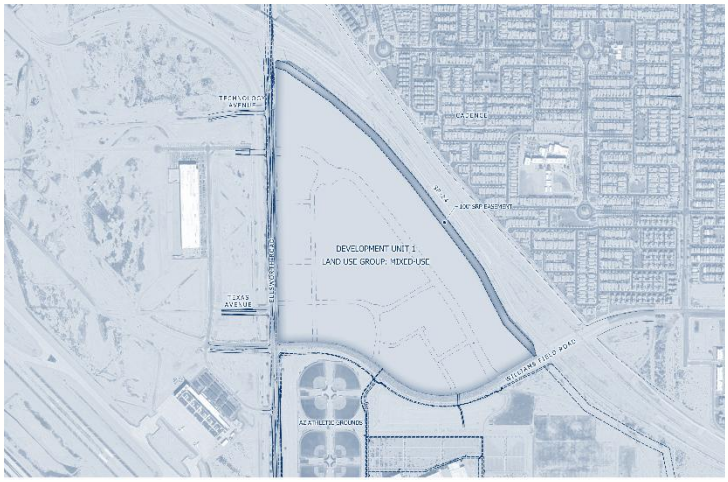
# *Legacy Park /Gateway Crossing*

## Traffic Impact Study

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**Project Number 24.5745**
**August 8, 2026**

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# 1. INTRODUCTION AND EXECUTIVE SUMMARY

## 1.1. PURPOSE OF REPORT AND STUDY OBJECTIVES

Lōkahi, LLC (Lōkahi) was retained by Vestar Pacific Master Plan, LLC to complete a Traffic Impact Study (TIS) for the proposed Legacy Park and Gateway Crossing developments, located on the northeast corner of Ellsworth Road and Williams Field Road in the City of Mesa, Arizona.

The proposed Legacy Park development, which contains two (2) phases, will include the following land uses and quantities:

**Legacy Park 'CORE' – 2029**

- Retail 411,400 square feet
- Office 161,000 square feet
- Resort Hotel 600 rooms
- Mid-rise multifamily 770 dwelling units

**Legacy Park (Full Buildout) – 2044**

- Retail 436,400 square feet
- Office 3,675,967 square feet
- Resort Hotel 750 rooms
- Mid-rise multifamily 2,321 dwelling units

The proposed Legacy Park development will be integrated with and closely related to the proposed Gateway Crossing development, located on the southwest corner of Williams Field Road and State Route 24 (SR-24).

The proposed Gateway Crossing development will include the following land uses and quantities:

**Opening Year – 2028**

| | | |
|---|---|---|
| • Discount superstore | *Anchor 1* | 166,000 square feet<br>28 fueling positions |
| • Retail | *Shops A and B* | 27,950 square feet |
| • Fast-food restaurants | *P1, P3, and P4* | 1,747 square feet |
| • High-volume fast-food | *P2* | 4,626 square feet |
| • Hotels | *Hotels A and B* | 212 rooms |

The objective of this Traffic Impact Study is to analyze the cumulative traffic related impacts of the two (2) proposed developments, Legacy Park and Gateway Crossing, to the adjacent roadway network. See **Figure 1** for the vicinity map.

This Traffic Impact Study includes:

- Level of service analysis of existing conditions for the weekday AM and PM peak hours.
- Trip generation for the proposed development
- Level of service analysis for the Legacy Park CORE buildout (year 2029) weekday AM, PM, and Saturday mid-day (MD) peak hours
- Level of service analysis for the full Legacy Park buildout (2044) weekday AM, PM, and Saturday MD peak hours
- Queuing analysis
- Signal warrant analysis
- Analysis of Legacy Park internal roadway capacity
- Level of service analysis of Legacy Park internal intersections

The following are the existing intersections included in this study:

- Ellsworth Road and Serenity Avenue (1)
- Ellsworth Road and Ray Road (2)
- Ellsworth Road and Cadence Parkway (3)
- Ellsworth Road and SR-24 Westbound Ramps (4)
- Ellsworth Road and SR-24 Eastbound Ramps (5)
- Ellsworth Road and Williams Field Road (6)
- Ellsworth Road and Legacy Avenue (7)
- Ellsworth Road and Pecos Road North (8)
- Williams Field Road and Legacy Drive (9)
- Williams Field Road and Legacy Park Driveway (10)
- Williams Field Road and SR-24 Eastbound Ramps (11)
- Williams Field Road and SR-24 Westbound Ramps (12)
- Williams Field Road and Crismon Road (13)
- Williams Field Road and Signal Butte Road (14)

Also included in this study are the proposed site driveways, which are further detailed in **Section 2.1**.

## 1.2. EXECUTIVE SUMMARY

This report presents the analyses and results of a Traffic Impact Study prepared for the proposed Legacy Park and Gateway Crossing developments, located on the northeast corner of Ellsworth Road and Williams Field Road in the City of Mesa, Arizona. The proposed Legacy Park development, which contains two (2) phases, will include the following land uses and quantities:

**Legacy Park 'CORE' – 2029**

- Retail 411,400 square feet
- Office 161,000 square feet
- Resort Hotel 600 rooms
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The proposed Legacy Park development will be integrated with and closely related to the proposed Gateway Crossing development, located on the southwest corner of Williams Field Road and SR-24.

The proposed Gateway Crossing development will include the following land uses and quantities:

**Opening Year – 2028**

| | | |
|---|---|---|
| • Discount superstore | *Anchor 1* | 166,000 square feet<br>28 fueling positions |
| • Retail | *Shops A and B* | 27,950 square feet |
| • Fast-food restaurants | *P1, P3, and P4* | 1,747 square feet |
| • High-volume fast-food | *P2* | 4,626 square feet |
| • Hotels | *Hotels A and B* | 212 rooms |

### Existing Capacity Analysis

The AM and PM peak hour existing conditions capacity analyses were completed for the existing study intersections as a baseline analysis of current operations.

### Trip Generation

The trip generation was calculated utilizing the Institute of Transportation Engineers (ITE) publication entitled *Trip Generation, 12th Edition* and NCHRP Report 684.

The proposed Legacy Park development will be integrated with and closely related to the proposed Gateway Crossing development, located on the southwest corner of Williams Field Road and SR-24. See **Section 5.1** for the trip generation associated with both the proposed Legacy Park development and the proposed Gateway Crossing development.

### Future Conditions

Future capacity analyses were completed without and with the buildout of the proposed Legacy Park and Gateway Crossing developments for the year 2029 and the year 2044. The year 2029 and 2044 background traffic volumes include a 1.0% annual growth rate based on Maricopa Associations of Governments (MAG) socioeconomic projections.

