | 0     | 36    |
| Lane Flow Rate           | 6     | 82    | 37    | 111   | 320   | 80    | 38    | 367   | 32    | 47    | 41    |
| Geometry Grp             | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 6     |
| Degree of Util (X)       | 0.014 | 0.177 | 0.073 | 0.217 | 0.577 | 0.129 | 0.075 | 0.663 | 0.073 | 0.101 | 0.08  |
| Departure Headway (Hd)   | 8.275 | 7.766 | 7.053 | 7.003 | 6.5   | 5.796 | 7.084 | 6.494 | 8.298 | 7.789 | 7.077 |
| Convergence, Y/N         | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |
| Cap                      | 435   | 465   | 510   | 509   | 550   | 613   | 502   | 551   | 434   | 463   | 509   |
| Service Time             | 5.981 | 5.472 | 4.76  | 4.797 | 4.294 | 3.59  | 4.877 | 4.287 | 6.003 | 5.494 | 4.782 |
| HCM Lane V/C Ratio       | 0.014 | 0.176 | 0.073 | 0.218 | 0.582 | 0.131 | 0.076 | 0.666 | 0.074 | 0.102 | 0.081 |
| HCM Control Delay, s/veh | 11.1  | 12.1  | 10.3  | 11.8  | 17.9  | 9.5   | 10.5  | 21.3  | 11.7  | 11.4  | 10.4  |
| HCM Lane LOS             | B     | B     | B     | B     | C     | A     | B     | C     | B     | B     | B     |
| HCM 95th-tile Q          | 0     | 0.6   | 0.2   | 0.8   | 3.6   | 0.4   | 0.2   | 4.9   | 0.2   | 0.3   | 0.3   |

## **Appendix H: 2026 Total AM Traffic Capacity Analysis**

## 1: Mesquite Ave &amp; Riviera Dr

## Intersection

Intersection Delay, s/veh 13.3

Intersection LOS B

| Movement            | EBL                                                                               | EBT                                                                               | EBR  | WBL                                                                               | WBT                                                                               | WBR  | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
|---------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Configurations |  |  |      |  |  |      |  |  |  |  |  |  |
| Traffic Vol, veh/h  | 52                                                                                | 94                                                                                | 53   | 51                                                                                | 230                                                                               | 34   | 79                                                                                 | 38                                                                                  | 8                                                                                   | 37                                                                                  | 121                                                                                 | 74                                                                                  |
| Future Vol, veh/h   | 52                                                                                | 94                                                                                | 53   | 51                                                                                | 230                                                                               | 34   | 79                                                                                 | 38                                                                                  | 8                                                                                   | 37                                                                                  | 121                                                                                 | 74                                                                                  |
| Peak Hour Factor    | 0.84                                                                              | 0.84                                                                              | 0.84 | 0.90                                                                              | 0.90                                                                              | 0.90 | 0.68                                                                               | 0.68                                                                                | 0.68                                                                                | 0.78                                                                                | 0.78                                                                                | 0.78                                                                                |
| Heavy Vehicles, %   | 2                                                                                 | 2                                                                                 | 2    | 2                                                                                 | 2                                                                                 | 2    | 2                                                                                  | 2                                                                                   | 2                                                                                   | 2                                                                                   | 2                                                                                   | 2                                                                                   |
| Mvmt Flow           | 62                                                                                | 112                                                                               | 63   | 57                                                                                | 256                                                                               | 38   | 116                                                                                | 56                                                                                  | 12                                                                                  | 47                                                                                  | 155                                                                                 | 95                                                                                  |
| Number of Lanes     | 1                                                                                 | 2                                                                                 | 0    | 1                                                                                 | 1                                                                                 | 0    | 1                                                                                  | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   |

| Approach                   | EB   | WB   | NB   | SB   |
|----------------------------|------|------|------|------|
| Opposing Approach          | WB   | EB   | SB   | NB   |
| Opposing Lanes             | 2    | 3    | 3    | 3    |
| Conflicting Approach Left  | SB   | NB   | EB   | WB   |
| Conflicting Lanes Left     | 3    | 3    | 3    | 2    |
| Conflicting Approach Right | NB   | SB   | WB   | EB   |
| Conflicting Lanes Right    | 3    | 3    | 2    | 3    |
| HCM Control Delay, s/veh   | 11.3 | 16.4 | 12.4 | 11.9 |
| HCM LOS                    | B    | C    | B    | B    |

| Lane                     | NBLn1 | NBLn2 | NBLn3 | EBLn1 | EBLn2 | EBLn3 | WBLn1 | WBLn2 | SBLn1 | SBLn2 | SBLn3 |
|--------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Vol Left, %              | 100%  | 0%    | 0%    | 100%  | 0%    | 0%    | 100%  | 0%    | 100%  | 0%    | 0%    |
| Vol Thru, %              | 0%    | 100%  | 0%    | 0%    | 100%  | 37%   | 0%    | 87%   | 0%    | 100%  | 0%    |
| Vol Right, %             | 0%    | 0%    | 100%  | 0%    | 0%    | 63%   | 0%    | 13%   | 0%    | 0%    | 100%  |
| Sign Control             | Stop  | Stop  | Stop  | Stop  | Stop  | Stop  | Stop  | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane      | 79    | 38    | 8     | 52    | 63    | 84    | 51    | 264   | 37    | 121   | 74    |
| LT Vol                   | 79    | 0     | 0     | 52    | 0     | 0     | 51    | 0     | 37    | 0     | 0     |
| Through Vol              | 0     | 38    | 0     | 0     | 63    | 31    | 0     | 230   | 0     | 121   | 0     |
| RT Vol                   | 0     | 0     | 8     | 0     | 0     | 53    | 0     | 34    | 0     | 0     | 74    |
| Lane Flow Rate           | 116   | 56    | 12    | 62    | 75    | 100   | 57    | 293   | 47    | 155   | 95    |
| Geometry Grp             | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 6     |
| Degree of Util (X)       | 0.255 | 0.115 | 0.022 | 0.132 | 0.149 | 0.188 | 0.116 | 0.55  | 0.101 | 0.308 | 0.169 |
| Departure Headway (Hd)   | 7.894 | 7.386 | 6.676 | 7.693 | 7.189 | 6.746 | 7.338 | 6.748 | 7.646 | 7.139 | 6.429 |
| Convergence, Y/N         | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |
| Cap                      | 455   | 486   | 536   | 466   | 499   | 532   | 491   | 537   | 469   | 504   | 558   |
| Service Time             | 5.638 | 5.13  | 4.419 | 5.436 | 4.932 | 4.489 | 5.038 | 4.448 | 5.387 | 4.88  | 4.17  |
| HCM Lane V/C Ratio       | 0.255 | 0.115 | 0.022 | 0.133 | 0.15  | 0.188 | 0.116 | 0.546 | 0.1   | 0.308 | 0.17  |
| HCM Control Delay, s/veh | 13.3  | 11.1  | 9.6   | 11.6  | 11.2  | 11.1  | 11    | 17.4  | 11.2  | 13    | 10.5  |
| HCM Lane LOS             | B     | B     | A     | B     | B     | B     | B     | C     | B     | B     | B     |
| HCM 95th-tile Q          | 1     | 0.4   | 0.1   | 0.5   | 0.5   | 0.7   | 0.4   | 3.3   | 0.3   | 1.3   | 0.6   |

| Intersection             |                                                                                   |                                                                                   |                                                                                   |        |                                                                                   |                                                                                   |
|--------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Int Delay, s/veh         | 2.8                                                                               |                                                                                   |                                                                                   |        |                                                                                   |                                                                                   |
| Movement                 | EBL                                                                               | EBT                                                                               | WBT                                                                               | WBR    | SBL                                                                               | SBR                                                                               |
| Lane Configurations      |  |  |  |        |  |  |
| Traffic Vol, veh/h       | 56                                                                                | 144                                                                               | 292                                                                               | 90     | 55                                                                                | 86                                                                                |
| Future Vol, veh/h        | 56                                                                                | 144                                                                               | 292                                                                               | 90     | 55                                                                                | 86                                                                                |
| Conflicting Peds, #/hr   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0      | 0                                                                                 | 0                                                                                 |
| Sign Control             | Free                                                                              | Free                                                                              | Free                                                                              | Free   | Stop                                                                              | Stop                                                                              |
| RT Channelized           | -                                                                                 | None                                                                              | -                                                                                 | None   | -                                                                                 | None                                                                              |
| Storage Length           | 25                                                                                | -                                                                                 | -                                                                                 | -      | 0                                                                                 | 0                                                                                 |
| Veh in Median Storage, # | -                                                                                 | 0                                                                                 | 0                                                                                 | -      | 0                                                                                 | -                                                                                 |
| Grade, %                 | -                                                                                 | 0                                                                                 | 0                                                                                 | -      | 0                                                                                 | -                                                                                 |
| Peak Hour Factor         | 92                                                                                | 84                                                                                | 83                                                                                | 92     | 92                                                                                | 92                                                                                |
| Heavy Vehicles, %        | 2                                                                                 | 2                                                                                 | 2                                                                                 | 2      | 2                                                                                 | 2                                                                                 |
| Mvmt Flow                | 61                                                                                | 171                                                                               | 352                                                                               | 98     | 60                                                                                | 93                                                                                |
|                          |                                                                                   |                                                                                   |                                                                                   |        |                                                                                   |                                                                                   |
| Major/Minor              | Major1                                                                            | Major2                                                                            |                                                                                   | Minor2 |                                                                                   |                                                                                   |
| Conflicting Flow All     | 450                                                                               | 0                                                                                 | -                                                                                 | 0      | 608                                                                               | 401                                                                               |
| Stage 1                  | -                                                                                 | -                                                                                 | -                                                                                 | -      | 401                                                                               | -                                                                                 |
| Stage 2                  | -                                                                                 | -                                                                                 | -                                                                                 | -      | 207                                                                               | -                                                                                 |
| Critical Hdwy            | 4.13                                                                              | -                                                                                 | -                                                                                 | -      | 6.63                                                                              | 6.23                                                                              |
| Critical Hdwy Stg 1      | -                                                                                 | -                                                                                 | -                                                                                 | -      | 5.43                                                                              | -                                                                                 |
| Critical Hdwy Stg 2      | -                                                                                 | -                                                                                 | -                                                                                 | -      | 5.83                                                                              | -                                                                                 |
| Follow-up Hdwy           | 2.219                                                                             | -                                                                                 | -                                                                                 | -      | 3.519                                                                             | 3.319                                                                             |
| Pot Cap-1 Maneuver       | 1109                                                                              | -                                                                                 | -                                                                                 | -      | 443                                                                               | 648                                                                               |
| Stage 1                  | -                                                                                 | -                                                                                 | -                                                                                 | -      | 676                                                                               | -                                                                                 |
| Stage 2                  | -                                                                                 | -                                                                                 | -                                                                                 | -      | 808                                                                               | -                                                                                 |
| Platoon blocked, %       |                                                                                   | -                                                                                 | -                                                                                 | -      |                                                                                   |                                                                                   |
| Mov Cap-1 Maneuver       | 1109                                                                              | -                                                                                 | -                                                                                 | -      | 418                                                                               | 648                                                                               |
| Mov Cap-2 Maneuver       | -                                                                                 | -                                                                                 | -                                                                                 | -      | 510                                                                               | -                                                                                 |
| Stage 1                  | -                                                                                 | -                                                                                 | -                                                                                 | -      | 638                                                                               | -                                                                                 |
| Stage 2                  | -                                                                                 | -                                                                                 | -                                                                                 | -      | 808                                                                               | -                                                                                 |
|                          |                                                                                   |                                                                                   |                                                                                   |        |                                                                                   |                                                                                   |
|                          |                                                                                   |                                                                                   |                                                                                   |        |                                                                                   |                                                                                   |
| Approach                 | EB                                                                                | WB                                                                                |                                                                                   | SB     |                                                                                   |                                                                                   |
| HCM Ctrl Dly, s/v        | 2.21                                                                              | 0                                                                                 |                                                                                   | 12.07  |                                                                                   |                                                                                   |
| HCM LOS                  | B                                                                                 |                                                                                   |                                                                                   |        |                                                                                   |                                                                                   |
|                          |                                                                                   |                                                                                   |                                                                                   |        |                                                                                   |                                                                                   |
|                          |                                                                                   |                                                                                   |                                                                                   |        |                                                                                   |                                                                                   |
| Minor Lane/Major Mvmt    | EBL                                                                               | EBT                                                                               | WBT                                                                               | WBR    | SBLn1                                                                             | SBLn2                                                                             |
| Capacity (veh/h)         | 1109                                                                              | -                                                                                 | -                                                                                 | -      | 510                                                                               | 648                                                                               |
| HCM Lane V/C Ratio       | 0.055                                                                             | -                                                                                 | -                                                                                 | -      | 0.117                                                                             | 0.144                                                                             |
| HCM Ctrl Dly (s/v)       | 8.4                                                                               | -                                                                                 | -                                                                                 | -      | 13                                                                                | 11.5                                                                              |
| HCM Lane LOS             | A                                                                                 | -                                                                                 | -                                                                                 | -      | B                                                                                 | B                                                                                 |
| HCM 95th %tile Q(veh)    | 0.2                                                                               | -                                                                                 | -                                                                                 | -      | 0.4                                                                               | 0.5                                                                               |

