# Traffic Impact Analysis
## 3rd Submittal

Apache Trails
Multi-Family Residential

Plaza Drive & Apache Trail

Apache Junction, Arizona

May 2025

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EPS Project #: 24-0336



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# EXECUTIVE SUMMARY

### *INTRODUCTION*

The multi-family residential development is proposed east of Plaza Drive between Superstition Boulevard and Apache Trail in Apache Junction, Arizona. The development is proposed with three-story buildings primarily consisting of one and two-bedroom units with a total of 336 dwelling units. The primary access is proposed on Apache Trail. A secondary access is proposed on Plaza Drive north of the existing RV Resort driveway and will be limited to a southbound left-in and westbound right-out only. Both entrances will be gate controlled.

The traffic impact analysis was prepared in accordance with the requirements of the City of Apache Junction. The proposed development generates more than 100 peak hour trips. The analysis study years include existing conditions and horizon years 2026 and 2031. An additional annual 5% growth rate was used to estimate the growth of ambient background traffic in the horizon years (results in a 41% total increase by 2031).

This report has been updated to address the seasonality of the collected traffic counts and to discuss the difference in peak hour traffic generated from multi-family residential developments versus the existing peak hour at the study intersections.

### *SEASONAL FACTOR*

The City of Apache Junction annually collects traffic volumes in February or March and is available to the public. Additionally, both the Arizona Department of Transportation (ADOT) and Maricopa Association of Governments (MAG) regularly collect and compile traffic data on many roadways within their boundaries. At the applicant's request, this report has been revised to compare all recent historical traffic volumes near the proposed site from these agencies and compare them to the counts collected in September 2024 as part of this study.

There were several available counts recorded near the proposed site during both the higher traffic winter months and lower traffic summer months. Based on the evaluation of the relevant count data, an approximate 32% difference was observed between the peak and non-peak seasons. To provide a conservative evaluation, a 35% growth factor was utilized. Therefore, in addition to the typical annual background growth rate, a seasonal factor of 1.35 was applied to the existing traffic volumes collected in September for use in this analysis.

### *TRIP GENERATION*

Full build-out of the proposed development is anticipated to generate 2,265 weekday daily trips (entering/exiting) with 134 trips (entering/exiting) during the AM peak hour and 171 trips (entering/exiting) during the PM peak hour. Existing traffic counts reveal that the existing peak hour of traffic at the study intersections generally occurs at 12:00 PM, which differs from the morning and evening peak hour periods of multi-family residential land uses.

When compared to a shopping center use allowed under B-3 zoning, the proposed multi-family development generates 5,211 fewer daily trips, 36 fewer AM peak hour trips, and 516 fewer PM peak hour trips.

### *LEVEL-OF-SERVICE*

The study intersections operate at acceptable levels of service with existing conditions. With trips from the proposed development, the study intersections will continue to operate at acceptable levels of service in both horizon years 2026 and 2031 with the existing lane configurations and traffic control.

The two closest intersections to the proposed development's driveways are Plaza Drive / Superstition Drive and Apache Trail / Idaho Road. With the seasonal factor of 1.35 applied, the added site traffic is projected to add 3.0 seconds of delay to the northbound approach of the Plaza Drive / Superstition Boulevard intersection during the AM and PM multi-family peak hours. At the Apache Trail / Idaho Road intersection, with the seasonal factor of 1.35 applied, site traffic is expected to add 0.2 and 0.5 seconds of delay to the overall intersection during the AM and PM multi-family peak hours, respectively.

### *SITE ACCESS*

A full access driveway is proposed on Apache Trail. A secondary driveway is proposed on Plaza Drive north of the existing RV Resort driveway and will be limited to a southbound left-in and westbound right-out only. The driveways will be controlled by a stop sign. Both Plaza Drive and Apache Trail are low volume roadways with a projected daily traffic volume less than 3,500 vpd on Plaza Drive and less than 5,400 vpd on Apache Trail. The posted speed limit on Apache Trail is 15 mph. A speed limit sign of 15 mph is provided on Plaza Drive for the existing Lost Dutchman RV Resort. As part of the proposed development, half-street improvements will be provided on Apache Trail adjacent to the property. Half-street improvements will also be provided on Plaza Drive, which will include the provision of angled on-street parking in the northbound direction.

# INTRODUCTION

A traffic impact analysis is required during the development review process to assess the impacts of the proposed project on the surrounding transportation system. EPS Group has been retained to prepare the traffic impact analysis for the proposed multifamily project.

The development is proposed east of Plaza Drive between Superstition Boulevard and Apache Trail in Apache Junction, Arizona. The development is proposed with three-story buildings primarily consisting of one and two-bedroom units with a total of 336 dwelling units. The primary access is proposed on Apache Trail. A secondary access is proposed on Plaza Drive north of the existing RV Resort driveway. Both entrances will be gate controlled. **Figure 1** provides a location map, and an aerial map is provided in **Figure 2**.

## SCOPE OF STUDY

The traffic impact analysis was prepared in accordance with the requirements of the City of Apache Junction. The proposed development generates more than 100 peak hour trips. The analysis study years include existing conditions and horizon years 2026 and 2031. The objectives of the study are the following:

- Document and evaluate existing traffic conditions
- Estimate and evaluate future non-site 2026 and 2031 traffic conditions
- Estimate new traffic generated by the proposed development and assign new trips to street system
- Evaluate operation of adjacent streets and intersections with the proposed development
- Determine the need for modified traffic control and auxiliary lanes at the study intersections
- Review driveway design, spacing, and on-site circulation

## STUDY INTERSECTIONS

The following intersections are included in the study area:

- Plaza Drive & Superstition Boulevard
- Plaza Drive & Existing Driveway
- Plaza Drive & Site Access A
- Idaho Road & Apache Trail
- Apache Trail/Phelps Drive & Old West Highway
- Apache Trail & Site Access B

# EXISTING CONDITIONS

## SURROUNDING LAND USE

The proposed site is currently vacant. The existing Lost Dutchman RV Resort is on the west side of Plaza Drive opposite the site and currently exclusively uses Plaza Drive for resident and guest entry/exit and does not use their driveway at Superstition Boulevard. Retail uses and a public park border the site to the south. Horizon Health and Wellness borders the site to the north along with a United States Postal Service (USPS) office.

## DESCRIPTION OF EXISTING TRANSPORTATION SYSTEM

The existing roadway geometry and intersection control is depicted in **Figure 3**. Access to the proposed development is provided on existing Plaza Drive and Apache Trail.

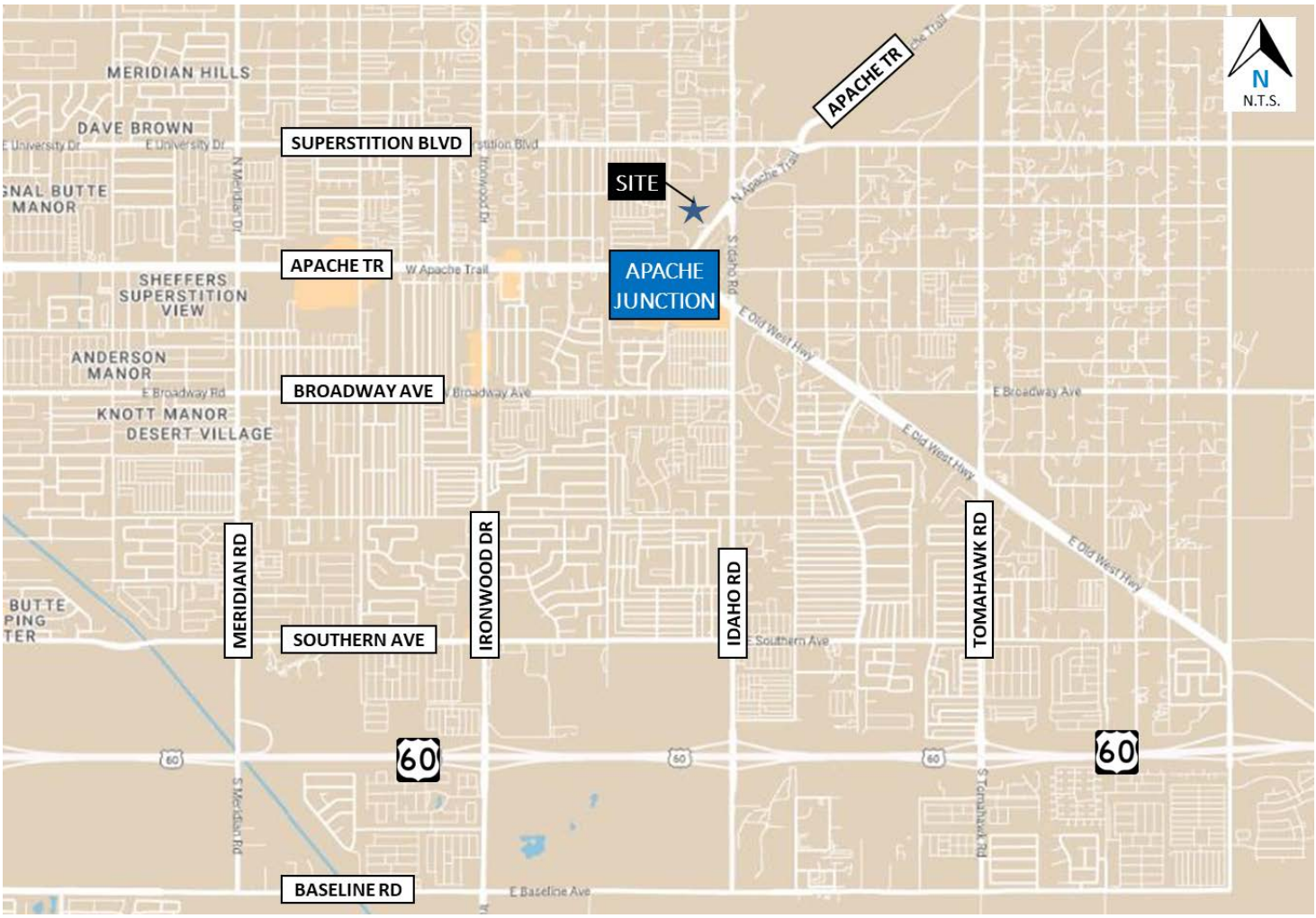


**Figure 1: Location Map**

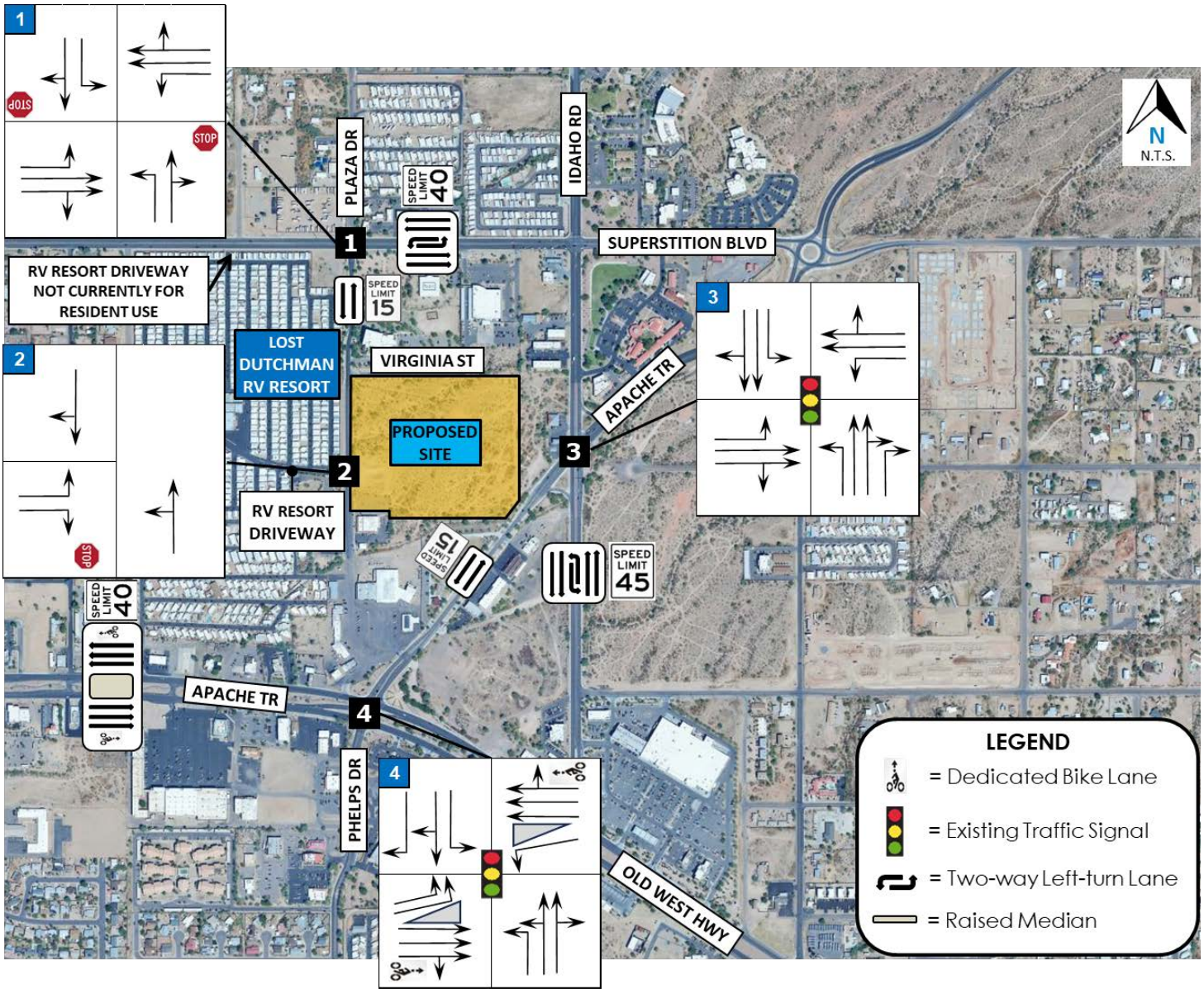


**Figure 2: Aerial Map**

### *STUDY INTERSECTIONS*

The existing intersection lane configuration and traffic control is depicted in **Figure 3**, and the traffic control is also summarized in **Table 1**.

**Table 1: Existing Intersection Traffic Control**

| Intersection | Traffic Control |
|---|---|
| 1. Plaza Drive & Superstition Boulevard | Minor Street Stop Control (NB/SB) |
| 2. Plaza Drive & Existing RV Resort Driveway | Minor Street Stop Control (EB) |
| 3. Idaho Road & Apache Trail | Traffic Signal |
| 4. Apache Trail/Phelps Drive & Old West Highway | Traffic Signal |

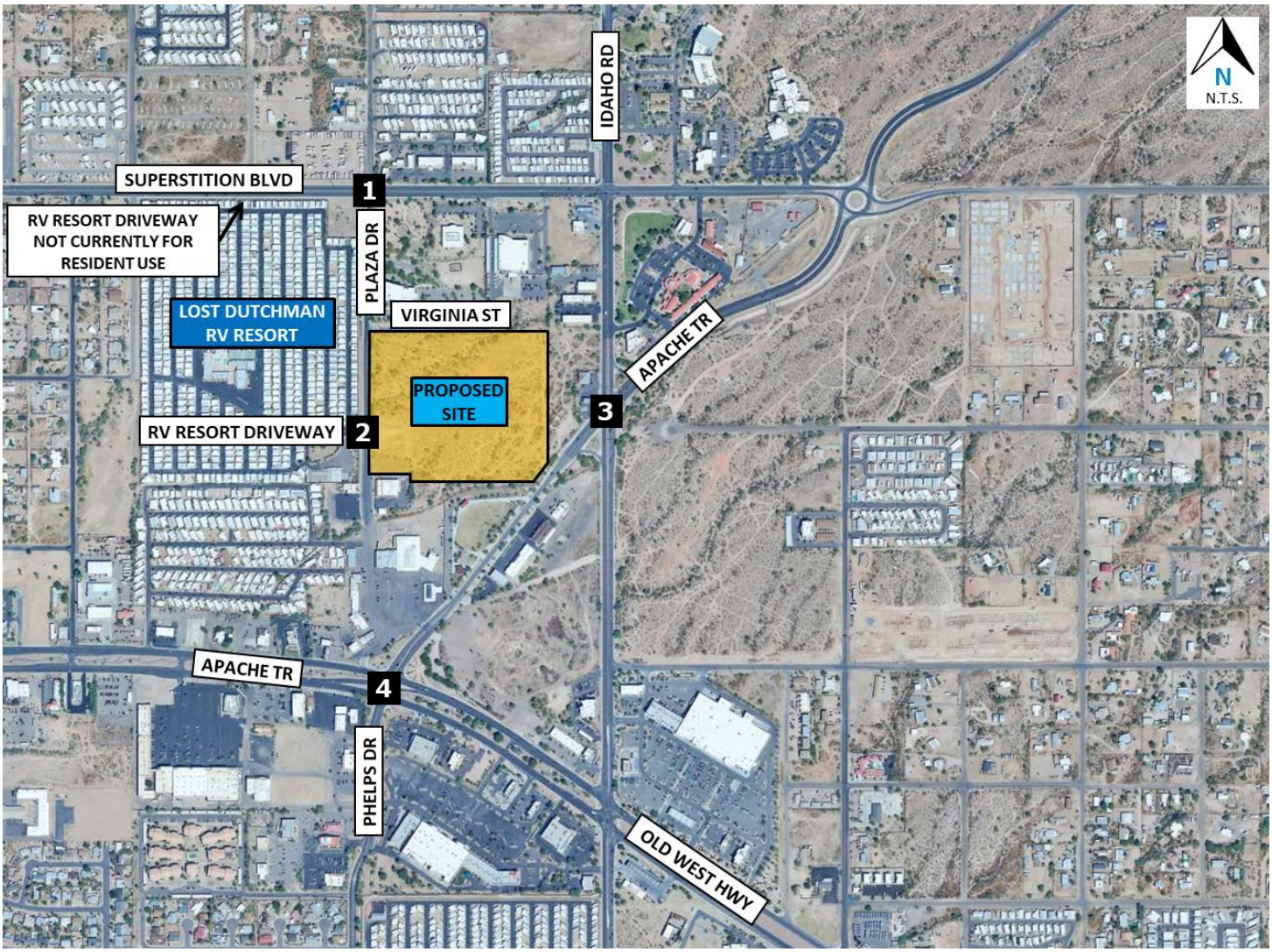


**Figure 3: Existing Lane Configuration and Traffic Control**

***ROADWAYS***

**Plaza Drive**

Plaza Drive is a local roadway with one lane in each direction providing access to the Lost Dutchman RV Resort and a commercial area south of the site. The posted speed limit is 15 mph near the site.

Plaza Drive right-of-way (ROW) terminates and transitions into the East Valley Shopping Center plaza private property. Traffic volumes were not collected in this area since it is not within the ROW, and therefore not intended for local traffic use through the shopping center parking area for access to Apache Trail. However, in discussions with neighboring owners and the City, the parking area does experience through traffic other than retail shoppers, including the Lost Dutchman RV park and Skyhaven Estates RV park. The Skyhaven Estates RV park has a secondary entrance into the shopping center property. The applicant has designed the Plaza Drive entrance to avoid movements that would encourage southbound traffic on Plaza Drive.

**Apache Trail**

Apache Trail runs east/west before heading northeast at Phelps Drive and towards the site continuing onto the lakes and recreation areas. Near the site, Apache Trail is two lanes with one in each direction and flares out at the signalized intersections at Idaho Road and Old West Highway. Angled parking is provided on Apache Trail Adjacent to the public park south of the site. The posted speed limit is 15 mph adjacent to the site.

## EXISTING TRAFFIC VOLUMES

Segment counts in each direction were collected on Thursday September 12, 2024 for 24 hours in 15-minute intervals on at the following locations:

- Plaza Drive south of Superstition Boulevard
- Idaho Road south of Superstition Boulevard
- Apache Trail southwest of Idaho Road

Turning movement traffic counts were also obtained on Thursday September 12, 2024 from 7:00 AM to 9:00 AM and from 4:00 PM to 6:00 PM at the following study intersections:

| | |
|---|---|
| 1. | Plaza Drive & Superstition Boulevard |
| 2. | Plaza Drive & Existing Driveway |
| 3. | Idaho Road & Apache Trail |
| 4. | Apache Trail/Phelps Drive & Old West Highway |

### *SEASONAL FACTOR*

The City of Apache Junction annually collects traffic volumes in February or March and is available to the public. Additionally, both the Arizona Department of Transportation (ADOT) and Maricopa Association of Governments (MAG) regularly collect and compile traffic data on many roadways within their boundaries. At the applicant's request, this report has been revised to compare all recent historical traffic volumes near the proposed site from these agencies and compare them to the counts collected in September 2024 as part of this study.

There were several available counts recorded near the proposed site during both the higher traffic winter months and lower traffic summer months. Based on the evaluation of the relevant count data, an approximate 32% difference was observed between the peak and non-peak seasons. To provide a conservative evaluation, a 35% growth factor was utilized. Therefore, in addition to the typical annual background growth rate, a seasonal factor of 1.35 was applied to the existing traffic volumes collected in September for use in this analysis.

**Figure 4** depicts the existing weekday traffic counts collected in September 2024, and **Figure 5** depicts the adjusted existing traffic counts with a 1.35 seasonal variation factor applied. The existing traffic counts are provided in **Appendix B** to this report. The seasonal factor calculation is included in **Appendix C**.

### *PEAK HOUR AND ANALYSIS TIME PERIODS*

Weekday turning movement counts were collected from 7:00 AM to 9:00 AM and from 4:00 PM to 6:00 PM to correspond with the typical peak hours of a proposed multi-family residential development. The Institute of Transportation Engineers' (ITE) *Trip Generation Manual* provides data for multi-family uses (Land Use Code 220) for weekday peak hour periods occurring between 7:00 and 9:00 AM and 4:00 and 6:00 PM as these are the typical peak periods for the land use.

Although the morning and evening peak hour periods are studied in the analysis, the 24-hour roadway segment traffic volumes collected for this analysis reveal that the study intersections experience the most traffic volumes during the late morning and early afternoon with the peak hour generally occurring at 12:00 PM. The City's annual traffic volumes also reveal the midday peak hour, which may largely be attributed to the significant number of 55+ age restricted RV parks in the area not following the typical commuting patterns of non-age restricted multi-family residential uses. Thus, the peak traffic of the proposed development will not correspond with the existing peak hour traffic of the study area.

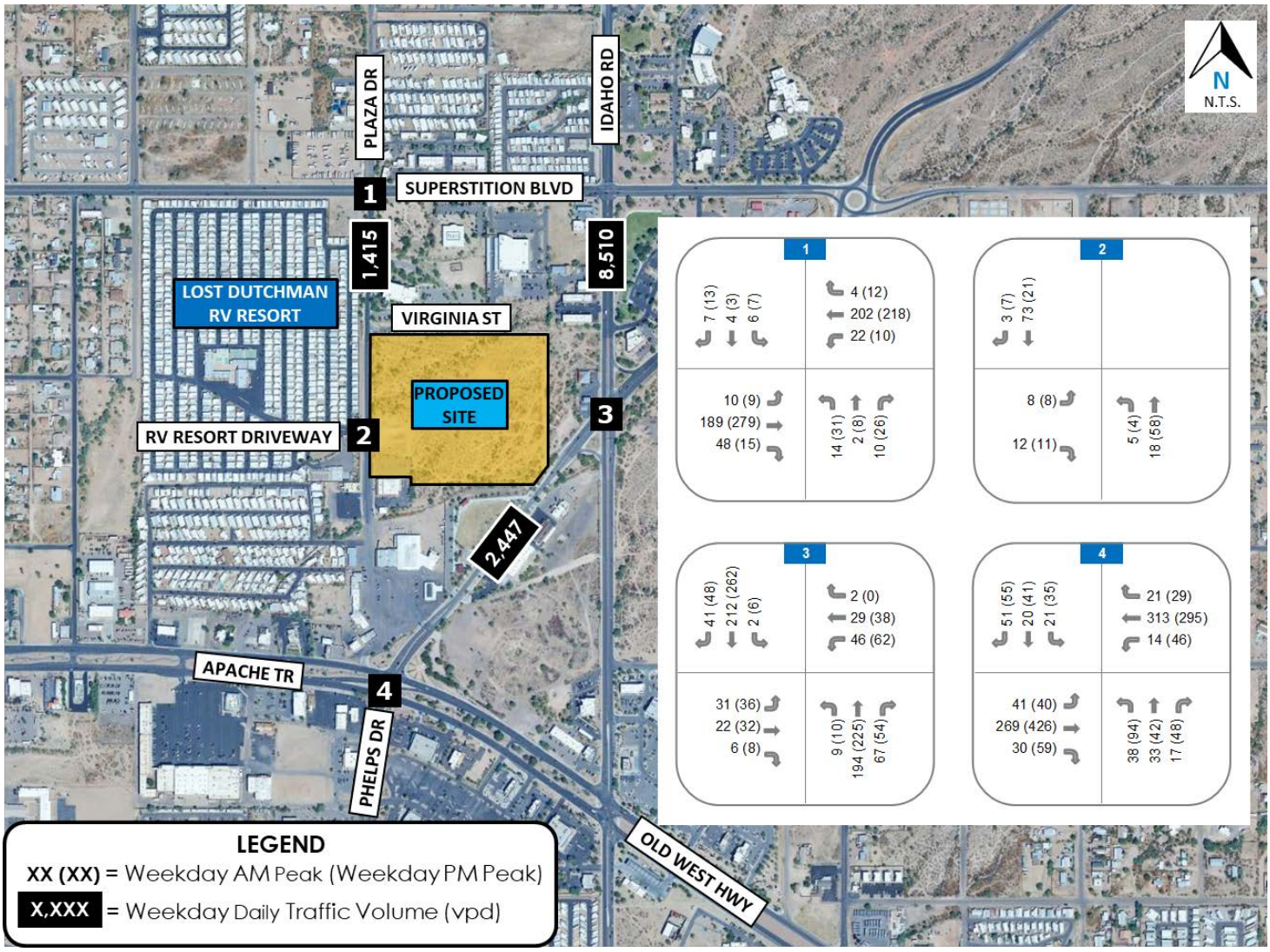


**Figure 4: Existing Weekday Traffic Volumes (September 2024)**

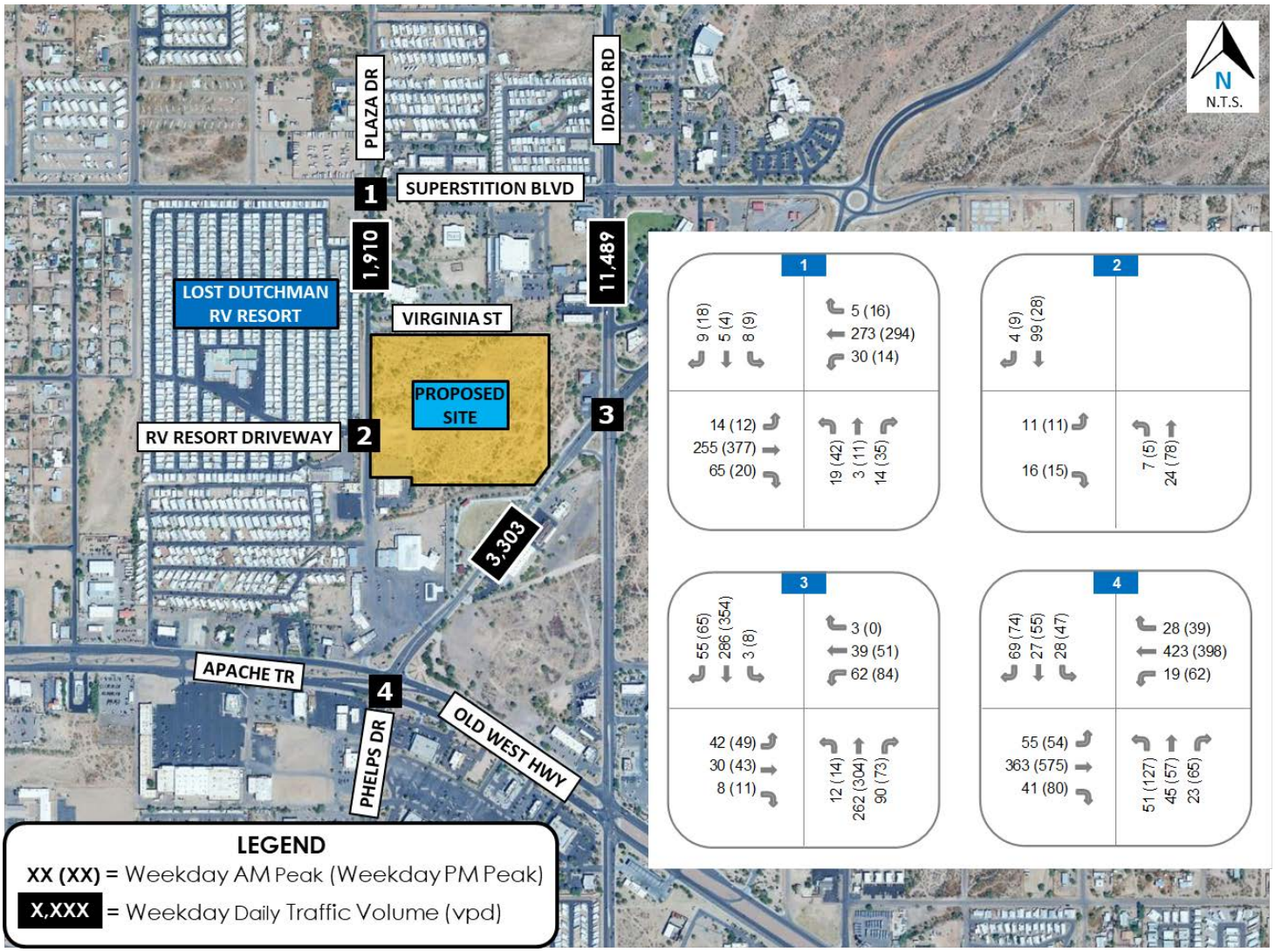


**Figure 5: Existing Weekday Traffic Volumes (adjusted for seasonal variation with a 1.35 factor applied)**

## EXISTING LEVEL-OF-SERVICE ANALYSIS

The ability of a transportation system to transmit the transportation demand is characterized as its level-of-service (LOS). Level-of-service is a rating system from "A", representing the best operation with the least delay, to "F", representing the worst operation with the greatest delay. The appropriate reference for level-of-service operation is the *Highway Capacity Manual*, 7$^{th}$ *Edition* published by the Transportation Research Board in 2022.

This manual considers the average delay per vehicle as the measure to determine the level-of-service for both signalized and unsignalized intersections. For signalized intersections and for multi-way stop intersections, the delay and level-of-service are calculated for the intersection, each approach, and each turning movement. For unsignalized intersections the level-of-service is defined for each minor movement for two-way stop controls, and is not defined for the major street approaches or for the entire intersection **Figure 6** provides a diagram and **Table 2** lists the level-of-service criteria for both signalized and unsignalized intersections as stated in the *Highway Capacity Manual*.

**Figure 6: Level-of-Service Criteria for Intersections**

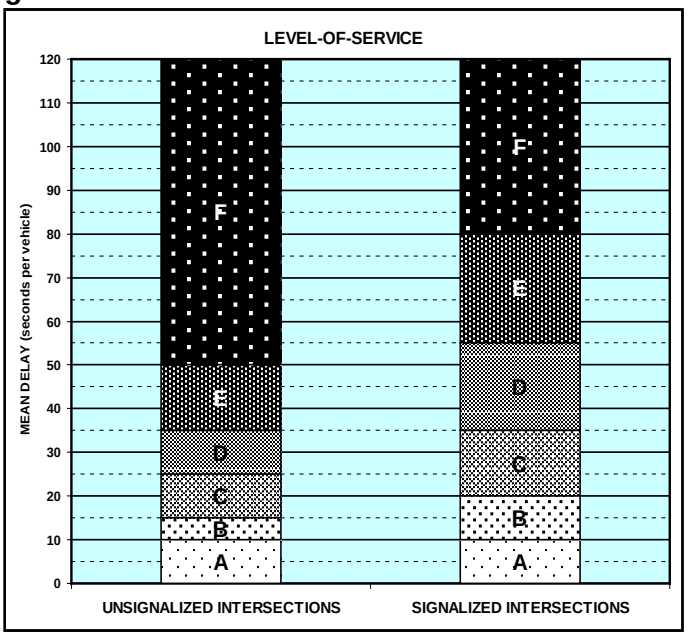


**Table 2: Level-of-Service Criteria for Intersections**

| | Average Delay (seconds per vehicle) | |
|---|---|---|
| Level-of-Service | Unsignalized | Signalized |
| A | ≤ 10 | ≤ 10 |
| B | > 10 to 15 | > 10 to 20 |
| C | > 15 to 25 | > 20 to 35 |
| D | > 25 to 35 | > 35 to 55 |
| E | > 35 to 50 | > 55 to 80 |
| F | > 50 | > 80 |

Level-of-service (LOS) analyses were prepared for the AM and PM peak hours for the study intersections utilizing Synchro software. The analysis worksheets are included in **Appendix D**. A summary of the level-of-service analysis for the existing conditions is provided in **Table 3**. The study intersections operate at acceptable levels of service with existing conditions.

## Table 3: Existing Level-of-Service Analysis

| Intersection | Traffic Control | Movement/ Approach | Existing Conditions | | | |
|---|---|---|---|---|---|---|
| | | | AM Peak Hour | | PM Peak Hour | |
| | | | Average Delay (sec/veh) | LOS | Average Delay (sec/veh) | LOS |
| 1 Plaza Dr & Superstition Blvd | Minor Street Stop Control (NB/SB) | | | | | |
| | | EB Left | 7.9 | A | 8.0 | A |
| | | WB Left | 8.1 | A | 8.2 | A |
| | | NB Left | 14.8 | B | 17.1 | C |
| | | NB Thru/Right | 10.5 | B | 11.9 | B |
| | | SB Left | 14.1 | B | 15.6 | C |
| | | SB Thru/Right | 11.8 | B | 10.9 | B |
| 2 Plaza Dr & Existing RV Resort Driveway | Minor Street Stop Control (EB) | | | | | |
| | | *EB Approach* | *9.2* | *A* | *8.9* | *A* |
| | | NB Left | 7.4 | A | 7.3 | A |
| 3 Idaho Rd & Apache Tr | Traffic Signal | | | | | |
| | | EB Left | 8.2 | A | 32.8 | C |
| | | EB Thru | 7.8 | A | 30.9 | C |
| | | EB Right | 7.8 | A | 31.0 | C |
| | | *EB Approach* | *8.0* | *A* | *31.9* | *C* |
| | | WB Left | 8.3 | A | 34.6 | C |
| | | WB Right | 7.8 | A | 30.7 | C |
| | | WB Right | 7.8 | A | 0.0 | A |
| | | *WB Approach* | *8.1* | *A* | *33.1* | *C* |
| | | NB Left | 7.0 | A | 3.8 | A |
| | | NB Thru | 6.1 | A | 3.2 | A |
| | | NB Right | 6.1 | A | 3.1 | A |
| | | *NB Approach* | *6.2* | *A* | *3.2* | *A* |
| | | SB Left | 6.5 | A | 3.4 | A |
| | | SB Thru | 6.6 | A | 3.5 | A |
| | | SB Right | 6.7 | A | 3.5 | A |
| | | *SB Approach* | *6.6* | *A* | *3.5* | *A* |
| | | INTERSECTION | 6.7 | A | 9.9 | *A* |
| 4 Apache Tr/Phelps Rd & Old West Hwy/Apache Tr | Traffic Signal | | | | | |
| | | EB Left | 38.8 | D | 42.0 | D |
| | | EB Thru | 30.4 | C | 32.6 | C |
| | | EB Right | 31.0 | C | 33.8 | C |
| | | *EB Approach* | *31.6* | *C* | *33.7* | *C* |
| | | WB Left | 48.1 | D | 54.1 | D |
| | | WB Right | 32.9 | C | 30.0 | C |
| | | WB Right | 34.0 | C | 30.4 | C |
| | | *WB Approach* | *33.9* | *C* | *33.1* | *C* |
| | | NB Left | 12.4 | B | 15.5 | B |
| | | NB Thru | 13.9 | B | 18.1 | B |
| | | NB Right | 14.0 | B | 18.3 | B |
| | | *NB Approach* | *13.5* | *B* | *17.3* | *B* |
| | | SB Left | 12.7 | B | 15.6 | B |
| | | SB Thru | 14.4 | B | 18.3 | B |
| | | SB Right | 14.4 | B | 18.5 | B |
| | | *SB Approach* | *14.0* | *B* | *17.7* | *B* |
| | | INTERSECTION | 28.6 | C | 29.1 | *C* |

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# PROPOSED DEVELOPMENT

## SITE LOCATION, LAND USE, AND ACCESS

The multifamily residential development is proposed east of Plaza Drive between Superstition Boulevard and Apache Trail in Apache Junction, Arizona. The development is proposed with three-story buildings primarily consisting of one and two-bedroom units with a total of 336 dwelling units. The primary access is proposed on Apache Trail. A secondary access is proposed on Plaza Drive north of the existing RV Resort driveway and will be limited to a southbound left-in and westbound right-out only. Both entrances will be gate controlled. **Figure 7** depicts the site plan. The detailed site plan is included in **Appendix A**.