## Recommendations

The following are the recommendations/improvements with the build out of the proposed Legacy Park and Gateway Crossing development:

### Williams Field Road and Legacy Drive / Driveway G (9) – *Signalized Intersection*

*The existing leg of this intersection, the Legacy Drive access to AAG is being realigned with the development of Legacy Park. The intent of this is to provide better access to both the existing and future development in the area.*

The northbound approach will provide two (2) dedicated left turn lanes, and one (1) shared through-right turn lane. The southbound approach will provide one (1) dedicated left turn lane, and one (1) shared through -right turn lane. The eastbound approach will provide one (1) dedicated left turn lane, three (3) through lanes and one (1) dedicated right turn lane. The westbound approach will provide two (2) dedicated left turn lanes, three (3) through lanes, and one (1) dedicated right turn lane.

### Williams Field Road and Gateway Main Driveway / Driveway J (10) – *Signalized Intersection*

A traffic signal will be installed with the buildout of the proposed site in anticipation of the year 2029 traffic volumes for both the Legacy Park 'CORE' component and the Gateway Crossing development. The northbound approach will provide one (1) dedicated left turn lane, one (1) shared through-right turn lane, and one (1) dedicated right turn lane. The southbound approach will provide two (2) left turn lanes and one (1) shared through-right turn lane. The eastbound and westbound approaches will provide two (2) left turn lanes, three (3) through lanes, and one (1) dedicated right turn lane, with the westbound approach having a channelized right turn lane anticipated to free flow into the proposed Legacy Park site. Additionally, there will be two (2) northbound and southbound receiving lanes. A westbound dual left turn lane will be constructed at the intersection.

### Ellsworth Road and Driveway C (18) – *Signalized Intersection*

A traffic signal will be installed by year 2044 in anticipation of the year 2044 traffic volumes, for which a signal is warranted. The westbound approach will provide one (1) dedicated left turn lane and one (1) dedicated right turn lane. A northbound right turn deceleration lane will be installed by year 2029.

### Legacy Park – Half Street Improvements

Half street improvements for the project frontage along the east side of Ellsworth Road and the north side of Williams Field Road.

### Legacy Park – Access Points

Buildout of the five (5) access points along Ellsworth Road and the seven (7) access points along Williams Field Road detailed in **Section 2.1.1**.

**Legacy Park - Internal Intersections**
Buildout of the internal intersections detailed in **Section 2.1.1**.

**Gateway Crossing – Half Street Improvements**
Half street improvements for the project frontage along the south side of Williams Field Road.

**Gateway Crossing – Access Points**
Buildout of the two (2) access points along Williams Field Road detailed in **Section 2.1.1**.

**Gateway Crossing - Internal Intersections**
Buildout of the internal intersections detailed in **Section 2.1.1**.

This Traffic Impact Study will need to be updated if there are land use changes for where the new land use creates different travel patterns based on higher trip generation or different trip assignment (in/out) than currently modeled. The City Traffic Engineer can request an update based on these changes in land use.

# 2. PROPOSED DEVELOPMENT

The proposed Legacy Park development is located on the northeast corner of Ellsworth Road and Williams Field Road in the City of Mesa, Arizona. See **Figure 1** for a vicinity map.

The proposed Legacy Park development, which contains two (2) phases, will include the following land uses and quantities:

**Legacy Park 'CORE' – 2029**

- Retail 411,400 square feet
- Office 161,000 square feet
- Resort Hotel 600 rooms
- Mid-rise multifamily 770 dwelling units

**Legacy Park (Full Buildout) – 2044**

- Retail 436,400 square feet
- Office 3,675,967 square feet
- Resort Hotel 750 rooms
- Mid-rise multifamily 2,321 dwelling units

## 2.1. SITE ACCESS

### 2.1.1. LEGACY PARK – SITE ACCESS

There will be a total of five (5) access points along Ellsworth Road and a total of seven (7) access points along Williams Field Road to serve the proposed Legacy Park development:

- Williams Field Road and Legacy Drive / Driveway G (9) – *full access*
- Williams Field Road and Gateway Main Driveway / Driveway J (10) – *full access*
- Ellsworth Road and Talon Avenue / Driveway A (15) – *right-in / right-out*
- Ellsworth Road and Technology Avenue / Driveway B (16) – *full access*
- Ellsworth Road and Park Avenue (17) – *right-in / right-out*
- Ellsworth Road and Driveway C (18) – *full access*
- Ellsworth Road and Pennsylvania Avenue / Driveway D (19) – *left-in / right-in / right-out*
- Williams Field Road and Driveway E (20) – *right-in / right-out*
- Williams Field Road and Driveway F (21) – *right-in / right-out*
- Williams Field Road and Legacy 3/4 (22) – *left-in / right-in / right-out*
- Williams Field Road and Driveway H (23) –*right-in / right-out*
- Williams Field Road and Main Street / Driveway I (24) – *left-in / right-in / right-out*

Accessibility between land uses within Legacy Park will be provided via an internal system of public and private collector roadways. Most of the internal roadway network proposed will be public

roadways with three (3) proposed private drive connections shown on the site plan in **Figure 2** and **Appendix A.**

Through coordination with the City of Mesa, seven (7) internal intersections will be evaluated:

- Legacy Parkway and Park View Road (26) – *roundabout*
- Park View Road and Park Avenue (27) – *one-way stop controlled*
- Park View Road and Pacific Avenue (28) – one-*way stop controlled*
- Park View Road and Pennsylvania Avenue (29) – *two way stop controlled*
- Legacy Drive and Pennsylvania Avenue (30) – *roundabout*
- Legacy Parkway and Pennsylvania Avenue (31) – one *way stop controlled*
- Legacy Parkway and Full Access (32) – one *way stop controlled*

See **Section 9** for an analysis of Legacy Park internal roadway capacity / sizing as well as the capacity and level of service for the seven (7) internal intersections.

### 2.1.2. GATEWAY CROSSING – SITE ACCESS

There will be a total of two (2) access points along Williams Field Road to serve the proposed Gateway Crossing development:

- Williams Field Road and Gateway Main Driveway (10) - *full access*
- Williams Field Road and Gateway RI/RO (25) - *right-in / right-out*

The proposed full access, Williams Field Road and Gateway Main Driveway (10), currently exists approximately 805 feet west of Williams Field Road and SR-24 Eastbound Ramps (11). The proposed full access will be shifted to be located approximately 830 feet west of Williams Field Road and SR-24 Eastbound Ramps (11). Traffic volumes from both the proposed Gateway Crossing and the proposed Legacy Park developments will utilize this full access.