| Intersection             |        |      |        |      |            |       |        |      |      |      |      |      |
|--------------------------|--------|------|--------|------|------------|-------|--------|------|------|------|------|------|
| Int Delay, s/veh         | 1.3    |      |        |      |            |       |        |      |      |      |      |      |
| Movement                 | EBL    | EBT  | EBR    | WBL  | WBT        | WBR   | NBL    | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |        |      | ↗      |      |            | ↗     |        | ↘    |      |      | ↘    |      |
| Traffic Vol, veh/h       | 0      | 0    | 59     | 0    | 0          | 0     | 0      | 125  | 0    | 0    | 173  | 55   |
| Future Vol, veh/h        | 0      | 0    | 59     | 0    | 0          | 0     | 0      | 125  | 0    | 0    | 173  | 55   |
| Conflicting Peds, #/hr   | 0      | 0    | 0      | 0    | 0          | 0     | 0      | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop   | Stop | Stop   | Stop | Stop       | Stop  | Free   | Free | Free | Free | Free | Free |
| RT Channelized           | -      | -    | None   | -    | -          | None  | -      | -    | None | -    | -    | None |
| Storage Length           | -      | -    | 0      | -    | -          | 0     | -      | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -      | 0    | -      | -    | 0          | -     | -      | 0    | -    | -    | 0    | -    |
| Grade, %                 | -      | 0    | -      | -    | 0          | -     | -      | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 92     | 92   | 92     | 92   | 92         | 92    | 92     | 80   | 92   | 92   | 78   | 92   |
| Heavy Vehicles, %        | 2      | 2    | 2      | 2    | 2          | 2     | 2      | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0      | 0    | 64     | 0    | 0          | 0     | 0      | 156  | 0    | 0    | 222  | 60   |
| Major/Minor              | Minor2 |      | Minor1 |      | Major1     |       | Major2 |      |      |      |      |      |
| Conflicting Flow All     | -      | -    | 252    | -    | -          | 156   | -      | 0    | 0    | -    | -    | 0    |
| Stage 1                  | -      | -    | -      | -    | -          | -     | -      | -    | -    | -    | -    | -    |
| Stage 2                  | -      | -    | -      | -    | -          | -     | -      | -    | -    | -    | -    | -    |
| Critical Hdwy            | -      | -    | 6.22   | -    | -          | 6.22  | -      | -    | -    | -    | -    | -    |
| Critical Hdwy Stg 1      | -      | -    | -      | -    | -          | -     | -      | -    | -    | -    | -    | -    |
| Critical Hdwy Stg 2      | -      | -    | -      | -    | -          | -     | -      | -    | -    | -    | -    | -    |
| Follow-up Hdwy           | -      | -    | 3.318  | -    | -          | 3.318 | -      | -    | -    | -    | -    | -    |
| Pot Cap-1 Maneuver       | 0      | 0    | 787    | 0    | 0          | 889   | 0      | -    | -    | 0    | -    | -    |
| Stage 1                  | 0      | 0    | -      | 0    | 0          | -     | 0      | -    | -    | 0    | -    | -    |
| Stage 2                  | 0      | 0    | -      | 0    | 0          | -     | 0      | -    | -    | 0    | -    | -    |
| Platoon blocked, %       | -      | -    | -      | -    | -          | -     | -      | -    | -    | -    | -    | -    |
| Mov Cap-1 Maneuver       | -      | -    | 787    | -    | -          | 889   | -      | -    | -    | -    | -    | -    |
| Mov Cap-2 Maneuver       | -      | -    | -      | -    | -          | -     | -      | -    | -    | -    | -    | -    |
| Stage 1                  | -      | -    | -      | -    | -          | -     | -      | -    | -    | -    | -    | -    |
| Stage 2                  | -      | -    | -      | -    | -          | -     | -      | -    | -    | -    | -    | -    |
| Approach                 | EB     |      | WB     |      | NB         |       | SB     |      |      |      |      |      |
| HCM Ctrl Dly, s/v        | 9.98   |      | 0      |      | 0          |       | 0      |      |      |      |      |      |
| HCM LOS                  | A      |      | A      |      |            |       |        |      |      |      |      |      |
| Minor Lane/Major Mvmt    | NBT    |      | NBR    |      | EBLn1WBLn1 |       | SBT    |      | SBR  |      |      |      |
| Capacity (veh/h)         | -      |      | -      |      | 787        |       | -      |      | -    |      | -    |      |
| HCM Lane V/C Ratio       | -      |      | -      |      | 0.081      |       | -      |      | -    |      | -    |      |
| HCM Ctrl Dly (s/v)       | -      |      | -      |      | 10         |       | 0      |      | -    |      | -    |      |
| HCM Lane LOS             | -      |      | -      |      | A          |       | A      |      | -    |      | -    |      |
| HCM 95th %tile Q(veh)    | -      |      | -      |      | 0.3        |       | -      |      | -    |      | -    |      |

# Timing Report, Sorted By Phase

## 1: Mesquite Ave & Riviera Dr

2026 Total AM Signalized

|                             |  |  |  |  |  |  |  |  |
|-----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Phase Number                | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                   | 8                                                                                   |
| Movement                    | SBL                                                                               | NBSB                                                                              | WBL                                                                               | EBWB                                                                              | NBL                                                                               | NBSB                                                                              | EBL                                                                                 | EBWB                                                                                |
| Lead/Lag                    | Lead                                                                              | Lag                                                                               | Lead                                                                              | Lag                                                                               | Lead                                                                              | Lag                                                                               | Lead                                                                                | Lag                                                                                 |
| Lead-Lag Optimize           | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                                 | Yes                                                                                 |
| Recall Mode                 | None                                                                              | Min                                                                               | None                                                                              | None                                                                              | None                                                                              | Min                                                                               | None                                                                                | None                                                                                |
| Maximum Split (s)           | 11                                                                                | 33                                                                                | 11                                                                                | 35                                                                                | 13                                                                                | 31                                                                                | 12                                                                                  | 34                                                                                  |
| Maximum Split (%)           | 12.2%                                                                             | 36.7%                                                                             | 12.2%                                                                             | 38.9%                                                                             | 14.4%                                                                             | 34.4%                                                                             | 13.3%                                                                               | 37.8%                                                                               |
| Minimum Split (s)           | 9.5                                                                               | 22.5                                                                              | 9.5                                                                               | 22.5                                                                              | 9.5                                                                               | 22.5                                                                              | 9.5                                                                                 | 22.5                                                                                |
| Yellow Time (s)             | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               | 3.5                                                                                 | 3.5                                                                                 |
| All-Red Time (s)            | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                   | 1                                                                                   |
| Minimum Initial (s)         | 5                                                                                 | 5                                                                                 | 5                                                                                 | 5                                                                                 | 5                                                                                 | 5                                                                                 | 5                                                                                   | 5                                                                                   |
| Vehicle Extension (s)       | 3                                                                                 | 3                                                                                 | 3                                                                                 | 3                                                                                 | 3                                                                                 | 3                                                                                 | 3                                                                                   | 3                                                                                   |
| Minimum Gap (s)             | 3                                                                                 | 3                                                                                 | 3                                                                                 | 3                                                                                 | 3                                                                                 | 3                                                                                 | 3                                                                                   | 3                                                                                   |
| Time Before Reduce (s)      | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   |
| Time To Reduce (s)          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   |
| Walk Time (s)               |                                                                                   | 7                                                                                 |                                                                                   | 7                                                                                 |                                                                                   | 7                                                                                 |                                                                                     | 7                                                                                   |
| Flash Don't Walk (s)        |                                                                                   | 11                                                                                |                                                                                   | 11                                                                                |                                                                                   | 11                                                                                |                                                                                     | 11                                                                                  |
| Dual Entry                  | No                                                                                | Yes                                                                               | No                                                                                | Yes                                                                               | No                                                                                | Yes                                                                               | No                                                                                  | Yes                                                                                 |
| Inhibit Max                 | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                                 | Yes                                                                                 |
| Start Time (s)              | 0                                                                                 | 11                                                                                | 44                                                                                | 55                                                                                | 0                                                                                 | 13                                                                                | 44                                                                                  | 56                                                                                  |
| End Time (s)                | 11                                                                                | 44                                                                                | 55                                                                                | 0                                                                                 | 13                                                                                | 44                                                                                | 56                                                                                  | 0                                                                                   |
| Yield/Force Off (s)         | 6.5                                                                               | 39.5                                                                              | 50.5                                                                              | 85.5                                                                              | 8.5                                                                               | 39.5                                                                              | 51.5                                                                                | 85.5                                                                                |
| Yield/Force Off 170(s)      | 6.5                                                                               | 39.5                                                                              | 50.5                                                                              | 74.5                                                                              | 8.5                                                                               | 39.5                                                                              | 51.5                                                                                | 74.5                                                                                |
| Local Start Time (s)        | 77                                                                                | 88                                                                                | 31                                                                                | 42                                                                                | 77                                                                                | 0                                                                                 | 31                                                                                  | 43                                                                                  |
| Local Yield (s)             | 83.5                                                                              | 26.5                                                                              | 37.5                                                                              | 72.5                                                                              | 85.5                                                                              | 26.5                                                                              | 38.5                                                                                | 72.5                                                                                |
| Local Yield 170(s)          | 83.5                                                                              | 26.5                                                                              | 37.5                                                                              | 61.5                                                                              | 85.5                                                                              | 26.5                                                                              | 38.5                                                                                | 61.5                                                                                |
| <b>Intersection Summary</b> |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
| Cycle Length                | 90                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
| Control Type                | Actuated-Uncoordinated                                                            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
| Natural Cycle               | 65                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |

Splits and Phases: 1: Mesquite Ave & Riviera Dr

|                                                                                        |                                                                                        |                                                                                        |                                                                                         |
|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
|  Ø1 |  Ø2 |  Ø3 |  Ø4 |
| 11 s                                                                                   | 33 s                                                                                   | 11 s                                                                                   | 35 s                                                                                    |
|  Ø5 |  Ø6 |  Ø7 |  Ø8 |
| 13 s                                                                                   | 31 s                                                                                   | 12 s                                                                                   | 34 s                                                                                    |

# HCM 7th Signalized Intersection Summary

2026 Total AM Signalized

## 1: Mesquite Ave & Riviera Dr

|                              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--|--|--|--|
| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |  |  |  |  |
| Lane Configurations          |  |  |                                                                                   |  |  |                                                                                   |  |  |  |  |  |  |  |  |  |  |
| Traffic Volume (veh/h)       | 52                                                                                | 94                                                                                | 53                                                                                | 51                                                                                | 230                                                                               | 34                                                                                | 79                                                                                  | 38                                                                                  | 8                                                                                   | 37                                                                                  | 121                                                                                 | 74                                                                                  |  |  |  |  |
| Future Volume (veh/h)        | 52                                                                                | 94                                                                                | 53                                                                                | 51                                                                                | 230                                                                               | 34                                                                                | 79                                                                                  | 38                                                                                  | 8                                                                                   | 37                                                                                  | 121                                                                                 | 74                                                                                  |  |  |  |  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |  |  |  |  |
| Lane Width 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                                                                                |  |  |  |  |
| 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                                                                                  |                                                                                     |                                                                                     |                                                                                     |  |  |  |  |
| Adj Sat Flow, veh/h/ln       | 1870                                                                              | 1870                                                                              | 1870                                                                              | 1870                                                                              | 1870                                                                              | 1870                                                                              | 1870                                                                                | 1870                                                                                | 1870                                                                                | 1870                                                                                | 1870                                                                                | 1870                                                                                |  |  |  |  |
| Adj Flow Rate, veh/h         | 62                                                                                | 112                                                                               | 63                                                                                | 57                                                                                | 256                                                                               | 38                                                                                | 116                                                                                 | 56                                                                                  | 12                                                                                  | 47                                                                                  | 155                                                                                 | 95                                                                                  |  |  |  |  |
| Peak Hour Factor             | 0.84                                                                              | 0.84                                                                              | 0.84                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.68                                                                                | 0.68                                                                                | 0.68                                                                                | 0.78                                                                                | 0.78                                                                                | 0.78                                                                                |  |  |  |  |
| Percent Heavy Veh, %         | 2                                                                                 | 2                                                                                 | 2                                                                                 | 2                                                                                 | 2                                                                                 | 2                                                                                 | 2                                                                                   | 2                                                                                   | 2                                                                                   | 2                                                                                   | 2                                                                                   | 2                                                                                   |  |  |  |  |
| Cap, veh/h                   | 393                                                                               | 544                                                                               | 288                                                                               | 528                                                                               | 380                                                                               | 56                                                                                | 432                                                                                 | 364                                                                                 | 308                                                                                 | 498                                                                                 | 289                                                                                 | 245                                                                                 |  |  |  |  |
| Arrive On Green              | 0.06                                                                              | 0.24                                                                              | 0.24                                                                              | 0.06                                                                              | 0.24                                                                              | 0.24                                                                              | 0.09                                                                                | 0.19                                                                                | 0.19                                                                                | 0.05                                                                                | 0.15                                                                                | 0.15                                                                                |  |  |  |  |
| Sat Flow, veh/h              | 1781                                                                              | 2247                                                                              | 1187                                                                              | 1781                                                                              | 1592                                                                              | 236                                                                               | 1781                                                                                | 1870                                                                                | 1585                                                                                | 1781                                                                                | 1870                                                                                | 1585                                                                                |  |  |  |  |
| Grp Volume(v), veh/h         | 62                                                                                | 87                                                                                | 88                                                                                | 57                                                                                | 0                                                                                 | 294                                                                               | 116                                                                                 | 56                                                                                  | 12                                                                                  | 47                                                                                  | 155                                                                                 | 95                                                                                  |  |  |  |  |
| Grp Sat Flow(s),veh/h/ln     | 1781                                                                              | 1777                                                                              | 1657                                                                              | 1781                                                                              | 0                                                                                 | 1828                                                                              | 1781                                                                                | 1870                                                                                | 1585                                                                                | 1781                                                                                | 1870                                                                                | 1585                                                                                |  |  |  |  |
| Q Serve(g_s), s              | 1.0                                                                               | 1.6                                                                               | 1.7                                                                               | 0.9                                                                               | 0.0                                                                               | 5.8                                                                               | 2.1                                                                                 | 1.0                                                                                 | 0.2                                                                                 | 0.8                                                                                 | 3.0                                                                                 | 2.1                                                                                 |  |  |  |  |
| Cycle Q Clear(g_c), s        | 1.0                                                                               | 1.6                                                                               | 1.7                                                                               | 0.9                                                                               | 0.0                                                                               | 5.8                                                                               | 2.1                                                                                 | 1.0                                                                                 | 0.2                                                                                 | 0.8                                                                                 | 3.0                                                                                 | 2.1                                                                                 |  |  |  |  |
| Prop In Lane                 | 1.00                                                                              |                                                                                   | 0.72                                                                              | 1.00                                                                              |                                                                                   | 0.13                                                                              | 1.00                                                                                |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |  |  |  |  |
| Lane Grp Cap(c), veh/h       | 393                                                                               | 431                                                                               | 401                                                                               | 528                                                                               | 0                                                                                 | 436                                                                               | 432                                                                                 | 364                                                                                 | 308                                                                                 | 498                                                                                 | 289                                                                                 | 245                                                                                 |  |  |  |  |
| V/C Ratio(X)                 | 0.16                                                                              | 0.20                                                                              | 0.22                                                                              | 0.11                                                                              | 0.00                                                                              | 0.67                                                                              | 0.27                                                                                | 0.15                                                                                | 0.04                                                                                | 0.09                                                                                | 0.54                                                                                | 0.39                                                                                |  |  |  |  |
| Avail Cap(c_a), veh/h        | 619                                                                               | 1365                                                                              | 1273                                                                              | 715                                                                               | 0                                                                                 | 1358                                                                              | 651                                                                                 | 1343                                                                                | 1138                                                                                | 699                                                                                 | 1248                                                                                | 1058                                                                                |  |  |  |  |
| 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                                                                              | 0.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |  |  |  |  |
| Uniform Delay (d), s/veh     | 10.5                                                                              | 12.0                                                                              | 12.0                                                                              | 10.1                                                                              | 0.0                                                                               | 13.7                                                                              | 12.2                                                                                | 13.3                                                                                | 13.0                                                                                | 11.6                                                                                | 15.5                                                                                | 15.1                                                                                |  |  |  |  |
| Incr Delay (d2), s/veh       | 0.2                                                                               | 0.2                                                                               | 0.3                                                                               | 0.1                                                                               | 0.0                                                                               | 1.8                                                                               | 0.3                                                                                 | 0.2                                                                                 | 0.1                                                                                 | 0.1                                                                                 | 1.5                                                                                 | 1.0                                                                                 |  |  |  |  |
| 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(95%),veh/ln     | 0.6                                                                               | 1.0                                                                               | 1.0                                                                               | 0.5                                                                               | 0.0                                                                               | 3.9                                                                               | 1.3                                                                                 | 0.7                                                                                 | 0.1                                                                                 | 0.5                                                                                 | 2.2                                                                                 | 1.3                                                                                 |  |  |  |  |
| Unsig. Movement Delay, s/veh |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |  |  |  |
| LnGrp Delay(d), s/veh        | 10.7                                                                              | 12.2                                                                              | 12.3                                                                              | 10.1                                                                              | 0.0                                                                               | 15.5                                                                              | 12.5                                                                                | 13.5                                                                                | 13.0                                                                                | 11.7                                                                                | 17.0                                                                                | 16.1                                                                                |  |  |  |  |
| LnGrp LOS                    | B                                                                                 | B                                                                                 | B                                                                                 | B                                                                                 |                                                                                   | B                                                                                 | B                                                                                   | B                                                                                   | B                                                                                   | B                                                                                   | B                                                                                   | B                                                                                   |  |  |  |  |
| Approach Vol, veh/h          | 237                                                                               |                                                                                   |                                                                                   |                                                                                   | 351                                                                               |                                                                                   |                                                                                     |                                                                                     | 184                                                                                 |                                                                                     |                                                                                     |                                                                                     |  |  |  |  |
| Approach Delay, s/veh        | 11.8                                                                              |                                                                                   |                                                                                   |                                                                                   | 14.7                                                                              |                                                                                   |                                                                                     |                                                                                     | 12.9                                                                                |                                                                                     |                                                                                     |                                                                                     |  |  |  |  |
| Approach LOS                 | B                                                                                 |                                                                                   |                                                                                   |                                                                                   | B                                                                                 |                                                                                   |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |                                                                                     |                                                                                     |  |  |  |  |
| Timer - Assigned Phs         | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                   | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |  |  |  |
| Phs Duration (G+Y+Rc), s     | 6.5                                                                               | 12.2                                                                              | 6.8                                                                               | 14.1                                                                              | 8.1                                                                               | 10.6                                                                              | 7.0                                                                                 | 14.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |  |  |  |
| Change Period (Y+Rc), s      | 4.5                                                                               | 4.5                                                                               | 4.5                                                                               | 4.5                                                                               | 4.5                                                                               | 4.5                                                                               | 4.5                                                                                 | 4.5                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |  |  |  |
| Max Green Setting (Gmax), s  | 6.5                                                                               | 28.5                                                                              | 6.5                                                                               | 30.5                                                                              | 8.5                                                                               | 26.5                                                                              | 7.5                                                                                 | 29.5                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |  |  |  |
| Max Q Clear Time (g_c+I1), s | 2.8                                                                               | 3.0                                                                               | 2.9                                                                               | 3.7                                                                               | 4.1                                                                               | 5.0                                                                               | 3.0                                                                                 | 7.8                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |  |  |  |
| Green Ext Time (p_c), s      | 0.0                                                                               | 0.3                                                                               | 0.0                                                                               | 1.0                                                                               | 0.1                                                                               | 1.1                                                                               | 0.0                                                                                 | 1.7                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |  |  |  |
| Intersection Summary         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |  |  |  |
| HCM 7th Control Delay, s/veh | 14.1                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |  |  |  |
| HCM 7th LOS                  | B                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |  |  |  |