## TRIP GENERATION

The trip generation for project was estimated utilizing the Institute of Transportation Engineers' (ITE) *Trip Generation Manual, 11th Edition*. The manual contains data collected by various transportation professionals for a wide range of different land uses. The data summarized in the manual include average rates and equations that have been established correlating the relationship between an independent variable that describes the development size and generated trips for each categorized land use. The manual provides information for daily and peak hour trips.

**Table 4** summarizes the trip generation for the proposed development, and **Appendix E** provides the generated trip calculation.

**Table 4: Trip Generation**

| DESCRIPTION OF LAND USE | | | | GENERATED TRIPS | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | DAILY | AM PEAK HOUR | | | PM PEAK HOUR | | |
| LAND USE | ITE LUC | SIZE | | TOTAL | ENTER | EXIT | TOTAL | ENTER | EXIT | TOTAL |
| Multifamily Housing | 220 | 336 | DU | 2,265 | 32 | 102 | 134 | 108 | 63 | 171 |

Full build-out of the proposed development is anticipated to generate 2,265 weekday daily trips (entering/exiting) with 134 trips (entering/exiting) during the AM peak hour and 171 trips (entering/exiting) during the PM peak hour.

## TRIP GENERATION COMPARISON

The existing B-3 zoning allows commercial uses. A commercial building size of 202,000 square feet (25% FAR) was utilized to compare potential trips generated with the existing zoning to the proposed development.

**Table 5** summarizes the trip generation comparison to a shopping center use. When compared to a shopping center use allowed under B-3 zoning, the proposed multi-family development generates 5,211 fewer daily trips, 36 fewer AM peak hour trips, and 516 fewer PM peak hour trips. When compared to an office use, the proposed multi-family development generates 126 more daily trips, 172 fewer AM peak hour trips and 127 fewer evening peak hour trips.

**Table 5: Trip Generation Comparison – Shopping Center**

| DESCRIPTION OF LAND USE | | | | VEHICLE GENERATED TRIPS | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Daily | AM Peak Hour | | | PM Peak Hour | | |
| Land Use | ITE LUC | SIZE | | Total | Enter | Exit | Total | Enter | Exit | Total |
| Multifamily Housing | 220 | 336 | DU | 2,265 | 32 | 102 | 134 | 108 | 63 | 171 |
| Shopping Center | 820 | 202,000 | SF | 7,476 | 105 | 65 | 170 | 330 | 357 | 687 |
| | | | ***Difference*** | ***-5,211*** | ***-73*** | ***37*** | ***-36*** | ***-222*** | ***-294*** | ***-516*** |


**Figure 7: Site Plan**

## TRIP DISTRIBUTION AND ASSIGNMENT

The generated trips for the proposed development have been distributed and assigned to the surrounding street system to estimate future traffic from the development. The distribution was based on existing traffic patterns and employment centers. The distribution percentages utilized in this analysis depicted in **Figure 8**. Utilizing the trip generation and distribution, new trips from the proposed development were assigned to the study intersections and are depicted in **Figure 9**.

# FUTURE TRAFFIC

An additional annual 5% growth rate was used to estimate the growth of ambient background traffic in the horizon years. The peak hour background without site traffic volumes are depicted in **Figure 10** for the 2026 horizon year and in **Figure 11** for the 2031 horizon year. Full build-out of the site was assumed for opening year in this analysis, which is a conservative estimate. The total weekday traffic volumes with the site are depicted in **Figure 12** and **Figure 13** for horizon years 2026 and 2031 respectively.

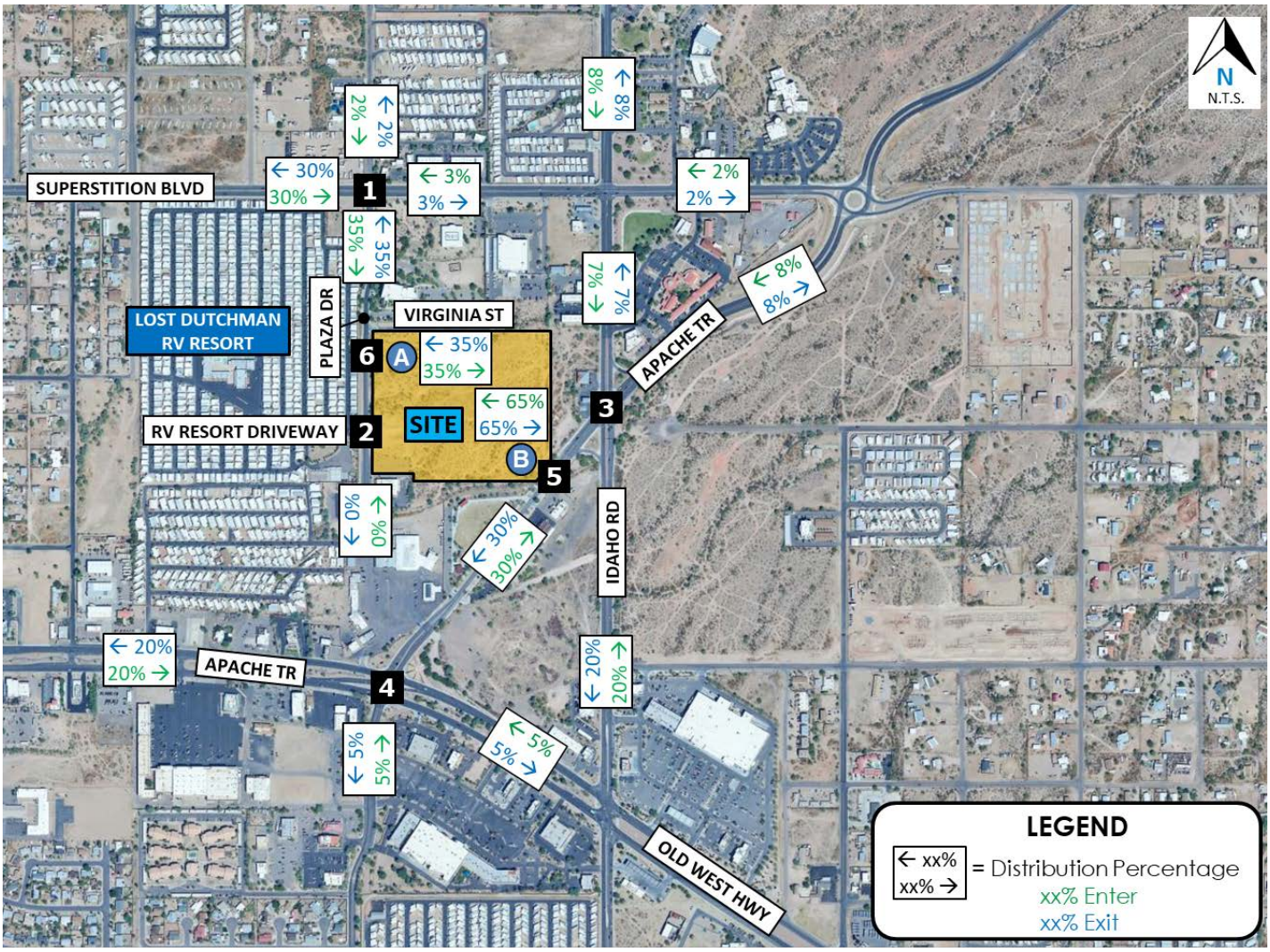



**Figure 8: Multifamily Residential Trip Distribution**

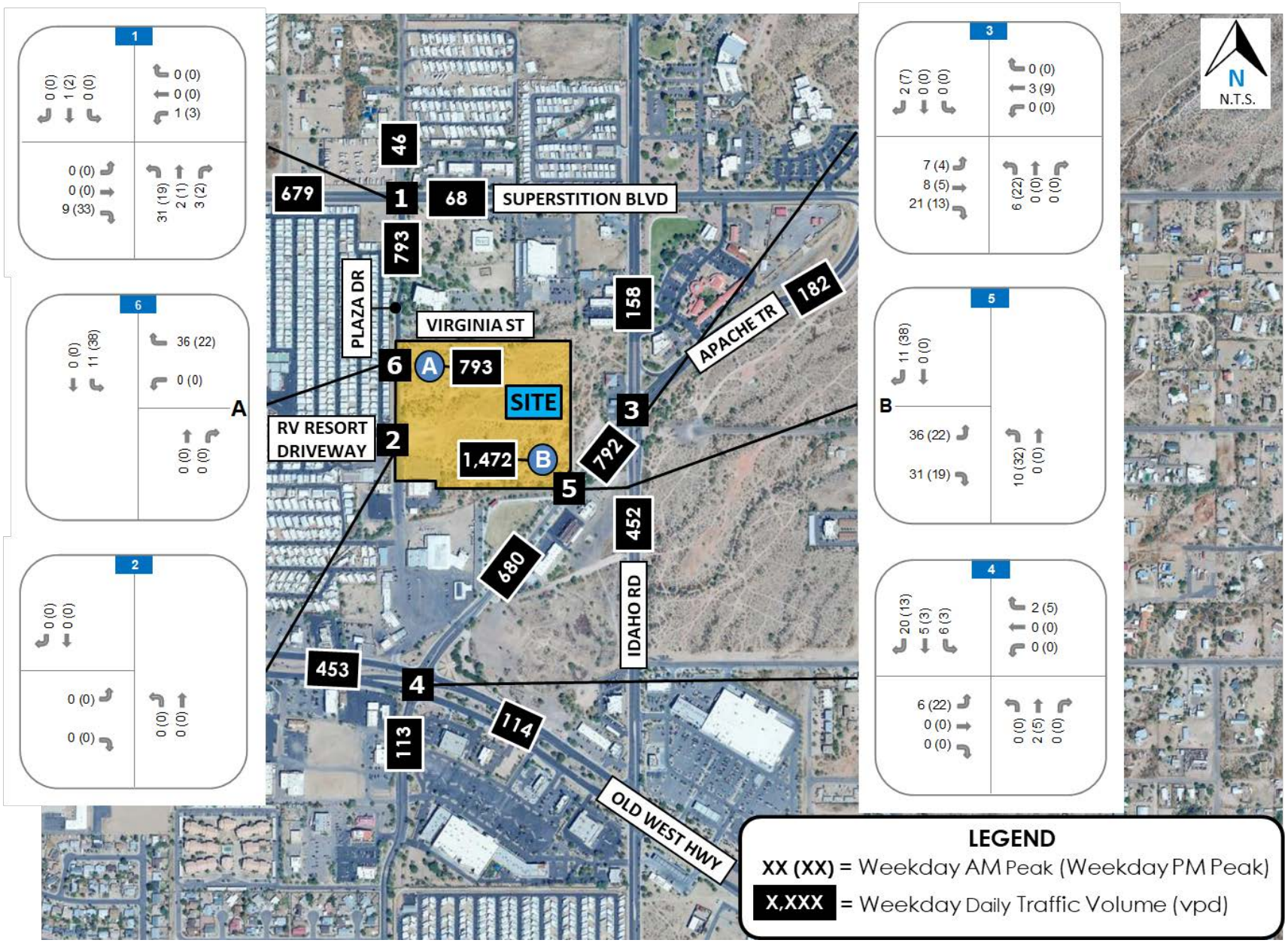



**Figure 9: Site Weekday Traffic Volumes**

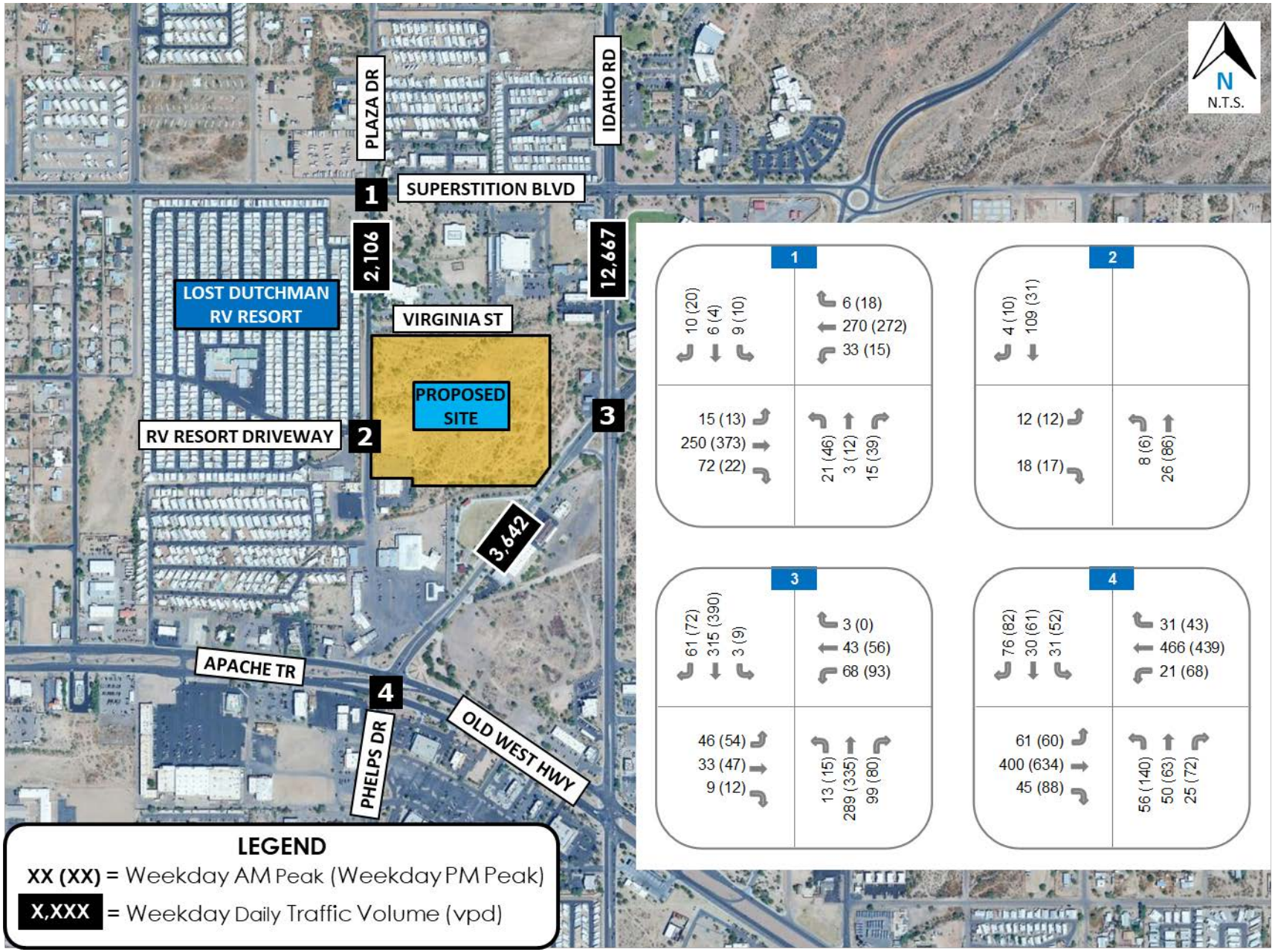



**Figure 10: 2026 Background without Site Weekday Traffic Volumes**

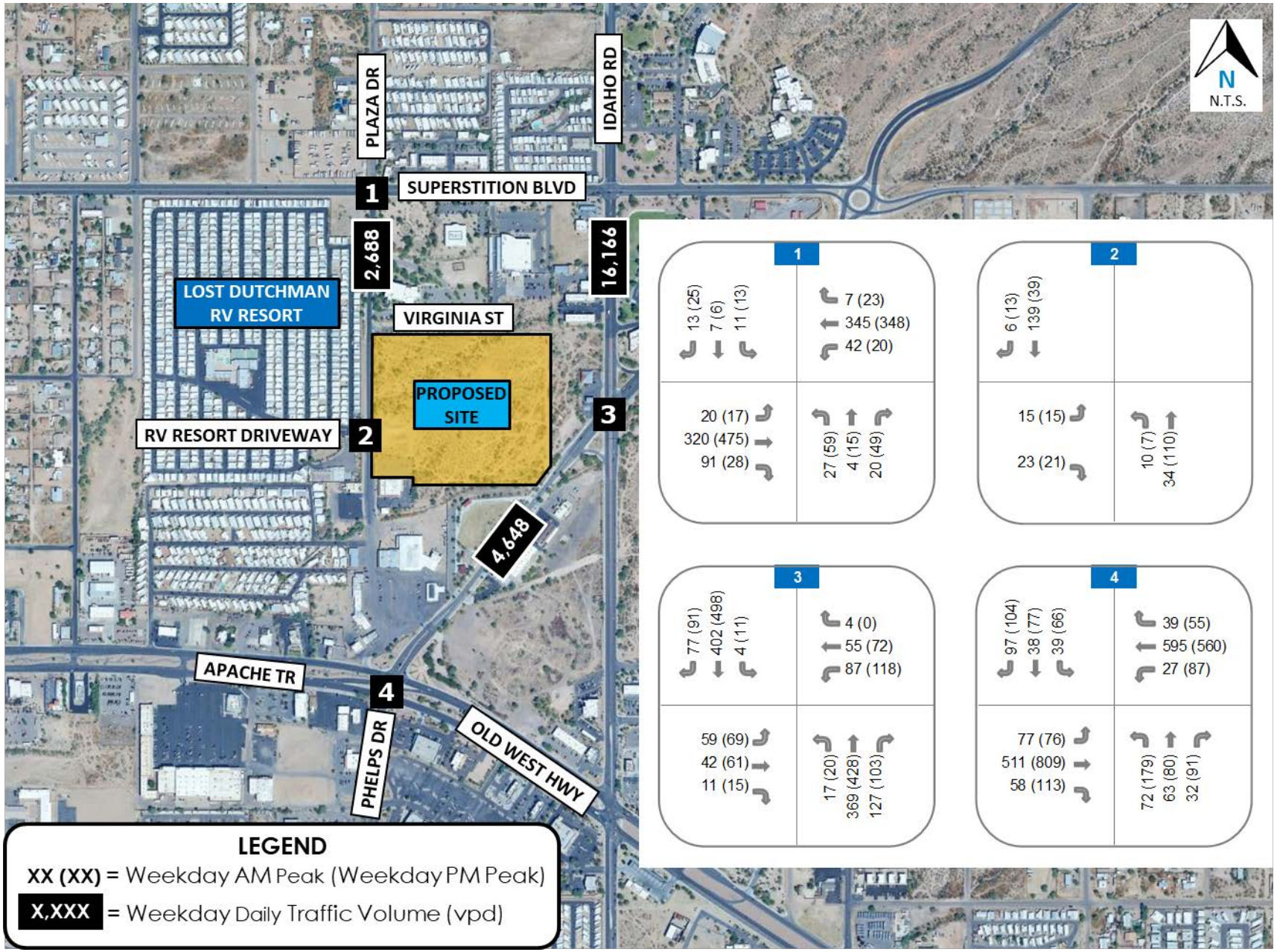



**Figure 11: 2031 Background without Site Weekday Traffic Volumes**

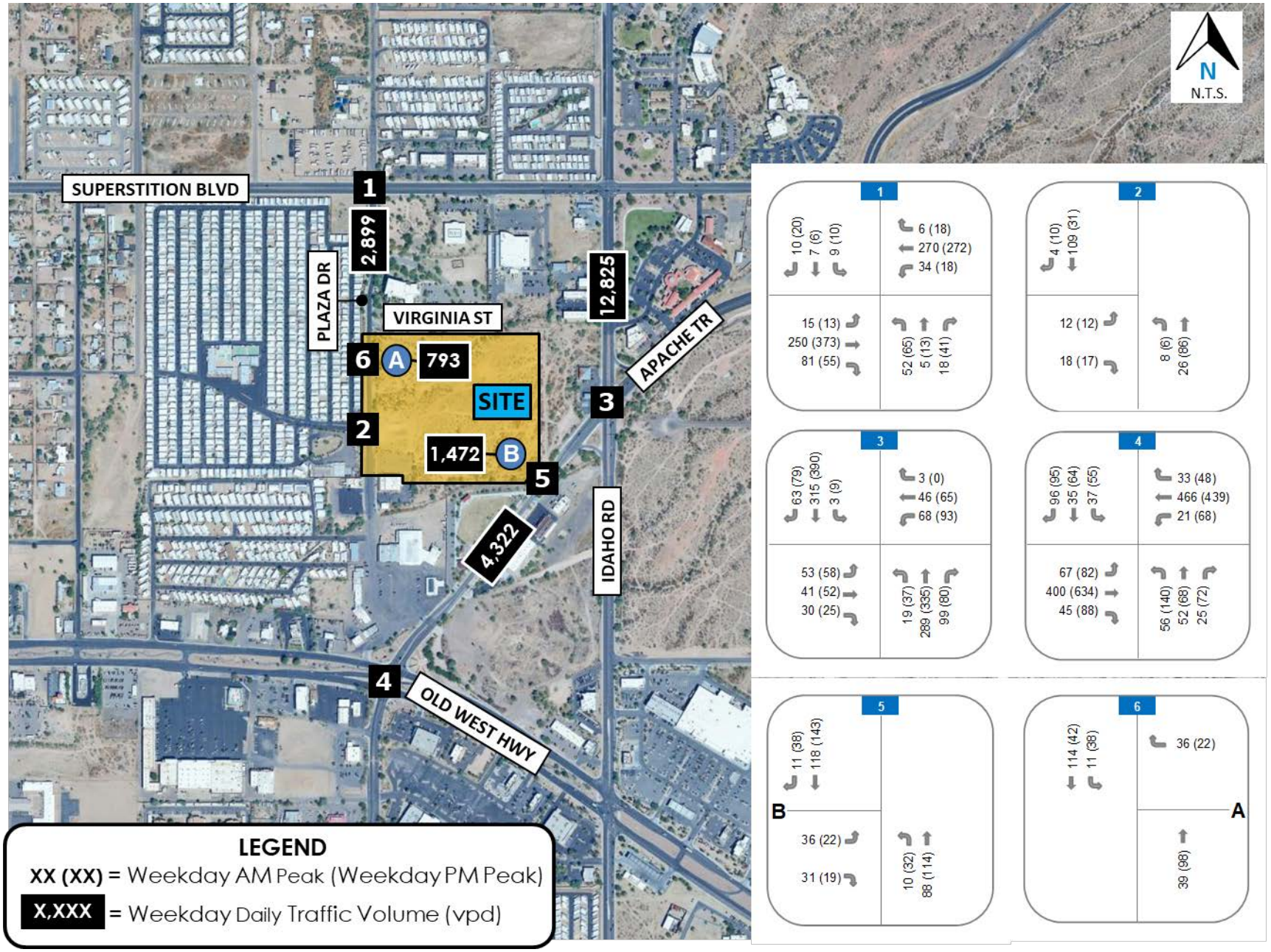



**Figure 12: 2026 Total (Background with Site) Traffic Volumes**

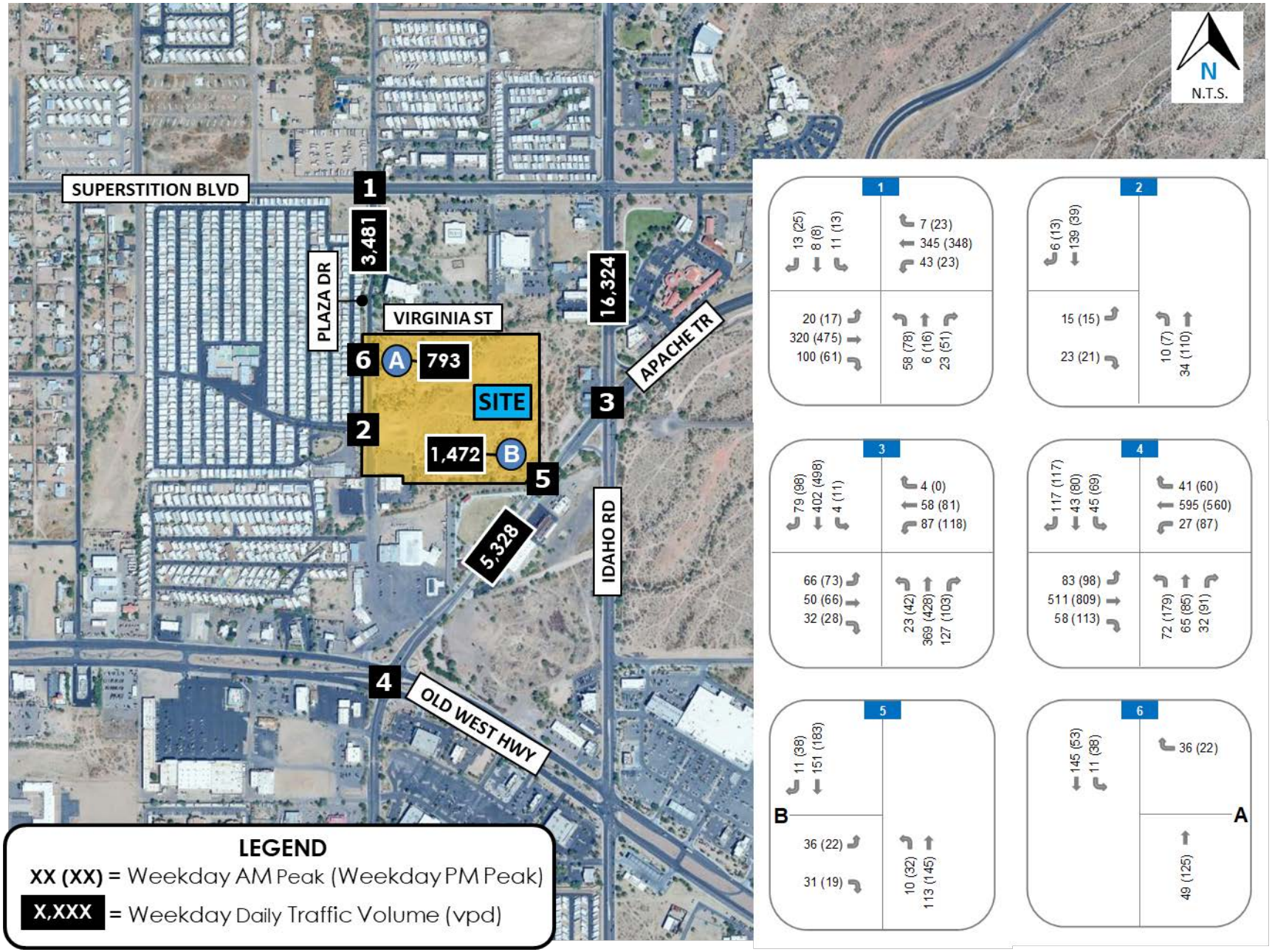



**Figure 13: 2031 Total (Background with Site) Traffic Volumes**

# FUTURE TRAFFIC ANALYSES

## FUTURE LEVEL-OF-SERVICE

The level-of-service for the future 2026 and 2031 horizon years was analyzed for the study intersections. Synchro software was utilized to calculate the average delay and level-of-service. The input and output for these analyses are provided in **Appendix F** and **Appendix G**. **Table 6** and **Table 7** summarize the LOS for horizon years 2026 and 2031 respectively.

With trips from the proposed development, the study intersections will continue to operate at acceptable levels of service in both horizon years 2026 and 2031 with the existing lane configuration and traffic control.

The two closest intersections to the proposed development's driveways are Plaza Drive/Superstition Drive and Apache Trail/Idaho Road. With the seasonal factor of 1.35 applied, the added site traffic is projected to add three seconds of delay to the northbound approach of the Plaza Drive/Superstition Boulevard intersection during the AM multi-family and PM multi-family peak hours. At the Apache Trail/Idaho Road intersection and with the seasonal factor of 1.35 applied, site traffic is expected to add 0.1 and 0.3 seconds of delay to the overall LOS during the AM multi-family peak hour and PM multi-family peak hour respectively.

# TRANSPORTATION IMPROVEMENTS

As part of the proposed development, half-street improvements will be provided on Apache Trail adjacent to the property. Half-street improvements will also be provided on Plaza Drive, which will include the provision of angled on-street parking in the northbound direction.

## SITE ACCESS

A full access driveway is proposed on Apache Trail. A secondary driveway is proposed on Plaza Drive north of the existing RV Resort driveway and will be limited to a southbound left-in and westbound right-out only. The driveways will be controlled by a stop sign. Both Plaza Drive and Apache Trail are low volume roadways with a projected daily traffic volume less than 3,500 vpd on Plaza Drive and less than 5,400 vpd on Apache Trail. The posted speed limit on Apache Trail is 15 mph. A speed limit sign of 15 mph is provided on Plaza Drive for the existing Lost Dutchman RV Resort.

## AUXILIARY LANES

When warranted, turn lanes permit separation of conflicting traffic movements and remove the slower turning traffic from the through traffic, thus improving capacity and reducing rear-end crashes. Determining the need for turn lanes is a key element of traffic impact studies.

### *RIGHT-TURN DECELERATION LANE*

The *2024 Pinal County Subdivision & Infrastructure Design Manual* states that right-turn deceleration lanes are required when both of the following factors are determined to apply:

A. The 85$^{th}$ percentile traffic speed on the street is at least 35 miles per hour or 45 miles per hour for a two lane (one lane each direction) roadway.
B. At least 20 vehicles will be making right turns into the access way and 100 vehicle directional traffic during a one-hour period.

The posted speed limit on Apache Trail is 15 mph, and the southbound right-turn volume at the site driveway is projected to be 11 vph during the AM peak hour and 38 vph during the PM peak hour. The directional DHV in the southbound direction is 151 vph during the AM peak hour and 183 vph during the PM peak hour. Due to the posted speed of 15 mph, a right-turn deceleration lane is not warranted at the site access on Apache Trail.

The site driveway on Plaza Drive is proposed as southbound left-in and westbound right-out only.

***LEFT-TURN LANE***

The posted speed limit on Apache Trail is 15 mph, and the northbound left-turn volume at the site driveway is projected to be 10 vph during the AM peak hour and 32 vph during the PM peak hour. The directional DHV in the northbound direction is 113 vph during the AM peak hour and 145 vph during the PM peak hour. Due to the posted speed of 15 mph, a separate left-turn lane is not warranted at the site driveway.

The posted speed limit on Plaza Drive is 15 mph, and the southbound left-turn volume at the site driveway is projected to be 11 vph during the AM peak hour and 38 vph during the PM peak hour. The directional DHV in the southbound direction is 145 vph during the AM peak hour and 53 vph during the PM peak hour. Due to the posted speed of 15 mph, a separate left-turn lane is not warranted at the site driveway.