A secondary access, Williams Field Road and Gateway RI/RO (25), is proposed along Williams Field Road, approximately 1,340 feet west of Williams Field Road and SR-24 Eastbound Ramps (11). This driveway is anticipated to accommodate only right turns into and out of the proposed Gateway Crossing development.

Within the Gateway Crossing development, an internal street system will connect with both Gateway RI/RO and Gateway Main Driveway, forming Gateway Crossing and Gateway RI/RO (33) and Gateway Crossing and Gateway Main Driveway (34), respectively.

It must be noted that the proposed Gateway Crossing development will be accessible through existing roadways that serve the Arizona Athletic Grounds site. These existing roadways are as follows:

- Ellsworth Road and Legacy Avenue (7)
- Williams Field Road and Legacy Drive (9)

As a conservative approach, site-generated traffic volumes for the proposed Gateway Crossing development were assumed to access the external roadway network using only the proposed access points associated with the Gateway Crossing development, and not the existing access points associated with the Arizona Athletic Grounds site.

See **Figure 2** and **Appendix A** for the proposed site plan with the driveway spacing annotated.

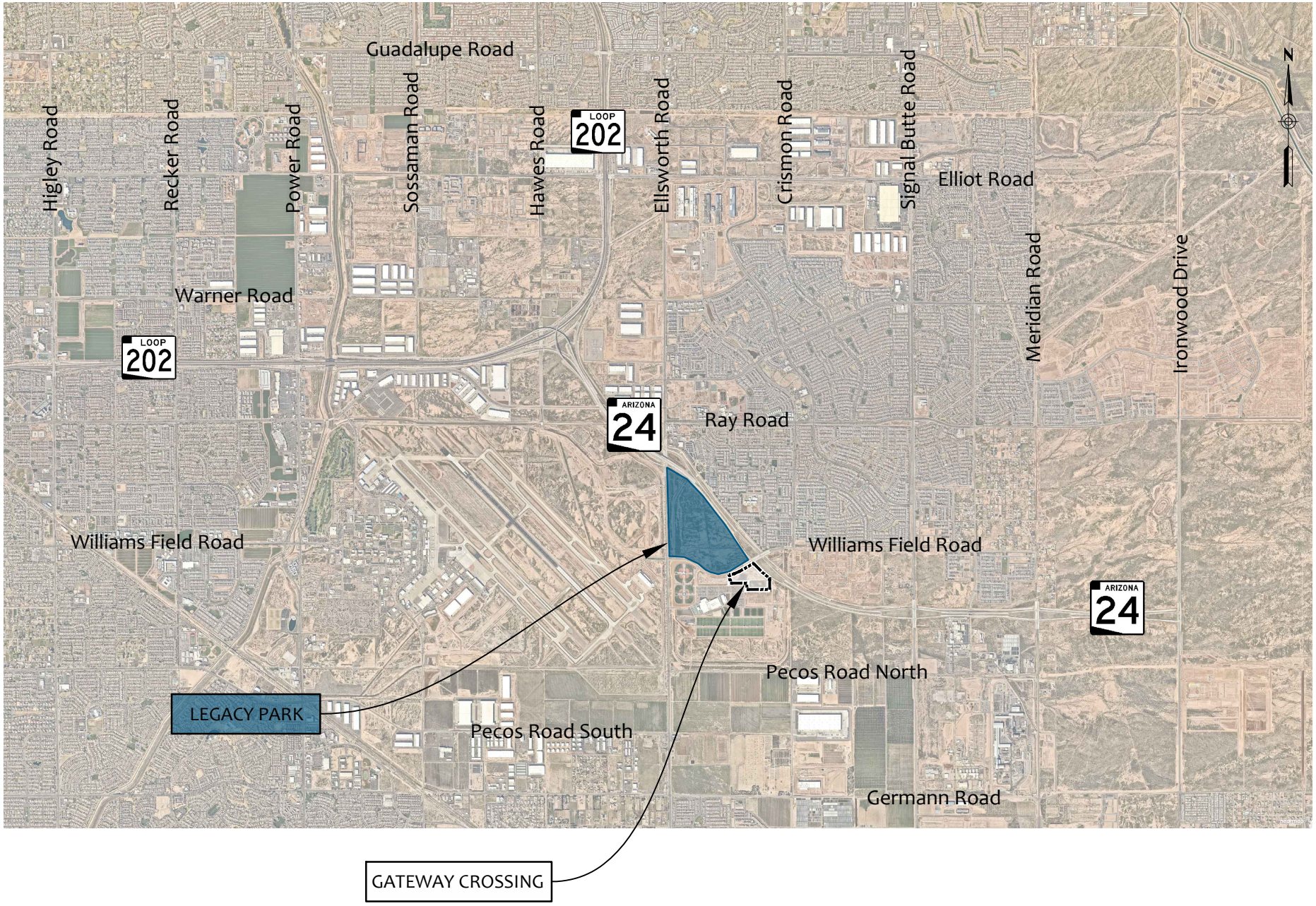



FIGURE 1 | VICINITY MAP

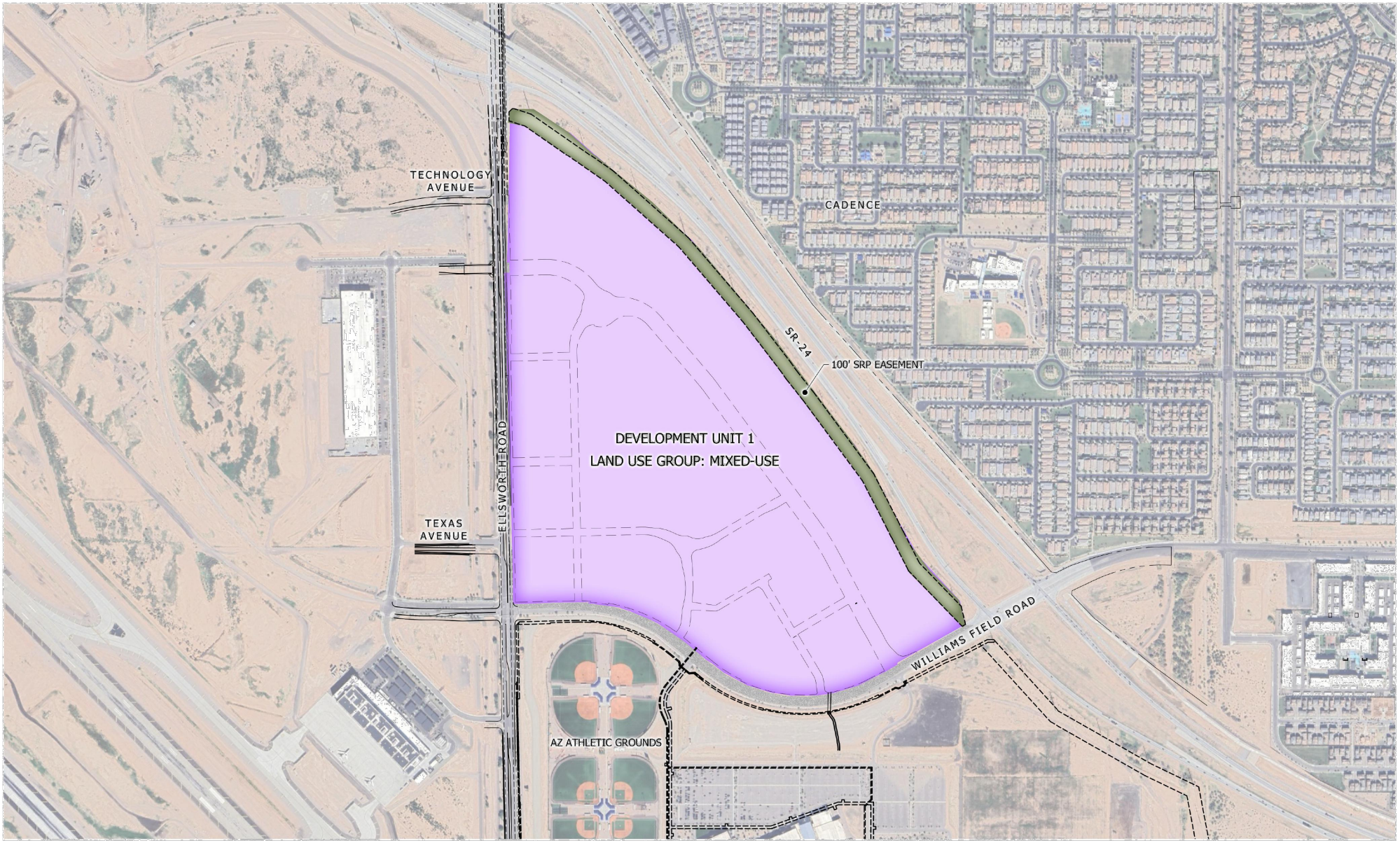



FIGURE 2 | SITE PLAN

# 3. AREA CONDITIONS

The proposed site is located within the City of Mesa, Arizona. **Sections 3.1** and **3.2** provide detailed descriptions of the study roadway segments and intersections. See **Figure 3** for the study area.

## 3.1. STUDY ROADWAY SEGMENTS

**Ellsworth Road** is a north-south roadway. Between SR-24 and Legacy Avenue, provides two (2) through lanes in the northbound and three (3) through lanes in the southbound direction of travel, with a raised median. Ellsworth Road south of Legacy Avenue provides two (2) lanes in each direction of travel, with a raised median. According to the *City of Mesa 2040 Transportation Plan*, Ellsworth Road is classified as an arterial. All Traffic Data Services, LLC collected 24-hour traffic counts on Tuesday, April 2, 2024, along Ellsworth Road, south of SR-24 and south of Williams Field Road. The recorded counts indicate an average daily traffic (ADT) of 49,248 and 50,042 vehicles per day (vpd), south of SR-24 and south of Williams Field Road, respectively. Additional counts were collected on Saturday, January 24, 2026. The recorded Saturday counts revealed that 43,840 vpd traveled along Ellsworth Road, north of Williams Field Road. There is a posted speed limit of 50 miles per hour (mph).