## **Appendix I: 2026 Total PM Traffic Capacity Analysis**

## 1: Mesquite Ave &amp; Riviera Dr

## Intersection

Intersection Delay, s/veh 17.2

Intersection LOS C

| Movement            | EBL                                                                               | EBT                                                                               | EBR  | WBL                                                                               | WBT                                                                               | WBR  | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
|---------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Configurations |  |  |      |  |  |      |  |  |  |  |  |  |
| Traffic Vol, veh/h  | 118                                                                               | 322                                                                               | 79   | 34                                                                                | 307                                                                               | 42   | 15                                                                                  | 55                                                                                  | 25                                                                                  | 35                                                                                  | 49                                                                                  | 36                                                                                  |
| Future Vol, veh/h   | 118                                                                               | 322                                                                               | 79   | 34                                                                                | 307                                                                               | 42   | 15                                                                                  | 55                                                                                  | 25                                                                                  | 35                                                                                  | 49                                                                                  | 36                                                                                  |
| Peak Hour Factor    | 0.96                                                                              | 0.96                                                                              | 0.96 | 0.89                                                                              | 0.89                                                                              | 0.89 | 0.67                                                                                | 0.67                                                                                | 0.67                                                                                | 0.88                                                                                | 0.88                                                                                | 0.88                                                                                |
| Heavy Vehicles, %   | 2                                                                                 | 2                                                                                 | 2    | 2                                                                                 | 2                                                                                 | 2    | 2                                                                                   | 2                                                                                   | 2                                                                                   | 2                                                                                   | 2                                                                                   | 2                                                                                   |
| Mvmt Flow           | 123                                                                               | 335                                                                               | 82   | 38                                                                                | 345                                                                               | 47   | 22                                                                                  | 82                                                                                  | 37                                                                                  | 40                                                                                  | 56                                                                                  | 41                                                                                  |
| Number of Lanes     | 1                                                                                 | 2                                                                                 | 0    | 1                                                                                 | 1                                                                                 | 0    | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   |

| Approach                   | EB   | WB   | NB | SB   |
|----------------------------|------|------|----|------|
| Opposing Approach          | WB   | EB   | SB | NB   |
| Opposing Lanes             | 2    | 3    | 3  | 3    |
| Conflicting Approach Left  | SB   | NB   | EB | WB   |
| Conflicting Lanes Left     | 3    | 3    | 3  | 2    |
| Conflicting Approach Right | NB   | SB   | WB | EB   |
| Conflicting Lanes Right    | 3    | 3    | 2  | 3    |
| HCM Control Delay, s/veh   | 13.5 | 25.4 | 12 | 11.7 |
| HCM LOS                    | B    | D    | B  | B    |

| Lane                     | NBLn1 | NBLn2 | NBLn3 | EBLn1 | EBLn2 | EBLn3 | WBLn1 | WBLn2 | SBLn1 | SBLn2 | SBLn3 |
|--------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Vol Left, %              | 100%  | 0%    | 0%    | 100%  | 0%    | 0%    | 100%  | 0%    | 100%  | 0%    | 0%    |
| Vol Thru, %              | 0%    | 100%  | 0%    | 0%    | 100%  | 58%   | 0%    | 88%   | 0%    | 100%  | 0%    |
| Vol Right, %             | 0%    | 0%    | 100%  | 0%    | 0%    | 42%   | 0%    | 12%   | 0%    | 0%    | 100%  |
| Sign Control             | Stop  | Stop  | Stop  | Stop  | Stop  | Stop  | Stop  | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane      | 15    | 55    | 25    | 118   | 215   | 186   | 34    | 349   | 35    | 49    | 36    |
| LT Vol                   | 15    | 0     | 0     | 118   | 0     | 0     | 34    | 0     | 35    | 0     | 0     |
| Through Vol              | 0     | 55    | 0     | 0     | 215   | 107   | 0     | 307   | 0     | 49    | 0     |
| RT Vol                   | 0     | 0     | 25    | 0     | 0     | 79    | 0     | 42    | 0     | 0     | 36    |
| Lane Flow Rate           | 22    | 82    | 37    | 123   | 224   | 194   | 38    | 392   | 40    | 56    | 41    |
| Geometry Grp             | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 6     |
| Degree of Util (X)       | 0.053 | 0.183 | 0.076 | 0.251 | 0.425 | 0.353 | 0.079 | 0.744 | 0.095 | 0.124 | 0.083 |
| Departure Headway (Hd)   | 8.535 | 8.026 | 7.312 | 7.345 | 6.841 | 6.542 | 7.418 | 6.834 | 8.554 | 8.044 | 7.331 |
| Convergence, Y/N         | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |
| Cap                      | 420   | 447   | 489   | 489   | 525   | 549   | 486   | 533   | 419   | 445   | 488   |
| Service Time             | 6.288 | 5.778 | 5.065 | 5.087 | 4.583 | 4.284 | 5.118 | 4.534 | 6.309 | 5.799 | 5.085 |
| HCM Lane V/C Ratio       | 0.052 | 0.183 | 0.076 | 0.252 | 0.427 | 0.353 | 0.078 | 0.735 | 0.095 | 0.126 | 0.084 |
| HCM Control Delay, s/veh | 11.8  | 12.6  | 10.7  | 12.5  | 14.6  | 12.8  | 10.8  | 26.8  | 12.2  | 11.9  | 10.8  |
| HCM Lane LOS             | B     | B     | B     | B     | B     | B     | B     | D     | B     | B     | B     |
| HCM 95th-tile Q          | 0.2   | 0.7   | 0.2   | 1     | 2.1   | 1.6   | 0.3   | 6.3   | 0.3   | 0.4   | 0.3   |

| Intersection             |                                                                                   |                                                                                   |                                                                                   |        |                                                                                   |                                                                                   |
|--------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Int Delay, s/veh         | 2.2                                                                               |                                                                                   |                                                                                   |        |                                                                                   |                                                                                   |
| Movement                 | EBL                                                                               | EBT                                                                               | WBT                                                                               | WBR    | SBL                                                                               | SBR                                                                               |
| Lane Configurations      |  |  |  |        |  |  |
| Traffic Vol, veh/h       | 65                                                                                | 455                                                                               | 279                                                                               | 79     | 64                                                                                | 75                                                                                |
| Future Vol, veh/h        | 65                                                                                | 455                                                                               | 279                                                                               | 79     | 64                                                                                | 75                                                                                |
| Conflicting Peds, #/hr   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0      | 0                                                                                 | 0                                                                                 |
| Sign Control             | Free                                                                              | Free                                                                              | Free                                                                              | Free   | Stop                                                                              | Stop                                                                              |
| RT Channelized           | -                                                                                 | None                                                                              | -                                                                                 | None   | -                                                                                 | None                                                                              |
| Storage Length           | 25                                                                                | -                                                                                 | -                                                                                 | -      | 0                                                                                 | 0                                                                                 |
| Veh in Median Storage, # | -                                                                                 | 0                                                                                 | 0                                                                                 | -      | 0                                                                                 | -                                                                                 |
| Grade, %                 | -                                                                                 | 0                                                                                 | 0                                                                                 | -      | 0                                                                                 | -                                                                                 |
| Peak Hour Factor         | 92                                                                                | 96                                                                                | 88                                                                                | 92     | 92                                                                                | 92                                                                                |
| Heavy Vehicles, %        | 2                                                                                 | 2                                                                                 | 2                                                                                 | 2      | 2                                                                                 | 2                                                                                 |
| Mvmt Flow                | 71                                                                                | 474                                                                               | 317                                                                               | 86     | 70                                                                                | 82                                                                                |
| Major/Minor              | Major1                                                                            | Major2                                                                            |                                                                                   | Minor2 |                                                                                   |                                                                                   |
| Conflicting Flow All     | 403                                                                               | 0                                                                                 | -                                                                                 | 0      | 738                                                                               | 360                                                                               |
| Stage 1                  | -                                                                                 | -                                                                                 | -                                                                                 | -      | 360                                                                               | -                                                                                 |
| Stage 2                  | -                                                                                 | -                                                                                 | -                                                                                 | -      | 378                                                                               | -                                                                                 |
| Critical Hdwy            | 4.13                                                                              | -                                                                                 | -                                                                                 | -      | 6.63                                                                              | 6.23                                                                              |
| Critical Hdwy Stg 1      | -                                                                                 | -                                                                                 | -                                                                                 | -      | 5.43                                                                              | -                                                                                 |
| Critical Hdwy Stg 2      | -                                                                                 | -                                                                                 | -                                                                                 | -      | 5.83                                                                              | -                                                                                 |
| Follow-up Hdwy           | 2.219                                                                             | -                                                                                 | -                                                                                 | -      | 3.519                                                                             | 3.319                                                                             |
| Pot Cap-1 Maneuver       | 1154                                                                              | -                                                                                 | -                                                                                 | -      | 369                                                                               | 684                                                                               |
| Stage 1                  | -                                                                                 | -                                                                                 | -                                                                                 | -      | 705                                                                               | -                                                                                 |
| Stage 2                  | -                                                                                 | -                                                                                 | -                                                                                 | -      | 663                                                                               | -                                                                                 |
| Platoon blocked, %       |                                                                                   | -                                                                                 | -                                                                                 | -      |                                                                                   |                                                                                   |
| Mov Cap-1 Maneuver       | 1154                                                                              | -                                                                                 | -                                                                                 | -      | 346                                                                               | 684                                                                               |
| Mov Cap-2 Maneuver       | -                                                                                 | -                                                                                 | -                                                                                 | -      | 460                                                                               | -                                                                                 |
| Stage 1                  | -                                                                                 | -                                                                                 | -                                                                                 | -      | 662                                                                               | -                                                                                 |
| Stage 2                  | -                                                                                 | -                                                                                 | -                                                                                 | -      | 663                                                                               | -                                                                                 |
| Approach                 | EB                                                                                | WB                                                                                |                                                                                   | SB     |                                                                                   |                                                                                   |
| HCM Ctrl Dly, s/v        | 1.08                                                                              | 0                                                                                 |                                                                                   | 12.46  |                                                                                   |                                                                                   |
| HCM LOS                  |                                                                                   |                                                                                   |                                                                                   | B      |                                                                                   |                                                                                   |
| Minor Lane/Major Mvmt    | EBL                                                                               | EBT                                                                               | WBT                                                                               | WBR    | SBLn1                                                                             | SBLn2                                                                             |
| Capacity (veh/h)         | 1154                                                                              | -                                                                                 | -                                                                                 | -      | 460                                                                               | 684                                                                               |
| HCM Lane V/C Ratio       | 0.061                                                                             | -                                                                                 | -                                                                                 | -      | 0.151                                                                             | 0.119                                                                             |
| HCM Ctrl Dly (s/v)       | 8.3                                                                               | -                                                                                 | -                                                                                 | -      | 14.2                                                                              | 11                                                                                |
| HCM Lane LOS             | A                                                                                 | -                                                                                 | -                                                                                 | -      | B                                                                                 | B                                                                                 |
| HCM 95th %tile Q(veh)    | 0.2                                                                               | -                                                                                 | -                                                                                 | -      | 0.5                                                                               | 0.4                                                                               |