## Table 6: Level-of-Service Summary – Horizon Year 2026

| Intersection | Traffic Control | Movement/ Approach | 2026 Background | | | | 2026 Background + Site Full Build-out | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | AM Peak Hour | | PM Peak Hour | | AM Peak Hour | | PM Peak Hour | |
| | | | Delay (Sec/Veh) | LOS | Delay (Sec/Veh) | LOS | Delay (Sec/Veh) | LOS | Delay (Sec/Veh) | LOS |
| 1 | | | | | | | | | | |
| Plaza Dr & Superstition Blvd | Minor Street Stop Control (NB/SB) | EB Left | 7.9 | A | 7.9 | A | 7.9 | A | 7.9 | A |
| | | WB Left | 8.1 | A | 8.2 | A | 8.1 | A | 8.4 | A |
| | | NB Left | 15.0 | B | 17.1 | C | 16.2 | C | 18.9 | C |
| | | NB Thru/Right | 10.5 | B | 11.8 | B | 11.0 | B | 12.2 | B |
| | | ***NB Approach*** | ***12.9*** | ***B*** | ***14.3*** | ***B*** | ***14.6*** | ***B*** | ***15.9*** | ***C*** |
| | | SB Left | 14.2 | B | 15.3 | C | 14.3 | B | 15.6 | C |
| | | SB Thru/Right | 12.0 | B | 10.6 | B | 12.4 | B | 11.4 | B |
| | | ***SB Approach*** | ***12.8*** | ***B*** | ***12.0*** | ***B*** | ***13.1*** | ***B*** | ***12.6*** | ***B*** |
| 2 | | | | | | | | | | |
| Plaza Dr & RV Resort Driveway | Minor Street Stop Control (EB) | ***EB Approach*** | ***9.2*** | ***A*** | ***9.0*** | ***A*** | ***9.2*** | ***A*** | ***9.0*** | ***A*** |
| | | NB Left | 7.5 | A | 7.3 | A | 7.5 | A | 7.3 | A |
| 3 | | | | | | | | | | |
| Idaho Rd & Apache Tr | Traffic Signal | EB Left | 8.4 | A | 32.8 | C | 8.5 | A | 32.8 | C |
| | | EB Thru | 8.0 | A | 30.6 | C | 8.1 | A | 30.6 | C |
| | | EB Right | 8.0 | A | 30.7 | C | 8.2 | A | 30.7 | C |
| | | ***EB Approach*** | ***8.2*** | ***A*** | ***31.7*** | ***C*** | ***8.3*** | ***A*** | ***31.6*** | ***C*** |
| | | WB Left | 8.6 | A | 34.7 | C | 8.8 | A | 34.9 | C |
| | | WB Thru/Right | 8.0 | A | 30.5 | C | 8.0 | A | 30.3 | C |
| | | WB Right | 8.0 | A | 0.0 | A | 8.0 | A | 30.3 | C |
| | | ***WB Approach*** | ***8.4*** | A | ***33.1*** | C | ***8.5*** | A | ***33.0*** | C |
| | | NB Left | 7.2 | A | 4.2 | A | 7.4 | A | 4.7 | A |
| | | NB Thru/Right | 6.2 | A | 3.4 | A | 6.3 | A | 3.6 | A |
| | | NB Right | 6.2 | A | 3.3 | A | 6.3 | A | 3.5 | A |
| | | ***NB Approach*** | ***6.2*** | ***A*** | ***3.4*** | ***A*** | ***6.3*** | ***A*** | ***3.7*** | ***A*** |
| | | SB Left | 6.6 | A | 3.8 | A | 6.7 | A | 4.0 | A |
| | | SB Thru/Right | 6.7 | A | 3.8 | A | 6.8 | A | 4.1 | A |
| | | SB Right | 6.7 | A | 3.9 | A | 6.8 | A | 4.1 | A |
| | | ***SB Approach*** | ***6.7*** | ***A*** | ***3.8*** | ***A*** | ***6.8*** | ***A*** | ***4.1*** | ***A*** |
| | | **INTERSECTION** | **6.8** | **A** | **10.2** | **B** | **7.0** | **A** | **10.7** | ***B*** |
| 4 | | | | | | | | | | |
| Apache Tr/Phelps Rd & Old West Hwy/Apache Tr | Traffic Signal | EB Left | 39.7 | D | 43.5 | D | 40.0 | D | 44.0 | D |
| | | EB Thru | 30.4 | C | 32.9 | C | 30.5 | C | 33.0 | C |
| | | EB Right | 31.1 | C | 34.1 | C | 31.1 | C | 34.1 | C |
| | | ***EB Approach*** | ***31.7*** | ***C*** | ***34.1*** | ***C*** | ***31.9*** | ***C*** | ***34.5*** | ***C*** |
| | | WB Left | 48.8 | D | 54.0 | D | 49.1 | D | 54.0 | D |
| | | WB Right | 33.0 | C | 29.7 | C | 33.2 | C | 30.2 | C |
| | | WB Right | 34.1 | C | 30.1 | C | 34.3 | C | 30.7 | C |
| | | ***WB Approach*** | ***34.0*** | ***C*** | ***32.8*** | ***C*** | ***34.2*** | ***C*** | ***33.3*** | ***C*** |
| | | NB Left | 13.0 | B | 16.7 | B | 13.1 | B | 16.7 | B |
| | | NB Thru | 14.7 | B | 19.6 | B | 15.0 | B | 19.6 | B |
| | | NB Right | 14.8 | B | 19.8 | B | 15.1 | B | 19.8 | B |
| | | ***NB Approach*** | ***14.2*** | ***B*** | ***18.7*** | ***B*** | ***14.4*** | ***B*** | ***18.8*** | ***B*** |
| | | SB Left | 13.2 | B | 16.8 | B | 13.2 | B | 16.8 | B |
| | | SB Thru | 15.1 | B | 19.7 | B | 15.4 | B | 20.0 | B |
| | | SB Right | 15.1 | B | 20.0 | B | 15.4 | B | 20.2 | C |
| | | ***SB Approach*** | ***14.7*** | ***B*** | ***19.1*** | ***B*** | ***15.0*** | ***B*** | ***19.3*** | ***B*** |
| | | **INTERSECTION** | **28.9** | **C** | **28.3** | **C** | **28.7** | **C** | **29.8** | ***C*** |
| 5 | | | | | | | | | | |
| Apache Tr & Site Access B | Minor Street Stop Control (EB) | EB Left | - | | - | | 10.2 | B | 11.1 | B |
| | | EB Right | - | | - | | 9.1 | A | 9.3 | A |
| | | ***EB Approach*** | ***-*** | | ***-*** | | ***9.7*** | ***A*** | ***10.3*** | ***B*** |
| | | NB Left | - | | - | | 7.5 | A | 7.7 | A |
| 6 | | | | | | | | | | |
| Plaza Dr & Site Access A | Minor Street Stop Control (WB) | WB Right | - | | - | | 8.6 | A | 8.9 | A |
| | | SB Left | - | | - | | 7.3 | A | 7.5 | A |

## Table 7: Level-of-Service Summary – Horizon Year 2031

| Intersection | Traffic Control | Movement/ Approach | 2031 Background | | | | 2031 Background + Site Full Build-out | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | AM Peak Hour | | PM Peak Hour | | AM Peak Hour | | PM Peak Hour | |
| | | | Delay (Sec/Veh) | LOS | Delay (Sec/Veh) | LOS | Delay (Sec/Veh) | LOS | Delay (Sec/Veh) | LOS |
| 1 | | | | | | | | | | |
| Plaza Dr & Superstition Blvd | Minor Street Stop Control (NB/SB) | EB Left | 8.1 | A | 8.2 | A | 8.1 | A | 8.2 | A |
| | | WB Left | 8.4 | A | 8.6 | A | 8.4 | A | 8.7 | A |
| | | NB Left | 19.1 | C | 24.1 | C | 21.5 | C | 28.1 | D |
| | | NB Thru/Right | 11.5 | B | 13.8 | B | 12.1 | B | 14.2 | B |
| | | ***NB Approach*** | ***15.5*** | ***C*** | ***18.7*** | ***C*** | ***18.4*** | ***C*** | ***21.7*** | ***C*** |
| | | SB Left | 17.4 | C | 19.5 | C | 17.6 | C | 20.0 | C |
| | | SB Thru/Right | 13.6 | B | 12.1 | B | 14.1 | B | 13.1 | B |
| | | ***SB Approach*** | ***14.9*** | ***B*** | ***14.3*** | ***B*** | ***15.3*** | ***C*** | ***15.1*** | ***C*** |
| 2 | | | | | | | | | | |
| Plaza Dr & RV Resort Driveway | Minor Street Stop Control (EB) | ***EB Approach*** | ***9.5*** | ***A*** | ***9.1*** | ***A*** | ***9.5*** | ***A*** | ***9.1*** | ***A*** |
| | | NB Left | 7.6 | A | 7.3 | A | 7.6 | A | 7.3 | A |
| 3 | | | | | | | | | | |
| Idaho Rd & Apache Tr | Traffic Signal | EB Left | 9.3 | A | 32.6 | C | 9.4 | A | 32.6 | C |
| | | EB Thru | 8.7 | A | 29.8 | C | 8.9 | A | 29.7 | C |
| | | EB Right | 8.7 | A | 29.9 | C | 8.9 | A | 29.9 | C |
| | | ***EB Approach*** | ***9.0*** | ***A*** | ***31.2*** | ***C*** | ***9.1*** | ***A*** | ***31.0*** | ***C*** |
| | | WB Left | 9.5 | A | 35.0 | C | 9.8 | A | 35.2 | D |
| | | WB Thru/Right | 8.7 | A | 29.7 | C | 8.8 | A | 29.5 | C |
| | | WB Right | 8.7 | A | 29.7 | C | 8.8 | A | 29.5 | C |
| | | ***WB Approach*** | ***9.2*** | A | ***33.0*** | C | ***9.4*** | A | ***32.9*** | C |
| | | NB Left | 7.6 | A | 5.7 | A | 7.7 | A | 6.3 | A |
| | | NB Thru/Right | 6.2 | A | 4.3 | A | 6.2 | A | 4.5 | A |
| | | NB Right | 6.1 | A | 4.1 | A | 6.2 | A | 4.3 | A |
| | | ***NB Approach*** | ***6.2*** | ***A*** | ***4.3*** | ***A*** | ***6.3*** | ***A*** | ***4.6*** | ***A*** |
| | | SB Left | 6.8 | A | 4.8 | A | 6.8 | A | 5.1 | A |
| | | SB Thru/Right | 6.8 | A | 4.9 | A | 6.8 | A | 5.2 | A |
| | | SB Right | 6.8 | A | 4.9 | A | 6.8 | A | 5.2 | A |
| | | ***SB Approach*** | ***6.8*** | ***A*** | ***4.9*** | ***A*** | ***6.8*** | ***A*** | ***5.2*** | ***A*** |
| | | **INTERSECTION** | **7.0** | **A** | **10.8** | **B** | **7.2** | **A** | **11.3** | ***B*** |
| 4 | | | | | | | | | | |
| Apache Tr/Phelps Rd & Old West Hwy/Apache Tr | Traffic Signal | EB Left | 42.3 | D | 46.9 | D | 42.8 | D | 47.8 | D |
| | | EB Thru | 30.5 | C | 33.1 | C | 30.6 | C | 33.2 | C |
| | | EB Right | 31.2 | C | 34.4 | C | 31.2 | C | 34.5 | C |
| | | ***EB Approach*** | ***32.1*** | ***C*** | ***34.6*** | ***C*** | ***32.3*** | ***C*** | ***35.0*** | ***C*** |
| | | WB Left | 50.9 | D | 53.5 | D | 51.2 | D | 53.5 | D |
| | | WB Right | 33.1 | C | 28.0 | C | 33.3 | C | 28.4 | C |
| | | WB Right | 34.1 | C | 28.4 | C | 34.3 | C | 28.8 | C |
| | | ***WB Approach*** | ***34.2*** | ***C*** | ***31.3*** | ***C*** | ***34.4*** | ***C*** | ***31.7*** | ***C*** |
| | | NB Left | 14.8 | B | 20.6 | C | 14.9 | B | 20.6 | C |
| | | NB Thru | 16.9 | B | 24.3 | C | 17.2 | B | 24.4 | C |
| | | NB Right | 17.0 | B | 24.6 | C | 17.3 | B | 24.7 | C |
| | | ***NB Approach*** | ***16.3*** | ***B*** | ***23.3*** | ***C*** | ***16.5*** | ***B*** | ***23.3*** | ***C*** |
| | | SB Left | 15.0 | B | 21.3 | C | 15.0 | B | 21.3 | C |
| | | SB Thru | 17.4 | B | 25.2 | C | 17.7 | B | 25.5 | C |
| | | SB Right | 17.4 | B | 25.5 | C | 17.7 | B | 25.8 | C |
| | | ***SB Approach*** | ***16.9*** | ***B*** | ***24.3*** | ***C*** | ***17.1*** | ***B*** | ***24.6*** | ***C*** |
| | | **INTERSECTION** | **29.6** | **C** | **30.6** | **C** | **29.5** | **C** | **30.9** | ***C*** |
| 5 | | | | | | | | | | |
| Apache Tr & Site Access B | Minor Street Stop Control (EB) | EB Left | - | | - | | 10.7 | B | 11.8 | B |
| | | EB Right | - | | - | | 9.3 | A | 9.5 | A |
| | | ***EB Approach*** | **-** | | **-** | | ***10.1*** | ***B*** | ***10.7*** | ***B*** |
| | | NB Left | - | | - | | 7.6 | A | 7.8 | A |
| 6 | | | | | | | | | | |
| Plaza Dr & Site Access A | Minor Street Stop Control (WB) | WB Right | - | | - | | 8.7 | A | 9.0 | A |
| | | SB Left | - | | - | | 7.3 | A | 7.6 | A |

# PRINCIPAL FINDINGS AND RECOMMENDATIONS

### *TRIP GENERATION*

Full build-out of the proposed development is anticipated to generate 2,265 weekday daily trips (entering/exiting) with 134 trips (entering/exiting) during the AM peak hour and 171 trips (entering/exiting) during the PM peak hour. Existing traffic counts reveal that the existing peak hour of traffic at the study intersections generally occurs at 12:00 PM, which differs from the morning and evening peak hour periods of multi-family residential land uses.

When compared to a shopping center use allowed under B-3 zoning, the proposed multi-family development generates 5,211 fewer daily trips, 36 fewer AM peak hour trips, and 516 fewer PM peak hour trips.

### *SEASONAL FACTOR*

The City of Apache Junction annually collects traffic volumes in February or March and is available to the public. Additionally, both the Arizona Department of Transportation (ADOT) and Maricopa Association of Governments (MAG) regularly collect and compile traffic data on many roadways within their boundaries. At the applicant's request, this report has been revised to compare all recent historical traffic volumes near the proposed site from these agencies and compare them to the counts collected in September 2024 as part of this study.

There were several available counts recorded near the proposed site during both the higher traffic winter months and lower traffic summer months. Based on the evaluation of the relevant count data, an approximate 32% difference was observed between the peak and non-peak seasons. To provide a conservative evaluation, a 35% growth factor was utilized. Therefore, in addition to the typical annual background growth rate, a seasonal factor of 1.35 was applied to the existing traffic volumes collected in September for use in this analysis.

### *LEVEL-OF-SERVICE*

The study intersections operate at acceptable levels of service with existing conditions. With trips from the proposed development, the study intersections will continue to operate at acceptable levels of service in both horizon years 2026 and 2031 with the existing lane configurations and traffic control.

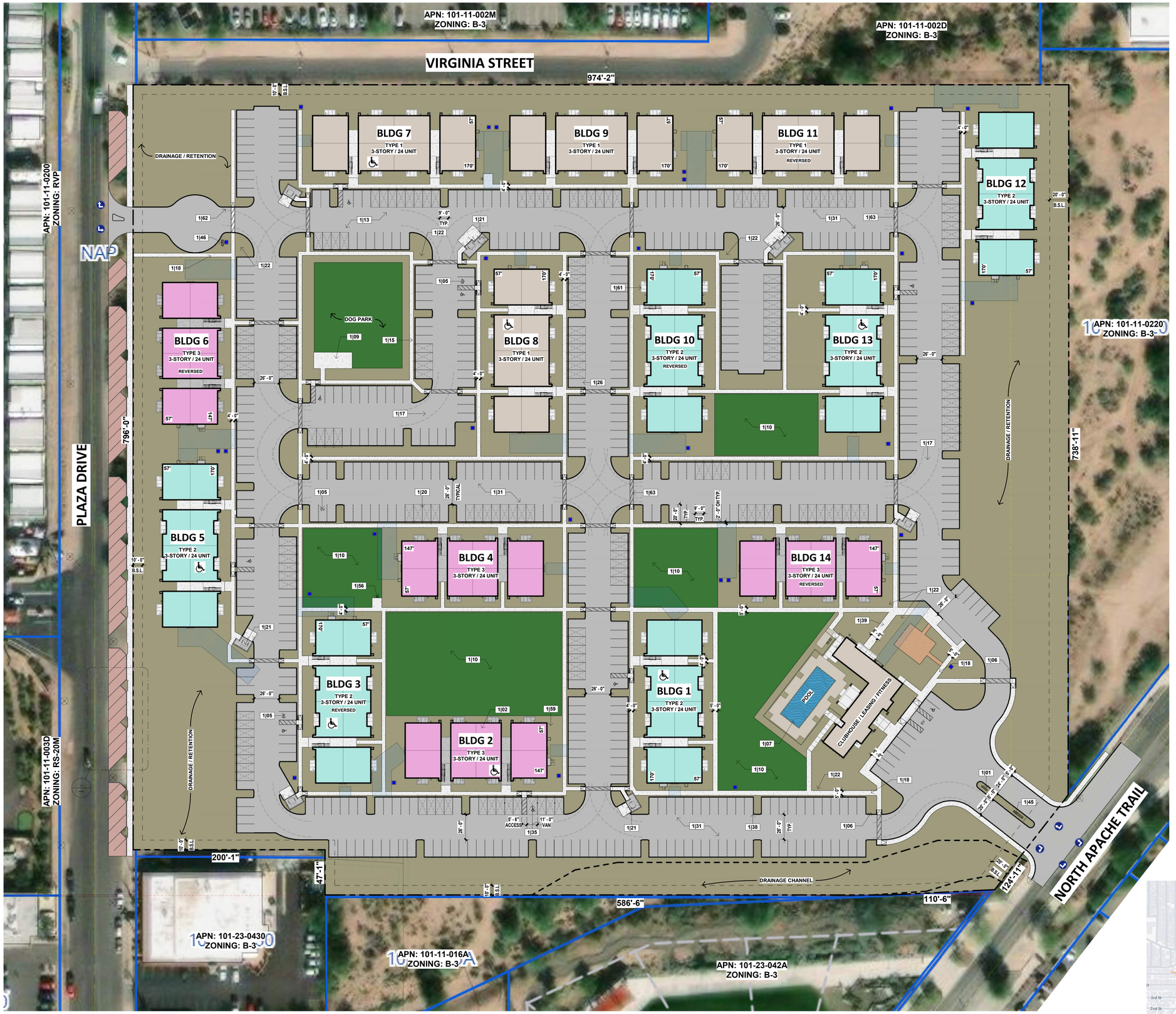
The two closest intersections to the proposed development’s driveways are Plaza Drive / Superstition Drive and Apache Trail / Idaho Road. With the seasonal factor of 1.35 applied, the added site traffic is projected to add 3.0 seconds of delay to the northbound approach of the Plaza Drive / Superstition Boulevard intersection during the AM and PM multi-family peak hours. At the Apache Trail / Idaho Road intersection, with the seasonal factor of 1.35 applied, site traffic is expected to add 0.2 and 0.5 seconds of delay to the overall intersection during the AM and PM multi-family peak hours, respectively.

### *SITE ACCESS*

A full access driveway is proposed on Apache Trail. A secondary driveway is proposed on Plaza Drive north of the existing RV Resort driveway and will be limited to a southbound left-in and westbound right-out only. The driveways will be controlled by a stop sign. Both Plaza Drive and Apache Trail are low volume roadways with a projected daily traffic volume less than 3,500 vpd on Plaza Drive and less than 5,400 vpd on Apache Trail. The posted speed limit on Apache Trail is 15 mph. A speed limit sign of 15 mph is provided on Plaza Drive for the existing Lost Dutchman RV Resort. As part of the proposed development, half-street improvements will be provided on Apache Trail adjacent to the property. Half-street improvements will also be provided on Plaza Drive, which will include the provision of angled on-street parking in the northbound direction.

# APPENDICES

# APPENDIX A: Site Plan




## SITE PLAN

1" = 40'-0"

## DEVELOPMENT DATA

**DEVELOPER:**
WOLFF ENTERPRISES III, LLC
6710 E CAMELBACK ROAD #100
SCOTTSDALE, ARIZONA 85251
CONTACT: DEREK CAYTON

PHONE: (480) 236-0998
EMAIL: dcayton@awolff.com

**SITE LOCATION:**
APN:101-11-005A

**ZONING:**
EXISTING: B-3 IN CORE DOWNTOWN OVERLAY
PROPOSED: B-3 W/ C.U.P. IN CORE DOWNTOWN OVERLAY

**NET LOT AREA:**
+/- 809,770 SF ( 18.59 AC) T.B.V.
MINIMUM REQUIRED: 1,089 X 336 UNITS = 365,904 S.F.

**USE:**
MULTI-FAMILY RESIDENTIAL

**AMENITIES:**
SWIMMING POOL, BBQ, FITNESS CENTER

**EXPLANATORY STATEMENT:**
THREE STORY MULTI-FAMILY RESIDENTIAL COMMUNITY, SPRINKLERED NFPA 13 / 13R

**COMMON OPEN SPACE:**
187,725 S.F. = 23%

**DENSITY:**
PROVIDED: 18.07 DU / ACRE
MIN PER 1-6-3: 13 DU / ACRE
MAX PER TABLE 5-4: 40 DU / ACRE

**BUILDING HEIGHT:**
ALLOWED: 3 STORIES - 60' MAX PER TABLE 5-4
PROVIDED: 3-STORIES - 37'-5" MAX.

**BUILDING SETBACKS:**
20' FRONT / EAST
10' SIDES / REAR

**BUILDING SEPARATION:**
30'+ PROVIDED

**CONSTRUCTION TYPE:**
TYPE VB, SPRINKLERED NFPA 13 / 13R

| BUILDING NUMBER | GROSS AREA |
|---|---|
| BLDG 1 | 28,924 SF |
| BLDG 2 | 24,779 SF |
| BLDG 3 | 28,924 SF |
| BLDG 4 | 24,779 SF |
| BLDG 5 | 28,924 SF |
| BLDG 6 | 24,779 SF |
| BLDG 7 | 28,591 SF |
| BLDG 8 | 28,591 SF |
| BLDG 9 | 28,591 SF |
| BLDG 10 | 28,924 SF |
| BLDG 11 | 28,591 SF |
| BLDG 12 | 28,924 SF |
| BLDG 13 | 28,924 SF |
| BLDG 14 | 24,779 SF |
| CLUBHOUSE | 4,494 SF |
| | 391,518 SF |

**ARCHITECT:**
STUDIO 15 ARCHITECTURE, INC.
4115 NORTH 15TH AVENUE
PHOENIX, ARIZONA 85015
CONTACT: REX BOYES
SHAN HARRIS
PHONE: (602) 586-1190
EMAIL: rex@studio15a.com
shan@studio15a.com

**REQUIRED PARKING:**
MULTIFAMILY
ONE BEDROOM 48X1.5 = 72 STALLS
TWO BEDROOM 288X2 = 576 STALLS
GUEST 1 SPACE PER 0.30 UNITS = 101 STALLS

TOTAL REQUIRED: 749 STALLS

2:22 PARKING RATIO REQUIRED

PARKING REQUIRED WITH 10% REDUCTION WITH ZONING ADMINISTRATOR REVIEW PER 1-7-4. 90% OF 749 = 674.1 STALLS

**ONSITE PARKING PROVIDED**

| | |
|---|---|
| CARPORT | 162 STALLS |
| CARPORT (ACCESSIBLE) | 1 STALLS |
| EV CHARGING | 4 STALLS |
| SURFACE | 509 STALLS |
| SURFACE (ACCESSIBLE) | 8 STALLS |
| TOTAL PARKING PROVIDED: | 684 STALLS |

8.7% REDUCTION REQUEST

OFFSITE PARKING: 45 STALLS

PARKING RATIO:
729 STALLS / 336 TOTAL D.U. = 2.17 (INCLUDES OFFSITE)
729 - 45 = 684 STALLS / 336 TOTAL D.U. = 2.04

BIKE PARKING REQUIRED: 6 SPACES +2 FOR EVERY 40 STALLS
749 STALL / 40 * 2 + 6 = 44 SPACES REQUIRED

## KEYNOTES

2|15

| | |
|---|---|
| 1\|01 | SITE DIRECTORY UNDER SEPARATE PERMIT - REFER TO SIGN PACKAGE / BUTTERFLYMX CALL BOX ON TUBE STEEL PEDESTAL WITH CONCRETE FOOTING |
| 1\|02 | INDICATES 1ST FLOOR TYPE A UNIT - TYPICAL |
| 1\|05 | INDICATES SINGLE EV CHARGING STATION - TYPICAL |
| 1\|06 | 26 FOOT WIDE VEHICULAR GATE W/ KNOX BOX FOR EMERGENCY FIRE ACCESS- UNDER SEPARATE PERMIT. AT MAIN ENTRANCE GATE TO BE PROVIDED WITH OPTICOM FOR FIRE DEPARTMENT ACCESS |
| 1\|07 | POOL AREA - REFER TO LANDSCAPE PLANS |
| 1\|09 | DOG PARK - REFER TO LANDSCAPE PLANS |
| 1\|10 | OPEN SPACE |
| 1\|13 | 26' WIDE DRIVE AISLE TYPICAL U.N.O. |
| 1\|15 | ALL SIDEWALKS ARE MINIMUM 5' WIDE TYPICAL U.N.O. |
| 1\|17 | INDICATES FIRE TURNING RADIUS TYPICAL - INSIDE 40', OUTSIDE 56' |
| 1\|18 | PEDESTRIAN GATE - REFER TO LANDSCAPE - TYPICAL |
| 1\|20 | INDICATES COVERED PARKING UNDER SEPARATE PERMIT - TYPICAL |
| 1\|21 | INDICATES REFUSE ENCLOSURE - TYPICAL |
| 1\|22 | INDICATES BIKE RACK TYPICAL - REFER TO LANDSCAPE |
| 1\|26 | PARKING STALL 9' WIDE X 18' LONG - TYPICAL U.N.O. |
| 1\|31 | ASPHALT DRIVE - REFER TO CIVIL |
| 1\|35 | INDICATES ACCESSIBLE PARKING STALL - TYPICAL |
| 1\|38 | CONCRETE CURB - REFER TO CIVIL |
| 1\|39 | CONCRETE CART DRIVE - REFER TO CIVIL |
| 1\|45 | MONUMENT SIGN LOCATION |
| 1\|46 | SITE DIRECTORY UNDER SEPARATE PERMIT - REFER TO SIGN PACKAGE |
| 1\|56 | BBQ TO BE MINIMUM 10 FOOT CLEAR FROM ANY COMBUSTABLE STRUCTURE. TYPICAL ALL LOCATIONS, SEE LANDSCAPE PLAN FOR LOCATIONS. |
| 1\|59 | GROUND MOUNTED MECHANICAL UNITS TO BE SCREENED WITH MASONRY SCREEN WALL |
| 1\|61 | PRIVATE PATIO - SCREEN WALL AROUND PATIOS AT FRONT OF BUILDINGS. |
| 1\|62 | 26 FOOT WIDE VEHICULAR GATE W/ KNOX BOX FOR EMERGENCY FIRE ACCESS- GATE FOR RESIDENCE ENTRANCE AND EXIT ONLY, NO GUEST ENTRANCE - UNDER SEPARATE PERMIT |
| 1\|63 | CONTRASTING COLOR PAINTED ASPHALT CROSS WALK, MATCH SIDEWALK WIDTH. |

## UNIT MIX

| UNIT TYPE | # OF BEDROOMS | UNIT S.F. | # OF UNITS | TOTAL UNIT S.F. | PERCENTAGE |
|---|---|---|---|---|---|
| UNIT A1 | 1 | 750 SF | 48 | 36,000 SF | 14% |
| | | | 48 | 36,000 SF | 14% |
| UNIT B1 | 2 | 1,068 SF | 216 | 230,688 SF | 64% |
| UNIT B2 | 2 | 1,012 SF | 72 | 72,864 SF | 21% |
| | | | 288 | 303,552 SF | 86% |
| Grand total | | | 336 | 339,552 SF | 100% |

## CODES

2018 INTERNATIONAL BUILDING CODE (IBC)
2018 INTERNATIONAL RESIDENTIAL CODE (IRC)
2018 INTERNATIONAL MECHANICAL CODE (IMC)
2018 UNIFORM MECHANICAL CODE (UPC)
2018 INTERNATIONAL PLUMBING CODE (IPC)
2018 UNIFORM PLUMBING CODE (UPC)
2018 INTERNATIONAL ENERGY CONSERVATION CODE (IECC)
2017 NATIONAL ELECTRICAL CODE (NEC)
2010 AMERICANS WITH DISABILITIES ACT STANDARDS FOR ACCESSIBLE DESIGN
ICC/ANSI A117.1-2009 ACCESSIBE AND USEABLE BUILDINGS AND FACILITIES
APPROVED ALTERNATIVE METHODS OF CONSTRUCTION PERMIT # B-2025-481

**The Wolff Company**

Apache Trail


Studio 15 Architecture & Planning

**PRELIMINARY NOT FOR CONSTRUCTION**

04/01/2025



| | |
|---|---|
| DATE: April 01, 2025 | JOB NO.: 24-022 |
| CURRENT REVISION: | SHEET: |

**A1.10**

Site Plan

Studio 15 Architecture, Inc. info@studio15a.com
4115 North 15th Avenue • Phoenix Arizona 85015 • 602.586.1190

4/14/2025 7:36:59 AM

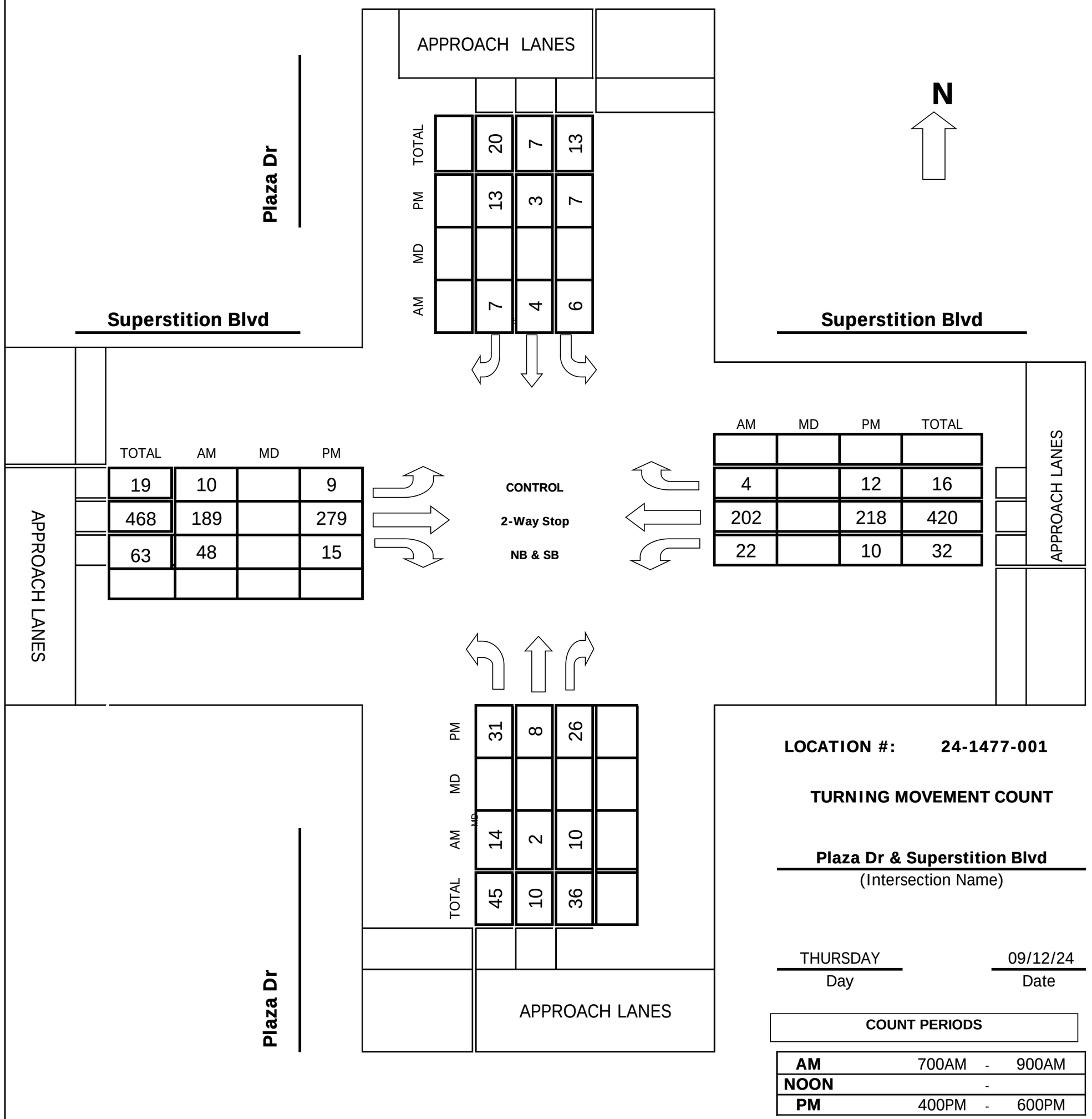
# APPENDIX B: Existing Traffic Counts

# Intersection Turning Movement
## Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

**Project #: 24-1477-001**

*TMC SUMMARY OF Plaza Dr & Superstition Blvd*




**LOCATION #: 24-1477-001**

**TURNING MOVEMENT COUNT**

**Plaza Dr & Superstition Blvd**
(Intersection Name)

THURSDAY — Day
09/12/24 — Date

**COUNT PERIODS**

| | | | |
|---|---|---|---|
| **AM** | 700AM | - | 900AM |
| **NOON** | | - | |
| **PM** | 400PM | - | 600PM |

AM PEAK HOUR 730 AM

NOON PEAK HOUR

PM PEAK HOUR 430 PM

# Intersection Turning Movement
**Prepared by:**

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup

N-S STREET: Plaza Dr | DATE: 09/12/24 | LOCATION: Apache Junction

E-W STREET: Superstition Blvd | DAY: THURSDAY | PROJECT# 24-1477-001

| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| LANES: | 1 | 0.5 | 0.5 | 1 | 0.5 | 0.5 | 0 | 2 | 0 | 0 | 2 | 0 | |
| 6:00 AM | | | | | | | | | | | | | |
| 6:15 AM | | | | | | | | | | | | | |
| 6:30 AM | | | | | | | | | | | | | |
| 6:45 AM | | | | | | | | | | | | | |
| 7:00 AM | 4 | 0 | 0 | 0 | 0 | 3 | 1 | 49 | 9 | 1 | 31 | 0 | 98 |
| 7:15 AM | 3 | 1 | 1 | 1 | 2 | 2 | 4 | 35 | 11 | 5 | 36 | 0 | 101 |
| 7:30 AM | 4 | 1 | 4 | 1 | 0 | 3 | 2 | 52 | 15 | 7 | 42 | 2 | 133 |
| 7:45 AM | 1 | 0 | 1 | 2 | 1 | 2 | 2 | 58 | 12 | 2 | 40 | 0 | 121 |
| 8:00 AM | 3 | 0 | 4 | 2 | 1 | 1 | 2 | 47 | 11 | 7 | 66 | 0 | 144 |
| 8:15 AM | 6 | 1 | 1 | 1 | 2 | 1 | 4 | 32 | 10 | 6 | 54 | 2 | 120 |
| 8:30 AM | 2 | 0 | 1 | 2 | 1 | 1 | 1 | 57 | 5 | 4 | 41 | 1 | 116 |
| 8:45 AM | 5 | 1 | 8 | 2 | 0 | 1 | 3 | 56 | 11 | 6 | 38 | 0 | 131 |
| 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 | | | | | | | | | | | | | |

| TOTAL | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Volumes | 28 | 4 | 20 | 11 | 7 | 14 | 19 | 386 | 84 | 38 | 348 | 5 | 964 |
| Approach % | 53.85 | 7.69 | 38.46 | 34.38 | 21.88 | 43.75 | 3.89 | 78.94 | 17.18 | 9.72 | 89.00 | 1.28 | |
| App/Depart | 52 | / | 28 | 32 | / | 129 | 489 | / | 417 | 391 | / | 390 | |

AM Peak Hr Begins at: 730 AM

| PEAK | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Volumes | 14 | 2 | 10 | 6 | 4 | 7 | 10 | 189 | 48 | 22 | 202 | 4 | 518 |
| Approach % | 53.85 | 7.69 | 38.46 | 35.29 | 23.53 | 41.18 | 4.05 | 76.52 | 19.43 | 9.65 | 88.60 | 1.75 | |
| PEAK HR. FACTOR: | 0.722 | | | 0.850 | | | 0.858 | | | 0.781 | | | 0.899 |

CONTROL: 2-Way Stop (NB & SB)
COMMENT 1:
GPS: 33.422335, -111.550436

# Intersection Turning Movement

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup

N-S STREET: Plaza Dr
0
E-W STREET: Superstition Blvd

DATE: 09/12/24
DAY: THURSDAY

LOCATION: Apache Junction
PROJECT# 24-1477-001

| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| LANES: | 1 | 0.5 | 0.5 | 1 | 0.5 | 0.5 | 0 | 2 | 0 | 0 | 2 | 0 | |
| 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 | 6 | 1 | 3 | 3 | 0 | 4 | 4 | 68 | 10 | 4 | 68 | 1 | 172 |
| 4:15 PM | 5 | 2 | 5 | 0 | 0 | 3 | 1 | 60 | 2 | 6 | 58 | 1 | 143 |
| 4:30 PM | 6 | 3 | 4 | 4 | 0 | 5 | 1 | 73 | 5 | 3 | 66 | 2 | 172 |
| 4:45 PM | 4 | 4 | 5 | 0 | 1 | 1 | 1 | 67 | 2 | 2 | 49 | 4 | 140 |
| 5:00 PM | 15 | 1 | 9 | 2 | 1 | 2 | 3 | 72 | 4 | 2 | 59 | 4 | 174 |
| 5:15 PM | 6 | 0 | 8 | 1 | 1 | 5 | 4 | 67 | 4 | 3 | 44 | 2 | 145 |
| 5:30 PM | 6 | 2 | 4 | 2 | 0 | 2 | 1 | 56 | 4 | 0 | 52 | 0 | 129 |
| 5:45 PM | 1 | 0 | 2 | 0 | 0 | 1 | 5 | 48 | 7 | 1 | 49 | 5 | 119 |
| 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 | 49 | 13 | 40 | 12 | 3 | 23 | 20 | 511 | 38 | 21 | 445 | 19 | 1194 |
| Approach % | 48.04 | 12.75 | 39.22 | 31.58 | 7.89 | 60.53 | 3.51 | 89.81 | 6.68 | 4.33 | 91.75 | 3.92 | |
| App/Depart | 102 | / | 52 | 38 | / | 62 | 569 | / | 563 | 485 | / | 517 | |

PM Peak Hr Begins at: 430 PM

| PEAK | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Volumes | 31 | 8 | 26 | 7 | 3 | 13 | 9 | 279 | 15 | 10 | 218 | 12 | 631 |
| Approach % | 47.69 | 12.31 | 40.00 | 30.43 | 13.04 | 56.52 | 2.97 | 92.08 | 4.95 | 4.17 | 90.83 | 5.00 | |
| PEAK HR. FACTOR: | | 0.650 | | | 0.639 | | | 0.959 | | | 0.845 | | 0.907 |

CONTROL: 2-Way Stop (NB & SB)
COMMENT 1: 0
GPS: 33.422335, -111.550436

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup

# Pedestrian & Bicycle Study

**N-S STREET:** Plaza Dr
**E-W STREET:** Superstition Blvd

**Date:** 09/12/24
**Day:** THURSDAY

**City:** Apache Junction
**Project #:** 24-1477-001

| | PEDESTRIANS | | | |
|---|---|---|---|---|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 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 | 1 | 0 | 0 | 0 |
| **TOTAL** | **1** | **0** | **0** | **0** |

| | BICYCLES | | | |
|---|---|---|---|---|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 7:00 AM | 0 | 0 | 0 | 0 |
| 7:15 AM | 1 | 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 | 1 | 0 | 0 | 0 |
| 8:30 AM | 0 | 0 | 0 | 0 |
| 8:45 AM | 0 | 1 | 0 | 0 |
| **TOTAL** | **2** | **1** | **0** | **0** |

| | PEDESTRIANS | | | |
|---|---|---|---|---|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 4:00 PM | 0 | 0 | 0 | 0 |
| 4:15 PM | 0 | 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 | 1 | 0 |
| 5:45 PM | 0 | 0 | 0 | 0 |
| **TOTAL** | **0** | **0** | **1** | **0** |

| | BICYCLES | | | |
|---|---|---|---|---|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 4:00 PM | 0 | 0 | 0 | 0 |
| 4:15 PM | 0 | 0 | 0 | 0 |
| 4:30 PM | 1 | 0 | 1 | 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 | 1 | 0 | 0 | 0 |
| **TOTAL** | **2** | **0** | **1** | **0** |