**Williams Field Road** is an east-west roadway and provides one (1) lane in each direction of travel with a center two-way left turn lane, between SR-24 and Ellsworth Road. According to *City of Mesa 2040 Transportation Plan,* Williams Field Road is classified as an arterial. All Traffic Data Services, LLC collected 24-hour traffic counts on Tuesday, April 2, 2024, along Williams Field Road, east of Ellsworth Road. The recorded counts indicate an ADT of 3,041 vpd. Additional counts were collected on Saturday, January 24, 2026. The recorded Saturday counts revealed that 7,884 vpd traveled along Williams field Road, east of Legacy Avenue. There is a posted speed limit of 40 mph, between Ellsworth Road and Crismon Road.

**Crismon Road** is a north-south roadway that currently provides one (1) lane in the southbound direction of travel with a raised center median. As of aerial photographs from January 30, 2026, Crismon Road currently terminates approximately 735 feet south of Williams Field Road (centerline to pavement edge). According to *City of Mesa 2040 Transportation Plan,* Crismon Road is classified as an arterial. According to the Maricopa Association of Governments (MAG) *Transportation Data Management System* tool, there is a ADT of 5,476 vpd of along Crismon Road, north of Williams Field Road. There is a posted speed limit of 35 mph.

## 3.2. STUDY INTERSECTIONS

**This section of the report describes the existing study intersections as they were during the time of traffic data collection.** Improvements to the study intersections which occurred after data collection are not considered to be existing for the purposes of the existing capacity analysis as shown in **Section 4.3**.

**Ellsworth Road and Ray Road** currently operates as two (2) signalized intersections.

**Ellsworth Road and Ray Road North / Serenity Avenue (1)** currently operates as a signalized intersection. The northbound and southbound approaches each provide one (1) dedicated left turn lane, two (2) through lanes, and one (1) dedicated right turn lane. The eastbound and westbound approaches each provide one (1) dedicated left turn lane and one (1) shared through-right turn lane.

**Ellsworth Road and Ray Road South (2)** currently operates as a signalized T-intersection. The northbound approach provides two (2) through lanes and one (1) dedicated right turn lane. The southbound approach provides one (1) dedicated left turn lane and two (2) through lanes. The westbound approach provides two (2) dedicated left turn lanes and two (2) dedicated right turn lanes.

As part of the City of Mesa Capital Improvement Project CP0983, Ray Road will be realigned and intersect with Ellsworth Road at one (1) location. This is discussed in detail in **Section 6.1**.

**Ellsworth Road and Cadence Parkway (3)** currently operates as a signalized T-intersection. The northbound approach provides two (2) through lanes and one (1) dedicated right turn lane. The southbound approach provides two (2) dedicated left turn lanes and two (2) through lanes. The westbound approach provides two (2) dedicated left turn lanes and one (1) dedicated right turn lane.