| Intersection             |        |      |        |      |            |       |        |      |      |      |      |      |
|--------------------------|--------|------|--------|------|------------|-------|--------|------|------|------|------|------|
| Int Delay, s/veh         | 0.8    |      |        |      |            |       |        |      |      |      |      |      |
| Movement                 | EBL    | EBT  | EBR    | WBL  | WBT        | WBR   | NBL    | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |        |      | ↗      |      |            | ↗     |        | ↘    |      |      | ↘    |      |
| Traffic Vol, veh/h       | 0      | 0    | 35     | 0    | 0          | 0     | 0      | 215  | 0    | 0    | 85   | 32   |
| Future Vol, veh/h        | 0      | 0    | 35     | 0    | 0          | 0     | 0      | 215  | 0    | 0    | 85   | 32   |
| Conflicting Peds, #/hr   | 0      | 0    | 0      | 0    | 0          | 0     | 0      | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop   | Stop | Stop   | Stop | Stop       | Stop  | Free   | Free | Free | Free | Free | Free |
| RT Channelized           | -      | -    | None   | -    | -          | None  | -      | -    | None | -    | -    | None |
| Storage Length           | -      | -    | 0      | -    | -          | 0     | -      | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -      | 0    | -      | -    | 0          | -     | -      | 0    | -    | -    | 0    | -    |
| Grade, %                 | -      | 0    | -      | -    | 0          | -     | -      | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 92     | 92   | 92     | 92   | 92         | 92    | 92     | 87   | 92   | 92   | 88   | 92   |
| Heavy Vehicles, %        | 2      | 2    | 2      | 2    | 2          | 2     | 2      | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0      | 0    | 38     | 0    | 0          | 0     | 0      | 247  | 0    | 0    | 97   | 35   |
| Major/Minor              | Minor2 |      | Minor1 |      | Major1     |       | Major2 |      |      |      |      |      |
| Conflicting Flow All     | -      | -    | 114    | -    | -          | 247   | -      | 0    | 0    | -    | -    | 0    |
| Stage 1                  | -      | -    | -      | -    | -          | -     | -      | -    | -    | -    | -    | -    |
| Stage 2                  | -      | -    | -      | -    | -          | -     | -      | -    | -    | -    | -    | -    |
| Critical Hdwy            | -      | -    | 6.22   | -    | -          | 6.22  | -      | -    | -    | -    | -    | -    |
| Critical Hdwy Stg 1      | -      | -    | -      | -    | -          | -     | -      | -    | -    | -    | -    | -    |
| Critical Hdwy Stg 2      | -      | -    | -      | -    | -          | -     | -      | -    | -    | -    | -    | -    |
| Follow-up Hdwy           | -      | -    | 3.318  | -    | -          | 3.318 | -      | -    | -    | -    | -    | -    |
| Pot Cap-1 Maneuver       | 0      | 0    | 939    | 0    | 0          | 792   | 0      | -    | -    | 0    | -    | -    |
| Stage 1                  | 0      | 0    | -      | 0    | 0          | -     | 0      | -    | -    | 0    | -    | -    |
| Stage 2                  | 0      | 0    | -      | 0    | 0          | -     | 0      | -    | -    | 0    | -    | -    |
| Platoon blocked, %       | -      | -    | -      | -    | -          | -     | -      | -    | -    | -    | -    | -    |
| Mov Cap-1 Maneuver       | -      | -    | 939    | -    | -          | 792   | -      | -    | -    | -    | -    | -    |
| Mov Cap-2 Maneuver       | -      | -    | -      | -    | -          | -     | -      | -    | -    | -    | -    | -    |
| Stage 1                  | -      | -    | -      | -    | -          | -     | -      | -    | -    | -    | -    | -    |
| Stage 2                  | -      | -    | -      | -    | -          | -     | -      | -    | -    | -    | -    | -    |
| Approach                 | EB     |      | WB     |      | NB         |       | SB     |      |      |      |      |      |
| HCM Ctrl Dly, s/v        | 9      |      | 0      |      | 0          |       | 0      |      |      |      |      |      |
| HCM LOS                  | A      |      | A      |      |            |       |        |      |      |      |      |      |
| Minor Lane/Major Mvmt    | NBT    |      | NBR    |      | EBLn1WBLn1 |       | SBT    |      | SBR  |      |      |      |
| Capacity (veh/h)         | -      |      | -      |      | 939        |       | -      |      | -    |      | -    |      |
| HCM Lane V/C Ratio       | -      |      | -      |      | 0.041      |       | -      |      | -    |      | -    |      |
| HCM Ctrl Dly (s/v)       | -      |      | -      |      | 9          |       | 0      |      | -    |      | -    |      |
| HCM Lane LOS             | -      |      | -      |      | A          |       | A      |      | -    |      | -    |      |
| HCM 95th %tile Q(veh)    | -      |      | -      |      | 0.1        |       | -      |      | -    |      | -    |      |

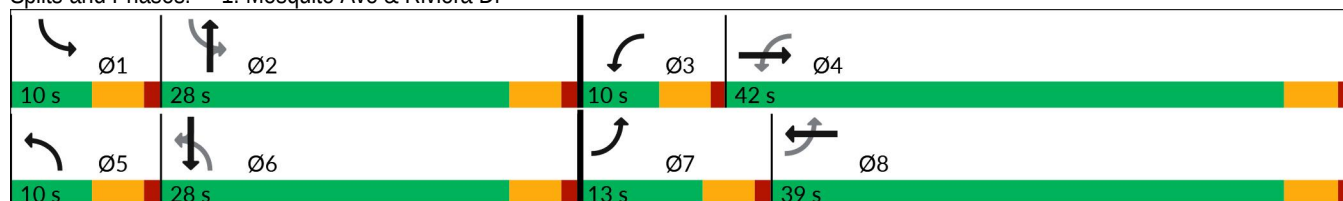
# Timing Report, Sorted By Phase

2026 Total PM Signalized

## 1: Mesquite Ave & Riviera Dr

|                        |  |  |  |  |  |  |  |  |
|------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Phase Number           | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |
| Movement               | SBL                                                                               | NBSB                                                                              | WBL                                                                               | EBWB                                                                              | NBL                                                                               | NBSB                                                                              | EBL                                                                                | EBWB                                                                                |
| Lead/Lag               | Lead                                                                              | Lag                                                                               | Lead                                                                              | Lag                                                                               | Lead                                                                              | Lag                                                                               | Lead                                                                               | Lag                                                                                 |
| Lead-Lag Optimize      | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                                | Yes                                                                                 |
| Recall Mode            | None                                                                              | Min                                                                               | None                                                                              | None                                                                              | None                                                                              | Min                                                                               | None                                                                               | None                                                                                |
| Maximum Split (s)      | 10                                                                                | 28                                                                                | 10                                                                                | 42                                                                                | 10                                                                                | 28                                                                                | 13                                                                                 | 39                                                                                  |
| Maximum Split (%)      | 11.1%                                                                             | 31.1%                                                                             | 11.1%                                                                             | 46.7%                                                                             | 11.1%                                                                             | 31.1%                                                                             | 14.4%                                                                              | 43.3%                                                                               |
| Minimum Split (s)      | 9.5                                                                               | 22.5                                                                              | 9.5                                                                               | 22.5                                                                              | 9.5                                                                               | 22.5                                                                              | 9.5                                                                                | 22.5                                                                                |
| Yellow Time (s)        | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               | 3.5                                                                                | 3.5                                                                                 |
| All-Red Time (s)       | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                  | 1                                                                                   |
| Minimum Initial (s)    | 5                                                                                 | 5                                                                                 | 5                                                                                 | 5                                                                                 | 5                                                                                 | 5                                                                                 | 5                                                                                  | 5                                                                                   |
| Vehicle Extension (s)  | 3                                                                                 | 3                                                                                 | 3                                                                                 | 3                                                                                 | 3                                                                                 | 3                                                                                 | 3                                                                                  | 3                                                                                   |
| Minimum Gap (s)        | 3                                                                                 | 3                                                                                 | 3                                                                                 | 3                                                                                 | 3                                                                                 | 3                                                                                 | 3                                                                                  | 3                                                                                   |
| Time Before Reduce (s) | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |
| Time To Reduce (s)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |
| Walk Time (s)          |                                                                                   | 7                                                                                 |                                                                                   | 7                                                                                 |                                                                                   | 7                                                                                 |                                                                                    | 7                                                                                   |
| Flash Don't Walk (s)   |                                                                                   | 11                                                                                |                                                                                   | 11                                                                                |                                                                                   | 11                                                                                |                                                                                    | 11                                                                                  |
| Dual Entry             | No                                                                                | Yes                                                                               | No                                                                                | Yes                                                                               | No                                                                                | Yes                                                                               | No                                                                                 | Yes                                                                                 |
| Inhibit Max            | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                                | Yes                                                                                 |
| Start Time (s)         | 0                                                                                 | 10                                                                                | 38                                                                                | 48                                                                                | 0                                                                                 | 10                                                                                | 38                                                                                 | 51                                                                                  |
| End Time (s)           | 10                                                                                | 38                                                                                | 48                                                                                | 0                                                                                 | 10                                                                                | 38                                                                                | 51                                                                                 | 0                                                                                   |
| Yield/Force Off (s)    | 5.5                                                                               | 33.5                                                                              | 43.5                                                                              | 85.5                                                                              | 5.5                                                                               | 33.5                                                                              | 46.5                                                                               | 85.5                                                                                |
| Yield/Force Off 170(s) | 5.5                                                                               | 33.5                                                                              | 43.5                                                                              | 74.5                                                                              | 5.5                                                                               | 33.5                                                                              | 46.5                                                                               | 74.5                                                                                |
| Local Start Time (s)   | 80                                                                                | 0                                                                                 | 28                                                                                | 38                                                                                | 80                                                                                | 0                                                                                 | 28                                                                                 | 41                                                                                  |
| Local Yield (s)        | 85.5                                                                              | 23.5                                                                              | 33.5                                                                              | 75.5                                                                              | 85.5                                                                              | 23.5                                                                              | 36.5                                                                               | 75.5                                                                                |
| Local Yield 170(s)     | 85.5                                                                              | 23.5                                                                              | 33.5                                                                              | 64.5                                                                              | 85.5                                                                              | 23.5                                                                              | 36.5                                                                               | 64.5                                                                                |
| Intersection Summary   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |
| Cycle Length           | 90                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |
| Control Type           | Actuated-Uncoordinated                                                            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |
| Natural Cycle          | 65                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |

Splits and Phases: 1: Mesquite Ave & Riviera Dr



# HCM 7th Signalized Intersection Summary

2026 Total PM Signalized

## 1: Mesquite Ave & Riviera Dr

|                              |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |  |  |                                                                                   |  |  |                                                                                   |  |  |  |  |  |  |
| Traffic Volume (veh/h)       | 118                                                                               | 322                                                                               | 79                                                                                | 34                                                                                | 307                                                                               | 42                                                                                | 15                                                                                  | 55                                                                                  | 25                                                                                  | 35                                                                                  | 49                                                                                  | 36                                                                                  |
| Future Volume (veh/h)        | 118                                                                               | 322                                                                               | 79                                                                                | 34                                                                                | 307                                                                               | 42                                                                                | 15                                                                                  | 55                                                                                  | 25                                                                                  | 35                                                                                  | 49                                                                                  | 36                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Lane Width 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                                                                                |
| 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       | 1870                                                                              | 1870                                                                              | 1870                                                                              | 1870                                                                              | 1870                                                                              | 1870                                                                              | 1870                                                                                | 1870                                                                                | 1870                                                                                | 1870                                                                                | 1870                                                                                | 1870                                                                                |
| Adj Flow Rate, veh/h         | 123                                                                               | 335                                                                               | 82                                                                                | 38                                                                                | 345                                                                               | 47                                                                                | 22                                                                                  | 82                                                                                  | 37                                                                                  | 40                                                                                  | 56                                                                                  | 41                                                                                  |
| Peak Hour Factor             | 0.96                                                                              | 0.96                                                                              | 0.96                                                                              | 0.89                                                                              | 0.89                                                                              | 0.89                                                                              | 0.67                                                                                | 0.67                                                                                | 0.67                                                                                | 0.88                                                                                | 0.88                                                                                | 0.88                                                                                |
| Percent Heavy Veh, %         | 2                                                                                 | 2                                                                                 | 2                                                                                 | 2                                                                                 | 2                                                                                 | 2                                                                                 | 2                                                                                   | 2                                                                                   | 2                                                                                   | 2                                                                                   | 2                                                                                   | 2                                                                                   |
| Cap, veh/h                   | 450                                                                               | 994                                                                               | 240                                                                               | 506                                                                               | 485                                                                               | 66                                                                                | 371                                                                                 | 229                                                                                 | 194                                                                                 | 360                                                                                 | 262                                                                                 | 222                                                                                 |
| Arrive On Green              | 0.09                                                                              | 0.35                                                                              | 0.35                                                                              | 0.04                                                                              | 0.30                                                                              | 0.30                                                                              | 0.03                                                                                | 0.12                                                                                | 0.12                                                                                | 0.04                                                                                | 0.14                                                                                | 0.14                                                                                |
| Sat Flow, veh/h              | 1781                                                                              | 2838                                                                              | 685                                                                               | 1781                                                                              | 1611                                                                              | 220                                                                               | 1781                                                                                | 1870                                                                                | 1585                                                                                | 1781                                                                                | 1870                                                                                | 1585                                                                                |
| Grp Volume(v), veh/h         | 123                                                                               | 208                                                                               | 209                                                                               | 38                                                                                | 0                                                                                 | 392                                                                               | 22                                                                                  | 82                                                                                  | 37                                                                                  | 40                                                                                  | 56                                                                                  | 41                                                                                  |
| Grp Sat Flow(s),veh/h/ln     | 1781                                                                              | 1777                                                                              | 1747                                                                              | 1781                                                                              | 0                                                                                 | 1831                                                                              | 1781                                                                                | 1870                                                                                | 1585                                                                                | 1781                                                                                | 1870                                                                                | 1585                                                                                |
| Q Serve(g_s), s              | 1.8                                                                               | 3.5                                                                               | 3.6                                                                               | 0.5                                                                               | 0.0                                                                               | 7.8                                                                               | 0.4                                                                                 | 1.6                                                                                 | 0.9                                                                                 | 0.8                                                                                 | 1.1                                                                                 | 0.9                                                                                 |
| Cycle Q Clear(g_c), s        | 1.8                                                                               | 3.5                                                                               | 3.6                                                                               | 0.5                                                                               | 0.0                                                                               | 7.8                                                                               | 0.4                                                                                 | 1.6                                                                                 | 0.9                                                                                 | 0.8                                                                                 | 1.1                                                                                 | 0.9                                                                                 |
| Prop In Lane                 | 1.00                                                                              |                                                                                   | 0.39                                                                              | 1.00                                                                              |                                                                                   | 0.12                                                                              | 1.00                                                                                |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Lane Grp Cap(c), veh/h       | 450                                                                               | 622                                                                               | 612                                                                               | 506                                                                               | 0                                                                                 | 551                                                                               | 371                                                                                 | 229                                                                                 | 194                                                                                 | 360                                                                                 | 262                                                                                 | 222                                                                                 |
| V/C Ratio(X)                 | 0.27                                                                              | 0.33                                                                              | 0.34                                                                              | 0.08                                                                              | 0.00                                                                              | 0.71                                                                              | 0.06                                                                                | 0.36                                                                                | 0.19                                                                                | 0.11                                                                                | 0.21                                                                                | 0.18                                                                                |
| Avail Cap(c_a), veh/h        | 656                                                                               | 1629                                                                              | 1602                                                                              | 669                                                                               | 0                                                                                 | 1545                                                                              | 563                                                                                 | 1075                                                                                | 911                                                                                 | 520                                                                                 | 1075                                                                                | 911                                                                                 |
| 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                                                                              | 0.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Uniform Delay (d), s/veh     | 8.9                                                                               | 9.8                                                                               | 9.8                                                                               | 7.9                                                                               | 0.0                                                                               | 12.7                                                                              | 14.4                                                                                | 16.5                                                                                | 16.1                                                                                | 14.6                                                                                | 15.6                                                                                | 15.5                                                                                |
| Incr Delay (d2), s/veh       | 0.3                                                                               | 0.3                                                                               | 0.3                                                                               | 0.1                                                                               | 0.0                                                                               | 1.7                                                                               | 0.1                                                                                 | 0.9                                                                                 | 0.5                                                                                 | 0.1                                                                                 | 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(95%),veh/ln     | 1.0                                                                               | 2.0                                                                               | 2.0                                                                               | 0.3                                                                               | 0.0                                                                               | 5.0                                                                               | 0.3                                                                                 | 1.2                                                                                 | 0.5                                                                                 | 0.5                                                                                 | 0.8                                                                                 | 0.6                                                                                 |
| Unsig. Movement Delay, s/veh |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| LnGrp Delay(d), s/veh        | 9.3                                                                               | 10.1                                                                              | 10.1                                                                              | 7.9                                                                               | 0.0                                                                               | 14.4                                                                              | 14.4                                                                                | 17.4                                                                                | 16.6                                                                                | 14.7                                                                                | 16.0                                                                                | 15.9                                                                                |
| LnGrp LOS                    | A                                                                                 | B                                                                                 | B                                                                                 | A                                                                                 |                                                                                   | B                                                                                 | B                                                                                   | B                                                                                   | B                                                                                   | B                                                                                   | B                                                                                   | B                                                                                   |
| Approach Vol, veh/h          | 540                                                                               |                                                                                   |                                                                                   | 430                                                                               |                                                                                   |                                                                                   | 141                                                                                 |                                                                                     |                                                                                     | 137                                                                                 |                                                                                     |                                                                                     |
| Approach Delay, s/veh        | 9.9                                                                               |                                                                                   |                                                                                   | 13.9                                                                              |                                                                                   |                                                                                   | 16.7                                                                                |                                                                                     |                                                                                     | 15.6                                                                                |                                                                                     |                                                                                     |
| Approach LOS                 | A                                                                                 |                                                                                   |                                                                                   | B                                                                                 |                                                                                   |                                                                                   | B                                                                                   |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |                                                                                     |
| Timer - Assigned Phs         | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                   | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 6.3                                                                               | 9.5                                                                               | 6.3                                                                               | 18.8                                                                              | 5.6                                                                               | 10.2                                                                              | 8.3                                                                                 | 16.8                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      | 4.5                                                                               | 4.5                                                                               | 4.5                                                                               | 4.5                                                                               | 4.5                                                                               | 4.5                                                                               | 4.5                                                                                 | 4.5                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  | 5.5                                                                               | 23.5                                                                              | 5.5                                                                               | 37.5                                                                              | 5.5                                                                               | 23.5                                                                              | 8.5                                                                                 | 34.5                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+I1), s | 2.8                                                                               | 3.6                                                                               | 2.5                                                                               | 5.6                                                                               | 2.4                                                                               | 3.1                                                                               | 3.8                                                                                 | 9.8                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      | 0.0                                                                               | 0.5                                                                               | 0.0                                                                               | 2.7                                                                               | 0.0                                                                               | 0.3                                                                               | 0.1                                                                                 | 2.5                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 7th Control Delay, s/veh | 12.7                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 7th LOS                  | B                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

## **Appendix J: Signal Warrant Analysis**

TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS (2023 MUTCD)

MAJOR STREET: 

Mesquite Ave

EB

WB

 # OF APPROACH LANES: 

2

MINOR STREET: 

Riviera Dr

NB

SB

 # OF APPROACH LANES: 

1

CITY, STATE: 

Lake Havasu, Arizona

COMMENTS: 

2026 Total Volumes

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N): 

N

85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N): 

N

|                  |    |          | MAJOR ST<br>TWO-WAY<br>TRAFFIC | MINOR ST<br>TRAFFIC<br>HEAVY LEG | WARRANT 1 - Condition A, Part 1 |                |             | WARRANT 1 - Condition B, Part 1 |                |             | WARRANT 1 - Condition A, Part 2 |                                         |             | WARRANT 1 - Condition B, Part 2 |                |             | WARRANT 2<br>Four-Hour | WARRANT 3<br>Peak Hour |
|------------------|----|----------|--------------------------------|----------------------------------|---------------------------------|----------------|-------------|---------------------------------|----------------|-------------|---------------------------------|-----------------------------------------|-------------|---------------------------------|----------------|-------------|------------------------|------------------------|
|                  |    |          |                                |                                  | MAIN<br>LINE                    | SIDE<br>STREET | BOTH<br>MET | MAIN<br>LINE                    | SIDE<br>STREET | BOTH<br>MET | MAIN<br>LINE                    | SIDE<br>STREET                          | BOTH<br>MET | MAIN<br>LINE                    | SIDE<br>STREET | BOTH<br>MET |                        |                        |
| THRESHOLD VALUES |    |          |                                |                                  | 600                             | 150            |             | 900                             | 75             |             | 480                             | 120                                     |             | 720                             | 60             |             |                        |                        |
| 06:00 AM         | TO | 07:00 AM | 275                            | 111                              |                                 |                |             |                                 | Y              |             |                                 |                                         |             |                                 | Y              |             |                        |                        |
| 07:00 AM         | TO | 08:00 AM | 495                            | 175                              |                                 | Y              |             |                                 | Y              |             | Y                               | Y                                       | Y           |                                 | Y              |             |                        |                        |
| 08:00 AM         | TO | 09:00 AM | 509                            | 230                              |                                 | Y              |             |                                 | Y              |             | Y                               | Y                                       | Y           |                                 | Y              |             |                        |                        |
| 09:00 AM         | TO | 10:00 AM | 567                            | 274                              |                                 | Y              |             |                                 | Y              |             | Y                               | Y                                       | Y           |                                 | Y              |             |                        |                        |
| 10:00 AM         | TO | 11:00 AM | 634                            | 285                              | Y                               | Y              | Y           |                                 | Y              |             | Y                               | Y                                       | Y           |                                 | Y              |             | Y                      |                        |
| 11:00 AM         | TO | 12:00 PM | 691                            | 216                              | Y                               | Y              | Y           |                                 | Y              |             | Y                               | Y                                       | Y           |                                 | Y              |             |                        |                        |
| 12:00 PM         | TO | 01:00 PM | 785                            | 168                              | Y                               | Y              | Y           |                                 | Y              |             | Y                               | Y                                       | Y           | Y                               | Y              | Y           |                        |                        |
| 01:00 PM         | TO | 02:00 PM | 840                            | 211                              | Y                               | Y              | Y           |                                 | Y              |             | Y                               | Y                                       | Y           | Y                               | Y              | Y           | Y                      |                        |
| 02:00 PM         | TO | 03:00 PM | 914                            | 205                              | Y                               | Y              | Y           | Y                               | Y              | Y           | Y                               | Y                                       | Y           | Y                               | Y              | Y           | Y                      |                        |
| 03:00 PM         | TO | 04:00 PM | 892                            | 164                              | Y                               | Y              | Y           |                                 | Y              |             | Y                               | Y                                       | Y           | Y                               | Y              | Y           |                        |                        |
| 04:00 PM         | TO | 05:00 PM | 872                            | 118                              | Y                               |                |             |                                 | Y              |             | Y                               |                                         |             | Y                               | Y              | Y           |                        |                        |
| 05:00 PM         | TO | 06:00 PM | 775                            | 161                              | Y                               | Y              | Y           |                                 | Y              |             | Y                               | Y                                       | Y           | Y                               | Y              | Y           |                        |                        |
| 06:00 PM         | TO | 07:00 PM | 538                            | 130                              |                                 |                |             |                                 | Y              |             | Y                               | Y                                       | Y           |                                 | Y              |             |                        |                        |
| 07:00 PM         | TO | 08:00 PM | 410                            | 91                               |                                 |                |             |                                 | Y              |             |                                 |                                         |             |                                 | Y              |             |                        |                        |
| 08:00 PM         | TO | 09:00 PM | 302                            | 68                               |                                 |                |             |                                 |                |             |                                 |                                         |             |                                 | Y              |             |                        |                        |
| 09:00 PM         | TO | 10:00 PM | 206                            | 44                               |                                 |                |             |                                 |                |             |                                 |                                         |             |                                 |                |             |                        |                        |
|                  |    |          | 9,705                          | 2,651                            | 8                               | 10             | 7           | 1                               | 14             | 1           | 12                              | 11                                      | 11          | 6                               | 15             | 6           | 3                      | 0                      |
|                  |    |          |                                |                                  |                                 | 8 HOURS NEEDED |             |                                 | 8 HOURS NEEDED |             |                                 | 8 HOURS NEEDED for both Condition A & B |             |                                 | 4 HRS NEEDED   |             |                        | 1 HR NEEDED            |
|                  |    |          |                                |                                  |                                 | NOT SATISFIED  |             |                                 | NOT SATISFIED  |             |                                 | NOT SATISFIED                           |             |                                 | NOT SATISFIED  |             |                        | NOT SATISFIED          |

**Section 4C.07 Warrant 6, Coordinated Signal System**

Support:

- 01 Progressive movement in a coordinated signal system sometimes necessitates installing traffic control signals at intersections where they would not otherwise be needed in order to maintain proper platooning of vehicles.