**North Leg**

**West Leg**

**East Leg**

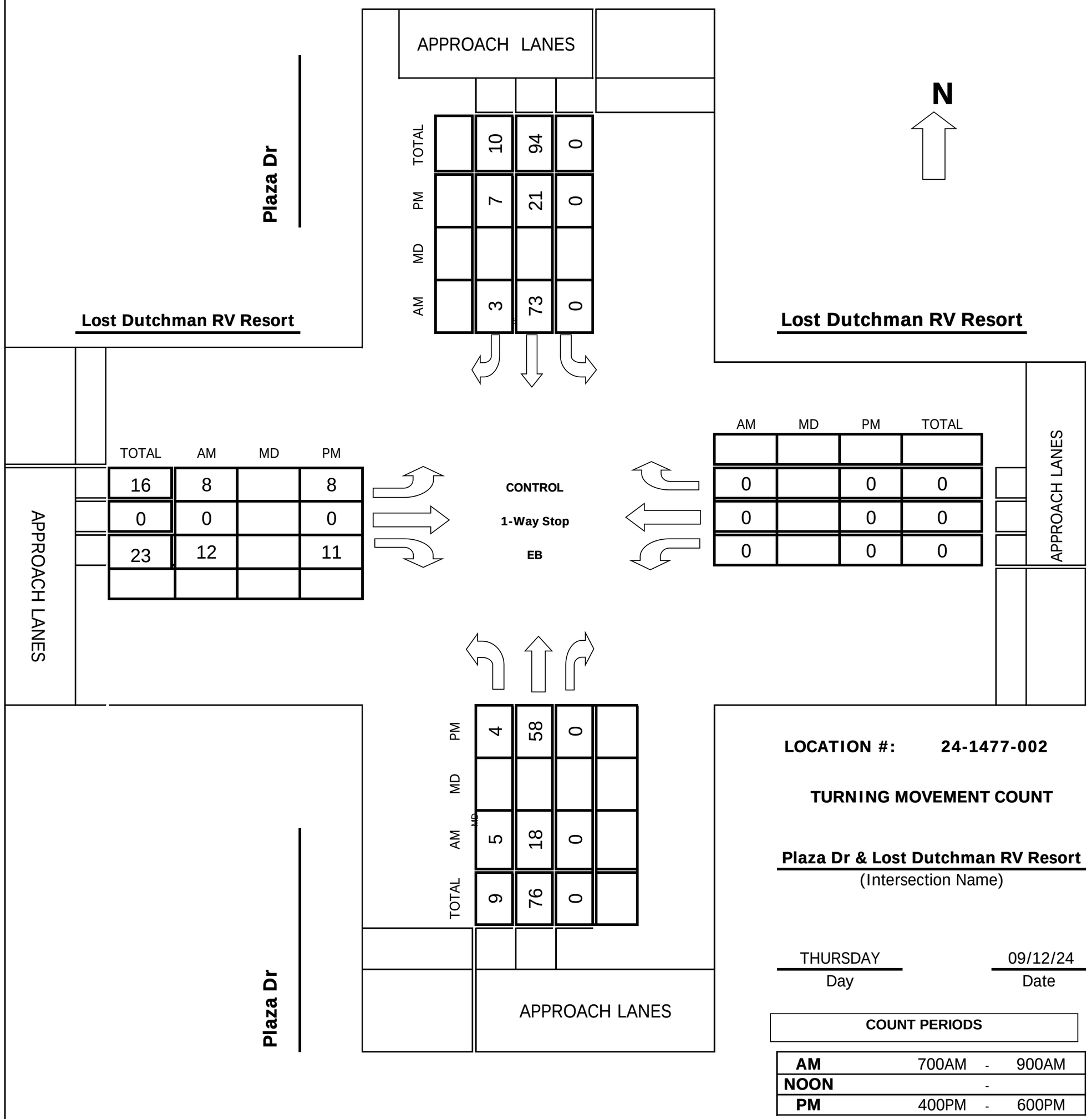
**South Leg**

# Intersection Turning Movement
## Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

**Project #: 24-1477-002**

*TMC SUMMARY OF Plaza Dr & Lost Dutchman RV Resort*




**LOCATION #: 24-1477-002**

**TURNING MOVEMENT COUNT**

**Plaza Dr & Lost Dutchman RV Resort**
(Intersection Name)

THURSDAY — Day
09/12/24 — Date

**COUNT PERIODS**

| | | | |
|---|---|---|---|
| **AM** | 700AM | - | 900AM |
| **NOON** | | - | |
| **PM** | 400PM | - | 600PM |

AM PEAK HOUR 730 AM

NOON PEAK HOUR

PM PEAK HOUR 430 PM

# Intersection Turning Movement
**Prepared by:**

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup

N-S STREET: Plaza Dr  DATE: 09/12/24  LOCATION: Apache Junction

E-W STREET: Lost Dutchman RV Resort  DAY: THURSDAY  PROJECT# 24-1477-002

| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| LANES: | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | |
| 6:00 AM | | | | | | | | | | | | | |
| 6:15 AM | | | | | | | | | | | | | |
| 6:30 AM | | | | | | | | | | | | | |
| 6:45 AM | | | | | | | | | | | | | |
| 7:00 AM | 1 | 2 | 0 | 0 | 8 | 1 | 1 | 0 | 3 | 0 | 0 | 0 | 16 |
| 7:15 AM | 1 | 3 | 0 | 0 | 16 | 1 | 2 | 0 | 1 | 0 | 0 | 0 | 24 |
| 7:30 AM | 2 | 4 | 0 | 0 | 22 | 0 | 4 | 0 | 3 | 0 | 0 | 0 | 35 |
| 7:45 AM | 0 | 2 | 0 | 0 | 16 | 0 | 1 | 0 | 4 | 0 | 0 | 0 | 23 |
| 8:00 AM | 3 | 5 | 0 | 0 | 18 | 1 | 2 | 0 | 3 | 0 | 0 | 0 | 32 |
| 8:15 AM | 0 | 7 | 0 | 0 | 17 | 2 | 1 | 0 | 2 | 0 | 0 | 0 | 29 |
| 8:30 AM | 1 | 3 | 0 | 0 | 10 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 17 |
| 8:45 AM | 0 | 10 | 0 | 0 | 14 | 2 | 2 | 0 | 4 | 0 | 0 | 0 | 32 |
| 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 | | | | | | | | | | | | | |

| TOTAL | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Volumes | 8 | 36 | 0 | 0 | 121 | 8 | 14 | 0 | 21 | 0 | 0 | 0 | 208 |
| Approach % | 18.18 | 81.82 | 0.00 | 0.00 | 93.80 | 6.20 | 40.00 | 0.00 | 60.00 | #### | #### | #### | |
| App/Depart | 44 | / | 50 | 129 | / | 142 | 35 | / | 0 | 0 | / | 16 | |

AM Peak Hr Begins at: 730 AM

| PEAK | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Volumes | 5 | 18 | 0 | 0 | 73 | 3 | 8 | 0 | 12 | 0 | 0 | 0 | 119 |
| Approach % | 21.74 | 78.26 | 0.00 | 0.00 | 96.05 | 3.95 | 40.00 | 0.00 | 60.00 | #### | #### | #### | |
| PEAK HR. FACTOR: | | 0.719 | | | 0.864 | | | 0.714 | | | 0.000 | | 0.850 |

CONTROL: 1-Way Stop (EB)
COMMENT 1:
GPS: 33.418663, -111.550538

# Intersection Turning Movement

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup

N-S STREET: Plaza Dr
0
E-W STREET: Lost Dutchman RV Resort

DATE: 09/12/24
DAY: THURSDAY

LOCATION: Apache Junction
PROJECT# 24-1477-002

| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| LANES: | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | |
| 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 | 3 | 10 | 0 | 0 | 10 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 26 |
| 4:15 PM | 2 | 10 | 0 | 0 | 6 | 2 | 2 | 0 | 2 | 0 | 0 | 0 | 24 |
| 4:30 PM | 1 | 9 | 0 | 0 | 8 | 1 | 3 | 0 | 5 | 0 | 0 | 0 | 27 |
| 4:45 PM | 0 | 12 | 0 | 0 | 3 | 3 | 2 | 0 | 2 | 0 | 0 | 0 | 22 |
| 5:00 PM | 1 | 23 | 0 | 0 | 5 | 2 | 2 | 0 | 3 | 0 | 0 | 0 | 36 |
| 5:15 PM | 2 | 14 | 0 | 0 | 5 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 24 |
| 5:30 PM | 1 | 9 | 0 | 0 | 3 | 1 | 4 | 0 | 4 | 0 | 0 | 0 | 22 |
| 5:45 PM | 3 | 3 | 0 | 0 | 4 | 2 | 2 | 0 | 1 | 0 | 0 | 0 | 15 |
| 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 | 13 | 90 | 0 | 0 | 44 | 13 | 17 | 0 | 19 | 0 | 0 | 0 | 196 |
| Approach % | 12.62 | 87.38 | 0.00 | 0.00 | 77.19 | 22.81 | 47.22 | 0.00 | 52.78 | #### | #### | #### | |
| App/Depart | 103 | / | 107 | 57 | / | 63 | 36 | / | 0 | 0 | / | 26 | |

PM Peak Hr Begins at: 430 PM

| PEAK | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Volumes | 4 | 58 | 0 | 0 | 21 | 7 | 8 | 0 | 11 | 0 | 0 | 0 | 109 |
| Approach % | 6.45 | 93.55 | 0.00 | 0.00 | 75.00 | 25.00 | 42.11 | 0.00 | 57.89 | #### | #### | #### | |
| PEAK HR. FACTOR: | | 0.646 | | | 0.778 | | | 0.594 | | | 0.000 | | 0.757 |

CONTROL: 1-Way Stop (EB)
COMMENT 1: 0
GPS: 33.418663, -111.550538

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup

# Pedestrian & Bicycle Study

**N-S STREET:** Plaza Dr
**E-W STREET:** Lost Dutchman RV Resort

**Date:** 09/12/24
**Day:** THURSDAY

**City:** Apache Junction
**Project #:** 24-1477-002

| | PEDESTRIANS | | | |
|---|---|---|---|---|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 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 | 1 | 0 | 0 | 0 |
| **TOTAL** | **1** | **0** | **0** | **0** |

| | BICYCLES | | | |
|---|---|---|---|---|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 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 |
| **TOTAL** | **0** | **0** | **0** | **0** |

| | PEDESTRIANS | | | |
|---|---|---|---|---|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 4:00 PM | 0 | 0 | 0 | 0 |
| 4:15 PM | 0 | 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 |
| **TOTAL** | **0** | **0** | **0** | **0** |

| | BICYCLES | | | |
|---|---|---|---|---|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 4:00 PM | 0 | 0 | 0 | 0 |
| 4:15 PM | 0 | 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 |
| **TOTAL** | **0** | **0** | **0** | **0** |

**North Leg**

**West Leg**

**East Leg**

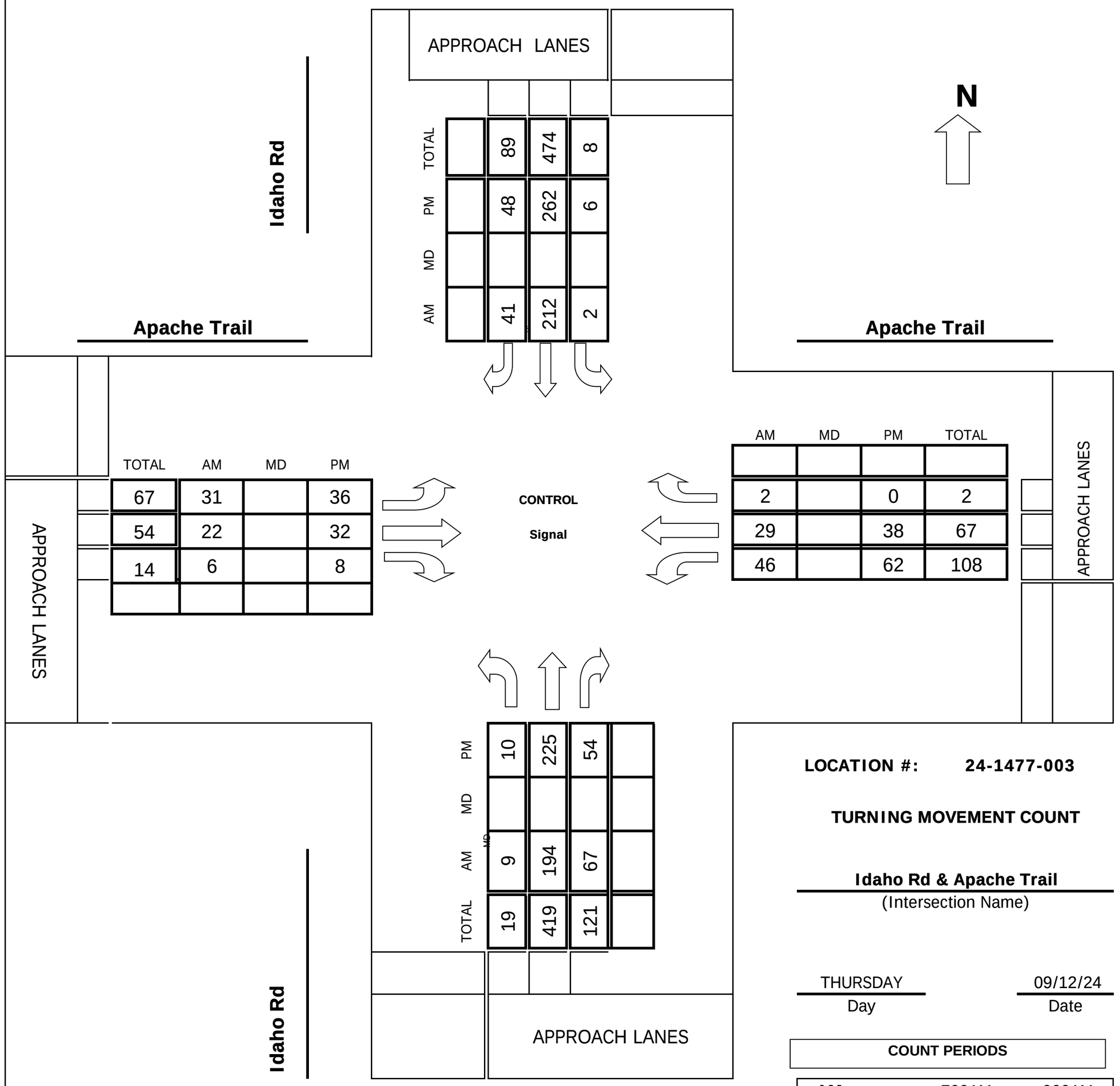
**South Leg**

# Intersection Turning Movement
## Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

**Project #: 24-1477-003**

*TMC SUMMARY OF Idaho Rd & Apache Trail*




**LOCATION #: 24-1477-003**

**TURNING MOVEMENT COUNT**

**Idaho Rd & Apache Trail**
(Intersection Name)

THURSDAY — Day
09/12/24 — Date

**COUNT PERIODS**

| | | | |
|---|---|---|---|
| **AM** | 700AM | - | 900AM |
| **NOON** | | - | |
| **PM** | 400PM | - | 600PM |

AM PEAK HOUR 800 AM

NOON PEAK HOUR

PM PEAK HOUR 430 PM

# Intersection Turning Movement
**Prepared by:**

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup

N-S STREET: Idaho Rd | DATE: 09/12/24 | LOCATION: Apache Junction

E-W STREET: Apache Trail | DAY: THURSDAY | PROJECT# 24-1477-003

| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| LANES: | 1 | 1.5 | 1.5 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | |
| 6:00 AM | | | | | | | | | | | | | |
| 6:15 AM | | | | | | | | | | | | | |
| 6:30 AM | | | | | | | | | | | | | |
| 6:45 AM | | | | | | | | | | | | | |
| 7:00 AM | 1 | 41 | 16 | 1 | 24 | 5 | 2 | 2 | 0 | 16 | 3 | 1 | 112 |
| 7:15 AM | 2 | 42 | 13 | 1 | 43 | 6 | 2 | 2 | 4 | 13 | 8 | 2 | 138 |
| 7:30 AM | 4 | 46 | 19 | 0 | 30 | 9 | 4 | 3 | 2 | 9 | 6 | 1 | 133 |
| 7:45 AM | 1 | 41 | 18 | 3 | 58 | 10 | 2 | 3 | 1 | 19 | 9 | 0 | 165 |
| 8:00 AM | 1 | 48 | 16 | 0 | 42 | 11 | 9 | 2 | 2 | 11 | 5 | 1 | 148 |
| 8:15 AM | 2 | 50 | 18 | 1 | 52 | 10 | 6 | 6 | 3 | 9 | 5 | 0 | 162 |
| 8:30 AM | 2 | 51 | 22 | 1 | 61 | 5 | 6 | 5 | 1 | 15 | 9 | 1 | 179 |
| 8:45 AM | 4 | 45 | 11 | 0 | 57 | 15 | 10 | 9 | 0 | 11 | 10 | 0 | 172 |
| 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 | | | | | | | | | | | | | |

| TOTAL | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Volumes | 17 | 364 | 133 | 7 | 367 | 71 | 41 | 32 | 13 | 103 | 55 | 6 | 1209 |
| Approach % | 3.31 | 70.82 | 25.88 | 1.57 | 82.47 | 15.96 | 47.67 | 37.21 | 15.12 | 62.80 | 33.54 | 3.66 | |
| App/Depart | 514 | / | 411 | 445 | / | 483 | 86 | / | 172 | 164 | / | 143 | |

AM Peak Hr Begins at: 800 AM

| PEAK | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Volumes | 9 | 194 | 67 | 2 | 212 | 41 | 31 | 22 | 6 | 46 | 29 | 2 | 661 |
| Approach % | 3.33 | 71.85 | 24.81 | 0.78 | 83.14 | 16.08 | 52.54 | 37.29 | 10.17 | 59.74 | 37.66 | 2.60 | |
| PEAK HR. FACTOR: | | 0.900 | | | 0.885 | | | 0.776 | | | 0.770 | | 0.923 |

CONTROL: Signal
COMMENT 1:
GPS: 33.419040, -111.546090

# Intersection Turning Movement

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup

N-S STREET: Idaho Rd
E-W STREET: Apache Trail
0
DATE: 09/12/24
DAY: THURSDAY
LOCATION: Apache Junction
PROJECT# 24-1477-003

| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| LANES: | 1 | 1.5 | 1.5 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | |
| 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 | 2 | 75 | 15 | 2 | 67 | 13 | 9 | 7 | 2 | 15 | 5 | 0 | 212 |
| 4:15 PM | 3 | 46 | 10 | 2 | 70 | 13 | 7 | 9 | 2 | 12 | 4 | 0 | 178 |
| 4:30 PM | 5 | 49 | 15 | 1 | 66 | 9 | 11 | 5 | 4 | 14 | 15 | 0 | 194 |
| 4:45 PM | 2 | 56 | 16 | 2 | 68 | 12 | 7 | 10 | 2 | 12 | 10 | 0 | 197 |
| 5:00 PM | 2 | 59 | 10 | 3 | 57 | 14 | 8 | 8 | 1 | 21 | 3 | 0 | 186 |
| 5:15 PM | 1 | 61 | 13 | 0 | 71 | 13 | 10 | 9 | 1 | 15 | 10 | 0 | 204 |
| 5:30 PM | 5 | 48 | 11 | 0 | 50 | 10 | 8 | 6 | 2 | 13 | 7 | 0 | 160 |
| 5:45 PM | 0 | 48 | 12 | 1 | 45 | 12 | 11 | 11 | 1 | 9 | 3 | 0 | 153 |
| 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 | 20 | 442 | 102 | 11 | 494 | 96 | 71 | 65 | 15 | 111 | 57 | 0 | 1484 |
| Approach % | 3.55 | 78.37 | 18.09 | 1.83 | 82.20 | 15.97 | 47.02 | 43.05 | 9.93 | 66.07 | 33.93 | 0.00 | |
| App/Depart | 564 | / | 513 | 601 | / | 620 | 151 | / | 178 | 168 | / | 173 | |

PM Peak Hr Begins at: 430 PM

| PEAK | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Volumes | 10 | 225 | 54 | 6 | 262 | 48 | 36 | 32 | 8 | 62 | 38 | 0 | 781 |
| Approach % | 3.46 | 77.85 | 18.69 | 1.90 | 82.91 | 15.19 | 47.37 | 42.11 | 10.53 | 62.00 | 38.00 | 0.00 | |

| PEAK HR. FACTOR: | 0.963 | 0.940 | 0.950 | 0.862 | 0.957 |
|---|---|---|---|---|---|

CONTROL: Signal
COMMENT 1: 0
GPS: 33.419040, -111.546090

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup

# Pedestrian & Bicycle Study

**N-S STREET:** Idaho Rd
**E-W STREET:** Apache Trail

**Date:** 09/12/24
**Day:** THURSDAY

**City:** Apache Junction
**Project #:** 24-1477-003

| | PEDESTRIANS | | | |
|---|---|---|---|---|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 7:00 AM | 0 | 0 | 0 | 0 |
| 7:15 AM | 0 | 0 | 0 | 1 |
| 7:30 AM | 0 | 0 | 0 | 0 |
| 7:45 AM | 2 | 0 | 4 | 0 |
| 8:00 AM | 0 | 0 | 0 | 0 |
| 8:15 AM | 0 | 0 | 1 | 0 |
| 8:30 AM | 0 | 0 | 0 | 0 |
| 8:45 AM | 1 | 0 | 1 | 0 |
| **TOTAL** | **3** | **0** | **6** | **1** |

| | BICYCLES | | | |
|---|---|---|---|---|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 7:00 AM | 0 | 0 | 0 | 0 |
| 7:15 AM | 0 | 0 | 1 | 0 |
| 7:30 AM | 0 | 0 | 0 | 0 |
| 7:45 AM | 0 | 0 | 0 | 0 |
| 8:00 AM | 0 | 0 | 1 | 0 |
| 8:15 AM | 0 | 0 | 0 | 0 |
| 8:30 AM | 0 | 0 | 0 | 0 |
| 8:45 AM | 0 | 0 | 0 | 0 |
| **TOTAL** | **0** | **0** | **2** | **0** |

| | PEDESTRIANS | | | |
|---|---|---|---|---|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 4:00 PM | 0 | 0 | 0 | 0 |
| 4:15 PM | 0 | 0 | 2 | 0 |
| 4:30 PM | 0 | 0 | 1 | 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 | 1 |
| 5:45 PM | 0 | 0 | 0 | 1 |
| **TOTAL** | **0** | **0** | **3** | **2** |

| | BICYCLES | | | |
|---|---|---|---|---|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 4:00 PM | 0 | 0 | 0 | 0 |
| 4:15 PM | 0 | 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 | 1 | 0 |
| 5:30 PM | 1 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 0 | 0 |
| **TOTAL** | **1** | **0** | **1** | **0** |

**North Leg**

**West Leg**

**East Leg**

**South Leg**

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

Volumes for: Thursday, September 12, 2024 City: Apache Junction Project #: 24-1477-005

Location: Plaza Dr south of Superstition Blvd

| AM Period | NB | | SB | | EB | WB | | PM Period | NB | | SB | | EB | WB | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 00:00 | 1 | | 0 | | | | | 12:00 | 12 | | 15 | | | | |
| 00:15 | 0 | | 0 | | | | | 12:15 | 13 | | 27 | | | | |
| 00:30 | 0 | | 0 | | | | | 12:30 | 20 | | 19 | | | | |
| 00:45 | 0 | 1 | 0 | 0 | | | 1 | 12:45 | 17 | 62 | 23 | 84 | | | 146 |
| 01:00 | 0 | | 0 | | | | | 13:00 | 15 | | 13 | | | | |
| 01:15 | 0 | | 0 | | | | | 13:15 | 11 | | 15 | | | | |
| 01:30 | 0 | | 0 | | | | | 13:30 | 15 | | 12 | | | | |
| 01:45 | 0 | 0 | 0 | 0 | | | | 13:45 | 13 | 54 | 22 | 62 | | | 116 |
| 02:00 | 0 | | 1 | | | | | 14:00 | 10 | | 18 | | | | |
| 02:15 | 0 | | 0 | | | | | 14:15 | 11 | | 12 | | | | |
| 02:30 | 0 | | 1 | | | | | 14:30 | 21 | | 14 | | | | |
| 02:45 | 0 | 0 | 2 | 4 | | | 4 | 14:45 | 12 | 54 | 16 | 60 | | | 114 |
| 03:00 | 1 | | 1 | | | | | 15:00 | 16 | | 11 | | | | |
| 03:15 | 0 | | 0 | | | | | 15:15 | 17 | | 14 | | | | |
| 03:30 | 0 | | 0 | | | | | 15:30 | 13 | | 9 | | | | |
| 03:45 | 0 | 1 | 0 | 1 | | | 2 | 15:45 | 20 | 66 | 9 | 43 | | | 109 |
| 04:00 | 0 | | 0 | | | | | 16:00 | 10 | | 14 | | | | |
| 04:15 | 1 | | 0 | | | | | 16:15 | 12 | | 8 | | | | |
| 04:30 | 2 | | 2 | | | | | 16:30 | 13 | | 8 | | | | |
| 04:45 | 1 | 4 | 2 | 4 | | | 8 | 16:45 | 13 | 48 | 5 | 35 | | | 83 |
| 05:00 | 0 | | 3 | | | | | 17:00 | 25 | | 7 | | | | |
| 05:15 | 1 | | 1 | | | | | 17:15 | 14 | | 8 | | | | |
| 05:30 | 1 | | 1 | | | | | 17:30 | 12 | | 4 | | | | |
| 05:45 | 0 | 2 | 7 | 12 | | | 14 | 17:45 | 3 | 54 | 8 | 27 | | | 81 |
| 06:00 | 3 | | 7 | | | | | 18:00 | 13 | | 5 | | | | |
| 06:15 | 3 | | 6 | | | | | 18:15 | 2 | | 6 | | | | |
| 06:30 | 0 | | 9 | | | | | 18:30 | 6 | | 3 | | | | |
| 06:45 | 2 | 8 | 18 | 40 | | | 48 | 18:45 | 5 | 26 | 1 | 15 | | | 41 |
| 07:00 | 4 | | 10 | | | | | 19:00 | 5 | | 3 | | | | |
| 07:15 | 5 | | 18 | | | | | 19:15 | 6 | | 2 | | | | |
| 07:30 | 9 | | 22 | | | | | 19:30 | 5 | | 8 | | | | |
| 07:45 | 2 | 20 | 15 | 65 | | | 85 | 19:45 | 6 | 22 | 5 | 18 | | | 40 |
| 08:00 | 7 | | 19 | | | | | 20:00 | 3 | | 1 | | | | |
| 08:15 | 8 | | 18 | | | | | 20:15 | 3 | | 1 | | | | |
| 08:30 | 3 | | 10 | | | | | 20:30 | 3 | | 0 | | | | |
| 08:45 | 14 | 32 | 17 | 64 | | | 96 | 20:45 | 2 | 11 | 1 | 3 | | | 14 |
| 09:00 | 30 | | 12 | | | | | 21:00 | 2 | | 5 | | | | |
| 09:15 | 33 | | 12 | | | | | 21:15 | 0 | | 2 | | | | |
| 09:30 | 29 | | 10 | | | | | 21:30 | 1 | | 3 | | | | |
| 09:45 | 10 | 102 | 10 | 44 | | | 146 | 21:45 | 0 | 3 | 0 | 10 | | | 13 |
| 10:00 | 11 | | 13 | | | | | 22:00 | 1 | | 1 | | | | |
| 10:15 | 9 | | 12 | | | | | 22:15 | 1 | | 0 | | | | |
| 10:30 | 12 | | 22 | | | | | 22:30 | 1 | | 0 | | | | |
| 10:45 | 15 | 47 | 21 | 68 | | | 115 | 22:45 | 0 | 3 | 0 | 1 | | | 4 |
| 11:00 | 15 | | 10 | | | | | 23:00 | 0 | | 0 | | | | |
| 11:15 | 19 | | 23 | | | | | 23:15 | 0 | | 0 | | | | |
| 11:30 | 16 | | 12 | | | | | 23:30 | 0 | | 0 | | | | |
| 11:45 | 15 | 65 | 24 | 69 | | | 134 | 23:45 | 1 | 1 | 0 | 0 | | | 1 |
| **Total Vol.** | | 282 | | 371 | | | **653** | | | 404 | | 358 | | | **762** |

GPS Coordinates: 33.421540, -111.550436

**Daily Totals**

| NB | SB | EB | WB | **Combined** |
|---|---|---|---|---|
| 686 | 729 | | | **1415** |

| | AM | | | PM | | |
|---|---|---|---|---|---|---|
| **Split %** | 43.2% | 56.8% | **46.1%** | 53.0% | 47.0% | **53.9%** |
| **Peak Hour** | 08:45 | 11:45 | **08:45** | 14:30 | 12:00 | **12:15** |
| **Volume** | 106 | 85 | **157** | 66 | 84 | **147** |
| **P.H.F.** | 0.80 | 0.79 | **0.87** | 0.79 | 0.78 | **0.92** |

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

Volumes for: Thursday, September 12, 2024 City: Apache Junction Project #: 24-1477-006

Location: Idaho Rd north of Apache Trail

| AM Period | NB | | SB | | EB | WB | | PM Period | NB | | SB | | EB | WB | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 00:00 | 5 | | 3 | | | | | 12:00 | 77 | | 98 | | | | |
| 00:15 | 3 | | 3 | | | | | 12:15 | 80 | | 87 | | | | |
| 00:30 | 5 | | 2 | | | | | 12:30 | 77 | | 87 | | | | |
| 00:45 | 7 | 20 | 0 | 8 | | | 28 | 12:45 | 93 | 327 | 90 | 362 | | | 689 |
| 01:00 | 2 | | 3 | | | | | 13:00 | 102 | | 91 | | | | |
| 01:15 | 3 | | 3 | | | | | 13:15 | 91 | | 57 | | | | |
| 01:30 | 3 | | 2 | | | | | 13:30 | 77 | | 90 | | | | |
| 01:45 | 3 | 11 | 0 | 8 | | | 19 | 13:45 | 93 | 363 | 82 | 320 | | | 683 |
| 02:00 | 0 | | 1 | | | | | 14:00 | 73 | | 111 | | | | |
| 02:15 | 1 | | 4 | | | | | 14:15 | 83 | | 88 | | | | |
| 02:30 | 1 | | 3 | | | | | 14:30 | 73 | | 74 | | | | |
| 02:45 | 1 | 3 | 2 | 10 | | | 13 | 14:45 | 72 | 301 | 73 | 346 | | | 647 |
| 03:00 | 2 | | 6 | | | | | 15:00 | 80 | | 84 | | | | |
| 03:15 | 3 | | 2 | | | | | 15:15 | 82 | | 93 | | | | |
| 03:30 | 4 | | 7 | | | | | 15:30 | 70 | | 91 | | | | |
| 03:45 | 6 | 15 | 7 | 22 | | | 37 | 15:45 | 66 | 298 | 109 | 377 | | | 675 |
| 04:00 | 8 | | 11 | | | | | 16:00 | 84 | | 82 | | | | |
| 04:15 | 9 | | 6 | | | | | 16:15 | 53 | | 85 | | | | |
| 04:30 | 11 | | 13 | | | | | 16:30 | 60 | | 76 | | | | |
| 04:45 | 15 | 43 | 17 | 47 | | | 90 | 16:45 | 63 | 260 | 82 | 325 | | | 585 |
| 05:00 | 15 | | 18 | | | | | 17:00 | 67 | | 74 | | | | |
| 05:15 | 23 | | 16 | | | | | 17:15 | 71 | | 84 | | | | |
| 05:30 | 19 | | 21 | | | | | 17:30 | 56 | | 60 | | | | |
| 05:45 | 21 | 78 | 19 | 74 | | | 152 | 17:45 | 59 | 253 | 58 | 276 | | | 529 |
| 06:00 | 20 | | 43 | | | | | 18:00 | 54 | | 73 | | | | |
| 06:15 | 38 | | 34 | | | | | 18:15 | 41 | | 52 | | | | |
| 06:30 | 43 | | 41 | | | | | 18:30 | 53 | | 36 | | | | |
| 06:45 | 53 | 154 | 36 | 154 | | | 308 | 18:45 | 40 | 188 | 46 | 207 | | | 395 |
| 07:00 | 44 | | 30 | | | | | 19:00 | 45 | | 43 | | | | |
| 07:15 | 46 | | 50 | | | | | 19:15 | 43 | | 30 | | | | |
| 07:30 | 51 | | 39 | | | | | 19:30 | 41 | | 44 | | | | |
| 07:45 | 43 | 184 | 71 | 190 | | | 374 | 19:45 | 42 | 171 | 35 | 152 | | | 323 |
| 08:00 | 58 | | 53 | | | | | 20:00 | 30 | | 43 | | | | |
| 08:15 | 56 | | 63 | | | | | 20:15 | 32 | | 43 | | | | |
| 08:30 | 58 | | 67 | | | | | 20:30 | 24 | | 32 | | | | |
| 08:45 | 55 | 227 | 72 | 255 | | | 482 | 20:45 | 24 | 110 | 20 | 138 | | | 248 |
| 09:00 | 75 | | 70 | | | | | 21:00 | 17 | | 30 | | | | |
| 09:15 | 70 | | 84 | | | | | 21:15 | 11 | | 26 | | | | |
| 09:30 | 58 | | 102 | | | | | 21:30 | 16 | | 12 | | | | |
| 09:45 | 93 | 296 | 78 | 334 | | | 630 | 21:45 | 13 | 57 | 16 | 84 | | | 141 |
| 10:00 | 71 | | 80 | | | | | 22:00 | 16 | | 13 | | | | |
| 10:15 | 76 | | 79 | | | | | 22:15 | 9 | | 9 | | | | |
| 10:30 | 75 | | 88 | | | | | 22:30 | 11 | | 13 | | | | |
| 10:45 | 75 | 297 | 84 | 331 | | | 628 | 22:45 | 10 | 46 | 6 | 41 | | | 87 |
| 11:00 | 81 | | 69 | | | | | 23:00 | 12 | | 8 | | | | |
| 11:15 | 58 | | 99 | | | | | 23:15 | 9 | | 16 | | | | |
| 11:30 | 89 | | 108 | | | | | 23:30 | 4 | | 6 | | | | |
| 11:45 | 82 | 310 | 91 | 367 | | | 677 | 23:45 | 8 | 33 | 7 | 37 | | | 70 |
| **Total Vol.** | | 1638 | | 1800 | | | **3438** | | | 2407 | | 2665 | | | **5072** |

GPS Coordinates: 33.419939, -111.546105

**Daily Totals**

| NB | SB | EB | WB | **Combined** |
|---|---|---|---|---|
| 4045 | 4465 | | | **8510** |

| | AM | | | PM | | |
|---|---|---|---|---|---|---|
| **Split %** | 47.6% | 52.4% | **40.4%** | 47.5% | 52.5% | **59.6%** |
| **Peak Hour** | 11:30 | 11:15 | **11:30** | 12:30 | 15:00 | **12:15** |
| **Volume** | 328 | 396 | **712** | 363 | 377 | **707** |
| **P.H.F.** | 0.92 | 0.92 | **0.90** | 0.89 | 0.86 | **0.92** |

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

Volumes for: Thursday, September 12, 2024 City: Apache Junction Project #: 24-1477-007