**Ellsworth Road and SR-24 Westbound Ramps (4)** currently operates as a signalized intersection. The northbound approach provides four (4) through lanes and one (1) dedicated right turn lane. The southbound approach provides two (2) dedicated left turn lanes and three (3) through lanes. The eastbound approach provides one (1) dedicated left turn lane, one (1) shared left-through lane, and two (2) dedicated right turn lanes.

**Ellsworth Road and SR-24 Eastbound Ramps (5)** currently operates as a signalized intersection. The northbound approach provides two (2) dedicated left turn lanes and two (2) through lanes. The southbound approach provides four (4) through lanes and two (2) dedicated right turn lanes. The westbound approach provides one (1) dedicated left turn lane, one (1) shared left-through lane, one (1) shared right-through lane, and one (1) dedicated right turn lane.

When weekday traffic counts were conducted on Tuesday, April 2, 2024, **Ellsworth Road and Williams Field Road (6)** operated as a signalized T-intersection, as the west leg of the intersection was barricaded off. When Saturday traffic counts were conducted on January 24, 2026, **Ellsworth Road and Williams Field Road (6)** operated as a signalized four-legged intersection, with the west leg open and functional. No intersection geometry was changed between the two data collection dates, and only the signal operation changed. The northbound approach provided one (1) dedicated

left turn lane, two (2) through lanes, and one (1) dedicated right turn lane. The southbound approach provided two (2) dedicated left turn lanes and two (2) through lanes, and one (1) shared through-right turn lane. The eastbound approach provided two (2) left turn lanes, one (1) through lane, and one (1) dedicated right turn lane. The westbound approach provided two (2) dedicated left turn lanes and two (2) dedicated right turn lanes.

**Ellsworth Road and Legacy Avenue (7)** currently operates as a signalized T-intersection. The northbound approach provides two (2) through lanes and one (1) dedicated right turn lane. The southbound approach provides two (2) dedicated left turn lanes and two (2) through lanes. The westbound approach provides one (1) dedicated left turn lane, one (1) shared left-right turn lane, and one (1) dedicated right turn lane.

**Ellsworth Road and Pecos Road North (8)** currently operates as a signalized T-intersection. The northbound approach provides one (1) through lane and one (1) shared right-through lane. The southbound approach provides one (1) dedicated left turn lane and two (2) through lanes. The westbound approach provides one (1) dedicated left turn lane and one (1) dedicated right turn lane.

**Williams Field Road and Legacy Drive (9)** currently operates as a signalized T-intersection. The northbound approach provides one (1) dedicated left turn lane and one (1) dedicated right turn lane. The eastbound approach provides one (1) through lane and one (1) dedicated right turn lane. The westbound approach provides one (1) dedicated left turn lane and one (1) through lane.

**Williams Field Road and Legacy Park Driveway (10)** currently operates as a one-way stop-controlled T-intersection with stop control on the northbound approach. The northbound approach provides one (1) dedicated right turn lane. The eastbound approach provides one (1) through lane and one (1) dedicated right turn lane. The westbound approach provides one (1) through lane.

**Williams Field Road and SR-24 Eastbound Ramps (11)** currently operates as a signalized intersection. The southbound approach provides one (1) dedicated left turn lane, one (1) shared left-through lane, and one (1) shared through-right turn lane. The eastbound approach provides four (4) through lanes and one (1) dedicated right turn lane. The westbound approach provides two (2) dedicated left turn lanes and two (2) through lanes.

**Williams Field Road and SR-24 Westbound Ramps (12)** currently operates as a signalized intersection. The northbound approach provides one (1) dedicated left turn lane, one (1) through lane, and one (1) shared through-right turn lane. The eastbound approach provides two (2) dedicated left turn lanes and two (2) through lanes. The westbound approach provides four (4) through lanes and one (1) dedicated right turn lane.

**Williams Field Road and Crismon Road (13)** currently operates as a one-way stop-controlled T-intersection with stop control on the southbound approach. The southbound approach provides

one (1) dedicated left turn lane and one (1) dedicated right turn lane. The eastbound approach provides one (1) dedicated left turn lane and one (1) through lane. The westbound approach provides one (1) through lane and one (1) shared through-right turn lane.

**Williams Field Road and Signal Butte Road (14)** currently operates as a signalized intersection. The northbound approach provides one (1) dedicated left turn lane, one (1) through lane, and one (1) shared through-right turn lane. The southbound approach provides one (1) dedicated left turn lane, two (2) through lanes, and one (1) dedicated right turn lane. The eastbound and westbound approaches each provide one (1) dedicated left turn lane, two (2) through lanes, and one (1) dedicated right turn lane.

See **Section 6.1.2** for a detailed description of the study intersections that serve as driveways to both the Gateway Crossing and Legacy Park developments.

## 3.3. STUDY AREA LAND USE

The proposed site is located on the northeast corner of Ellsworth Road and Williams Field Road in the City of Mesa, Arizona. The proposed development is bordered by SR-24 to the north and east, Williams Field Road to the south, and Ellsworth Road to the west. Additionally, the proposed Gateway Crossing development is located on the southwest corner of Williams Field Road and SR-24.

## 3.4. SITE ACCESSIBILITY

### Roadway System

The study area is located in the City of Mesa, Arizona. State Route 24 (SR-24) is located approximately one-half (0.50) mile to the north and west and can be accessed by both Ellsworth Road and Williams Field Road. Similarly, Arizona State Route 202 Loop (SR 202L) is located approximately one and one-half (1.50) miles northwest of the proposed development, which can be accessed via SR-24 and by Hawes Road. These routes provide regional access to the Phoenix metropolitan area. Additional roadway descriptions can be found under **Section 3.1**.

### Pedestrian Facilities

Ellsworth Road provides sidewalks on the west side of the road between SR-24 and Williams Field Road. Additionally, south of Williams Field Road, Ellsworth Road provides sidewalks on the east and west side of the road. Williams Field Road provides sidewalks on the south side of the roadway between Ellsworth Road and SR-24. Sidewalks generally border the existing Arizona Athletic Grounds site, directly to the west of the proposed Gateway Crossing.

A pedestrian underpass is planned to cross Williams Field Road, providing pedestrian connectivity between Gateway Crossing, Legacy Park, and the existing Arizona Athletic Grounds property.

Additionally, pedestrian facilities such as sidewalks are anticipated to be provided within the Gateway Crossing site.

### Bicycle Facilities

On-street bike lanes are provided in both directions of travel along Ellsworth Road within the study area. Additionally, the Gateway Shared Use Path is located within the vicinity area.