Guidance:

- 02 *The need for a traffic control signal should be considered if an engineering study finds that one of the following criteria is met:*
- A. *On a one-way street or a street that has traffic predominantly in one direction, the adjacent traffic control signals are so far apart that they do not provide the necessary degree of vehicular platooning.*
  - B. *On a two-way street, adjacent traffic control signals do not provide the necessary degree of platooning and the proposed and adjacent traffic control signals will collectively provide a progressive operation.*
- 03 *The Coordinated Signal System signal warrant should not be applied where the resultant spacing of traffic control signals would be less than 1,000 feet.*

**Section 4C.08 Warrant 7, Crash Experience**

Support:

- 01 The Crash Experience signal warrant conditions are intended for application where the severity and frequency of crashes are the principal reasons to consider installing a traffic control signal.

Guidance:

- 02 *The need for a traffic control signal should be considered if an engineering study finds that all of the following criteria are met:*
- A. *Adequate trial of alternatives with satisfactory observance and enforcement has failed to reduce the crash frequency; and*
  - B. *At least one of the following conditions applies to the reported crash history (where each reported crash considered is related to the intersection and apparently exceeds the applicable requirements for a reportable crash):*
    - 1. *The number of reported angle crashes and pedestrian crashes within a 1-year period equals or exceeds the threshold number in Table 4C-2 for total angle crashes and pedestrian crashes (all severities); or*
    - 2. *The number of reported fatal-and-injury angle crashes and pedestrian crashes within a 1-year period equals or exceeds the threshold number in Table 4C-2 for total fatal-and-injury angle crashes and pedestrian crashes; or*
    - 3. *The number of reported angle crashes and pedestrian crashes within a 3-year period equals or exceeds the threshold number in Table 4C-3 for total angle crashes and pedestrian crashes (all severities); or*
    - 4. *The number of reported fatal-and-injury angle crashes and pedestrian crashes within a 3-year period equals or exceeds the threshold number in Table 4C-3 for total fatal-and-injury angle crashes and pedestrian crashes; and*
  - C. *For each of any 8 hours of an average day, the vehicles per hour (vph) given in both of the 80 percent columns of Condition A in Table 4C-1 (see Section 4C.02), or the vph in both of the 80 percent columns of Condition B in Table 4C-1 exists on the major street and the more critical minor-street approach, respectively, to the intersection, or the volume of pedestrian traffic is not less than 80 percent of the requirements specified in the Pedestrian Volume warrant (see Section 4C.05).*

**Table 4C-2. Minimum Number of Reported Crashes in a One-Year Period**

| Number of through lanes on each approach |              | Total of angle and pedestrian crashes (all severities) <sup>a</sup> |            | Total of fatal-and-injury angle and pedestrian crashes <sup>a</sup> |            |
|------------------------------------------|--------------|---------------------------------------------------------------------|------------|---------------------------------------------------------------------|------------|
| Major Street                             | Minor Street | Four Legs                                                           | Three Legs | Four Legs                                                           | Three Legs |
| 1                                        | 1            | 5                                                                   | 4          | 3                                                                   | 3          |
| 2 or more                                | 1            | 5                                                                   | 4          | 3                                                                   | 3          |
| 2 or more                                | 2 or more    | 5                                                                   | 4          | 3                                                                   | 3          |
| 1                                        | 2 or more    | 5                                                                   | 4          | 3                                                                   | 3          |

<sup>a</sup> Angle crashes include all crashes that occur at an angle and involve one or more vehicles on the major street and one or more vehicles on the minor street

**Table 4C-3. Minimum Number of Reported Crashes in a Three-Year Period**

| Number of through lanes on each approach |              | Total of angle and pedestrian crashes (all severities) <sup>a</sup> |            | Total of fatal-and-injury angle and pedestrian crashes <sup>a</sup> |            |
|------------------------------------------|--------------|---------------------------------------------------------------------|------------|---------------------------------------------------------------------|------------|
| Major Street                             | Minor Street | Four Legs                                                           | Three Legs | Four Legs                                                           | Three Legs |
| 1                                        | 1            | 6                                                                   | 5          | 4                                                                   | 4          |
| 2 or more                                | 1            | 6                                                                   | 5          | 4                                                                   | 4          |
| 2 or more                                | 2 or more    | 6                                                                   | 5          | 4                                                                   | 4          |
| 1                                        | 2 or more    | 6                                                                   | 5          | 4                                                                   | 4          |

<sup>a</sup> Angle crashes include all crashes that occur at an angle and involve one or more vehicles on the major street and one or more vehicles on the minor street

**Standard:**

- 03 **These major-street and minor-street volumes shall be for the same 8 hours.**

**Support:**

- 04 On the minor street, the more critical volume is not required to be on the same approach during each of these 8 hours. The more critical minor-street volume is the one that meets the warranting criteria for that approach, and in the case of a one-lane minor-street approach that is opposite from a multi-lane minor-street approach might not have the higher volume.

**Option:**

- 05 If the posted or statutory speed limit or the 85th-percentile speed on the major street exceeds 40 mph, or if the intersection lies within the built-up area of an isolated community having a population of less than 10,000:
- A. The traffic volumes in the 56 percent columns in Table 4C-1 may be used in place of the 80 percent columns.
  - B. Tables 4C-4 and 4C-5 may be used in place of Tables 4C-2 and 4C-3, respectively.

**Table 4C-4. Minimum Number of Reported Crashes in a One-Year Period**

| Community less than 10,000 population or above 40 mph on major street |              |                                                                     |            |                                                                     |            |
|-----------------------------------------------------------------------|--------------|---------------------------------------------------------------------|------------|---------------------------------------------------------------------|------------|
| Number of through lanes on each approach                              |              | Total of angle and pedestrian crashes (all severities) <sup>a</sup> |            | Total of fatal-and-injury angle and pedestrian crashes <sup>a</sup> |            |
| Major Street                                                          | Minor Street | Four Legs                                                           | Three Legs | Four Legs                                                           | Three Legs |
| 1                                                                     | 1            | 4                                                                   | 3          | 3                                                                   | 3          |
| 2 or more                                                             | 1            | 10                                                                  | 9          | 6                                                                   | 6          |
| 2 or more                                                             | 2 or more    | 10                                                                  | 9          | 6                                                                   | 6          |
| 1                                                                     | 2 or more    | 4                                                                   | 3          | 3                                                                   | 3          |

<sup>a</sup> Angle crashes include all crashes that occur at an angle and involve one or more vehicles on the major street and one or more vehicles on the minor street

**Table 4C-5. Minimum Number of Reported Crashes in a Three-Year Period**

| Community less than 10,000 population or above 40 mph on major street |              |                                                                     |            |                                                                     |            |
|-----------------------------------------------------------------------|--------------|---------------------------------------------------------------------|------------|---------------------------------------------------------------------|------------|
| Number of through lanes on each approach                              |              | Total of angle and pedestrian crashes (all severities) <sup>a</sup> |            | Total of fatal-and-injury angle and pedestrian crashes <sup>a</sup> |            |
| Major Street                                                          | Minor Street | Four Legs                                                           | Three Legs | Four Legs                                                           | Three Legs |
| 1                                                                     | 1            | 6                                                                   | 5          | 4                                                                   | 4          |
| 2 or more                                                             | 1            | 16                                                                  | 13         | 9                                                                   | 9          |
| 2 or more                                                             | 2 or more    | 16                                                                  | 13         | 9                                                                   | 9          |
| 1                                                                     | 2 or more    | 6                                                                   | 5          | 4                                                                   | 4          |

<sup>a</sup> Angle crashes include all crashes that occur at an angle and involve one or more vehicles on the major street and one or more vehicles on the minor street

Option:

- 06 Agencies may calibrate Highway Safety Manual (HSM) (AASHTO, 2010) safety performance functions (SPFs) to their own crash data or develop their own SPFs to produce agency specific average crash frequency values. When documented as part of the engineering study, these agency specific crash frequency values may be used instead of the values shown in Tables 4C-2 through 4C-5 when applying the Crash Experience signal warrant. Support:
- 07 The values in Tables 4C-2 through 4C-5 for Minimum Number of Reported Crashes that correspond to the Crash Experience signal warrant were derived using the safety performance functions (SPFs) in the Highway Safety Manual (HSM) (AASHTO, 2010) for stop-controlled and signalized intersections with characteristics that are considered typical. The values in Tables 4C-2 through 4C-5 are representative of average crash frequency for the given intersection condition. The values correspond to the threshold at which the signalized intersection safety performance outperforms the stop-controlled intersection, for otherwise identical conditions and equivalent traffic.

### **Section 4C.09 Warrant 8, Roadway Network**

Support:

- 01 Installing a traffic control signal at some intersections might be justified to encourage concentration and organization of traffic flow on a roadway network.
- Guidance:
- 02 *The need for a traffic control signal should be considered if an engineering study finds that the common intersection of two or more major routes meets one or both of the following criteria:*
- A. *The intersection has a total existing, or immediately projected, entering volume of at least 1,000 vehicles per hour during the peak hour of a typical weekday and has 5-year projected traffic volumes, based on an engineering study, that meet one or more of Warrants 1, 2, and 3 during an average weekday; or*
  - B. *The intersection has a total existing or immediately projected entering volume of at least 1,000 vehicles per hour for each of any 5 hours of a non-normal business day (Saturday or Sunday).*
- 03 *A major route as used in this signal warrant should have at least one of the following characteristics:*
- A. *It is part of the street or highway system that serves as the principal roadway network for through traffic flow;*
  - B. *It includes rural or suburban highways outside, entering, or traversing a city; or*
  - C. *It appears as a major route on an official plan, such as a major street plan in an urban area traffic and transportation study.*

### **Section 4C.10 Warrant 9, Intersection Near a Grade Crossing**

Support:

- 01 The Intersection Near a Grade Crossing signal warrant is intended for use at a location where none of the conditions described in the other eight traffic signal warrants are met, but the proximity of a grade crossing on an approach controlled by a STOP or YIELD sign at a highway-highway intersection is the principal reason to consider installing a traffic control signal.
- Guidance:
- 02 *This signal warrant should be applied only after adequate consideration has been given to other alternatives or after a trial of an alternative has failed to alleviate the safety concerns associated with the grade crossing. Among the alternatives that should be considered or tried are:*
- A. *Providing additional pavement that would enable vehicles to clear the track or that would provide space for an evasive maneuver, or*
  - B. *Reassigning the stop controls at the highway-highway intersection to make the approach across the track a non-stopping approach.*
- 03 *The need for a traffic control signal should be considered if an engineering study finds that both of the following criteria are met:*
- A. *A grade crossing exists on an approach controlled by a STOP or YIELD sign at a highway-highway intersection and the center of the track nearest to the intersection is within 140 feet of the stop line or yield line on the approach; and*
  - B. *During the highest traffic volume hour during which rail traffic uses the crossing, the plotted point representing the vehicles per hour on the major street (total of both approaches) of the highway-highway intersection and the corresponding vehicles per hour on the minor-street approach that crosses the track (one direction only, approaching the intersection) falls above the applicable curve in Figure 4C-9 or 4C-10 for the existing combination of approach lanes over the track and the distance D, which is the clear storage distance as defined in Section 1C.02.*

## **Appendix K: Relevant Standards**



## TRAFFIC IMPACT ANALYSIS STANDARDS

### PURPOSE

These standards present policies, detailed procedures, and minimum analysis parameters and criteria for uniform development of traffic impact analysis studies, which enable preparers to present findings and recommendations in a systematic manner, based on sound engineering principles, consistent with the expectations and practice of Mohave County.