Location: Apache Trail south west of Idaho Rd

| AM Period | NB | SB | EB | | WB | | | PM Period | NB | SB | EB | | WB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 00:00 | | | 1 | | 2 | | | 12:00 | | | 25 | | 37 | | |
| 00:15 | | | 2 | | 1 | | | 12:15 | | | 14 | | 28 | | |
| 00:30 | | | 0 | | 0 | | | 12:30 | | | 27 | | 36 | | |
| 00:45 | | | 1 | 4 | 0 | 3 | 7 | 12:45 | | | 30 | 96 | 26 | 127 | 223 |
| 01:00 | | | 0 | | 3 | | | 13:00 | | | 32 | | 23 | | |
| 01:15 | | | 0 | | 0 | | | 13:15 | | | 27 | | 17 | | |
| 01:30 | | | 1 | | 1 | | | 13:30 | | | 24 | | 27 | | |
| 01:45 | | | 0 | 1 | 0 | 4 | 5 | 13:45 | | | 22 | 105 | 30 | 97 | 202 |
| 02:00 | | | 0 | | 4 | | | 14:00 | | | 21 | | 34 | | |
| 02:15 | | | 0 | | 1 | | | 14:15 | | | 19 | | 21 | | |
| 02:30 | | | 0 | | 0 | | | 14:30 | | | 25 | | 22 | | |
| 02:45 | | | 0 | 0 | 0 | 5 | 5 | 14:45 | | | 31 | 96 | 20 | 97 | 193 |
| 03:00 | | | 0 | | 1 | | | 15:00 | | | 15 | | 20 | | |
| 03:15 | | | 0 | | 0 | | | 15:15 | | | 20 | | 12 | | |
| 03:30 | | | 1 | | 0 | | | 15:30 | | | 19 | | 29 | | |
| 03:45 | | | 1 | 2 | 0 | 1 | 3 | 15:45 | | | 20 | 74 | 32 | 93 | 167 |
| 04:00 | | | 1 | | 0 | | | 16:00 | | | 18 | | 20 | | |
| 04:15 | | | 0 | | 0 | | | 16:15 | | | 18 | | 20 | | |
| 04:30 | | | 1 | | 3 | | | 16:30 | | | 20 | | 29 | | |
| 04:45 | | | 3 | 5 | 5 | 8 | 13 | 16:45 | | | 19 | 75 | 24 | 93 | 168 |
| 05:00 | | | 2 | | 1 | | | 17:00 | | | 17 | | 19 | | |
| 05:15 | | | 2 | | 1 | | | 17:15 | | | 20 | | 24 | | |
| 05:30 | | | 1 | | 0 | | | 17:30 | | | 16 | | 22 | | |
| 05:45 | | | 5 | 10 | 6 | 8 | 18 | 17:45 | | | 23 | 76 | 15 | 80 | 156 |
| 06:00 | | | 3 | | 9 | | | 18:00 | | | 16 | | 12 | | |
| 06:15 | | | 4 | | 10 | | | 18:15 | | | 17 | | 16 | | |
| 06:30 | | | 8 | | 6 | | | 18:30 | | | 19 | | 20 | | |
| 06:45 | | | 7 | 22 | 11 | 36 | 58 | 18:45 | | | 21 | 73 | 20 | 68 | 141 |
| 07:00 | | | 4 | | 9 | | | 19:00 | | | 17 | | 17 | | |
| 07:15 | | | 8 | | 16 | | | 19:15 | | | 15 | | 10 | | |
| 07:30 | | | 9 | | 19 | | | 19:30 | | | 13 | | 14 | | |
| 07:45 | | | 6 | 27 | 20 | 64 | 91 | 19:45 | | | 16 | 61 | 11 | 52 | 113 |
| 08:00 | | | 13 | | 17 | | | 20:00 | | | 10 | | 9 | | |
| 08:15 | | | 15 | | 17 | | | 20:15 | | | 9 | | 11 | | |
| 08:30 | | | 12 | | 16 | | | 20:30 | | | 9 | | 9 | | |
| 08:45 | | | 19 | 59 | 29 | 79 | 138 | 20:45 | | | 8 | 36 | 6 | 35 | 71 |
| 09:00 | | | 16 | | 23 | | | 21:00 | | | 4 | | 5 | | |
| 09:15 | | | 8 | | 30 | | | 21:15 | | | 7 | | 4 | | |
| 09:30 | | | 21 | | 35 | | | 21:30 | | | 5 | | 1 | | |
| 09:45 | | | 22 | 67 | 33 | 121 | 188 | 21:45 | | | 3 | 19 | 4 | 14 | 33 |
| 10:00 | | | 22 | | 30 | | | 22:00 | | | 4 | | 4 | | |
| 10:15 | | | 23 | | 27 | | | 22:15 | | | 4 | | 1 | | |
| 10:30 | | | 19 | | 37 | | | 22:30 | | | 4 | | 6 | | |
| 10:45 | | | 20 | 84 | 35 | 129 | 213 | 22:45 | | | 0 | 12 | 1 | 12 | 24 |
| 11:00 | | | 23 | | 21 | | | 23:00 | | | 3 | | 0 | | |
| 11:15 | | | 18 | | 44 | | | 23:15 | | | 2 | | 2 | | |
| 11:30 | | | 19 | | 31 | | | 23:30 | | | 0 | | 1 | | |
| 11:45 | | | 24 | 84 | 26 | 122 | 206 | 23:45 | | | 1 | 6 | 2 | 5 | 11 |
| **Total Vol.** | | | | 365 | | 580 | **945** | | | | | 729 | | 773 | **1502** |

GPS Coordinates: 33.418036, -111.547100

**Daily Totals**

| NB | SB | EB | WB | Combined |
|---|---|---|---|---|
| | | 1094 | 1353 | **2447** |

| | AM | | | PM | | |
|---|---|---|---|---|---|---|
| **Split %** | 38.6% | 61.4% | **38.6%** | 48.5% | 51.5% | **61.4%** |
| **Peak Hour** | 11:45 | 11:15 | **11:15** | 12:30 | 12:00 | **12:00** |
| **Volume** | 90 | 138 | **224** | 116 | 127 | **223** |
| **P.H.F.** | 0.83 | 0.78 | **0.90** | 0.91 | 0.86 | **0.88** |

# APPENDIX C: Seasonal Factor Calculation

| **DAILY TRAFFIC** | **2016 (Winter)** | | **2015 (Summer)** | | **2013 (Winter)** | | **2012 (Summer)** | | | *Source: ADOT & MAG Traffic Count Data System (TCDS)* |
|---|---|---|---|---|---|---|---|---|---|---|
| Superstitiion Blvd, west of Idaho Rd (EB Approach) | 6,312 | | 4,004 | | 6,999 | | 4,192 | | | |
| % Difference | | 36.57% | | 42.79% | | 40.11% | | | | |
| % Difference (Average) | | | | 41.45% | | | | | | |

| **DAILY TRAFFIC** | **2021 (Spring)** | | **2020 (Summer)** | | **2019 (Winter)** | | **2017 (Spring)** | | **2016 (Winter)** | *Source: ADOT & MAG Traffic Count Data System (TCDS)* |
|---|---|---|---|---|---|---|---|---|---|---|
| Idaho Rd, south of Apache Trail (NB/SB Approaches) | 9,204 | | 7,367 | | 9,327 | | 10,447 | | 7,866 | |
| % Difference | | 19.96% | | 21.01% | | 10.72% | | 24.71% | | |
| % Difference (Average) | | | | | 19.10% | | | | | |

| **DAILY TRAFFIC** | **2022 (Spring)** | | **2020 (Spring)** | | **2019 (Summer)** | | **2018 (Winter)** | | **2014 (Winter)** | *Source: ADOT & MAG Traffic Count Data System (TCDS)* |
|---|---|---|---|---|---|---|---|---|---|---|
| Apache Trail, east of Idaho Rd (EB/WB Approaches) | 3,540 | | 3,618 | | 2,372 | | 3,077 | | 3,598 | |
| % Difference | | - | | 34.44% | | 22.91% | | - | | |
| % Difference (Average) | | | | | 28.68% | | | | | |

| **DAILY TRAFFIC** | **2025 (Spring)** | | **2024 (Summer)** | *Source: City of Apache Junction & Current Count Data* |
|---|---|---|---|---|
| Plaza Dr, south of Superstition Blvd (NB/SB Approaches) | 2,255 | | 1,415 | |
| % Difference | | 37.25% | | |

| **TOTAL AVERAGE SEASONAL DIFFERENCE** | **31.62%** | **[Used 35%]** |
|---|---|---|

# APPENDIX D: Existing Level-of-Service Analysis

| Intersection | |
|---|---|
| Int Delay, s/veh | 1.5 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 14 | 255 | 65 | 30 | 273 | 5 | 19 | 3 | 14 | 8 | 5 | 9 |
| Future Vol, veh/h | 14 | 255 | 65 | 30 | 273 | 5 | 19 | 3 | 14 | 8 | 5 | 9 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 0 | - | - | 0 | - | - | 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 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 15 | 277 | 71 | 33 | 297 | 5 | 21 | 3 | 15 | 9 | 5 | 10 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 302 | 0 | 0 | 348 | 0 | 0 | 560 | 711 | 174 | 536 | 744 | 151 |
| Stage 1 | - | - | - | - | - | - | 343 | 343 | - | 366 | 366 | - |
| Stage 2 | - | - | - | - | - | - | 217 | 368 | - | 170 | 378 | - |
| Critical Hdwy | 4.14 | - | - | 4.14 | - | - | 7.54 | 6.54 | 6.94 | 7.54 | 6.54 | 6.94 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.54 | 5.54 | - | 6.54 | 5.54 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.54 | 5.54 | - | 6.54 | 5.54 | - |
| Follow-up Hdwy | 2.22 | - | - | 2.22 | - | - | 3.52 | 4.02 | 3.32 | 3.52 | 4.02 | 3.32 |
| Pot Cap-1 Maneuver | 1256 | - | - | 1208 | - | - | 411 | 357 | 839 | 428 | 341 | 868 |
| Stage 1 | - | - | - | - | - | - | 646 | 636 | - | 626 | 621 | - |
| Stage 2 | - | - | - | - | - | - | 765 | 620 | - | 815 | 614 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1256 | - | - | 1208 | - | - | 389 | 343 | 839 | 405 | 328 | 868 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 389 | 343 | - | 405 | 328 | - |
| Stage 1 | - | - | - | - | - | - | 638 | 628 | - | 618 | 604 | - |
| Stage 2 | - | - | - | - | - | - | 729 | 603 | - | 787 | 607 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.3 | 0.8 | 12.8 | 12.6 |
| HCM LOS | | | B | B |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 | SBLn2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 389 | 668 | 1256 | - | - | 1208 | - | - | 405 | 547 |
| HCM Lane V/C Ratio | 0.053 | 0.028 | 0.012 | - | - | 0.027 | - | - | 0.021 | 0.028 |
| HCM Control Delay (s) | 14.8 | 10.5 | 7.9 | - | - | 8.1 | - | - | 14.1 | 11.8 |
| HCM Lane LOS | B | B | A | - | - | A | - | - | B | B |
| HCM 95th %tile Q(veh) | 0.2 | 0.1 | 0 | - | - | 0.1 | - | - | 0.1 | 0.1 |

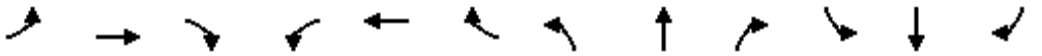
| Intersection | |
|---|---|
| Int Delay, s/veh | 1.9 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 11 | 16 | 7 | 24 | 99 | 4 |
| Future Vol, veh/h | 11 | 16 | 7 | 24 | 99 | 4 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 12 | 17 | 8 | 26 | 108 | 4 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 152 | 110 | 112 | 0 | - | 0 |
| Stage 1 | 110 | - | - | - | - | - |
| Stage 2 | 42 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - | - |
| Pot Cap-1 Maneuver | 840 | 943 | 1478 | - | - | - |
| Stage 1 | 915 | - | - | - | - | - |
| Stage 2 | 980 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 836 | 943 | 1478 | - | - | - |
| Mov Cap-2 Maneuver | 836 | - | - | - | - | - |
| Stage 1 | 910 | - | - | - | - | - |
| Stage 2 | 980 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 9.2 | 1.7 | 0 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1478 | - | 896 | - | - |
| HCM Lane V/C Ratio | 0.005 | - | 0.033 | - | - |
| HCM Control Delay (s) | 7.4 | 0 | 9.2 | - | - |
| HCM Lane LOS | A | A | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 0.1 | - | - |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 42 | 30 | 8 | 62 | 39 | 3 | 12 | 262 | 90 | 3 | 286 | 55 |
| Future Volume (veh/h) | 42 | 30 | 8 | 62 | 39 | 3 | 12 | 262 | 90 | 3 | 286 | 55 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 46 | 33 | 9 | 67 | 42 | 3 | 13 | 285 | 98 | 3 | 311 | 60 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 537 | 450 | 118 | 538 | 544 | 38 | 535 | 1067 | 452 | 558 | 849 | 162 |
| Arrive On Green | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.29 | 0.29 | 0.29 | 0.29 | 0.29 | 0.29 |
| Sat Flow, veh/h | 1361 | 2787 | 729 | 1365 | 3367 | 238 | 1011 | 3741 | 1585 | 1000 | 2978 | 567 |
| Grp Volume(v), veh/h | 46 | 21 | 21 | 67 | 22 | 23 | 13 | 285 | 98 | 3 | 184 | 187 |
| Grp Sat Flow(s),veh/h/ln | 1361 | 1777 | 1739 | 1365 | 1777 | 1828 | 1011 | 1870 | 1585 | 1000 | 1777 | 1768 |
| Q Serve(g_s), s | 0.6 | 0.2 | 0.2 | 1.0 | 0.2 | 0.2 | 0.2 | 1.3 | 1.0 | 0.1 | 1.8 | 1.8 |
| Cycle Q Clear(g_c), s | 0.9 | 0.2 | 0.2 | 1.2 | 0.2 | 0.2 | 2.1 | 1.3 | 1.0 | 1.3 | 1.8 | 1.8 |
| Prop In Lane | 1.00 | | 0.42 | 1.00 | | 0.13 | 1.00 | | 1.00 | 1.00 | | 0.32 |
| Lane Grp Cap(c), veh/h | 537 | 287 | 281 | 538 | 287 | 295 | 535 | 1067 | 452 | 558 | 507 | 504 |
| V/C Ratio(X) | 0.09 | 0.07 | 0.08 | 0.12 | 0.08 | 0.08 | 0.02 | 0.27 | 0.22 | 0.01 | 0.36 | 0.37 |
| Avail Cap(c_a), veh/h | 2514 | 2868 | 2807 | 2521 | 2868 | 2950 | 2252 | 7418 | 3143 | 2257 | 3524 | 3507 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 8.1 | 7.7 | 7.7 | 8.2 | 7.7 | 7.7 | 7.0 | 6.0 | 5.9 | 6.5 | 6.2 | 6.2 |
| Incr Delay (d2), s/veh | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.2 | 0.0 | 0.4 | 0.5 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.1 | 0.0 | 0.1 | 0.2 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.2 | 0.2 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 8.2 | 7.8 | 7.8 | 8.3 | 7.8 | 7.8 | 7.0 | 6.1 | 6.1 | 6.5 | 6.6 | 6.7 |
| LnGrp LOS | A | A | A | A | A | A | A | A | A | A | A | A |
| Approach Vol, veh/h | | 88 | | | 112 | | | 396 | | | 374 | |
| Approach Delay, s/veh | | 8.0 | | | 8.1 | | | 6.2 | | | 6.6 | |
| Approach LOS | | A | | | A | | | A | | | A | |

| Timer - Assigned Phs | | 2 | | 4 | | 6 | | 8 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 12.2 | | 9.5 | | 12.2 | | 9.5 | | | | |
| Change Period (Y+Rc), s | | 6.0 | | 6.0 | | 6.0 | | 6.0 | | | | |
| Max Green Setting (Gmax), s | | 43.0 | | 35.0 | | 43.0 | | 35.0 | | | | |
| Max Q Clear Time (g_c+I1), s | | 4.1 | | 2.9 | | 3.8 | | 3.2 | | | | |
| Green Ext Time (p_c), s | | 2.1 | | 0.3 | | 2.1 | | 0.4 | | | | |

| Intersection Summary | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HCM 6th Ctrl Delay | | | 6.7 | | | | | | | | | |
| HCM 6th LOS | | | A | | | | | | | | | |

**Notes**

User approved volume balancing among the lanes for turning movement.

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 55 | 363 | 41 | 19 | 423 | 28 | 51 | 45 | 23 | 28 | 27 | 69 |
| Future Volume (veh/h) | 55 | 363 | 41 | 19 | 423 | 28 | 51 | 45 | 23 | 28 | 27 | 69 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 60 | 395 | 45 | 21 | 460 | 30 | 43 | 66 | 25 | 30 | 64 | 52 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 158 | 825 | 92 | 41 | 757 | 49 | 659 | 1109 | 398 | 674 | 774 | 656 |
| Arrive On Green | 0.05 | 0.18 | 0.18 | 0.02 | 0.15 | 0.15 | 0.04 | 0.42 | 0.42 | 0.03 | 0.41 | 0.41 |
| Sat Flow, veh/h | 3456 | 4659 | 521 | 1781 | 4901 | 317 | 1781 | 2628 | 943 | 1781 | 1870 | 1585 |
| Grp Volume(v), veh/h | 60 | 287 | 153 | 21 | 318 | 172 | 43 | 46 | 45 | 30 | 64 | 52 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1702 | 1777 | 1781 | 1702 | 1813 | 1781 | 1870 | 1701 | 1781 | 1870 | 1585 |
| Q Serve(g_s), s | 1.4 | 6.1 | 6.3 | 0.9 | 7.0 | 7.1 | 1.1 | 1.2 | 1.3 | 0.8 | 1.7 | 1.6 |
| Cycle Q Clear(g_c), s | 1.4 | 6.1 | 6.3 | 0.9 | 7.0 | 7.1 | 1.1 | 1.2 | 1.3 | 0.8 | 1.7 | 1.6 |
| Prop In Lane | 1.00 | | 0.29 | 1.00 | | 0.17 | 1.00 | | 0.55 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 158 | 603 | 315 | 41 | 526 | 280 | 659 | 789 | 717 | 674 | 774 | 656 |
| V/C Ratio(X) | 0.38 | 0.48 | 0.49 | 0.51 | 0.61 | 0.61 | 0.07 | 0.06 | 0.06 | 0.04 | 0.08 | 0.08 |
| Avail Cap(c_a), veh/h | 472 | 1605 | 838 | 243 | 1605 | 855 | 790 | 789 | 717 | 818 | 789 | 669 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 37.3 | 29.8 | 29.9 | 38.9 | 31.8 | 31.8 | 12.4 | 13.8 | 13.8 | 12.7 | 14.3 | 14.3 |
| Incr Delay (d2), s/veh | 1.5 | 0.6 | 1.2 | 9.2 | 1.1 | 2.2 | 0.0 | 0.1 | 0.2 | 0.0 | 0.0 | 0.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.6 | 2.5 | 2.7 | 0.5 | 2.9 | 3.2 | 0.4 | 0.5 | 0.5 | 0.3 | 0.7 | 0.6 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 38.8 | 30.4 | 31.0 | 48.1 | 32.9 | 34.0 | 12.4 | 13.9 | 14.0 | 12.7 | 14.4 | 14.4 |
| LnGrp LOS | D | C | C | D | C | C | B | B | B | B | B | B |
| Approach Vol, veh/h | | 500 | | | 511 | | | 134 | | | 146 | |
| Approach Delay, s/veh | | 31.6 | | | 33.9 | | | 13.5 | | | 14.0 | |
| Approach LOS | | C | | | C | | | B | | | B | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 9.4 | 41.0 | 8.9 | 21.3 | 10.1 | 40.4 | 10.7 | 19.5 |
| Change Period (Y+Rc), s | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 |
| Max Green Setting (Gmax), s | 9.0 | 34.0 | 11.0 | 38.0 | 9.0 | 34.0 | 11.0 | 38.0 |
| Max Q Clear Time (g_c+I1), s | 2.8 | 3.3 | 2.9 | 8.3 | 3.1 | 3.7 | 3.4 | 9.1 |
| Green Ext Time (p_c), s | 0.0 | 0.5 | 0.0 | 3.0 | 0.0 | 0.5 | 0.1 | 3.3 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 28.6 |
| HCM 6th LOS | C |

**Notes**

User approved volume balancing among the lanes for turning movement.

| Intersection | |
|---|---|
| Int Delay, s/veh | 2.2 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 12 | 377 | 20 | 14 | 294 | 16 | 42 | 11 | 35 | 9 | 4 | 18 |
| Future Vol, veh/h | 12 | 377 | 20 | 14 | 294 | 16 | 42 | 11 | 35 | 9 | 4 | 18 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 0 | - | - | 0 | - | - | 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 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 13 | 410 | 22 | 15 | 320 | 17 | 46 | 12 | 38 | 10 | 4 | 20 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 337 | 0 | 0 | 432 | 0 | 0 | 639 | 814 | 216 | 596 | 817 | 169 |
| Stage 1 | - | - | - | - | - | - | 447 | 447 | - | 359 | 359 | - |
| Stage 2 | - | - | - | - | - | - | 192 | 367 | - | 237 | 458 | - |
| Critical Hdwy | 4.14 | - | - | 4.14 | - | - | 7.54 | 6.54 | 6.94 | 7.54 | 6.54 | 6.94 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.54 | 5.54 | - | 6.54 | 5.54 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.54 | 5.54 | - | 6.54 | 5.54 | - |
| Follow-up Hdwy | 2.22 | - | - | 2.22 | - | - | 3.52 | 4.02 | 3.32 | 3.52 | 4.02 | 3.32 |
| Pot Cap-1 Maneuver | 1219 | - | - | 1124 | - | - | 361 | 311 | 789 | 387 | 309 | 845 |
| Stage 1 | - | - | - | - | - | - | 560 | 572 | - | 632 | 626 | - |
| Stage 2 | - | - | - | - | - | - | 791 | 621 | - | 745 | 565 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1219 | - | - | 1124 | - | - | 343 | 304 | 789 | 351 | 302 | 845 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 343 | 304 | - | 351 | 302 | - |
| Stage 1 | - | - | - | - | - | - | 554 | 566 | - | 625 | 618 | - |
| Stage 2 | - | - | - | - | - | - | 757 | 613 | - | 687 | 559 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.2 | 0.4 | 14.4 | 12.3 |
| HCM LOS | | | B | B |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 | SBLn2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 343 | 571 | 1219 | - | - | 1124 | - | - | 351 | 637 |
| HCM Lane V/C Ratio | 0.133 | 0.088 | 0.011 | - | - | 0.014 | - | - | 0.028 | 0.038 |
| HCM Control Delay (s) | 17.1 | 11.9 | 8 | - | - | 8.2 | - | - | 15.6 | 10.9 |
| HCM Lane LOS | C | B | A | - | - | A | - | - | C | B |
| HCM 95th %tile Q(veh) | 0.5 | 0.3 | 0 | - | - | 0 | - | - | 0.1 | 0.1 |

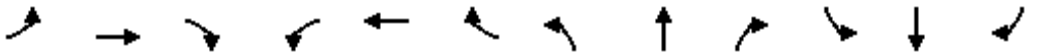
| Intersection | |
|---|---|
| Int Delay, s/veh | 1.8 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 11 | 15 | 5 | 78 | 28 | 9 |
| Future Vol, veh/h | 11 | 15 | 5 | 78 | 28 | 9 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 12 | 16 | 5 | 85 | 30 | 10 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 130 | 35 | 40 | 0 | - | 0 |
| Stage 1 | 35 | - | - | - | - | - |
| Stage 2 | 95 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - | - |
| Pot Cap-1 Maneuver | 864 | 1038 | 1570 | - | - | - |
| Stage 1 | 987 | - | - | - | - | - |
| Stage 2 | 929 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 861 | 1038 | 1570 | - | - | - |
| Mov Cap-2 Maneuver | 861 | - | - | - | - | - |
| Stage 1 | 984 | - | - | - | - | - |
| Stage 2 | 929 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 8.9 | 0.4 | 0 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1570 | - | 955 | - | - |
| HCM Lane V/C Ratio | 0.003 | - | 0.03 | - | - |
| HCM Control Delay (s) | 7.3 | 0 | 8.9 | - | - |
| HCM Lane LOS | A | A | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 0.1 | - | - |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 49 | 43 | 11 | 84 | 51 | 0 | 14 | 304 | 73 | 8 | 354 | 65 |
| Future Volume (veh/h) | 49 | 43 | 11 | 84 | 51 | 0 | 14 | 304 | 73 | 8 | 354 | 65 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 53 | 47 | 12 | 91 | 55 | 0 | 15 | 330 | 79 | 9 | 385 | 71 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 229 | 323 | 79 | 226 | 406 | 0 | 738 | 2728 | 1156 | 832 | 2188 | 400 |
| Arrive On Green | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.00 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 |
| Sat Flow, veh/h | 1349 | 2827 | 695 | 1344 | 3647 | 0 | 935 | 3741 | 1585 | 1050 | 3000 | 548 |
| Grp Volume(v), veh/h | 53 | 29 | 30 | 91 | 55 | 0 | 15 | 330 | 79 | 9 | 227 | 229 |
| Grp Sat Flow(s),veh/h/ln | 1349 | 1777 | 1745 | 1344 | 1777 | 0 | 935 | 1870 | 1585 | 1050 | 1777 | 1772 |
| Q Serve(g_s), s | 2.8 | 1.1 | 1.2 | 5.0 | 1.1 | 0.0 | 0.4 | 2.0 | 1.1 | 0.2 | 3.0 | 3.1 |
| Cycle Q Clear(g_c), s | 3.9 | 1.1 | 1.2 | 6.2 | 1.1 | 0.0 | 3.5 | 2.0 | 1.1 | 2.2 | 3.0 | 3.1 |
| Prop In Lane | 1.00 | | 0.40 | 1.00 | | 0.00 | 1.00 | | 1.00 | 1.00 | | 0.31 |
| Lane Grp Cap(c), veh/h | 229 | 203 | 199 | 226 | 406 | 0 | 738 | 2728 | 1156 | 832 | 1296 | 1292 |
| V/C Ratio(X) | 0.23 | 0.14 | 0.15 | 0.40 | 0.14 | 0.00 | 0.02 | 0.12 | 0.07 | 0.01 | 0.17 | 0.18 |
| Avail Cap(c_a), veh/h | 813 | 972 | 955 | 808 | 1944 | 0 | 738 | 2728 | 1156 | 832 | 1296 | 1292 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 32.3 | 30.6 | 30.6 | 33.4 | 30.6 | 0.0 | 3.8 | 3.1 | 3.0 | 3.4 | 3.2 | 3.2 |
| Incr Delay (d2), s/veh | 0.5 | 0.3 | 0.3 | 1.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.3 | 0.3 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.9 | 0.5 | 0.5 | 1.7 | 0.5 | 0.0 | 0.1 | 0.6 | 0.3 | 0.0 | 0.9 | 0.9 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 32.8 | 30.9 | 31.0 | 34.6 | 30.7 | 0.0 | 3.8 | 3.2 | 3.1 | 3.4 | 3.5 | 3.5 |
| LnGrp LOS | C | C | C | C | C | A | A | A | A | A | A | A |
| Approach Vol, veh/h | | 112 | | | 146 | | | 424 | | | 465 | |
| Approach Delay, s/veh | | 31.9 | | | 33.1 | | | 3.2 | | | 3.5 | |
| Approach LOS | | C | | | C | | | A | | | A | |

| Timer - Assigned Phs | | 2 | | 4 | | 6 | | 8 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 62.0 | | 14.8 | | 62.0 | | 14.8 | | | | |
| Change Period (Y+Rc), s | | 6.0 | | 6.0 | | 6.0 | | 6.0 | | | | |
| Max Green Setting (Gmax), s | | 56.0 | | 42.0 | | 56.0 | | 42.0 | | | | |
| Max Q Clear Time (g_c+I1), s | | 5.5 | | 5.9 | | 5.1 | | 8.2 | | | | |
| Green Ext Time (p_c), s | | 2.7 | | 0.5 | | 3.1 | | 0.6 | | | | |

| Intersection Summary | | |
|---|---|---|
| HCM 6th Ctrl Delay | | 9.9 |
| HCM 6th LOS | | A |

**Notes**

User approved volume balancing among the lanes for turning movement.

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 54 | 575 | 80 | 62 | 398 | 39 | 127 | 57 | 65 | 47 | 55 | 74 |
| Future Volume (veh/h) | 54 | 575 | 80 | 62 | 398 | 39 | 127 | 57 | 65 | 47 | 55 | 74 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 59 | 625 | 87 | 67 | 433 | 42 | 90 | 129 | 71 | 51 | 75 | 70 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 151 | 943 | 130 | 87 | 1010 | 97 | 629 | 882 | 457 | 559 | 692 | 586 |
| Arrive On Green | 0.04 | 0.21 | 0.21 | 0.05 | 0.21 | 0.21 | 0.05 | 0.38 | 0.38 | 0.04 | 0.37 | 0.37 |
| Sat Flow, veh/h | 3456 | 4538 | 624 | 1781 | 4740 | 453 | 1781 | 2322 | 1203 | 1781 | 1870 | 1585 |
| Grp Volume(v), veh/h | 59 | 467 | 245 | 67 | 309 | 166 | 90 | 102 | 98 | 51 | 75 | 70 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1702 | 1758 | 1781 | 1702 | 1789 | 1781 | 1870 | 1654 | 1781 | 1870 | 1585 |
| Q Serve(g_s), s | 1.4 | 10.9 | 11.1 | 3.2 | 6.8 | 7.0 | 2.7 | 3.1 | 3.4 | 1.5 | 2.3 | 2.5 |
| Cycle Q Clear(g_c), s | 1.4 | 10.9 | 11.1 | 3.2 | 6.8 | 7.0 | 2.7 | 3.1 | 3.4 | 1.5 | 2.3 | 2.5 |
| Prop In Lane | 1.00 | | 0.36 | 1.00 | | 0.25 | 1.00 | | 0.73 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 151 | 708 | 365 | 87 | 725 | 381 | 629 | 711 | 629 | 559 | 692 | 586 |
| V/C Ratio(X) | 0.39 | 0.66 | 0.67 | 0.77 | 0.43 | 0.44 | 0.14 | 0.14 | 0.16 | 0.09 | 0.11 | 0.12 |
| Avail Cap(c_a), veh/h | 517 | 1451 | 749 | 267 | 1451 | 762 | 743 | 711 | 629 | 671 | 692 | 586 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 40.4 | 31.6 | 31.7 | 40.8 | 29.6 | 29.6 | 15.4 | 17.7 | 17.7 | 15.6 | 18.0 | 18.0 |
| Incr Delay (d2), s/veh | 1.6 | 1.1 | 2.1 | 13.3 | 0.4 | 0.8 | 0.1 | 0.4 | 0.5 | 0.1 | 0.3 | 0.4 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.6 | 4.5 | 4.8 | 1.7 | 2.8 | 3.0 | 1.1 | 1.4 | 1.3 | 0.6 | 1.0 | 1.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 42.0 | 32.6 | 33.8 | 54.1 | 30.0 | 30.4 | 15.5 | 18.1 | 18.3 | 15.6 | 18.3 | 18.5 |
| LnGrp LOS | D | C | C | D | C | C | B | B | B | B | B | B |
| Approach Vol, veh/h | | 771 | | | 542 | | | 290 | | | 196 | |
| Approach Delay, s/veh | | 33.7 | | | 33.1 | | | 17.3 | | | 17.7 | |
| Approach LOS | | C | | | C | | | B | | | B | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 10.5 | 40.0 | 11.2 | 25.0 | 11.4 | 39.1 | 10.8 | 25.5 |
| Change Period (Y+Rc), s | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 |
| Max Green Setting (Gmax), s | 9.0 | 33.0 | 13.0 | 37.0 | 10.0 | 32.0 | 13.0 | 37.0 |
| Max Q Clear Time (g_c+I1), s | 3.5 | 5.4 | 5.2 | 13.1 | 4.7 | 4.5 | 3.4 | 9.0 |
| Green Ext Time (p_c), s | 0.0 | 1.2 | 0.1 | 4.9 | 0.1 | 0.6 | 0.1 | 3.2 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 29.1 |
| HCM 6th LOS | C |

**Notes**

User approved volume balancing among the lanes for turning movement.