### Transit Facilities

There are currently no available transit services within the immediate study area.

### 3.4.1. ACCESSIBILITY – ARIZONA ATHLETIC GROUNDS

The existing sports complex known as Arizona Athletic Grounds is currently largely accessed by personal vehicles, via three (3) access points that have previously been detailed:

- Ellsworth Road and Legacy Avenue (7) – *full access traffic signal*
- Williams Field Road and Legacy Drive (9)** – *full access traffic signal*
- Williams Field Road and Legacy Park Driveway (10)** – *right-in / right-out stop control*

**During the existing tournament operations of Arizona Athletic Grounds, vehicles have been known to queue along Williams Field Road, particularly the westbound left turn in at Williams Field Road and Legacy Drive (9).*

***It should be noted that illegal left turns into and out of this access are regularly performed.*

With the proposed Gateway Crossing development, Williams Field Road and Legacy Park Driveway (10) will be reconstructed, allowing for full access, but making the route to access Arizona Athletic Grounds less direct. However, the following intersection will be constructed, which will provide a more direct route to the Arizona Athletic Grounds property:

- Williams Field Road and Gateway RI/RO (25) – *right-in / right-out stop control*

As detailed in **Section 2.1.2**, the following two (2) internal intersections for the Gateway Crossing development will be constructed:

- Gateway Crossing and Gateway RI/RO (33)
- Gateway Crossing and Gateway Main Driveway (34)

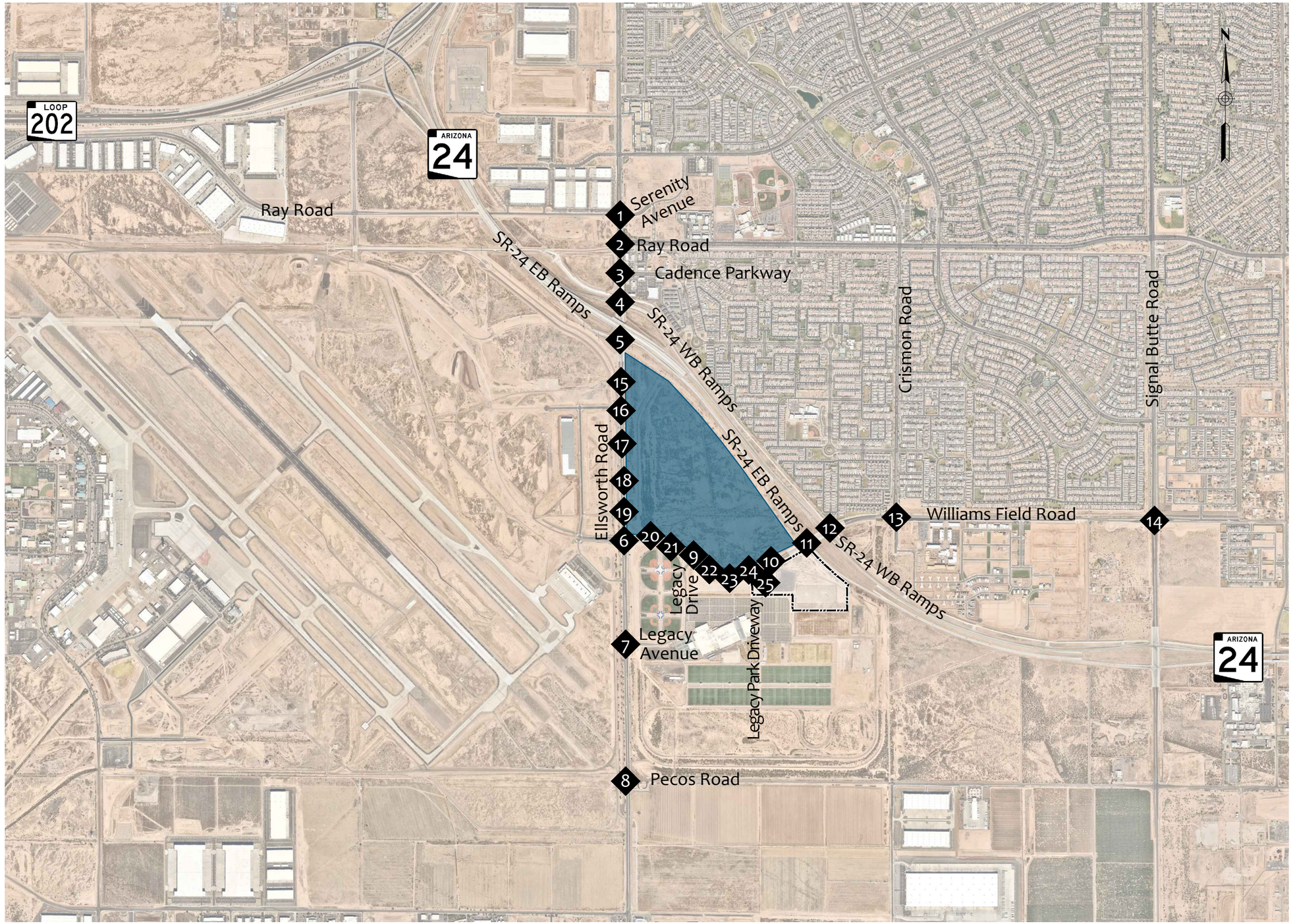



FIGURE 3 | STUDY AREA

# 4. EXISTING CONDITIONS

## 4.1. EXISTING LAND USE

According to the Maricopa County Assessor, the proposed site will occupy a portion of Assessor Parcel Number (APN) 313-25-859S. The proposed site is currently zoned Light Industrial (LI). See **Appendix B** for detailed parcel information.

## 4.2. EXISTING TRAFFIC COUNTS

A local data collection firm, All Traffic Data Services, LLC, was utilized to collect traffic counts. On Tuesday, April 2, 2024, four hours of typical weekday turning movement counts were obtained during the AM (7:00 to 9:00 am) and PM (4:00 to 6:00 pm) peak hours at the following intersections:

- Ellsworth Road and Serenity Avenue (1)
- Ellsworth Road and Ray Road (2)
- Ellsworth Road and Cadence Parkway (3)
- Ellsworth Road and SR-24 Westbound Ramps (4)*
- Ellsworth Road and SR-24 Eastbound Ramps (5)*
- Ellsworth Road and Williams Field Road (6)*
- Ellsworth Road and Legacy Avenue (7)*
- Ellsworth Road and Pecos Road North (8)
- Williams Field Road and Legacy Drive (9)*
- Williams Field Road and Legacy Park Driveway (10)*
- Williams Field Road and SR-24 Eastbound Ramps (11)*
- Williams Field Road and SR-24 Westbound Ramps (12)*
- Williams Field Road and Crismon Road (13)
- Williams Field Road and Signal Butte Road (14)

Per coordination with the City of Mesa, a limited study area was deemed appropriate for the Saturday analysis. On Saturday, January 24, 2026, six hours of typical Saturday turning movement counts were obtained during the AM (6:30 to 8:30 am), MD (1:30 to 3:30 pm), and PM (6:00 to 8:00 pm) peak hours at the intersections indicated with an asterisk* above. It was coordinated with Mesa that the Saturday analysis would include only the MD peak hour.