### TRAFFIC IMPACT ANALYSIS STANDARDS

A traffic impact analysis (TIA) shall be required for all new land developments or additions/modifications to existing land developments expected to generate 75 or greater new peak hour trips per day based on highest peak hour of generator estimates derived from data contained in the Institute of Transportation Engineers' *Trip Generation*, latest edition.

A traffic impact statement (TIS) shall be required for all new land developments or additions/modifications to existing land developments expected to generate 10 to 74 new peak hour trips per day based on highest peak hour of generator estimates derived from data contained in the Institute of Transportation Engineers' *Trip Generation*, latest edition.

Mohave County arterial- and collector-classified roadways operating at Level of Service C or better under the condition – future traffic without development in horizon year – shall be mitigated to a Level of Service C. Mohave County local-classified roadways operating at Level of Service D or better under the condition – future traffic without development in horizon year – shall be mitigated to a Level of Service D.

All TIA recommended and County approved road and/or traffic control improvements shall be designed and constructed in accordance with or exceed design policy set forth in *Mohave County Standard Specifications and Details* and guidelines herein. The County may consider and approve exceptions on basis of engineering judgment supported by relevant engineering data and calculations.

## **TRAFFIC IMPACT STATEMENT GUIDELINES**

1. Estimate total trip generation.
  - ❖ Reference data in Institute of Transportation Engineers (ITE) Trip Generation, latest edition.
  - ❖ Use highest (AM or PM) peak hour of generator; many Mohave County roads exhibit peak in traffic volume during midday hours.
  - ❖ Evaluate use of rate versus equation; consider and compare size of subject development against generator sizes in ITE published studies.
  - ❖ Local and/or brand-specific trip generation studies may be acceptable with discussion and presentation of individual location characteristics and study data.
2. Estimate daily site-generated truck traffic, FHWA Vehicle Class 5 and above (e.g., total single-unit and semi tractor-trailer trucks).
3. Present directional distribution.
  - ❖ For developments producing trips (e.g., residential), consider effect of area destinations (location and relative weight of attractiveness) from the site on directional distribution.
  - ❖ For developments attracting trips (e.g., commercial), consider effect of area origins (location and relative weight of attractiveness) of trips to the site on directional distribution.
  - ❖ Existing traffic volume distribution may – but not always – approximate directional distribution.
4. Present trip assignment to/from all proposed site access driveways.
  - ❖ Turning movements to/from proposed site access driveways must include site generated pass-by trips.
5. Document location and configuration of all proposed site access driveways adjacent County roads.
6. Calculate total crash rate for each County road adjacent a proposed site access driveway(s).
  - ❖ Obtain the 5-year crash history for the County road(s) from Mohave County Public Works; document total crashes and fatal crashes.
  - ❖ Obtain the average daily traffic for the County road(s) from (1) ADOT Transportation Data Management System or (2) Mohave County Public Works.
  - ❖ Calculate total crash rate as crashes per million vehicle miles traveled.
  - ❖ Obtain the latest published State total crash rate from the latest ADOT *Arizona Motor Vehicle Crash Facts*; take total crashes divided by millions of vehicle miles traveled as published (typically in Table 1-1).
  - ❖ Compare State total crash rate to total crash rate for each County road evaluated.
7. Analyze proximity of proposed site access driveway(s) to other intersections, including intersections of other site access driveways.
  - ❖ Evaluate and confirm the functional area of the proposed site access driveway(s) are does not overlap the functional area of any adjacent intersection on the same road.
  - ❖ Intersection functional area means the distance traveled by vehicles (1) while decelerating on approach to an intersection to stop for traffic control or permissive left-turn and (2) while accelerating away from an intersection after stop or turning maneuver.

8. Determine need for auxiliary lanes (left-turn and right-turn lanes) on roads adjacent proposed site access driveway(s) through Section 245 of the ADOT published *Traffic Engineering Guidelines and Processes*, latest edition.
  - ❖ If the State total crash rate exceeds the total crash rate for the County road evaluated, then apply the Section 245 criteria for right-turn traffic volume and left-turn traffic volume at 80% of published value.
9. For any recommended new auxiliary lanes, determine minimum turn lane length based on through Section 430 of the ADOT published *Traffic Engineering Guidelines and Processes*, latest edition.

## **TRAFFIC IMPACT ANALYSIS GUIDELINES**

1. Complete Traffic Impact Statement Guidelines.
2. Identify County intersections serving site-generated traffic for intersection capacity analysis.
  - ❖ All site access driveways
  - ❖ Nearest County intersection in each direction from site access driveway(s)
3. Collect intersection turning movement counts for each study intersection during target peak hour(s).
  - ❖ Calculate peak hour factor from analysis of turning movement counts.
  - ❖ Determine heavy truck percentage for intersection capacity analysis.
4. Perform intersection capacity analysis for study intersections under the following conditions:
  - ❖ Existing Year Condition – analysis of (1) existing traffic and (2) existing intersection configuration and control.
  - ❖ Horizon Year No-Build Condition – analysis of (1) existing traffic forecast to horizon year, (2) new traffic generated by other known planned developments, and (3) existing intersection configuration and control with modifications per County or other known planned improvements.
  - ❖ Horizon Year Build Condition – analysis of (1) existing traffic forecast to horizon year, (2) new traffic generated by other known planned developments, (3) traffic generated by subject development, and (4) existing intersection configuration and control with modifications per County or other known planned improvements.
  - ❖ Horizon Year represents the year that the subject development opens under full buildout and operation.
  - ❖ Use intersection capacity analysis software based on Highway Capacity Manual, latest edition.
5. Determine roadway modifications from intersection capacity analysis findings and, as pertinent, *Manual on Uniform Traffic Control Devices*, traffic signal warrants.

## 245 TURN LANE WARRANTS

The intent of this document is to offer guidance to warrant the installation of dedicated left or right turn lanes on state routes, whether during new construction, major reconstruction, or in the course of the encroachment permitting process. **The primary determining factors to warrant an exclusive turn lane shall be: (a) the combination of through traffic volume and turning traffic volume, (b) the posted roadway speed, and (c) the number of through lanes on the roadway.** Note: Dual right- or left-turn lanes should be considered when the turning volume exceeds 300 vehicles per hour. In addition to the criteria presented in the tables below, other factors should be taken into consideration when performing a warrant study such as: shoulder width, percentage of trucks, sight distance, highway grade, horizontal and vertical curvature and crash history.

### Right-Turn Lane Warrants

| Peak Hour Traffic Volume on the Highway in Advancing Direction | Minimum Peak Hour Right-turn Traffic Volume |                       |                       |                       |            |
|----------------------------------------------------------------|---------------------------------------------|-----------------------|-----------------------|-----------------------|------------|
|                                                                | # of thru lanes per direction               |                       |                       |                       |            |
|                                                                | 1                                           |                       | 2                     |                       | 3          |
|                                                                | < 45 MPH Posted Speed                       | ≥ 45 MPH Posted Speed | < 45 MPH Posted Speed | ≥ 45 MPH Posted Speed | All Speeds |
| ≤ 200                                                          |                                             |                       |                       |                       |            |
| 201 – 300                                                      | -                                           | 30                    | -                     | -                     | -          |
| 301 – 400                                                      | -                                           | 19                    | -                     | 55                    | -          |
| 401 – 500                                                      | 85                                          | 14                    | -                     | 30                    | -          |
| 501 – 600                                                      | 58                                          | 12                    | 140                   | 25                    | -          |
| 601 – 700                                                      | 27                                          | 9                     | 80                    | 18                    | -          |
| 701 – 800                                                      | 20                                          | 8                     | 53                    | 15                    | -          |
| 801 – 900                                                      | 12                                          | 7                     | 40                    | 12                    | -          |
| 901 – 1000                                                     | 9                                           | 6                     | 30                    | 11                    | -          |
| 1001 – 1100                                                    | 8                                           | 5                     | 23                    | 9                     | 18         |
| 1101 – 1200                                                    | 7                                           | 5                     | 18                    | 8                     | 16         |
| 1201 – 1300                                                    | 6                                           | 4                     | 14                    | 8                     | 15         |
| 1301 – 1400                                                    | 6                                           | 4                     | 11                    | 6                     | 12         |
| 1400+                                                          | 5                                           | 3                     | 8                     | 6                     | 10         |

## Left-Turn Lane Warrants

| Peak Hour Traffic Volume on the Highway in Advancing Direction | Minimum Peak Hour Left-turn Traffic Volume |                             |                             |                             |
|----------------------------------------------------------------|--------------------------------------------|-----------------------------|-----------------------------|-----------------------------|
|                                                                | # of thru lanes per direction              |                             |                             |                             |
|                                                                | 1                                          |                             | 2<br>(Undivided)*           |                             |
|                                                                | < 45 MPH<br>Posted<br>Speed                | ≥ 45 MPH<br>Posted<br>Speed | < 45 MPH<br>Posted<br>Speed | ≥ 45 MPH<br>Posted<br>Speed |
| ≤ 200                                                          | 30                                         | 15                          | -                           | -                           |
| 201 – 300                                                      | 12                                         | 12                          | 40                          | 30                          |
| 301 – 400                                                      | 12                                         | 12                          | 30                          | 25                          |
| 401 – 500                                                      | 12                                         | 12                          | 25                          | 18                          |
| 501 – 600                                                      | 12                                         | 12                          | 15                          | 12                          |
| 601 – 1000                                                     | 12                                         | 12                          | 10                          | 8                           |
| 1000+                                                          | 12                                         | 8                           | 10                          | 8                           |

\*On non-freeway divided highways, left-turn or U-turn lanes should be provided at median breaks.

Volumes and traffic factors utilized should be based on data from ADOT's Multimodal Planning Division, or should be based on current traffic counts as approved by the Regional Traffic Engineer. For encroachment permits, analysis of the relevant through and turning traffic volumes should be completed in the design year as identified in ADOT Traffic Guidelines and Processes (TGP) 240. For new construction and major reconstruction, analysis should be performed based on data for the appropriate design year. Turn lane warrant studies should be reviewed and approved by the Regional Traffic Engineer. In cases where the State Highway section in question intersects a route under other jurisdiction, it is recommended that a turning movement analysis be performed on the intersecting route as well.

When it is determined that a turn lane is warranted, shoulder width should be provided as part of the turn lane design in accordance with the ADOT Roadway Design Guidelines, which should be used to determine the minimum continuous usable width of paved shoulder along the turn lanes. Turn lane design should also conform to the guidance in ADOT TGP430.