# APPENDIX E: Trip Generation Calculation

Apache Trail (24-0336)
October 11, 2024

| DESCRIPTION OF LAND USE | | | | VEHICLE GENERATED TRIPS | | | | | | | | | Data Points | AVERAGE RATE or EQUATION | | | DIRECTIONAL DISTRIBUTION | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Daily | | | AM Peak Hour | | | PM Peak Hour | | | | | | | Daily | | AM Peak Hour | | PM Peak Hour | |
| Phase/Parcel | Land Use | ITE Land Use Code (LUC) | SIZE | Enter | Exit | Total | Enter | Exit | Total | Enter | Exit | Total | | Daily | AM Peak Hour | PM Peak Hour | Enter | Exit | Enter | Exit | Enter | Exit |
| | Multi-family Residential | 220 Multifamily Housing | 336 DU | 1,133 | 1,132 | 2,265 | 32 | 102 | 134 | 108 | 63 | 171 | | 6.74 | 0.4 | 0.51 | 50% | 50% | 24% | 76% | 63% | 37% |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | Total Trips | 1,133 | 1,132 | 2,265 | 32 | 102 | 134 | 108 | 63 | 171 | | | | | | | | | | |
| | | | *Alternate Mode Reduction* *0%* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | | | | | | | | | | |
| | | | *Internal Trips (Retail/Restaurant)* *20%* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | | | | | | | | | | |
| | | | "New" Trips Added to Street System | 1,133 | 1,132 | 2,265 | 32 | 102 | 134 | 108 | 63 | 171 | | | | | | | | | | |

*Source: ITE Trip Generation Manual 11th Edition*

# APPENDIX F: Future 2026 Level-of-Service Analysis

| Intersection | |
|---|---|
| Int Delay, s/veh | 1.7 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 15 | 250 | 72 | 33 | 270 | 6 | 21 | 3 | 15 | 9 | 6 | 10 |
| Future Vol, veh/h | 15 | 250 | 72 | 33 | 270 | 6 | 21 | 3 | 15 | 9 | 6 | 10 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 0 | - | - | 0 | - | - | 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 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 16 | 272 | 78 | 36 | 293 | 7 | 23 | 3 | 16 | 10 | 7 | 11 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 300 | 0 | 0 | 350 | 0 | 0 | 565 | 715 | 175 | 539 | 751 | 150 |
| Stage 1 | - | - | - | - | - | - | 343 | 343 | - | 369 | 369 | - |
| Stage 2 | - | - | - | - | - | - | 222 | 372 | - | 170 | 382 | - |
| Critical Hdwy | 4.14 | - | - | 4.14 | - | - | 7.54 | 6.54 | 6.94 | 7.54 | 6.54 | 6.94 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.54 | 5.54 | - | 6.54 | 5.54 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.54 | 5.54 | - | 6.54 | 5.54 | - |
| Follow-up Hdwy | 2.22 | - | - | 2.22 | - | - | 3.52 | 4.02 | 3.32 | 3.52 | 4.02 | 3.32 |
| Pot Cap-1 Maneuver | 1258 | - | - | 1206 | - | - | 408 | 355 | 838 | 426 | 338 | 870 |
| Stage 1 | - | - | - | - | - | - | 646 | 636 | - | 623 | 619 | - |
| Stage 2 | - | - | - | - | - | - | 760 | 617 | - | 815 | 611 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1258 | - | - | 1206 | - | - | 384 | 340 | 838 | 401 | 323 | 870 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 384 | 340 | - | 401 | 323 | - |
| Stage 1 | - | - | - | - | - | - | 638 | 628 | - | 615 | 600 | - |
| Stage 2 | - | - | - | - | - | - | 720 | 598 | - | 785 | 603 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.4 | 0.9 | 12.9 | 12.8 |
| HCM LOS | | | B | B |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 | SBLn2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 384 | 674 | 1258 | - | - | 1206 | - | - | 401 | 532 |
| HCM Lane V/C Ratio | 0.059 | 0.029 | 0.013 | - | - | 0.03 | - | - | 0.024 | 0.033 |
| HCM Control Delay (s) | 15 | 10.5 | 7.9 | - | - | 8.1 | - | - | 14.2 | 12 |
| HCM Lane LOS | C | B | A | - | - | A | - | - | B | B |
| HCM 95th %tile Q(veh) | 0.2 | 0.1 | 0 | - | - | 0.1 | - | - | 0.1 | 0.1 |

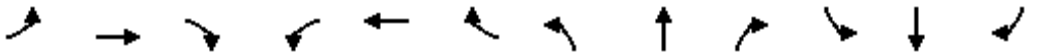
| Intersection | |
|---|---|
| Int Delay, s/veh | 1.9 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 12 | 18 | 8 | 26 | 109 | 4 |
| Future Vol, veh/h | 12 | 18 | 8 | 26 | 109 | 4 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 13 | 20 | 9 | 28 | 118 | 4 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 166 | 120 | 122 | 0 | - | 0 |
| Stage 1 | 120 | - | - | - | - | - |
| Stage 2 | 46 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - | - |
| Pot Cap-1 Maneuver | 824 | 931 | 1465 | - | - | - |
| Stage 1 | 905 | - | - | - | - | - |
| Stage 2 | 976 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 819 | 931 | 1465 | - | - | - |
| Mov Cap-2 Maneuver | 819 | - | - | - | - | - |
| Stage 1 | 900 | - | - | - | - | - |
| Stage 2 | 976 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 9.2 | 1.8 | 0 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1465 | - | 883 | - | - |
| HCM Lane V/C Ratio | 0.006 | - | 0.037 | - | - |
| HCM Control Delay (s) | 7.5 | 0 | 9.2 | - | - |
| HCM Lane LOS | A | A | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 0.1 | - | - |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 46 | 33 | 9 | 68 | 43 | 3 | 13 | 289 | 99 | 3 | 315 | 61 |
| Future Volume (veh/h) | 46 | 33 | 9 | 68 | 43 | 3 | 13 | 289 | 99 | 3 | 315 | 61 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 50 | 36 | 10 | 74 | 47 | 3 | 14 | 314 | 108 | 3 | 342 | 66 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 531 | 462 | 123 | 532 | 565 | 36 | 523 | 1116 | 473 | 547 | 888 | 169 |
| Arrive On Green | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.30 | 0.30 | 0.30 | 0.30 | 0.30 | 0.30 |
| Sat Flow, veh/h | 1355 | 2775 | 739 | 1360 | 3394 | 215 | 978 | 3741 | 1585 | 965 | 2977 | 568 |
| Grp Volume(v), veh/h | 50 | 22 | 24 | 74 | 24 | 26 | 14 | 314 | 108 | 3 | 203 | 205 |
| Grp Sat Flow(s),veh/h/ln | 1355 | 1777 | 1737 | 1360 | 1777 | 1832 | 978 | 1870 | 1585 | 965 | 1777 | 1768 |
| Q Serve(g_s), s | 0.7 | 0.2 | 0.3 | 1.1 | 0.3 | 0.3 | 0.3 | 1.4 | 1.2 | 0.1 | 2.0 | 2.1 |
| Cycle Q Clear(g_c), s | 1.0 | 0.2 | 0.3 | 1.3 | 0.3 | 0.3 | 2.3 | 1.4 | 1.2 | 1.5 | 2.0 | 2.1 |
| Prop In Lane | 1.00 | | 0.43 | 1.00 | | 0.12 | 1.00 | | 1.00 | 1.00 | | 0.32 |
| Lane Grp Cap(c), veh/h | 531 | 296 | 289 | 532 | 296 | 305 | 523 | 1116 | 473 | 547 | 530 | 527 |
| V/C Ratio(X) | 0.09 | 0.08 | 0.08 | 0.14 | 0.08 | 0.08 | 0.03 | 0.28 | 0.23 | 0.01 | 0.38 | 0.39 |
| Avail Cap(c_a), veh/h | 2421 | 2774 | 2713 | 2429 | 2774 | 2860 | 2106 | 7175 | 3040 | 2110 | 3408 | 3392 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 8.3 | 7.9 | 7.9 | 8.5 | 7.9 | 7.9 | 7.2 | 6.0 | 5.9 | 6.6 | 6.2 | 6.2 |
| Incr Delay (d2), s/veh | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.2 | 0.0 | 0.5 | 0.5 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.0 | 0.2 | 0.1 | 0.0 | 0.2 | 0.3 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 8.4 | 8.0 | 8.0 | 8.6 | 8.0 | 8.0 | 7.2 | 6.2 | 6.2 | 6.6 | 6.7 | 6.7 |
| LnGrp LOS | A | A | A | A | A | A | A | A | A | A | A | A |
| Approach Vol, veh/h | | 96 | | | 124 | | | 436 | | | 411 | |
| Approach Delay, s/veh | | 8.2 | | | 8.4 | | | 6.2 | | | 6.7 | |
| Approach LOS | | A | | | A | | | A | | | A | |

| Timer - Assigned Phs | | 2 | | 4 | | 6 | | 8 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 12.7 | | 9.7 | | 12.7 | | 9.7 | | | | |
| Change Period (Y+Rc), s | | 6.0 | | 6.0 | | 6.0 | | 6.0 | | | | |
| Max Green Setting (Gmax), s | | 43.0 | | 35.0 | | 43.0 | | 35.0 | | | | |
| Max Q Clear Time (g_c+I1), s | | 4.3 | | 3.0 | | 4.1 | | 3.3 | | | | |
| Green Ext Time (p_c), s | | 2.4 | | 0.3 | | 2.3 | | 0.4 | | | | |

| Intersection Summary | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HCM 6th Ctrl Delay | | | 6.8 | | | | | | | | | |
| HCM 6th LOS | | | A | | | | | | | | | |

**Notes**

User approved volume balancing among the lanes for turning movement.

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 61 | 400 | 45 | 21 | 466 | 31 | 56 | 50 | 25 | 31 | 30 | 76 |
| Future Volume (veh/h) | 61 | 400 | 45 | 21 | 466 | 31 | 56 | 50 | 25 | 31 | 30 | 76 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 66 | 435 | 49 | 23 | 507 | 34 | 47 | 73 | 27 | 34 | 70 | 58 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 164 | 881 | 98 | 44 | 814 | 54 | 642 | 1093 | 384 | 658 | 759 | 643 |
| Arrive On Green | 0.05 | 0.19 | 0.19 | 0.02 | 0.17 | 0.17 | 0.04 | 0.41 | 0.41 | 0.03 | 0.41 | 0.41 |
| Sat Flow, veh/h | 3456 | 4664 | 517 | 1781 | 4891 | 325 | 1781 | 2645 | 929 | 1781 | 1870 | 1585 |
| Grp Volume(v), veh/h | 66 | 316 | 168 | 23 | 352 | 189 | 47 | 50 | 50 | 34 | 70 | 58 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1702 | 1777 | 1781 | 1702 | 1812 | 1781 | 1870 | 1703 | 1781 | 1870 | 1585 |
| Q Serve(g_s), s | 1.5 | 6.8 | 7.0 | 1.0 | 7.9 | 8.0 | 1.2 | 1.3 | 1.4 | 0.9 | 1.9 | 1.9 |
| Cycle Q Clear(g_c), s | 1.5 | 6.8 | 7.0 | 1.0 | 7.9 | 8.0 | 1.2 | 1.3 | 1.4 | 0.9 | 1.9 | 1.9 |
| Prop In Lane | 1.00 | | 0.29 | 1.00 | | 0.18 | 1.00 | | 0.55 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 164 | 643 | 336 | 44 | 567 | 302 | 642 | 773 | 704 | 658 | 759 | 643 |
| V/C Ratio(X) | 0.40 | 0.49 | 0.50 | 0.52 | 0.62 | 0.63 | 0.07 | 0.07 | 0.07 | 0.05 | 0.09 | 0.09 |
| Avail Cap(c_a), veh/h | 462 | 1572 | 821 | 238 | 1572 | 837 | 766 | 773 | 704 | 795 | 773 | 655 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 38.1 | 29.8 | 29.9 | 39.6 | 31.9 | 31.9 | 13.0 | 14.6 | 14.6 | 13.2 | 15.1 | 15.1 |
| Incr Delay (d2), s/veh | 1.6 | 0.6 | 1.2 | 9.1 | 1.1 | 2.1 | 0.0 | 0.2 | 0.2 | 0.0 | 0.1 | 0.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.7 | 2.8 | 3.0 | 0.6 | 3.3 | 3.6 | 0.5 | 0.6 | 0.6 | 0.3 | 0.8 | 0.7 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 39.7 | 30.4 | 31.1 | 48.8 | 33.0 | 34.1 | 13.0 | 14.7 | 14.8 | 13.2 | 15.1 | 15.1 |
| LnGrp LOS | D | C | C | D | C | C | B | B | B | B | B | B |
| Approach Vol, veh/h | | 550 | | | 564 | | | 147 | | | 162 | |
| Approach Delay, s/veh | | 31.7 | | | 34.0 | | | 14.2 | | | 14.7 | |
| Approach LOS | | C | | | C | | | B | | | B | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 9.7 | 41.0 | 9.0 | 22.6 | 10.3 | 40.4 | 10.9 | 20.7 |
| Change Period (Y+Rc), s | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 |
| Max Green Setting (Gmax), s | 9.0 | 34.0 | 11.0 | 38.0 | 9.0 | 34.0 | 11.0 | 38.0 |
| Max Q Clear Time (g_c+I1), s | 2.9 | 3.4 | 3.0 | 9.0 | 3.2 | 3.9 | 3.5 | 10.0 |
| Green Ext Time (p_c), s | 0.0 | 0.5 | 0.0 | 3.3 | 0.0 | 0.5 | 0.1 | 3.7 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 28.9 |
| HCM 6th LOS | C |

**Notes**

User approved volume balancing among the lanes for turning movement.

| Intersection | |
|---|---|
| Int Delay, s/veh | 2.4 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 13 | 373 | 22 | 15 | 272 | 18 | 46 | 12 | 39 | 10 | 4 | 20 |
| Future Vol, veh/h | 13 | 373 | 22 | 15 | 272 | 18 | 46 | 12 | 39 | 10 | 4 | 20 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 0 | - | - | 0 | - | - | 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 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 14 | 405 | 24 | 16 | 296 | 20 | 50 | 13 | 42 | 11 | 4 | 22 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 316 | 0 | 0 | 429 | 0 | 0 | 627 | 793 | 215 | 575 | 795 | 158 |
| Stage 1 | - | - | - | - | - | - | 445 | 445 | - | 338 | 338 | - |
| Stage 2 | - | - | - | - | - | - | 182 | 348 | - | 237 | 457 | - |
| Critical Hdwy | 4.14 | - | - | 4.14 | - | - | 7.54 | 6.54 | 6.94 | 7.54 | 6.54 | 6.94 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.54 | 5.54 | - | 6.54 | 5.54 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.54 | 5.54 | - | 6.54 | 5.54 | - |
| Follow-up Hdwy | 2.22 | - | - | 2.22 | - | - | 3.52 | 4.02 | 3.32 | 3.52 | 4.02 | 3.32 |
| Pot Cap-1 Maneuver | 1241 | - | - | 1127 | - | - | 368 | 320 | 790 | 401 | 319 | 859 |
| Stage 1 | - | - | - | - | - | - | 562 | 573 | - | 650 | 639 | - |
| Stage 2 | - | - | - | - | - | - | 802 | 633 | - | 745 | 566 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1241 | - | - | 1127 | - | - | 348 | 312 | 790 | 360 | 311 | 859 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 348 | 312 | - | 360 | 311 | - |
| Stage 1 | - | - | - | - | - | - | 556 | 567 | - | 643 | 630 | - |
| Stage 2 | - | - | - | - | - | - | 765 | 624 | - | 681 | 560 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.3 | 0.4 | 14.3 | 12 |
| HCM LOS | | | B | B |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 | SBLn2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 348 | 581 | 1241 | - | - | 1127 | - | - | 360 | 664 |
| HCM Lane V/C Ratio | 0.144 | 0.095 | 0.011 | - | - | 0.014 | - | - | 0.03 | 0.039 |
| HCM Control Delay (s) | 17.1 | 11.8 | 7.9 | - | - | 8.2 | - | - | 15.3 | 10.6 |
| HCM Lane LOS | C | B | A | - | - | A | - | - | C | B |
| HCM 95th %tile Q(veh) | 0.5 | 0.3 | 0 | - | - | 0 | - | - | 0.1 | 0.1 |

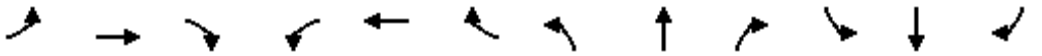
| Intersection | |
|---|---|
| Int Delay, s/veh | 1.9 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 12 | 17 | 6 | 86 | 31 | 10 |
| Future Vol, veh/h | 12 | 17 | 6 | 86 | 31 | 10 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 13 | 18 | 7 | 93 | 34 | 11 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 147 | 40 | 45 | 0 | - | 0 |
| Stage 1 | 40 | - | - | - | - | - |
| Stage 2 | 107 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - | - |
| Pot Cap-1 Maneuver | 845 | 1031 | 1563 | - | - | - |
| Stage 1 | 982 | - | - | - | - | - |
| Stage 2 | 917 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 841 | 1031 | 1563 | - | - | - |
| Mov Cap-2 Maneuver | 841 | - | - | - | - | - |
| Stage 1 | 977 | - | - | - | - | - |
| Stage 2 | 917 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 9 | 0.5 | 0 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1563 | - | 943 | - | - |
| HCM Lane V/C Ratio | 0.004 | - | 0.033 | - | - |
| HCM Control Delay (s) | 7.3 | 0 | 9 | - | - |
| HCM Lane LOS | A | A | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 0.1 | - | - |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 54 | 47 | 12 | 93 | 56 | 0 | 15 | 335 | 80 | 9 | 390 | 72 |
| Future Volume (veh/h) | 54 | 47 | 12 | 93 | 56 | 0 | 15 | 335 | 80 | 9 | 390 | 72 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 59 | 51 | 13 | 101 | 61 | 0 | 16 | 364 | 87 | 10 | 424 | 78 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 238 | 350 | 86 | 236 | 440 | 0 | 698 | 2700 | 1144 | 797 | 2165 | 395 |
| Arrive On Green | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.00 | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 |
| Sat Flow, veh/h | 1341 | 2828 | 694 | 1338 | 3647 | 0 | 896 | 3741 | 1585 | 1018 | 3001 | 548 |
| Grp Volume(v), veh/h | 59 | 31 | 33 | 101 | 61 | 0 | 16 | 364 | 87 | 10 | 250 | 252 |
| Grp Sat Flow(s),veh/h/ln | 1341 | 1777 | 1745 | 1338 | 1777 | 0 | 896 | 1870 | 1585 | 1018 | 1777 | 1772 |
| Q Serve(g_s), s | 3.2 | 1.2 | 1.3 | 5.7 | 1.2 | 0.0 | 0.5 | 2.3 | 1.3 | 0.2 | 3.5 | 3.6 |
| Cycle Q Clear(g_c), s | 4.4 | 1.2 | 1.3 | 7.0 | 1.2 | 0.0 | 4.0 | 2.3 | 1.3 | 2.6 | 3.5 | 3.6 |
| Prop In Lane | 1.00 | | 0.40 | 1.00 | | 0.00 | 1.00 | | 1.00 | 1.00 | | 0.31 |
| Lane Grp Cap(c), veh/h | 238 | 220 | 216 | 236 | 440 | 0 | 698 | 2700 | 1144 | 797 | 1282 | 1279 |
| V/C Ratio(X) | 0.25 | 0.14 | 0.15 | 0.43 | 0.14 | 0.00 | 0.02 | 0.13 | 0.08 | 0.01 | 0.19 | 0.20 |
| Avail Cap(c_a), veh/h | 798 | 962 | 945 | 795 | 1923 | 0 | 698 | 2700 | 1144 | 797 | 1282 | 1279 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 32.3 | 30.3 | 30.4 | 33.5 | 30.3 | 0.0 | 4.2 | 3.3 | 3.2 | 3.7 | 3.5 | 3.5 |
| Incr Delay (d2), s/veh | 0.5 | 0.3 | 0.3 | 1.2 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.3 | 0.3 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.0 | 0.5 | 0.6 | 1.9 | 0.5 | 0.0 | 0.1 | 0.7 | 0.3 | 0.0 | 1.0 | 1.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 32.8 | 30.6 | 30.7 | 34.7 | 30.5 | 0.0 | 4.2 | 3.4 | 3.3 | 3.8 | 3.8 | 3.9 |
| LnGrp LOS | C | C | C | C | C | A | A | A | A | A | A | A |
| Approach Vol, veh/h | | 123 | | | 162 | | | 467 | | | 512 | |
| Approach Delay, s/veh | | 31.7 | | | 33.1 | | | 3.4 | | | 3.8 | |
| Approach LOS | | C | | | C | | | A | | | A | |

| Timer - Assigned Phs | | 2 | | 4 | | 6 | | 8 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 62.0 | | 15.6 | | 62.0 | | 15.6 | | | | |
| Change Period (Y+Rc), s | | 6.0 | | 6.0 | | 6.0 | | 6.0 | | | | |
| Max Green Setting (Gmax), s | | 56.0 | | 42.0 | | 56.0 | | 42.0 | | | | |
| Max Q Clear Time (g_c+I1), s | | 6.0 | | 6.4 | | 5.6 | | 9.0 | | | | |
| Green Ext Time (p_c), s | | 3.1 | | 0.5 | | 3.5 | | 0.7 | | | | |

| Intersection Summary | | |
|---|---|---|
| HCM 6th Ctrl Delay | | 10.2 |
| HCM 6th LOS | | B |

**Notes**

User approved volume balancing among the lanes for turning movement.

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 60 | 634 | 88 | 68 | 439 | 43 | 140 | 63 | 72 | 52 | 61 | 82 |
| Future Volume (veh/h) | 60 | 634 | 88 | 68 | 439 | 43 | 140 | 63 | 72 | 52 | 61 | 82 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 65 | 689 | 96 | 74 | 477 | 47 | 99 | 142 | 78 | 57 | 83 | 78 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 155 | 1012 | 140 | 96 | 1100 | 107 | 606 | 854 | 443 | 532 | 669 | 567 |
| Arrive On Green | 0.04 | 0.22 | 0.22 | 0.05 | 0.23 | 0.23 | 0.05 | 0.37 | 0.37 | 0.04 | 0.36 | 0.36 |
| Sat Flow, veh/h | 3456 | 4536 | 626 | 1781 | 4731 | 460 | 1781 | 2321 | 1203 | 1781 | 1870 | 1585 |
| Grp Volume(v), veh/h | 65 | 515 | 270 | 74 | 341 | 183 | 99 | 113 | 107 | 57 | 83 | 78 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1702 | 1758 | 1781 | 1702 | 1788 | 1781 | 1870 | 1654 | 1781 | 1870 | 1585 |
| Q Serve(g_s), s | 1.6 | 12.4 | 12.6 | 3.7 | 7.7 | 7.8 | 3.1 | 3.6 | 3.9 | 1.8 | 2.7 | 3.0 |
| Cycle Q Clear(g_c), s | 1.6 | 12.4 | 12.6 | 3.7 | 7.7 | 7.8 | 3.1 | 3.6 | 3.9 | 1.8 | 2.7 | 3.0 |
| Prop In Lane | 1.00 | | 0.36 | 1.00 | | 0.26 | 1.00 | | 0.73 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 155 | 760 | 392 | 96 | 791 | 416 | 606 | 689 | 609 | 532 | 669 | 567 |
| V/C Ratio(X) | 0.42 | 0.68 | 0.69 | 0.77 | 0.43 | 0.44 | 0.16 | 0.16 | 0.18 | 0.11 | 0.12 | 0.14 |
| Avail Cap(c_a), veh/h | 501 | 1405 | 726 | 258 | 1405 | 738 | 710 | 689 | 609 | 636 | 669 | 567 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 41.7 | 31.9 | 31.9 | 41.8 | 29.3 | 29.4 | 16.5 | 19.0 | 19.1 | 16.7 | 19.4 | 19.5 |
| Incr Delay (d2), s/veh | 1.8 | 1.1 | 2.1 | 12.1 | 0.4 | 0.7 | 0.1 | 0.5 | 0.6 | 0.1 | 0.4 | 0.5 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.7 | 5.1 | 5.5 | 1.9 | 3.1 | 3.4 | 1.3 | 1.6 | 1.6 | 0.7 | 1.2 | 1.2 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 43.5 | 32.9 | 34.1 | 54.0 | 29.7 | 30.1 | 16.7 | 19.6 | 19.8 | 16.8 | 19.7 | 20.0 |
| LnGrp LOS | D | C | C | D | C | C | B | B | B | B | B | B |
| Approach Vol, veh/h | | 850 | | | 598 | | | 319 | | | 218 | |
| Approach Delay, s/veh | | 34.1 | | | 32.8 | | | 18.7 | | | 19.1 | |
| Approach LOS | | C | | | C | | | B | | | B | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 10.8 | 40.0 | 11.8 | 27.0 | 11.8 | 39.0 | 11.0 | 27.8 |
| Change Period (Y+Rc), s | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 |
| Max Green Setting (Gmax), s | 3.8 | 33.0 | 13.0 | 37.0 | 10.0 | 32.0 | 13.0 | 37.0 |
| Max Q Clear Time (g_c+I1), s | 3.8 | 5.9 | 5.7 | 14.6 | 5.1 | 5.0 | 3.6 | 9.8 |
| Green Ext Time (p_c), s | 0.0 | 1.3 | 0.1 | 5.4 | 0.1 | 0.7 | 0.1 | 3.6 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 29.6 |
| HCM 6th LOS | C |

**Notes**

User approved volume balancing among the lanes for turning movement.

| Intersection | |
|---|---|
| Int Delay, s/veh | 2.4 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 15 | 250 | 81 | 34 | 270 | 6 | 52 | 5 | 18 | 9 | 7 | 10 |
| Future Vol, veh/h | 15 | 250 | 81 | 34 | 270 | 6 | 52 | 5 | 18 | 9 | 7 | 10 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 0 | - | - | 0 | - | - | 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 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 16 | 272 | 88 | 37 | 293 | 7 | 57 | 5 | 20 | 10 | 8 | 11 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 300 | 0 | 0 | 360 | 0 | 0 | 573 | 722 | 180 | 542 | 763 | 150 |
| Stage 1 | - | - | - | - | - | - | 348 | 348 | - | 371 | 371 | - |
| Stage 2 | - | - | - | - | - | - | 225 | 374 | - | 171 | 392 | - |
| Critical Hdwy | 4.14 | - | - | 4.14 | - | - | 7.54 | 6.54 | 6.94 | 7.54 | 6.54 | 6.94 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.54 | 5.54 | - | 6.54 | 5.54 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.54 | 5.54 | - | 6.54 | 5.54 | - |
| Follow-up Hdwy | 2.22 | - | - | 2.22 | - | - | 3.52 | 4.02 | 3.32 | 3.52 | 4.02 | 3.32 |
| Pot Cap-1 Maneuver | 1258 | - | - | 1195 | - | - | 402 | 351 | 832 | 423 | 333 | 870 |
| Stage 1 | - | - | - | - | - | - | 641 | 633 | - | 622 | 618 | - |
| Stage 2 | - | - | - | - | - | - | 757 | 616 | - | 814 | 605 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1258 | - | - | 1195 | - | - | 377 | 336 | 832 | 395 | 318 | 870 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 377 | 336 | - | 395 | 318 | - |
| Stage 1 | - | - | - | - | - | - | 633 | 625 | - | 614 | 599 | - |
| Stage 2 | - | - | - | - | - | - | 715 | 597 | - | 778 | 597 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.3 | 0.9 | 14.6 | 13.1 |
| HCM LOS | | | B | B |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 | SBLn2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 377 | 630 | 1258 | - | - | 1195 | - | - | 395 | 507 |
| HCM Lane V/C Ratio | 0.15 | 0.04 | 0.013 | - | - | 0.031 | - | - | 0.025 | 0.036 |
| HCM Control Delay (s) | 16.2 | 11 | 7.9 | - | - | 8.1 | - | - | 14.3 | 12.4 |
| HCM Lane LOS | C | B | A | - | - | A | - | - | B | B |
| HCM 95th %tile Q(veh) | 0.5 | 0.1 | 0 | - | - | 0.1 | - | - | 0.1 | 0.1 |

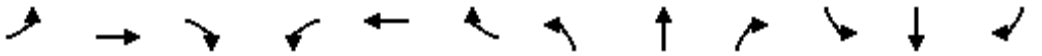
| Intersection | |
|---|---|
| Int Delay, s/veh | 1.9 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 12 | 18 | 8 | 26 | 109 | 4 |
| Future Vol, veh/h | 12 | 18 | 8 | 26 | 109 | 4 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 13 | 20 | 9 | 28 | 118 | 4 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 166 | 120 | 122 | 0 | - | 0 |
| Stage 1 | 120 | - | - | - | - | - |
| Stage 2 | 46 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - | - |
| Pot Cap-1 Maneuver | 824 | 931 | 1465 | - | - | - |
| Stage 1 | 905 | - | - | - | - | - |
| Stage 2 | 976 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 819 | 931 | 1465 | - | - | - |
| Mov Cap-2 Maneuver | 819 | - | - | - | - | - |
| Stage 1 | 900 | - | - | - | - | - |
| Stage 2 | 976 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 9.2 | 1.8 | 0 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1465 | - | 883 | - | - |
| HCM Lane V/C Ratio | 0.006 | - | 0.037 | - | - |
| HCM Control Delay (s) | 7.5 | 0 | 9.2 | - | - |
| HCM Lane LOS | A | A | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 0.1 | - | - |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 53 | 41 | 30 | 68 | 46 | 3 | 19 | 289 | 99 | 3 | 315 | 63 |
| Future Volume (veh/h) | 53 | 41 | 30 | 68 | 46 | 3 | 19 | 289 | 99 | 3 | 315 | 63 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 58 | 45 | 33 | 74 | 50 | 3 | 21 | 314 | 108 | 3 | 342 | 68 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 536 | 362 | 240 | 520 | 603 | 36 | 517 | 1127 | 477 | 542 | 892 | 175 |
| Arrive On Green | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.30 | 0.30 | 0.30 | 0.30 | 0.30 | 0.30 |
| Sat Flow, veh/h | 1351 | 2046 | 1357 | 1321 | 3408 | 203 | 976 | 3741 | 1585 | 965 | 2960 | 582 |
| Grp Volume(v), veh/h | 58 | 38 | 40 | 74 | 26 | 27 | 21 | 314 | 108 | 3 | 204 | 206 |
| Grp Sat Flow(s),veh/h/ln | 1351 | 1777 | 1626 | 1321 | 1777 | 1834 | 976 | 1870 | 1585 | 965 | 1777 | 1766 |
| Q Serve(g_s), s | 0.9 | 0.4 | 0.5 | 1.2 | 0.3 | 0.3 | 0.4 | 1.5 | 1.2 | 0.1 | 2.1 | 2.1 |
| Cycle Q Clear(g_c), s | 1.1 | 0.4 | 0.5 | 1.6 | 0.3 | 0.3 | 2.5 | 1.5 | 1.2 | 1.5 | 2.1 | 2.1 |
| Prop In Lane | 1.00 | | 0.83 | 1.00 | | 0.11 | 1.00 | | 1.00 | 1.00 | | 0.33 |
| Lane Grp Cap(c), veh/h | 536 | 314 | 288 | 520 | 314 | 324 | 517 | 1127 | 477 | 542 | 535 | 532 |
| V/C Ratio(X) | 0.11 | 0.12 | 0.14 | 0.14 | 0.08 | 0.08 | 0.04 | 0.28 | 0.23 | 0.01 | 0.38 | 0.39 |
| Avail Cap(c_a), veh/h | 2353 | 2705 | 2475 | 2297 | 2705 | 2792 | 2048 | 6996 | 2964 | 2056 | 3323 | 3302 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 8.4 | 8.0 | 8.0 | 8.7 | 7.9 | 7.9 | 7.4 | 6.1 | 6.0 | 6.7 | 6.3 | 6.4 |
| Incr Delay (d2), s/veh | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.2 | 0.0 | 0.4 | 0.5 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.0 | 0.2 | 0.1 | 0.0 | 0.3 | 0.3 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 8.5 | 8.1 | 8.2 | 8.8 | 8.0 | 8.0 | 7.4 | 6.3 | 6.3 | 6.7 | 6.8 | 6.8 |
| LnGrp LOS | A | A | A | A | A | A | A | A | A | A | A | A |
| Approach Vol, veh/h | | 136 | | | 127 | | | 443 | | | 413 | |
| Approach Delay, s/veh | | 8.3 | | | 8.5 | | | 6.3 | | | 6.8 | |
| Approach LOS | | A | | | A | | | A | | | A | |

| Timer - Assigned Phs | | 2 | | 4 | | 6 | | 8 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 12.9 | | 10.1 | | 12.9 | | 10.1 | | | | |
| Change Period (Y+Rc), s | | 6.0 | | 6.0 | | 6.0 | | 6.0 | | | | |
| Max Green Setting (Gmax), s | | 43.0 | | 35.0 | | 43.0 | | 35.0 | | | | |
| Max Q Clear Time (g_c+I1), s | | 4.5 | | 3.1 | | 4.1 | | 3.6 | | | | |
| Green Ext Time (p_c), s | | 2.4 | | 0.6 | | 2.3 | | 0.5 | | | | |

| Intersection Summary | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HCM 6th Ctrl Delay | | | 7.0 | | | | | | | | | |
| HCM 6th LOS | | | A | | | | | | | | | |

**Notes**

User approved volume balancing among the lanes for turning movement.

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 67 | 400 | 45 | 21 | 466 | 33 | 56 | 52 | 25 | 37 | 35 | 96 |
| Future Volume (veh/h) | 67 | 400 | 45 | 21 | 466 | 33 | 56 | 52 | 25 | 37 | 35 | 96 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 73 | 435 | 49 | 23 | 507 | 36 | 48 | 75 | 27 | 40 | 88 | 71 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 170 | 891 | 99 | 44 | 812 | 57 | 621 | 1093 | 374 | 658 | 760 | 644 |
| Arrive On Green | 0.05 | 0.19 | 0.19 | 0.02 | 0.17 | 0.17 | 0.04 | 0.41 | 0.41 | 0.04 | 0.41 | 0.41 |
| Sat Flow, veh/h | 3456 | 4664 | 517 | 1781 | 4870 | 343 | 1781 | 2665 | 912 | 1781 | 1870 | 1585 |
| Grp Volume(v), veh/h | 73 | 316 | 168 | 23 | 353 | 190 | 48 | 51 | 51 | 40 | 88 | 71 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1702 | 1777 | 1781 | 1702 | 1809 | 1781 | 1870 | 1706 | 1781 | 1870 | 1585 |
| Q Serve(g_s), s | 1.7 | 6.9 | 7.0 | 1.1 | 8.0 | 8.1 | 1.3 | 1.4 | 1.5 | 1.1 | 2.4 | 2.3 |
| Cycle Q Clear(g_c), s | 1.7 | 6.9 | 7.0 | 1.1 | 8.0 | 8.1 | 1.3 | 1.4 | 1.5 | 1.1 | 2.4 | 2.3 |
| Prop In Lane | 1.00 | | 0.29 | 1.00 | | 0.19 | 1.00 | | 0.53 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 170 | 650 | 339 | 44 | 567 | 301 | 621 | 767 | 700 | 658 | 760 | 644 |
| V/C Ratio(X) | 0.43 | 0.49 | 0.50 | 0.52 | 0.62 | 0.63 | 0.08 | 0.07 | 0.07 | 0.06 | 0.12 | 0.11 |
| Avail Cap(c_a), veh/h | 459 | 1560 | 815 | 236 | 1560 | 829 | 743 | 767 | 700 | 787 | 767 | 650 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 38.3 | 29.9 | 30.0 | 39.9 | 32.1 | 32.2 | 13.1 | 14.8 | 14.9 | 13.2 | 15.3 | 15.3 |
| Incr Delay (d2), s/veh | 1.7 | 0.6 | 1.1 | 9.2 | 1.1 | 2.2 | 0.1 | 0.2 | 0.2 | 0.0 | 0.1 | 0.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.7 | 2.8 | 3.0 | 0.6 | 3.3 | 3.6 | 0.5 | 0.6 | 0.6 | 0.4 | 1.0 | 0.8 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 40.0 | 30.5 | 31.1 | 49.1 | 33.2 | 34.3 | 13.1 | 15.0 | 15.1 | 13.2 | 15.4 | 15.4 |
| LnGrp LOS | D | C | C | D | C | C | B | B | B | B | B | B |
| Approach Vol, veh/h | | 557 | | | 566 | | | 150 | | | 199 | |
| Approach Delay, s/veh | | 31.9 | | | 34.2 | | | 14.4 | | | 15.0 | |
| Approach LOS | | C | | | C | | | B | | | B | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 10.0 | 41.0 | 9.1 | 22.8 | 10.3 | 40.7 | 11.1 | 20.8 |
| Change Period (Y+Rc), s | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 |
| Max Green Setting (Gmax), s | 3.0 | 34.0 | 11.0 | 38.0 | 9.0 | 34.0 | 11.0 | 38.0 |
| Max Q Clear Time (g_c+I1), s | 3.1 | 3.5 | 3.1 | 9.0 | 3.3 | 4.4 | 3.7 | 10.1 |
| Green Ext Time (p_c), s | 0.0 | 0.5 | 0.0 | 3.3 | 0.0 | 0.7 | 0.1 | 3.7 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 28.7 |
| HCM 6th LOS | C |

**Notes**

User approved volume balancing among the lanes for turning movement.

| Intersection | |
|---|---|
| Int Delay, s/veh | 2.5 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 36 | 31 | 10 | 88 | 118 | 11 |
| Future Vol, veh/h | 36 | 31 | 10 | 88 | 118 | 11 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | 0 | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 39 | 34 | 11 | 96 | 128 | 12 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 252 | 134 | 140 | 0 | - | 0 |
| Stage 1 | 134 | - | - | - | - | - |
| Stage 2 | 118 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - | - |
| Pot Cap-1 Maneuver | 737 | 915 | 1443 | - | - | - |
| Stage 1 | 892 | - | - | - | - | - |
| Stage 2 | 907 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 731 | 915 | 1443 | - | - | - |
| Mov Cap-2 Maneuver | 731 | - | - | - | - | - |
| Stage 1 | 885 | - | - | - | - | - |
| Stage 2 | 907 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 9.7 | 0.8 | 0 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | EBLn2 | SBT | SBR |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1443 | - | 731 | 915 | - | - |
| HCM Lane V/C Ratio | 0.008 | - | 0.054 | 0.037 | - | - |
| HCM Control Delay (s) | 7.5 | 0 | 10.2 | 9.1 | - | - |
| HCM Lane LOS | A | A | B | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 0.2 | 0.1 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 1.9 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 0 | 36 | 39 | 0 | 11 | 114 |
| Future Vol, veh/h | 0 | 36 | 39 | 0 | 11 | 114 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 39 | 42 | 0 | 12 | 124 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 190 | 42 | 0 | 0 | 42 | 0 |
| Stage 1 | 42 | - | - | - | - | - |
| Stage 2 | 148 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | - | - | 4.12 | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | - | - | 2.218 | - |
| Pot Cap-1 Maneuver | 799 | 1029 | - | - | 1567 | - |
| Stage 1 | 980 | - | - | - | - | - |
| Stage 2 | 880 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | 793 | 1029 | - | - | 1567 | - |
| Mov Cap-2 Maneuver | 793 | - | - | - | - | - |
| Stage 1 | 980 | - | - | - | - | - |
| Stage 2 | 873 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 8.6 | 0 | 0.6 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | SBL | SBT |
|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 1029 | 1567 | - |
| HCM Lane V/C Ratio | - | - | 0.038 | 0.008 | - |
| HCM Control Delay (s) | - | - | 8.6 | 7.3 | 0 |
| HCM Lane LOS | - | - | A | A | A |
| HCM 95th %tile Q(veh) | - | - | 0.1 | 0 | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 2.9 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 13 | 373 | 55 | 18 | 272 | 18 | 65 | 13 | 41 | 10 | 6 | 20 |
| Future Vol, veh/h | 13 | 373 | 55 | 18 | 272 | 18 | 65 | 13 | 41 | 10 | 6 | 20 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 0 | - | - | 0 | - | - | 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 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 14 | 405 | 60 | 20 | 296 | 20 | 71 | 14 | 45 | 11 | 7 | 22 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 316 | 0 | 0 | 465 | 0 | 0 | 655 | 819 | 233 | 584 | 839 | 158 |
| Stage 1 | - | - | - | - | - | - | 463 | 463 | - | 346 | 346 | - |
| Stage 2 | - | - | - | - | - | - | 192 | 356 | - | 238 | 493 | - |
| Critical Hdwy | 4.14 | - | - | 4.14 | - | - | 7.54 | 6.54 | 6.94 | 7.54 | 6.54 | 6.94 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.54 | 5.54 | - | 6.54 | 5.54 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.54 | 5.54 | - | 6.54 | 5.54 | - |
| Follow-up Hdwy | 2.22 | - | - | 2.22 | - | - | 3.52 | 4.02 | 3.32 | 3.52 | 4.02 | 3.32 |
| Pot Cap-1 Maneuver | 1241 | - | - | 1093 | - | - | 351 | 309 | 769 | 395 | 300 | 859 |
| Stage 1 | - | - | - | - | - | - | 548 | 562 | - | 643 | 634 | - |
| Stage 2 | - | - | - | - | - | - | 791 | 628 | - | 744 | 545 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1241 | - | - | 1093 | - | - | 329 | 300 | 769 | 351 | 291 | 859 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 329 | 300 | - | 351 | 291 | - |
| Stage 1 | - | - | - | - | - | - | 542 | 556 | - | 636 | 623 | - |
| Stage 2 | - | - | - | - | - | - | 749 | 617 | - | 675 | 539 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.2 | 0.5 | 15.9 | 12.6 |
| HCM LOS | | | C | B |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 | SBLn2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 329 | 559 | 1241 | - | - | 1093 | - | - | 351 | 592 |
| HCM Lane V/C Ratio | 0.215 | 0.105 | 0.011 | - | - | 0.018 | - | - | 0.031 | 0.048 |
| HCM Control Delay (s) | 18.9 | 12.2 | 7.9 | - | - | 8.4 | - | - | 15.6 | 11.4 |
| HCM Lane LOS | C | B | A | - | - | A | - | - | C | B |
| HCM 95th %tile Q(veh) | 0.8 | 0.3 | 0 | - | - | 0.1 | - | - | 0.1 | 0.1 |