The turning movement counts were then analyzed for the highest 1-hour within each time period. The following peak hours were analyzed throughout this study.

| | |
|---|---|
| Weekday AM Peak Hour | 7:00 – 8:00 am |
| Weekday PM Peak Hour | 4:00 – 5:00 pm |
| Saturday MD Peak Hour | 1:30 – 2:30 pm |

Additionally, on Tuesday, April 2, 2024, bi-directional tube counts for 24-hours in 15-minute intervals were collected along the following roadway segments:

- Ellsworth Road, south of SR-24
- Ellsworth Road, south of Williams Field Road
- Williams Field Road, east of Ellsworth Road

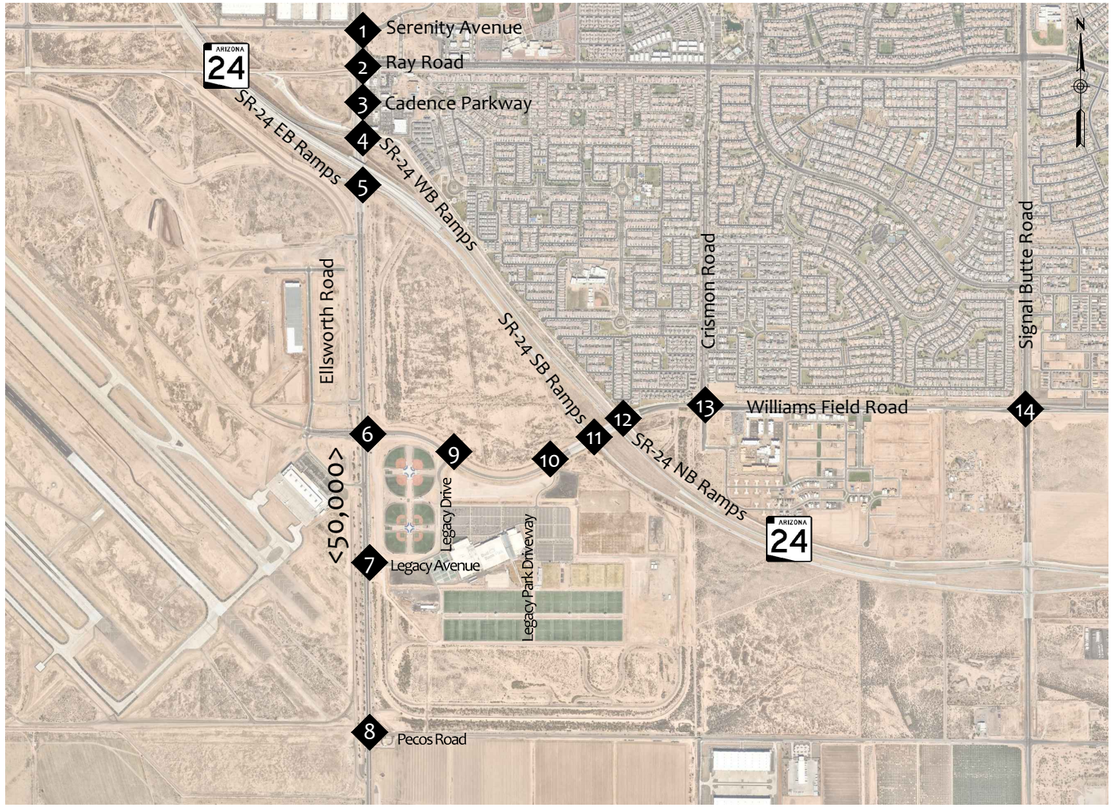
On Saturday, January 24, 2026, bi-directional tube counts for 24-hours in 15-minute intervals were collected along the following roadway segments:

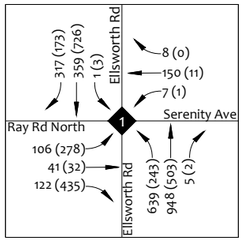
- Ellsworth Road, north of Williams Field Road
- Williams Field Road, east of Ellsworth Road

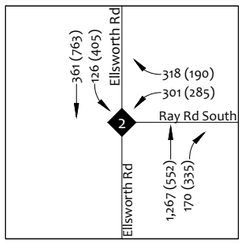
See **Appendix C** for detailed traffic count data. See **Figure 4** for the existing AM and PM peak hour traffic volumes.

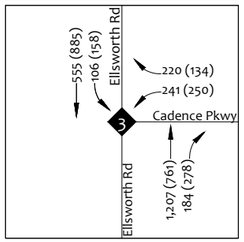
LEGEND

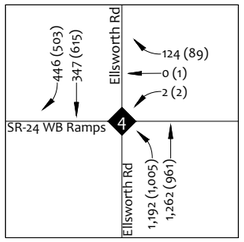
| | |
|---|---|
| AM (PM) | Peak Hour Traffic Volumes |
| X | Intersection |
| <X,XXX> | Average Daily Traffic |

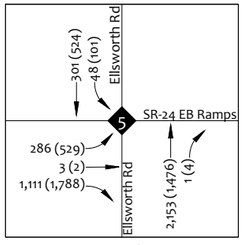
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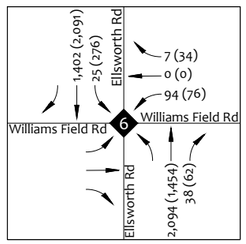