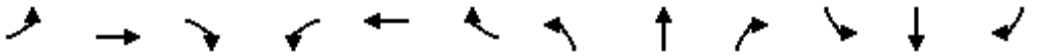
| Intersection | |
|---|---|
| Int Delay, s/veh | 1.9 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 12 | 17 | 6 | 86 | 31 | 10 |
| Future Vol, veh/h | 12 | 17 | 6 | 86 | 31 | 10 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 13 | 18 | 7 | 93 | 34 | 11 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 147 | 40 | 45 | 0 | - | 0 |
| Stage 1 | 40 | - | - | - | - | - |
| Stage 2 | 107 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - | - |
| Pot Cap-1 Maneuver | 845 | 1031 | 1563 | - | - | - |
| Stage 1 | 982 | - | - | - | - | - |
| Stage 2 | 917 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 841 | 1031 | 1563 | - | - | - |
| Mov Cap-2 Maneuver | 841 | - | - | - | - | - |
| Stage 1 | 977 | - | - | - | - | - |
| Stage 2 | 917 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 9 | 0.5 | 0 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1563 | - | 943 | - | - |
| HCM Lane V/C Ratio | 0.004 | - | 0.033 | - | - |
| HCM Control Delay (s) | 7.3 | 0 | 9 | - | - |
| HCM Lane LOS | A | A | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 0.1 | - | - |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 58 | 52 | 25 | 93 | 65 | 0 | 37 | 335 | 80 | 9 | 390 | 79 |
| Future Volume (veh/h) | 58 | 52 | 25 | 93 | 65 | 0 | 37 | 335 | 80 | 9 | 390 | 79 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 63 | 57 | 27 | 101 | 71 | 0 | 40 | 364 | 87 | 10 | 424 | 86 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 243 | 315 | 140 | 235 | 468 | 0 | 685 | 2675 | 1133 | 789 | 2108 | 424 |
| Arrive On Green | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.00 | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 |
| Sat Flow, veh/h | 1329 | 2394 | 1062 | 1314 | 3647 | 0 | 890 | 3741 | 1585 | 1018 | 2947 | 593 |
| Grp Volume(v), veh/h | 63 | 41 | 43 | 101 | 71 | 0 | 40 | 364 | 87 | 10 | 254 | 256 |
| Grp Sat Flow(s),veh/h/ln | 1329 | 1777 | 1679 | 1314 | 1777 | 0 | 890 | 1870 | 1585 | 1018 | 1777 | 1764 |
| Q Serve(g_s), s | 3.5 | 1.6 | 1.8 | 5.8 | 1.4 | 0.0 | 1.2 | 2.4 | 1.3 | 0.2 | 3.7 | 3.8 |
| Cycle Q Clear(g_c), s | 4.8 | 1.6 | 1.8 | 7.6 | 1.4 | 0.0 | 5.0 | 2.4 | 1.3 | 2.7 | 3.7 | 3.8 |
| Prop In Lane | 1.00 | | 0.63 | 1.00 | | 0.00 | 1.00 | | 1.00 | 1.00 | | 0.34 |
| Lane Grp Cap(c), veh/h | 243 | 234 | 221 | 235 | 468 | 0 | 685 | 2675 | 1133 | 789 | 1271 | 1261 |
| V/C Ratio(X) | 0.26 | 0.18 | 0.19 | 0.43 | 0.15 | 0.00 | 0.06 | 0.14 | 0.08 | 0.01 | 0.20 | 0.20 |
| Avail Cap(c_a), veh/h | 781 | 953 | 901 | 767 | 1906 | 0 | 685 | 2675 | 1133 | 789 | 1271 | 1261 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 32.3 | 30.2 | 30.3 | 33.7 | 30.1 | 0.0 | 4.6 | 3.5 | 3.4 | 3.9 | 3.7 | 3.7 |
| Incr Delay (d2), s/veh | 0.6 | 0.4 | 0.4 | 1.2 | 0.1 | 0.0 | 0.2 | 0.1 | 0.1 | 0.0 | 0.4 | 0.4 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.1 | 0.7 | 0.7 | 1.9 | 0.6 | 0.0 | 0.2 | 0.7 | 0.3 | 0.0 | 1.1 | 1.1 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 32.8 | 30.6 | 30.7 | 34.9 | 30.3 | 0.0 | 4.7 | 3.6 | 3.5 | 4.0 | 4.1 | 4.1 |
| LnGrp LOS | C | C | C | C | C | A | A | A | A | A | A | A |
| Approach Vol, veh/h | | 147 | | | 172 | | | 491 | | | 520 | |
| Approach Delay, s/veh | | 31.6 | | | 33.0 | | | 3.7 | | | 4.1 | |
| Approach LOS | | C | | | C | | | A | | | A | |

| Timer - Assigned Phs | | 2 | | 4 | | 6 | | 8 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 62.0 | | 16.3 | | 62.0 | | 16.3 | | | | |
| Change Period (Y+Rc), s | | 6.0 | | 6.0 | | 6.0 | | 6.0 | | | | |
| Max Green Setting (Gmax), s | | 56.0 | | 42.0 | | 56.0 | | 42.0 | | | | |
| Max Q Clear Time (g_c+I1), s | | 7.0 | | 6.8 | | 5.8 | | 9.6 | | | | |
| Green Ext Time (p_c), s | | 3.2 | | 0.7 | | 3.5 | | 0.7 | | | | |

| Intersection Summary | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HCM 6th Ctrl Delay | | | 10.7 | | | | | | | | | |
| HCM 6th LOS | | | B | | | | | | | | | |

**Notes**

User approved volume balancing among the lanes for turning movement.

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 82 | 634 | 88 | 68 | 439 | 48 | 140 | 68 | 72 | 55 | 64 | 95 |
| Future Volume (veh/h) | 82 | 634 | 88 | 68 | 439 | 48 | 140 | 68 | 72 | 55 | 64 | 95 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 89 | 689 | 96 | 74 | 477 | 52 | 101 | 145 | 78 | 60 | 95 | 86 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 172 | 1012 | 140 | 96 | 1065 | 114 | 596 | 860 | 437 | 532 | 668 | 566 |
| Arrive On Green | 0.05 | 0.22 | 0.22 | 0.05 | 0.23 | 0.23 | 0.05 | 0.37 | 0.37 | 0.04 | 0.36 | 0.36 |
| Sat Flow, veh/h | 3456 | 4536 | 626 | 1781 | 4681 | 503 | 1781 | 2338 | 1189 | 1781 | 1870 | 1585 |
| Grp Volume(v), veh/h | 89 | 515 | 270 | 74 | 345 | 184 | 101 | 114 | 109 | 60 | 95 | 86 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1702 | 1758 | 1781 | 1702 | 1780 | 1781 | 1870 | 1656 | 1781 | 1870 | 1585 |
| Q Serve(g_s), s | 2.3 | 12.4 | 12.6 | 3.7 | 7.8 | 8.0 | 3.2 | 3.7 | 4.0 | 1.9 | 3.1 | 3.3 |
| Cycle Q Clear(g_c), s | 2.3 | 12.4 | 12.6 | 3.7 | 7.8 | 8.0 | 3.2 | 3.7 | 4.0 | 1.9 | 3.1 | 3.3 |
| Prop In Lane | 1.00 | | 0.36 | 1.00 | | 0.28 | 1.00 | | 0.72 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 172 | 759 | 392 | 96 | 774 | 405 | 596 | 688 | 609 | 532 | 668 | 566 |
| V/C Ratio(X) | 0.52 | 0.68 | 0.69 | 0.77 | 0.45 | 0.45 | 0.17 | 0.17 | 0.18 | 0.11 | 0.14 | 0.15 |
| Avail Cap(c_a), veh/h | 501 | 1403 | 725 | 258 | 1403 | 734 | 698 | 688 | 609 | 633 | 668 | 566 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 41.6 | 31.9 | 32.0 | 41.9 | 29.8 | 29.9 | 16.6 | 19.1 | 19.2 | 16.8 | 19.5 | 19.6 |
| Incr Delay (d2), s/veh | 2.4 | 1.1 | 2.1 | 12.1 | 0.4 | 0.8 | 0.1 | 0.5 | 0.6 | 0.1 | 0.4 | 0.6 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.0 | 5.1 | 5.5 | 1.9 | 3.2 | 3.5 | 1.3 | 1.7 | 1.6 | 0.8 | 1.4 | 1.3 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 44.0 | 33.0 | 34.1 | 54.0 | 30.2 | 30.7 | 16.7 | 19.6 | 19.8 | 16.8 | 20.0 | 20.2 |
| LnGrp LOS | D | C | C | D | C | C | B | B | B | B | B | C |
| Approach Vol, veh/h | | 874 | | | 603 | | | 324 | | | 241 | |
| Approach Delay, s/veh | | 34.5 | | | 33.3 | | | 18.8 | | | 19.3 | |
| Approach LOS | | C | | | C | | | B | | | B | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 10.9 | 40.0 | 11.8 | 27.0 | 11.8 | 39.0 | 11.5 | 27.4 |
| Change Period (Y+Rc), s | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 |
| Max Green Setting (Gmax), s | 3.9 | 33.0 | 13.0 | 37.0 | 10.0 | 32.0 | 13.0 | 37.0 |
| Max Q Clear Time (g_c+I1), s | 13.9 | 6.0 | 5.7 | 14.6 | 5.2 | 5.3 | 4.3 | 10.0 |
| Green Ext Time (p_c), s | 0.0 | 1.3 | 0.1 | 5.4 | 0.1 | 0.8 | 0.1 | 3.6 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 29.8 |
| HCM 6th LOS | C |

**Notes**

User approved volume balancing among the lanes for turning movement.

| Intersection | |
|---|---|
| Int Delay, s/veh | 1.8 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 22 | 19 | 32 | 114 | 143 | 38 |
| Future Vol, veh/h | 22 | 19 | 32 | 114 | 143 | 38 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | 0 | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 24 | 21 | 35 | 124 | 155 | 41 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 370 | 176 | 196 | 0 | - | 0 |
| Stage 1 | 176 | - | - | - | - | - |
| Stage 2 | 194 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - | - |
| Pot Cap-1 Maneuver | 630 | 867 | 1377 | - | - | - |
| Stage 1 | 855 | - | - | - | - | - |
| Stage 2 | 839 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 613 | 867 | 1377 | - | - | - |
| Mov Cap-2 Maneuver | 613 | - | - | - | - | - |
| Stage 1 | 832 | - | - | - | - | - |
| Stage 2 | 839 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 10.3 | 1.7 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | EBLn2 | SBT | SBR |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1377 | - | 613 | 867 | - | - |
| HCM Lane V/C Ratio | 0.025 | - | 0.039 | 0.024 | - | - |
| HCM Control Delay (s) | 7.7 | 0 | 11.1 | 9.3 | - | - |
| HCM Lane LOS | A | A | B | A | - | - |
| HCM 95th %tile Q(veh) | 0.1 | - | 0.1 | 0.1 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 2.4 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 0 | 22 | 98 | 0 | 38 | 42 |
| Future Vol, veh/h | 0 | 22 | 98 | 0 | 38 | 42 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 24 | 107 | 0 | 41 | 46 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 235 | 107 | 0 | 0 | 107 | 0 |
| Stage 1 | 107 | - | - | - | - | - |
| Stage 2 | 128 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | - | - | 4.12 | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | - | - | 2.218 | - |
| Pot Cap-1 Maneuver | 753 | 947 | - | - | 1484 | - |
| Stage 1 | 917 | - | - | - | - | - |
| Stage 2 | 898 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | 732 | 947 | - | - | 1484 | - |
| Mov Cap-2 Maneuver | 732 | - | - | - | - | - |
| Stage 1 | 917 | - | - | - | - | - |
| Stage 2 | 873 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 8.9 | 0 | 3.6 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | SBL | SBT |
|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 947 | 1484 | - |
| HCM Lane V/C Ratio | - | - | 0.025 | 0.028 | - |
| HCM Control Delay (s) | - | - | 8.9 | 7.5 | 0 |
| HCM Lane LOS | - | - | A | A | A |
| HCM 95th %tile Q(veh) | - | - | 0.1 | 0.1 | - |

# APPENDIX G: Future 2031 Level-of-Service Analysis

| Intersection | |
|---|---|
| Int Delay, s/veh | 2 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 20 | 320 | 91 | 42 | 345 | 7 | 27 | 4 | 20 | 11 | 7 | 13 |
| Future Vol, veh/h | 20 | 320 | 91 | 42 | 345 | 7 | 27 | 4 | 20 | 11 | 7 | 13 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 0 | - | - | 0 | - | - | 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 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 22 | 348 | 99 | 46 | 375 | 8 | 29 | 4 | 22 | 12 | 8 | 14 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 383 | 0 | 0 | 447 | 0 | 0 | 726 | 917 | 224 | 691 | 962 | 192 |
| Stage 1 | - | - | - | - | - | - | 442 | 442 | - | 471 | 471 | - |
| Stage 2 | - | - | - | - | - | - | 284 | 475 | - | 220 | 491 | - |
| Critical Hdwy | 4.14 | - | - | 4.14 | - | - | 7.54 | 6.54 | 6.94 | 7.54 | 6.54 | 6.94 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.54 | 5.54 | - | 6.54 | 5.54 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.54 | 5.54 | - | 6.54 | 5.54 | - |
| Follow-up Hdwy | 2.22 | - | - | 2.22 | - | - | 3.52 | 4.02 | 3.32 | 3.52 | 4.02 | 3.32 |
| Pot Cap-1 Maneuver | 1172 | - | - | 1110 | - | - | 312 | 270 | 779 | 331 | 254 | 817 |
| Stage 1 | - | - | - | - | - | - | 564 | 575 | - | 542 | 558 | - |
| Stage 2 | - | - | - | - | - | - | 699 | 556 | - | 762 | 546 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1172 | - | - | 1110 | - | - | 285 | 254 | 779 | 303 | 239 | 817 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 285 | 254 | - | 303 | 239 | - |
| Stage 1 | - | - | - | - | - | - | 553 | 564 | - | 532 | 535 | - |
| Stage 2 | - | - | - | - | - | - | 649 | 533 | - | 721 | 536 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.4 | 0.9 | 15.5 | 14.9 |
| HCM LOS | | | C | B |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 | SBLn2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 285 | 579 | 1172 | - | - | 1110 | - | - | 303 | 442 |
| HCM Lane V/C Ratio | 0.103 | 0.045 | 0.019 | - | - | 0.041 | - | - | 0.039 | 0.049 |
| HCM Control Delay (s) | 19.1 | 11.5 | 8.1 | - | - | 8.4 | - | - | 17.4 | 13.6 |
| HCM Lane LOS | C | B | A | - | - | A | - | - | C | B |
| HCM 95th %tile Q(veh) | 0.3 | 0.1 | 0.1 | - | - | 0.1 | - | - | 0.1 | 0.2 |

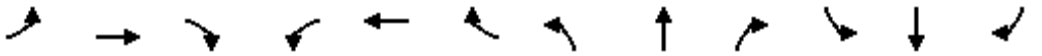
| Intersection | |
|---|---|
| Int Delay, s/veh | 1.9 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 15 | 23 | 10 | 34 | 139 | 6 |
| Future Vol, veh/h | 15 | 23 | 10 | 34 | 139 | 6 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 16 | 25 | 11 | 37 | 151 | 7 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 214 | 155 | 158 | 0 | - | 0 |
| Stage 1 | 155 | - | - | - | - | - |
| Stage 2 | 59 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - | - |
| Pot Cap-1 Maneuver | 774 | 891 | 1422 | - | - | - |
| Stage 1 | 873 | - | - | - | - | - |
| Stage 2 | 964 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 768 | 891 | 1422 | - | - | - |
| Mov Cap-2 Maneuver | 768 | - | - | - | - | - |
| Stage 1 | 866 | - | - | - | - | - |
| Stage 2 | 964 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 9.5 | 1.7 | 0 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1422 | - | 838 | - | - |
| HCM Lane V/C Ratio | 0.008 | - | 0.049 | - | - |
| HCM Control Delay (s) | 7.6 | 0 | 9.5 | - | - |
| HCM Lane LOS | A | A | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 0.2 | - | - |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 59 | 42 | 11 | 87 | 55 | 4 | 17 | 369 | 127 | 4 | 402 | 77 |
| Future Volume (veh/h) | 59 | 42 | 11 | 87 | 55 | 4 | 17 | 369 | 127 | 4 | 402 | 77 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 64 | 46 | 12 | 95 | 60 | 4 | 18 | 401 | 138 | 4 | 437 | 84 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 505 | 488 | 122 | 507 | 587 | 39 | 490 | 1267 | 537 | 517 | 1009 | 192 |
| Arrive On Green | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.34 | 0.34 | 0.34 | 0.34 | 0.34 | 0.34 |
| Sat Flow, veh/h | 1338 | 2814 | 706 | 1345 | 3384 | 223 | 881 | 3741 | 1585 | 866 | 2977 | 568 |
| Grp Volume(v), veh/h | 64 | 28 | 30 | 95 | 31 | 33 | 18 | 401 | 138 | 4 | 260 | 261 |
| Grp Sat Flow(s),veh/h/ln | 1338 | 1777 | 1743 | 1345 | 1777 | 1830 | 881 | 1870 | 1585 | 866 | 1777 | 1768 |
| Q Serve(g_s), s | 1.0 | 0.3 | 0.4 | 1.6 | 0.4 | 0.4 | 0.4 | 2.0 | 1.6 | 0.1 | 2.8 | 2.8 |
| Cycle Q Clear(g_c), s | 1.4 | 0.3 | 0.4 | 1.9 | 0.4 | 0.4 | 3.2 | 2.0 | 1.6 | 2.0 | 2.8 | 2.8 |
| Prop In Lane | 1.00 | | 0.41 | 1.00 | | 0.12 | 1.00 | | 1.00 | 1.00 | | 0.32 |
| Lane Grp Cap(c), veh/h | 505 | 308 | 302 | 507 | 308 | 317 | 490 | 1267 | 537 | 517 | 602 | 599 |
| V/C Ratio(X) | 0.13 | 0.09 | 0.10 | 0.19 | 0.10 | 0.10 | 0.04 | 0.32 | 0.26 | 0.01 | 0.43 | 0.44 |
| Avail Cap(c_a), veh/h | 2176 | 2528 | 2480 | 2187 | 2528 | 2604 | 1731 | 6538 | 2770 | 1738 | 3105 | 3090 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 9.2 | 8.5 | 8.5 | 9.4 | 8.6 | 8.6 | 7.6 | 6.0 | 5.9 | 6.8 | 6.3 | 6.3 |
| Incr Delay (d2), s/veh | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.0 | 0.1 | 0.3 | 0.0 | 0.5 | 0.5 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.2 | 0.1 | 0.1 | 0.3 | 0.1 | 0.1 | 0.0 | 0.2 | 0.2 | 0.0 | 0.4 | 0.4 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 9.3 | 8.7 | 8.7 | 9.5 | 8.7 | 8.7 | 7.6 | 6.2 | 6.1 | 6.8 | 6.8 | 6.8 |
| LnGrp LOS | A | A | A | A | A | A | A | A | A | A | A | A |
| Approach Vol, veh/h | | 122 | | | 159 | | | 557 | | | 525 | |
| Approach Delay, s/veh | | 9.0 | | | 9.2 | | | 6.2 | | | 6.8 | |
| Approach LOS | | A | | | A | | | A | | | A | |

| Timer - Assigned Phs | | 2 | | 4 | | 6 | | 8 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 14.3 | | 10.3 | | 14.3 | | 10.3 | | | | |
| Change Period (Y+Rc), s | | 6.0 | | 6.0 | | 6.0 | | 6.0 | | | | |
| Max Green Setting (Gmax), s | | 43.0 | | 35.0 | | 43.0 | | 35.0 | | | | |
| Max Q Clear Time (g_c+I1), s | | 5.2 | | 3.4 | | 4.8 | | 3.9 | | | | |
| Green Ext Time (p_c), s | | 3.1 | | 0.5 | | 3.1 | | 0.6 | | | | |

| Intersection Summary | | |
|---|---|---|
| HCM 6th Ctrl Delay | | 7.0 |
| HCM 6th LOS | | A |

**Notes**

User approved volume balancing among the lanes for turning movement.

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 77 | 511 | 58 | 27 | 595 | 39 | 72 | 63 | 32 | 39 | 38 | 97 |
| Future Volume (veh/h) | 77 | 511 | 58 | 27 | 595 | 39 | 72 | 63 | 32 | 39 | 38 | 97 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 84 | 555 | 63 | 29 | 647 | 42 | 60 | 93 | 35 | 42 | 89 | 73 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 173 | 1031 | 116 | 52 | 982 | 63 | 593 | 1028 | 368 | 612 | 718 | 608 |
| Arrive On Green | 0.05 | 0.22 | 0.22 | 0.03 | 0.20 | 0.20 | 0.04 | 0.39 | 0.39 | 0.04 | 0.38 | 0.38 |
| Sat Flow, veh/h | 3456 | 4658 | 522 | 1781 | 4901 | 316 | 1781 | 2630 | 942 | 1781 | 1870 | 1585 |
| Grp Volume(v), veh/h | 84 | 404 | 214 | 29 | 448 | 241 | 60 | 65 | 63 | 42 | 89 | 73 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1702 | 1776 | 1781 | 1702 | 1813 | 1781 | 1870 | 1701 | 1781 | 1870 | 1585 |
| Q Serve(g_s), s | 2.1 | 9.1 | 9.3 | 1.4 | 10.5 | 10.6 | 1.7 | 1.9 | 2.0 | 1.2 | 2.7 | 2.6 |
| Cycle Q Clear(g_c), s | 2.1 | 9.1 | 9.3 | 1.4 | 10.5 | 10.6 | 1.7 | 1.9 | 2.0 | 1.2 | 2.7 | 2.6 |
| Prop In Lane | 1.00 | | 0.29 | 1.00 | | 0.17 | 1.00 | | 0.55 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 173 | 753 | 393 | 52 | 682 | 363 | 593 | 731 | 665 | 612 | 718 | 608 |
| V/C Ratio(X) | 0.49 | 0.54 | 0.55 | 0.56 | 0.66 | 0.66 | 0.10 | 0.09 | 0.10 | 0.07 | 0.12 | 0.12 |
| Avail Cap(c_a), veh/h | 437 | 1488 | 776 | 225 | 1488 | 793 | 699 | 731 | 665 | 731 | 731 | 620 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 40.2 | 29.9 | 30.0 | 41.7 | 32.0 | 32.1 | 14.8 | 16.7 | 16.7 | 15.0 | 17.3 | 17.3 |
| Incr Delay (d2), s/veh | 2.1 | 0.6 | 1.2 | 9.2 | 1.1 | 2.1 | 0.1 | 0.2 | 0.3 | 0.0 | 0.1 | 0.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.9 | 3.7 | 4.0 | 0.7 | 4.3 | 4.8 | 0.7 | 0.8 | 0.8 | 0.5 | 1.1 | 0.9 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 42.3 | 30.5 | 31.2 | 50.9 | 33.1 | 34.1 | 14.8 | 16.9 | 17.0 | 15.0 | 17.4 | 17.4 |
| LnGrp LOS | D | C | C | D | C | C | B | B | B | B | B | B |
| Approach Vol, veh/h | | 702 | | | 718 | | | 188 | | | 204 | |
| Approach Delay, s/veh | | 32.1 | | | 34.2 | | | 16.3 | | | 16.9 | |
| Approach LOS | | C | | | C | | | B | | | B | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 10.2 | 41.0 | 9.5 | 26.2 | 10.8 | 40.4 | 11.3 | 24.4 |
| Change Period (Y+Rc), s | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 |
| Max Green Setting (Gmax), s | 9.0 | 34.0 | 11.0 | 38.0 | 9.0 | 34.0 | 11.0 | 38.0 |
| Max Q Clear Time (g_c+I1), s | 3.2 | 4.0 | 3.4 | 11.3 | 3.7 | 4.7 | 4.1 | 12.6 |
| Green Ext Time (p_c), s | 0.0 | 0.7 | 0.0 | 4.3 | 0.0 | 0.7 | 0.1 | 4.8 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 29.6 |
| HCM 6th LOS | C |

**Notes**

User approved volume balancing among the lanes for turning movement.

| Intersection | |
|---|---|
| Int Delay, s/veh | 3 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 17 | 475 | 28 | 20 | 348 | 23 | 59 | 15 | 49 | 13 | 6 | 25 |
| Future Vol, veh/h | 17 | 475 | 28 | 20 | 348 | 23 | 59 | 15 | 49 | 13 | 6 | 25 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 0 | - | - | 0 | - | - | 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 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 18 | 516 | 30 | 22 | 378 | 25 | 64 | 16 | 53 | 14 | 7 | 27 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 403 | 0 | 0 | 546 | 0 | 0 | 804 | 1014 | 273 | 737 | 1017 | 202 |
| Stage 1 | - | - | - | - | - | - | 567 | 567 | - | 435 | 435 | - |
| Stage 2 | - | - | - | - | - | - | 237 | 447 | - | 302 | 582 | - |
| Critical Hdwy | 4.14 | - | - | 4.14 | - | - | 7.54 | 6.54 | 6.94 | 7.54 | 6.54 | 6.94 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.54 | 5.54 | - | 6.54 | 5.54 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.54 | 5.54 | - | 6.54 | 5.54 | - |
| Follow-up Hdwy | 2.22 | - | - | 2.22 | - | - | 3.52 | 4.02 | 3.32 | 3.52 | 4.02 | 3.32 |
| Pot Cap-1 Maneuver | 1152 | - | - | 1019 | - | - | 274 | 237 | 725 | 307 | 236 | 805 |
| Stage 1 | - | - | - | - | - | - | 476 | 505 | - | 570 | 579 | - |
| Stage 2 | - | - | - | - | - | - | 745 | 572 | - | 682 | 497 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1152 | - | - | 1019 | - | - | 252 | 228 | 725 | 262 | 227 | 805 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 252 | 228 | - | 262 | 227 | - |
| Stage 1 | - | - | - | - | - | - | 468 | 497 | - | 561 | 566 | - |
| Stage 2 | - | - | - | - | - | - | 696 | 559 | - | 602 | 489 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.3 | 0.4 | 18.7 | 14.3 |
| HCM LOS | | | C | B |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 | SBLn2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 252 | 480 | 1152 | - | - | 1019 | - | - | 262 | 539 |
| HCM Lane V/C Ratio | 0.254 | 0.145 | 0.016 | - | - | 0.021 | - | - | 0.054 | 0.063 |
| HCM Control Delay (s) | 24.1 | 13.8 | 8.2 | - | - | 8.6 | - | - | 19.5 | 12.1 |
| HCM Lane LOS | C | B | A | - | - | A | - | - | C | B |
| HCM 95th %tile Q(veh) | 1 | 0.5 | 0 | - | - | 0.1 | - | - | 0.2 | 0.2 |

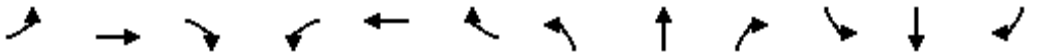
| Intersection | |
|---|---|
| Int Delay, s/veh | 1.8 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 15 | 21 | 7 | 110 | 39 | 13 |
| Future Vol, veh/h | 15 | 21 | 7 | 110 | 39 | 13 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 16 | 23 | 8 | 120 | 42 | 14 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 185 | 49 | 56 | 0 | - | 0 |
| Stage 1 | 49 | - | - | - | - | - |
| Stage 2 | 136 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - | - |
| Pot Cap-1 Maneuver | 804 | 1020 | 1549 | - | - | - |
| Stage 1 | 973 | - | - | - | - | - |
| Stage 2 | 890 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 799 | 1020 | 1549 | - | - | - |
| Mov Cap-2 Maneuver | 799 | - | - | - | - | - |
| Stage 1 | 967 | - | - | - | - | - |
| Stage 2 | 890 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 9.1 | 0.4 | 0 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1549 | - | 915 | - | - |
| HCM Lane V/C Ratio | 0.005 | - | 0.043 | - | - |
| HCM Control Delay (s) | 7.3 | 0 | 9.1 | - | - |
| HCM Lane LOS | A | A | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 0.1 | - | - |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 69 | 61 | 15 | 118 | 72 | 0 | 20 | 428 | 103 | 11 | 498 | 91 |
| Future Volume (veh/h) | 69 | 61 | 15 | 118 | 72 | 0 | 20 | 428 | 103 | 11 | 498 | 91 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 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 | 75 | 66 | 16 | 128 | 78 | 0 | 22 | 465 | 112 | 12 | 541 | 99 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 263 | 430 | 101 | 261 | 534 | 0 | 590 | 2617 | 1109 | 699 | 2100 | 383 |
| Arrive On Green | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.00 | 0.70 | 0.70 | 0.70 | 0.70 | 0.70 | 0.70 |
| Sat Flow, veh/h | 1321 | 2857 | 669 | 1316 | 3647 | 0 | 789 | 3741 | 1585 | 928 | 3001 | 547 |
| Grp Volume(v), veh/h | 75 | 40 | 42 | 128 | 78 | 0 | 22 | 465 | 112 | 12 | 319 | 321 |
| Grp Sat Flow(s),veh/h/ln | 1321 | 1777 | 1750 | 1316 | 1777 | 0 | 789 | 1870 | 1585 | 928 | 1777 | 1772 |
| Q Serve(g_s), s | 4.2 | 1.6 | 1.7 | 7.5 | 1.5 | 0.0 | 0.8 | 3.4 | 1.8 | 0.4 | 5.3 | 5.3 |
| Cycle Q Clear(g_c), s | 5.7 | 1.6 | 1.7 | 9.2 | 1.5 | 0.0 | 6.2 | 3.4 | 1.8 | 3.8 | 5.3 | 5.3 |
| Prop In Lane | 1.00 | | 0.38 | 1.00 | | 0.00 | 1.00 | | 1.00 | 1.00 | | 0.31 |
| Lane Grp Cap(c), veh/h | 263 | 267 | 263 | 261 | 534 | 0 | 590 | 2617 | 1109 | 699 | 1243 | 1240 |
| V/C Ratio(X) | 0.28 | 0.15 | 0.16 | 0.49 | 0.15 | 0.00 | 0.04 | 0.18 | 0.10 | 0.02 | 0.26 | 0.26 |
| Avail Cap(c_a), veh/h | 758 | 932 | 918 | 753 | 1865 | 0 | 590 | 2617 | 1109 | 699 | 1243 | 1240 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 32.0 | 29.6 | 29.6 | 33.6 | 29.5 | 0.0 | 5.5 | 4.1 | 3.9 | 4.8 | 4.4 | 4.4 |
| Incr Delay (d2), s/veh | 0.6 | 0.3 | 0.3 | 1.4 | 0.1 | 0.0 | 0.1 | 0.1 | 0.2 | 0.0 | 0.5 | 0.5 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.3 | 0.7 | 0.7 | 2.4 | 0.6 | 0.0 | 0.1 | 1.1 | 0.5 | 0.1 | 1.7 | 1.7 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 32.6 | 29.8 | 29.9 | 35.0 | 29.7 | 0.0 | 5.7 | 4.3 | 4.1 | 4.8 | 4.9 | 4.9 |
| LnGrp LOS | C | C | C | D | C | A | A | A | A | A | A | A |
| Approach Vol, veh/h | | 157 | | | 206 | | | 599 | | | 652 | |
| Approach Delay, s/veh | | 31.2 | | | 33.0 | | | 4.3 | | | 4.9 | |
| Approach LOS | | C | | | C | | | A | | | A | |

| Timer - Assigned Phs | | 2 | | 4 | | 6 | | 8 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 62.0 | | 18.0 | | 62.0 | | 18.0 | | | | |
| Change Period (Y+Rc), s | | 6.0 | | 6.0 | | 6.0 | | 6.0 | | | | |
| Max Green Setting (Gmax), s | | 56.0 | | 42.0 | | 56.0 | | 42.0 | | | | |
| Max Q Clear Time (g_c+I1), s | | 8.2 | | 7.7 | | 7.3 | | 11.2 | | | | |
| Green Ext Time (p_c), s | | 4.1 | | 0.7 | | 4.7 | | 0.9 | | | | |

| Intersection Summary | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HCM 6th Ctrl Delay | | | 10.8 | | | | | | | | | |
| HCM 6th LOS | | | B | | | | | | | | | |

**Notes**

User approved volume balancing among the lanes for turning movement.

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 76 | 809 | 113 | 87 | 560 | 55 | 179 | 80 | 91 | 66 | 77 | 104 |
| Future Volume (veh/h) | 76 | 809 | 113 | 87 | 560 | 55 | 179 | 80 | 91 | 66 | 77 | 104 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 83 | 879 | 123 | 95 | 609 | 60 | 127 | 182 | 99 | 72 | 106 | 98 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 161 | 1203 | 168 | 123 | 1362 | 133 | 533 | 759 | 393 | 448 | 569 | 482 |
| Arrive On Green | 0.05 | 0.27 | 0.27 | 0.07 | 0.29 | 0.29 | 0.07 | 0.33 | 0.33 | 0.04 | 0.30 | 0.30 |
| Sat Flow, veh/h | 3456 | 4530 | 631 | 1781 | 4730 | 462 | 1781 | 2321 | 1203 | 1781 | 1870 | 1585 |
| Grp Volume(v), veh/h | 83 | 660 | 342 | 95 | 437 | 232 | 127 | 145 | 136 | 72 | 106 | 98 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1702 | 1757 | 1781 | 1702 | 1787 | 1781 | 1870 | 1654 | 1781 | 1870 | 1585 |
| Q Serve(g_s), s | 2.2 | 16.8 | 16.9 | 5.0 | 10.0 | 10.1 | 4.6 | 5.4 | 5.8 | 2.6 | 4.0 | 4.4 |
| Cycle Q Clear(g_c), s | 2.2 | 16.8 | 16.9 | 5.0 | 10.0 | 10.1 | 4.6 | 5.4 | 5.8 | 2.6 | 4.0 | 4.4 |
| Prop In Lane | 1.00 | | 0.36 | 1.00 | | 0.26 | 1.00 | | 0.73 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 161 | 904 | 467 | 123 | 980 | 515 | 533 | 611 | 541 | 448 | 569 | 482 |
| V/C Ratio(X) | 0.51 | 0.73 | 0.73 | 0.77 | 0.45 | 0.45 | 0.24 | 0.24 | 0.25 | 0.16 | 0.19 | 0.20 |
| Avail Cap(c_a), veh/h | 689 | 1286 | 664 | 355 | 1286 | 675 | 563 | 611 | 541 | 518 | 569 | 482 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 44.4 | 31.9 | 31.9 | 43.6 | 27.7 | 27.8 | 20.4 | 23.4 | 23.5 | 21.1 | 24.4 | 24.6 |
| Incr Delay (d2), s/veh | 2.5 | 1.3 | 2.5 | 9.8 | 0.3 | 0.6 | 0.2 | 0.9 | 1.1 | 0.2 | 0.7 | 0.9 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.0 | 6.9 | 7.4 | 2.5 | 4.0 | 4.3 | 1.9 | 2.5 | 2.4 | 1.1 | 1.9 | 1.7 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 46.9 | 33.1 | 34.4 | 53.5 | 28.0 | 28.4 | 20.6 | 24.3 | 24.6 | 21.3 | 25.2 | 25.5 |
| LnGrp LOS | D | C | C | D | C | C | C | C | C | C | C | C |
| Approach Vol, veh/h | | 1085 | | | 764 | | | 408 | | | 276 | |
| Approach Delay, s/veh | | 34.6 | | | 31.3 | | | 23.3 | | | 24.3 | |
| Approach LOS | | C | | | C | | | C | | | C | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 11.3 | 38.1 | 13.6 | 32.3 | 13.4 | 36.0 | 11.4 | 34.4 |
| Change Period (Y+Rc), s | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 |
| Max Green Setting (Gmax), s | 8.0 | 29.0 | 19.0 | 36.0 | 8.0 | 29.0 | 19.0 | 36.0 |
| Max Q Clear Time (g_c+I1), s | 4.6 | 7.8 | 7.0 | 18.9 | 6.6 | 6.4 | 4.2 | 12.1 |
| Green Ext Time (p_c), s | 0.0 | 1.6 | 0.2 | 6.4 | 0.0 | 0.8 | 0.2 | 4.5 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 30.6 |
| HCM 6th LOS | C |

Notes

User approved volume balancing among the lanes for turning movement.

| Intersection | |
|---|---|
| Int Delay, s/veh | 2.7 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 20 | 320 | 100 | 43 | 345 | 7 | 58 | 6 | 23 | 11 | 8 | 13 |
| Future Vol, veh/h | 20 | 320 | 100 | 43 | 345 | 7 | 58 | 6 | 23 | 11 | 8 | 13 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 0 | - | - | 0 | - | - | 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 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 22 | 348 | 109 | 47 | 375 | 8 | 63 | 7 | 25 | 12 | 9 | 14 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 383 | 0 | 0 | 457 | 0 | 0 | 733 | 924 | 229 | 695 | 974 | 192 |
| Stage 1 | - | - | - | - | - | - | 447 | 447 | - | 473 | 473 | - |
| Stage 2 | - | - | - | - | - | - | 286 | 477 | - | 222 | 501 | - |
| Critical Hdwy | 4.14 | - | - | 4.14 | - | - | 7.54 | 6.54 | 6.94 | 7.54 | 6.54 | 6.94 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.54 | 5.54 | - | 6.54 | 5.54 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.54 | 5.54 | - | 6.54 | 5.54 | - |
| Follow-up Hdwy | 2.22 | - | - | 2.22 | - | - | 3.52 | 4.02 | 3.32 | 3.52 | 4.02 | 3.32 |
| Pot Cap-1 Maneuver | 1172 | - | - | 1100 | - | - | 309 | 268 | 774 | 329 | 250 | 817 |
| Stage 1 | - | - | - | - | - | - | 560 | 572 | - | 541 | 557 | - |
| Stage 2 | - | - | - | - | - | - | 697 | 554 | - | 760 | 541 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1172 | - | - | 1100 | - | - | 281 | 252 | 774 | 298 | 235 | 817 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 281 | 252 | - | 298 | 235 | - |
| Stage 1 | - | - | - | - | - | - | 549 | 561 | - | 531 | 533 | - |
| Stage 2 | - | - | - | - | - | - | 645 | 530 | - | 713 | 531 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.4 | 0.9 | 18.4 | 15.3 |
| HCM LOS | | | C | C |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 | SBLn2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 281 | 542 | 1172 | - | - | 1100 | - | - | 298 | 420 |
| HCM Lane V/C Ratio | 0.224 | 0.058 | 0.019 | - | - | 0.042 | - | - | 0.04 | 0.054 |
| HCM Control Delay (s) | 21.5 | 12.1 | 8.1 | - | - | 8.4 | - | - | 17.6 | 14.1 |
| HCM Lane LOS | C | B | A | - | - | A | - | - | C | B |
| HCM 95th %tile Q(veh) | 0.8 | 0.2 | 0.1 | - | - | 0.1 | - | - | 0.1 | 0.2 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 1.9 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 15 | 23 | 10 | 34 | 139 | 6 |
| Future Vol, veh/h | 15 | 23 | 10 | 34 | 139 | 6 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 16 | 25 | 11 | 37 | 151 | 7 |

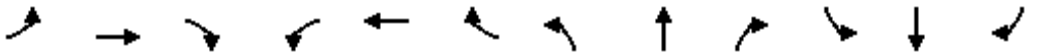
| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 214 | 155 | 158 | 0 | - | 0 |
| Stage 1 | 155 | - | - | - | - | - |
| Stage 2 | 59 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - | - |
| Pot Cap-1 Maneuver | 774 | 891 | 1422 | - | - | - |
| Stage 1 | 873 | - | - | - | - | - |
| Stage 2 | 964 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 768 | 891 | 1422 | - | - | - |
| Mov Cap-2 Maneuver | 768 | - | - | - | - | - |
| Stage 1 | 866 | - | - | - | - | - |
| Stage 2 | 964 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 9.5 | 1.7 | 0 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1422 | - | 838 | - | - |
| HCM Lane V/C Ratio | 0.008 | - | 0.049 | - | - |
| HCM Control Delay (s) | 7.6 | 0 | 9.5 | - | - |
| HCM Lane LOS | A | A | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 0.2 | - | - |

| Lane Group | EBL | EBT | WBL | WBT | NBL | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|---|---|---|
| Lane Group Flow (vph) | 72 | 89 | 95 | 67 | 25 | 415 | 124 | 4 | 523 |
| v/c Ratio | 0.21 | 0.10 | 0.29 | 0.07 | 0.06 | 0.26 | 0.17 | 0.01 | 0.32 |
| Control Delay | 11.0 | 6.6 | 11.9 | 8.7 | 7.7 | 7.6 | 2.8 | 7.0 | 7.5 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 11.0 | 6.6 | 11.9 | 8.7 | 7.7 | 7.6 | 2.8 | 7.0 | 7.5 |
| Queue Length 50th (ft) | 8 | 3 | 11 | 3 | 2 | 24 | 0 | 1 | 28 |
| Queue Length 95th (ft) | 29 | 13 | 36 | 13 | 12 | 51 | 19 | 4 | 58 |
| Internal Link Dist (ft) | | 73 | | 91 | | 2048 | | | 1141 |
| Turn Bay Length (ft) | | | | | | | | | |
| Base Capacity (vph) | 1316 | 3310 | 1288 | 3486 | 853 | 3373 | 1441 | 931 | 3451 |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.05 | 0.03 | 0.07 | 0.02 | 0.03 | 0.12 | 0.09 | 0.00 | 0.15 |

Intersection Summary



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 66 | 50 | 32 | 87 | 58 | 4 | 23 | 369 | 127 | 4 | 402 | 79 |
| Future Volume (veh/h) | 66 | 50 | 32 | 87 | 58 | 4 | 23 | 369 | 127 | 4 | 402 | 79 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 72 | 54 | 35 | 95 | 63 | 4 | 25 | 401 | 138 | 4 | 437 | 86 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 504 | 383 | 227 | 490 | 606 | 38 | 488 | 1283 | 544 | 516 | 1017 | 199 |
| Arrive On Green | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.34 | 0.34 | 0.34 | 0.34 | 0.34 | 0.34 |
| Sat Flow, veh/h | 1334 | 2145 | 1273 | 1308 | 3395 | 214 | 879 | 3741 | 1585 | 866 | 2964 | 579 |
| Grp Volume(v), veh/h | 72 | 44 | 45 | 95 | 33 | 34 | 25 | 401 | 138 | 4 | 261 | 262 |
| Grp Sat Flow(s),veh/h/ln | 1334 | 1777 | 1641 | 1308 | 1777 | 1832 | 879 | 1870 | 1585 | 866 | 1777 | 1766 |
| Q Serve(g_s), s | 1.2 | 0.5 | 0.6 | 1.7 | 0.4 | 0.4 | 0.6 | 2.0 | 1.6 | 0.1 | 2.8 | 2.9 |
| Cycle Q Clear(g_c), s | 1.6 | 0.5 | 0.6 | 2.2 | 0.4 | 0.4 | 3.4 | 2.0 | 1.6 | 2.1 | 2.8 | 2.9 |
| Prop In Lane | 1.00 | | 0.78 | 1.00 | | 0.12 | 1.00 | | 1.00 | 1.00 | | 0.33 |
| Lane Grp Cap(c), veh/h | 504 | 317 | 293 | 490 | 317 | 327 | 488 | 1283 | 544 | 516 | 609 | 606 |
| V/C Ratio(X) | 0.14 | 0.14 | 0.15 | 0.19 | 0.10 | 0.10 | 0.05 | 0.31 | 0.25 | 0.01 | 0.43 | 0.43 |
| Avail Cap(c_a), veh/h | 2129 | 2480 | 2291 | 2083 | 2480 | 2557 | 1694 | 6416 | 2719 | 1705 | 3047 | 3029 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 9.3 | 8.7 | 8.7 | 9.6 | 8.6 | 8.6 | 7.7 | 6.1 | 5.9 | 6.8 | 6.3 | 6.4 |
| Incr Delay (d2), s/veh | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.0 | 0.1 | 0.2 | 0.0 | 0.5 | 0.5 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.2 | 0.1 | 0.1 | 0.3 | 0.1 | 0.1 | 0.1 | 0.3 | 0.2 | 0.0 | 0.4 | 0.4 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 9.4 | 8.9 | 8.9 | 9.8 | 8.8 | 8.8 | 7.7 | 6.2 | 6.2 | 6.8 | 6.8 | 6.8 |
| LnGrp LOS | A | A | A | A | A | A | A | A | A | A | A | A |
| Approach Vol, veh/h | | 161 | | | 162 | | | 564 | | | 527 | |
| Approach Delay, s/veh | | 9.1 | | | 9.4 | | | 6.3 | | | 6.8 | |
| Approach LOS | | A | | | A | | | A | | | A | |

| Timer - Assigned Phs | | 2 | | 4 | | 6 | | 8 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 14.6 | | 10.5 | | 14.6 | | 10.5 | | | | |
| Change Period (Y+Rc), s | | 6.0 | | 6.0 | | 6.0 | | 6.0 | | | | |
| Max Green Setting (Gmax), s | | 43.0 | | 35.0 | | 43.0 | | 35.0 | | | | |
| Max Q Clear Time (g_c+I1), s | | 5.4 | | 3.6 | | 4.9 | | 4.2 | | | | |
| Green Ext Time (p_c), s | | 3.2 | | 0.7 | | 3.1 | | 0.6 | | | | |

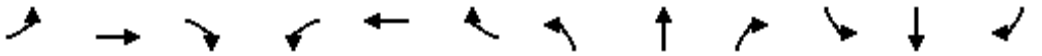
| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 7.2 |
| HCM 6th LOS | A |

**Notes**

User approved volume balancing among the lanes for turning movement.

| Lane Group | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|
| Lane Group Flow (vph) | 90 | 618 | 29 | 692 | 61 | 123 | 49 | 90 | 84 |
| v/c Ratio | 0.30 | 0.49 | 0.21 | 0.63 | 0.11 | 0.09 | 0.08 | 0.14 | 0.12 |
| Control Delay | 46.1 | 31.3 | 47.8 | 36.3 | 15.1 | 10.8 | 14.9 | 16.3 | 0.4 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 46.1 | 31.3 | 47.8 | 36.3 | 15.1 | 10.8 | 14.9 | 16.3 | 0.4 |
| Queue Length 50th (ft) | 27 | 121 | 17 | 142 | 20 | 14 | 15 | 22 | 0 |
| Queue Length 95th (ft) | 55 | 167 | 48 | 192 | 51 | 35 | 39 | 66 | 0 |
| Internal Link Dist (ft) | | 15 | | 1238 | | 264 | | 130 | |
| Turn Bay Length (ft) | | | | | | | | | |
| Base Capacity (vph) | 428 | 2167 | 220 | 2173 | 579 | 1376 | 621 | 656 | 680 |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.21 | 0.29 | 0.13 | 0.32 | 0.11 | 0.09 | 0.08 | 0.14 | 0.12 |

Intersection Summary



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 83 | 511 | 58 | 27 | 595 | 41 | 72 | 65 | 32 | 45 | 43 | 117 |
| Future Volume (veh/h) | 83 | 511 | 58 | 27 | 595 | 41 | 72 | 65 | 32 | 45 | 43 | 117 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 90 | 555 | 63 | 29 | 647 | 45 | 61 | 94 | 35 | 49 | 107 | 87 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 175 | 1037 | 116 | 51 | 979 | 68 | 573 | 1025 | 363 | 613 | 719 | 609 |
| Arrive On Green | 0.05 | 0.22 | 0.22 | 0.03 | 0.20 | 0.20 | 0.04 | 0.39 | 0.39 | 0.04 | 0.38 | 0.38 |
| Sat Flow, veh/h | 3456 | 4658 | 522 | 1781 | 4877 | 337 | 1781 | 2638 | 935 | 1781 | 1870 | 1585 |
| Grp Volume(v), veh/h | 90 | 404 | 214 | 29 | 450 | 242 | 61 | 65 | 64 | 49 | 107 | 87 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1702 | 1776 | 1781 | 1702 | 1810 | 1781 | 1870 | 1702 | 1781 | 1870 | 1585 |
| Q Serve(g_s), s | 2.2 | 9.2 | 9.3 | 1.4 | 10.7 | 10.8 | 1.8 | 1.9 | 2.1 | 1.4 | 3.3 | 3.1 |
| Cycle Q Clear(g_c), s | 2.2 | 9.2 | 9.3 | 1.4 | 10.7 | 10.8 | 1.8 | 1.9 | 2.1 | 1.4 | 3.3 | 3.1 |
| Prop In Lane | 1.00 | | 0.29 | 1.00 | | 0.19 | 1.00 | | 0.55 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 175 | 758 | 395 | 51 | 683 | 363 | 573 | 727 | 662 | 613 | 719 | 609 |
| V/C Ratio(X) | 0.51 | 0.53 | 0.54 | 0.56 | 0.66 | 0.67 | 0.11 | 0.09 | 0.10 | 0.08 | 0.15 | 0.14 |
| Avail Cap(c_a), veh/h | 435 | 1479 | 772 | 224 | 1479 | 786 | 678 | 727 | 662 | 726 | 727 | 616 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 40.5 | 30.0 | 30.1 | 41.9 | 32.2 | 32.2 | 14.9 | 16.9 | 17.0 | 14.9 | 17.6 | 17.5 |
| Incr Delay (d2), s/veh | 2.3 | 0.6 | 1.2 | 9.3 | 1.1 | 2.1 | 0.1 | 0.2 | 0.3 | 0.1 | 0.1 | 0.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.0 | 3.7 | 4.0 | 0.7 | 4.4 | 4.8 | 0.7 | 0.9 | 0.8 | 0.6 | 1.4 | 1.1 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 42.8 | 30.6 | 31.2 | 51.2 | 33.3 | 34.3 | 14.9 | 17.2 | 17.3 | 15.0 | 17.7 | 17.7 |
| LnGrp LOS | D | C | C | D | C | C | B | B | B | B | B | B |
| Approach Vol, veh/h | | 708 | | | 721 | | | 190 | | | 243 | |
| Approach Delay, s/veh | | 32.3 | | | 34.4 | | | 16.5 | | | 17.1 | |
| Approach LOS | | C | | | C | | | B | | | B | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 10.5 | 41.0 | 9.5 | 26.5 | 10.9 | 40.6 | 11.4 | 24.6 |
| Change Period (Y+Rc), s | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 |
| Max Green Setting (Gmax), s | 9.0 | 34.0 | 11.0 | 38.0 | 9.0 | 34.0 | 11.0 | 38.0 |
| Max Q Clear Time (g_c+I1), s | 3.4 | 4.1 | 3.4 | 11.3 | 3.8 | 5.3 | 4.2 | 12.8 |
| Green Ext Time (p_c), s | 0.0 | 0.7 | 0.0 | 4.3 | 0.0 | 0.9 | 0.1 | 4.8 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 29.5 |
| HCM 6th LOS | C |

**Notes**

User approved volume balancing among the lanes for turning movement.

| Intersection | |
|---|---|
| Int Delay, s/veh | 2.1 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 36 | 31 | 10 | 113 | 151 | 11 |
| Future Vol, veh/h | 36 | 31 | 10 | 113 | 151 | 11 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | 0 | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 39 | 34 | 11 | 123 | 164 | 12 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 315 | 170 | 176 | 0 | - | 0 |
| Stage 1 | 170 | - | - | - | - | - |
| Stage 2 | 145 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - | - |
| Pot Cap-1 Maneuver | 678 | 874 | 1400 | - | - | - |
| Stage 1 | 860 | - | - | - | - | - |
| Stage 2 | 882 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 673 | 874 | 1400 | - | - | - |
| Mov Cap-2 Maneuver | 673 | - | - | - | - | - |
| Stage 1 | 853 | - | - | - | - | - |
| Stage 2 | 882 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 10.1 | 0.6 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | EBLn2 | SBT | SBR |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1400 | - | 673 | 874 | - | - |
| HCM Lane V/C Ratio | 0.008 | - | 0.058 | 0.039 | - | - |
| HCM Control Delay (s) | 7.6 | 0 | 10.7 | 9.3 | - | - |
| HCM Lane LOS | A | A | B | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 0.2 | 0.1 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 1.6 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 0 | 36 | 49 | 0 | 11 | 145 |
| Future Vol, veh/h | 0 | 36 | 49 | 0 | 11 | 145 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 39 | 53 | 0 | 12 | 158 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 235 | 53 | 0 | 0 | 53 | 0 |
| Stage 1 | 53 | - | - | - | - | - |
| Stage 2 | 182 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | - | - | 4.12 | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | - | - | 2.218 | - |
| Pot Cap-1 Maneuver | 753 | 1014 | - | - | 1553 | - |
| Stage 1 | 970 | - | - | - | - | - |
| Stage 2 | 849 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | 747 | 1014 | - | - | 1553 | - |
| Mov Cap-2 Maneuver | 747 | - | - | - | - | - |
| Stage 1 | 970 | - | - | - | - | - |
| Stage 2 | 842 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 8.7 | 0 | 0.5 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | SBL | SBT |
|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 1014 | 1553 | - |
| HCM Lane V/C Ratio | - | - | 0.039 | 0.008 | - |
| HCM Control Delay (s) | - | - | 8.7 | 7.3 | 0 |
| HCM Lane LOS | - | - | A | A | A |
| HCM 95th %tile Q(veh) | - | - | 0.1 | 0 | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 3.7 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 17 | 475 | 61 | 23 | 348 | 23 | 78 | 16 | 51 | 13 | 8 | 25 |
| Future Vol, veh/h | 17 | 475 | 61 | 23 | 348 | 23 | 78 | 16 | 51 | 13 | 8 | 25 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 0 | - | - | 0 | - | - | 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 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 18 | 516 | 66 | 25 | 378 | 25 | 85 | 17 | 55 | 14 | 9 | 27 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 403 | 0 | 0 | 582 | 0 | 0 | 829 | 1038 | 291 | 744 | 1059 | 202 |
| Stage 1 | - | - | - | - | - | - | 585 | 585 | - | 441 | 441 | - |
| Stage 2 | - | - | - | - | - | - | 244 | 453 | - | 303 | 618 | - |
| Critical Hdwy | 4.14 | - | - | 4.14 | - | - | 7.54 | 6.54 | 6.94 | 7.54 | 6.54 | 6.94 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.54 | 5.54 | - | 6.54 | 5.54 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.54 | 5.54 | - | 6.54 | 5.54 | - |
| Follow-up Hdwy | 2.22 | - | - | 2.22 | - | - | 3.52 | 4.02 | 3.32 | 3.52 | 4.02 | 3.32 |
| Pot Cap-1 Maneuver | 1152 | - | - | 988 | - | - | 263 | 229 | 706 | 303 | 223 | 805 |
| Stage 1 | - | - | - | - | - | - | 464 | 496 | - | 565 | 575 | - |
| Stage 2 | - | - | - | - | - | - | 738 | 568 | - | 681 | 479 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1152 | - | - | 988 | - | - | 239 | 220 | 706 | 254 | 214 | 805 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 239 | 220 | - | 254 | 214 | - |
| Stage 1 | - | - | - | - | - | - | 457 | 488 | - | 556 | 561 | - |
| Stage 2 | - | - | - | - | - | - | 684 | 554 | - | 596 | 471 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.3 | 0.5 | 21.7 | 15.1 |
| HCM LOS | | | C | C |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 | SBLn2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 239 | 462 | 1152 | - | - | 988 | - | - | 254 | 482 |
| HCM Lane V/C Ratio | 0.355 | 0.158 | 0.016 | - | - | 0.025 | - | - | 0.056 | 0.074 |
| HCM Control Delay (s) | 28.1 | 14.2 | 8.2 | - | - | 8.7 | - | - | 20 | 13.1 |
| HCM Lane LOS | D | B | A | - | - | A | - | - | C | B |
| HCM 95th %tile Q(veh) | 1.5 | 0.6 | 0 | - | - | 0.1 | - | - | 0.2 | 0.2 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 1.8 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 15 | 21 | 7 | 110 | 39 | 13 |
| Future Vol, veh/h | 15 | 21 | 7 | 110 | 39 | 13 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 16 | 23 | 8 | 120 | 42 | 14 |

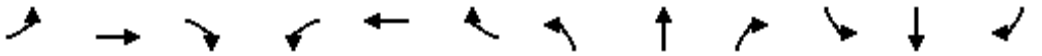
| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 185 | 49 | 56 | 0 | - | 0 |
| Stage 1 | 49 | - | - | - | - | - |
| Stage 2 | 136 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - | - |
| Pot Cap-1 Maneuver | 804 | 1020 | 1549 | - | - | - |
| Stage 1 | 973 | - | - | - | - | - |
| Stage 2 | 890 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 799 | 1020 | 1549 | - | - | - |
| Mov Cap-2 Maneuver | 799 | - | - | - | - | - |
| Stage 1 | 967 | - | - | - | - | - |
| Stage 2 | 890 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 9.1 | 0.4 | 0 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1549 | - | 915 | - | - |
| HCM Lane V/C Ratio | 0.005 | - | 0.043 | - | - |
| HCM Control Delay (s) | 7.3 | 0 | 9.1 | - | - |
| HCM Lane LOS | A | A | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 0.1 | - | - |

| Lane Group | EBL | EBT | WBL | WBT | NBL | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|---|---|---|
| Lane Group Flow (vph) | 79 | 102 | 128 | 88 | 46 | 476 | 101 | 12 | 648 |
| v/c Ratio | 0.38 | 0.18 | 0.62 | 0.15 | 0.09 | 0.20 | 0.10 | 0.02 | 0.27 |
| Control Delay | 35.3 | 21.4 | 45.1 | 29.2 | 5.7 | 5.2 | 1.5 | 5.3 | 5.3 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 35.3 | 21.4 | 45.1 | 29.2 | 5.7 | 5.2 | 1.5 | 5.3 | 5.3 |
| Queue Length 50th (ft) | 36 | 16 | 61 | 20 | 7 | 40 | 0 | 2 | 53 |
| Queue Length 95th (ft) | 76 | 37 | 116 | 40 | 22 | 75 | 17 | 8 | 95 |
| Internal Link Dist (ft) | | 73 | | 91 | | 2048 | | | 1141 |
| Turn Bay Length (ft) | | | | | | | | | |
| Base Capacity (vph) | 655 | 1722 | 647 | 1786 | 524 | 2347 | 1031 | 607 | 2405 |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.12 | 0.06 | 0.20 | 0.05 | 0.09 | 0.20 | 0.10 | 0.02 | 0.27 |

Intersection Summary



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 73 | 66 | 28 | 118 | 81 | 0 | 42 | 428 | 103 | 11 | 498 | 98 |
| Future Volume (veh/h) | 73 | 66 | 28 | 118 | 81 | 0 | 42 | 428 | 103 | 11 | 498 | 98 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 79 | 72 | 30 | 128 | 88 | 0 | 46 | 465 | 112 | 12 | 541 | 107 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 268 | 394 | 155 | 260 | 563 | 0 | 578 | 2593 | 1099 | 692 | 2051 | 404 |
| Arrive On Green | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.00 | 0.69 | 0.69 | 0.69 | 0.69 | 0.69 | 0.69 |
| Sat Flow, veh/h | 1309 | 2489 | 981 | 1293 | 3647 | 0 | 783 | 3741 | 1585 | 928 | 2959 | 583 |
| Grp Volume(v), veh/h | 79 | 50 | 52 | 128 | 88 | 0 | 46 | 465 | 112 | 12 | 324 | 324 |
| Grp Sat Flow(s),veh/h/ln | 1309 | 1777 | 1694 | 1293 | 1777 | 0 | 783 | 1870 | 1585 | 928 | 1777 | 1765 |
| Q Serve(g_s), s | 4.5 | 2.0 | 2.1 | 7.7 | 1.7 | 0.0 | 1.9 | 3.5 | 1.9 | 0.4 | 5.5 | 5.6 |
| Cycle Q Clear(g_c), s | 6.2 | 2.0 | 2.1 | 9.9 | 1.7 | 0.0 | 7.5 | 3.5 | 1.9 | 3.9 | 5.5 | 5.6 |
| Prop In Lane | 1.00 | | 0.58 | 1.00 | | 0.00 | 1.00 | | 1.00 | 1.00 | | 0.33 |
| Lane Grp Cap(c), veh/h | 268 | 281 | 268 | 260 | 563 | 0 | 578 | 2593 | 1099 | 692 | 1231 | 1224 |
| V/C Ratio(X) | 0.29 | 0.18 | 0.19 | 0.49 | 0.16 | 0.00 | 0.08 | 0.18 | 0.10 | 0.02 | 0.26 | 0.26 |
| Avail Cap(c_a), veh/h | 742 | 924 | 880 | 727 | 1847 | 0 | 578 | 2593 | 1099 | 692 | 1231 | 1224 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 32.0 | 29.4 | 29.5 | 33.8 | 29.3 | 0.0 | 6.1 | 4.3 | 4.1 | 5.0 | 4.7 | 4.7 |
| Incr Delay (d2), s/veh | 0.6 | 0.3 | 0.3 | 1.4 | 0.1 | 0.0 | 0.3 | 0.2 | 0.2 | 0.0 | 0.5 | 0.5 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.4 | 0.8 | 0.9 | 2.5 | 0.7 | 0.0 | 0.3 | 1.1 | 0.5 | 0.1 | 1.8 | 1.8 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 32.6 | 29.7 | 29.9 | 35.2 | 29.5 | 0.0 | 6.3 | 4.5 | 4.3 | 5.1 | 5.2 | 5.2 |
| LnGrp LOS | C | C | C | D | C | A | A | A | A | A | A | A |
| Approach Vol, veh/h | | 181 | | | 216 | | | 623 | | | 660 | |
| Approach Delay, s/veh | | 31.0 | | | 32.9 | | | 4.6 | | | 5.2 | |
| Approach LOS | | C | | | C | | | A | | | A | |

| Timer - Assigned Phs | | 2 | | 4 | | 6 | | 8 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 62.0 | | 18.8 | | 62.0 | | 18.8 | | | | |
| Change Period (Y+Rc), s | | 6.0 | | 6.0 | | 6.0 | | 6.0 | | | | |
| Max Green Setting (Gmax), s | | 56.0 | | 42.0 | | 56.0 | | 42.0 | | | | |
| Max Q Clear Time (g_c+I1), s | | 9.5 | | 8.2 | | 7.6 | | 11.9 | | | | |
| Green Ext Time (p_c), s | | 4.3 | | 0.8 | | 4.7 | | 0.9 | | | | |

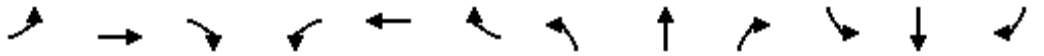
| Intersection Summary | | |
|---|---|---|
| HCM 6th Ctrl Delay | | 11.3 |
| HCM 6th LOS | | B |

**Notes**

User approved volume balancing among the lanes for turning movement.

| Lane Group | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|
| Lane Group Flow (vph) | 107 | 1002 | 95 | 674 | 129 | 257 | 75 | 114 | 100 |
| v/c Ratio | 0.37 | 0.67 | 0.51 | 0.47 | 0.29 | 0.23 | 0.17 | 0.23 | 0.18 |
| Control Delay | 51.0 | 34.8 | 55.5 | 30.5 | 24.1 | 13.6 | 22.5 | 30.1 | 1.2 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 51.0 | 34.8 | 55.5 | 30.5 | 24.1 | 13.6 | 22.5 | 30.1 | 1.2 |
| Queue Length 50th (ft) | 36 | 218 | 62 | 130 | 59 | 35 | 30 | 55 | 0 |
| Queue Length 95th (ft) | 68 | 282 | 121 | 172 | 123 | 73 | 70 | 118 | 5 |
| Internal Link Dist (ft) | | 15 | | 1238 | | 264 | | 130 | |
| Turn Bay Length (ft) | | | | | | | | | |
| Base Capacity (vph) | 634 | 1763 | 327 | 1811 | 449 | 1111 | 445 | 489 | 542 |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.17 | 0.57 | 0.29 | 0.37 | 0.29 | 0.23 | 0.17 | 0.23 | 0.18 |

Intersection Summary



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 98 | 809 | 113 | 87 | 560 | 60 | 179 | 85 | 91 | 69 | 80 | 117 |
| Future Volume (veh/h) | 98 | 809 | 113 | 87 | 560 | 60 | 179 | 85 | 91 | 69 | 80 | 117 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 107 | 879 | 123 | 95 | 609 | 65 | 129 | 185 | 99 | 75 | 117 | 107 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 175 | 1203 | 168 | 123 | 1331 | 141 | 525 | 763 | 389 | 447 | 569 | 482 |
| Arrive On Green | 0.05 | 0.27 | 0.27 | 0.07 | 0.28 | 0.28 | 0.07 | 0.33 | 0.33 | 0.05 | 0.30 | 0.30 |
| Sat Flow, veh/h | 3456 | 4530 | 631 | 1781 | 4690 | 496 | 1781 | 2334 | 1192 | 1781 | 1870 | 1585 |
| Grp Volume(v), veh/h | 107 | 660 | 342 | 95 | 440 | 234 | 129 | 146 | 138 | 75 | 117 | 107 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1702 | 1757 | 1781 | 1702 | 1781 | 1781 | 1870 | 1656 | 1781 | 1870 | 1585 |
| Q Serve(g_s), s | 2.9 | 16.8 | 17.0 | 5.0 | 10.2 | 10.3 | 4.7 | 5.5 | 5.8 | 2.7 | 4.4 | 4.8 |
| Cycle Q Clear(g_c), s | 2.9 | 16.8 | 17.0 | 5.0 | 10.2 | 10.3 | 4.7 | 5.5 | 5.8 | 2.7 | 4.4 | 4.8 |
| Prop In Lane | 1.00 | | 0.36 | 1.00 | | 0.28 | 1.00 | | 0.72 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 175 | 904 | 466 | 123 | 966 | 506 | 525 | 611 | 541 | 447 | 569 | 482 |
| V/C Ratio(X) | 0.61 | 0.73 | 0.73 | 0.77 | 0.46 | 0.46 | 0.25 | 0.24 | 0.25 | 0.17 | 0.21 | 0.22 |
| Avail Cap(c_a), veh/h | 688 | 1284 | 663 | 355 | 1284 | 672 | 553 | 611 | 541 | 516 | 569 | 482 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 44.4 | 31.9 | 32.0 | 43.7 | 28.1 | 28.2 | 20.4 | 23.5 | 23.6 | 21.2 | 24.7 | 24.8 |
| Incr Delay (d2), s/veh | 3.4 | 1.3 | 2.5 | 9.9 | 0.3 | 0.7 | 0.2 | 0.9 | 1.1 | 0.2 | 0.8 | 1.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.3 | 6.9 | 7.4 | 2.5 | 4.1 | 4.4 | 1.9 | 2.5 | 2.4 | 1.1 | 2.1 | 1.9 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 47.8 | 33.2 | 34.5 | 53.5 | 28.4 | 28.8 | 20.6 | 24.4 | 24.7 | 21.3 | 25.5 | 25.8 |
| LnGrp LOS | D | C | C | D | C | C | C | C | C | C | C | C |
| Approach Vol, veh/h | | 1109 | | | 769 | | | 413 | | | 299 | |
| Approach Delay, s/veh | | 35.0 | | | 31.7 | | | 23.3 | | | 24.6 | |
| Approach LOS | | C | | | C | | | C | | | C | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 11.3 | 38.2 | 13.6 | 32.3 | 13.5 | 36.0 | 11.8 | 34.1 |
| Change Period (Y+Rc), s | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 |
| Max Green Setting (Gmax), s | 8.0 | 29.0 | 19.0 | 36.0 | 8.0 | 29.0 | 19.0 | 36.0 |
| Max Q Clear Time (g_c+I1), s | 4.7 | 7.8 | 7.0 | 19.0 | 6.7 | 6.8 | 4.9 | 12.3 |
| Green Ext Time (p_c), s | 0.0 | 1.6 | 0.2 | 6.4 | 0.0 | 0.9 | 0.2 | 4.6 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 30.9 |
| HCM 6th LOS | C |

**Notes**

User approved volume balancing among the lanes for turning movement.

| Intersection | |
|---|---|
| Int Delay, s/veh | 1.6 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 22 | 19 | 32 | 145 | 183 | 38 |
| Future Vol, veh/h | 22 | 19 | 32 | 145 | 183 | 38 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | 0 | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 24 | 21 | 35 | 158 | 199 | 41 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 448 | 220 | 240 | 0 | - | 0 |
| Stage 1 | 220 | - | - | - | - | - |
| Stage 2 | 228 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - | - |
| Pot Cap-1 Maneuver | 568 | 820 | 1327 | - | - | - |
| Stage 1 | 817 | - | - | - | - | - |
| Stage 2 | 810 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 552 | 820 | 1327 | - | - | - |
| Mov Cap-2 Maneuver | 552 | - | - | - | - | - |
| Stage 1 | 793 | - | - | - | - | - |
| Stage 2 | 810 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 10.7 | 1.4 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | EBLn2 | SBT | SBR |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1327 | - | 552 | 820 | - | - |
| HCM Lane V/C Ratio | 0.026 | - | 0.043 | 0.025 | - | - |
| HCM Control Delay (s) | 7.8 | 0 | 11.8 | 9.5 | - | - |
| HCM Lane LOS | A | A | B | A | - | - |
| HCM 95th %tile Q(veh) | 0.1 | - | 0.1 | 0.1 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 2.1 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 0 | 22 | 125 | 0 | 38 | 53 |
| Future Vol, veh/h | 0 | 22 | 125 | 0 | 38 | 53 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 24 | 136 | 0 | 41 | 58 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 276 | 136 | 0 | 0 | 136 | 0 |
| Stage 1 | 136 | - | - | - | - | - |
| Stage 2 | 140 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | - | - | 4.12 | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | - | - | 2.218 | - |
| Pot Cap-1 Maneuver | 714 | 913 | - | - | 1448 | - |
| Stage 1 | 890 | - | - | - | - | - |
| Stage 2 | 887 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | 693 | 913 | - | - | 1448 | - |
| Mov Cap-2 Maneuver | 693 | - | - | - | - | - |
| Stage 1 | 890 | - | - | - | - | - |
| Stage 2 | 861 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 9 | 0 | 3.2 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | SBL | SBT |
|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 913 | 1448 | - |
| HCM Lane V/C Ratio | - | - | 0.026 | 0.029 | - |
| HCM Control Delay (s) | - | - | 9 | 7.6 | 0 |
| HCM Lane LOS | - | - | A | A | A |
| HCM 95th %tile Q(veh) | - | - | 0.1 | 0.1 | - |