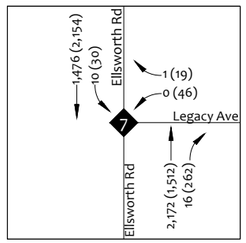


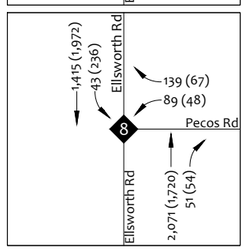


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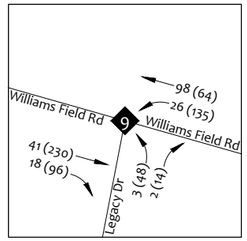
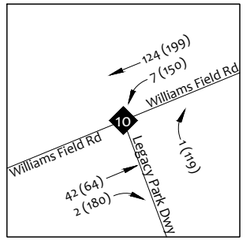
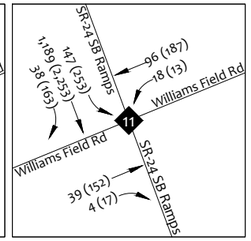
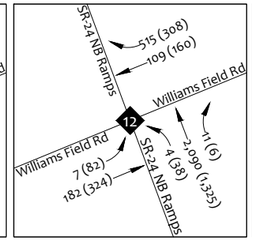
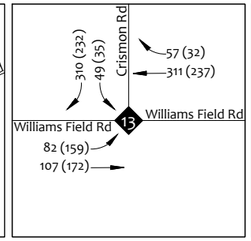


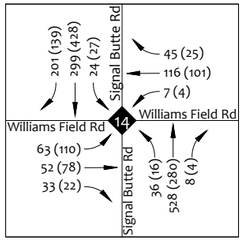
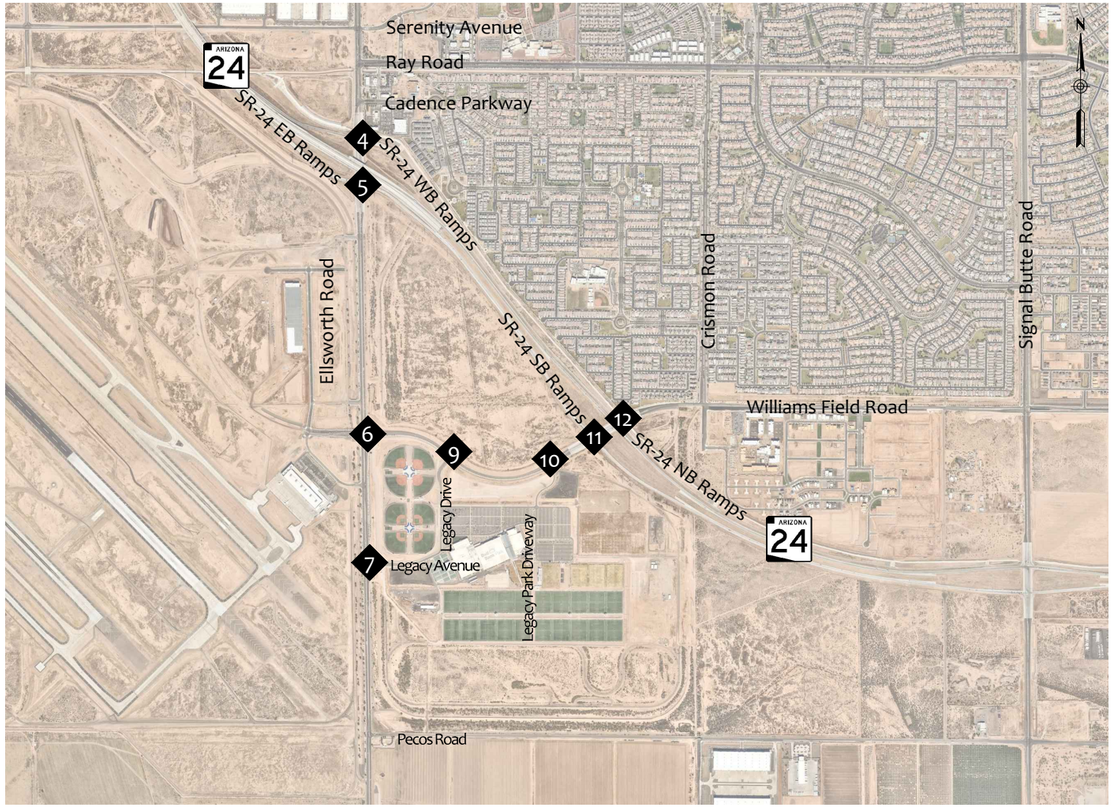
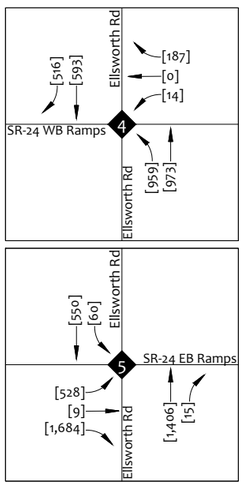



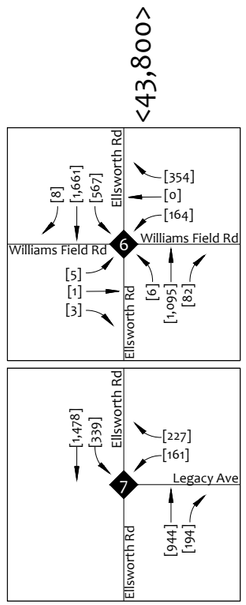

FIGURE 4 | EXISTING TRAFFIC VOLUMES (WEEKDAY)

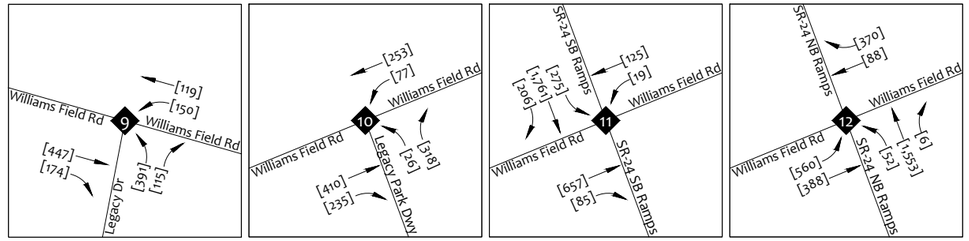
LEGEND

| | |
|---|---|
| [Saturday MD] | Peak Hour Traffic Volumes |
| X | Intersection |
| <X,XXX> | Average Daily Traffic |




<7,900>

FIGURE 5 | EXISTING TRAFFIC VOLUMES (SATURDAY)

## 4.3. EXISTING CAPACITY ANALYSIS

The existing conditions capacity analysis was completed for the existing study intersections. Traffic analysis software, Synchro Version 12, was used to perform the analyses using the existing peak hour factor (PHF) obtained from the traffic counts. See **Appendix D** for the existing signal timing.

**Table 1** is from the 7th *Edition of the Highway Capacity Manual* Exhibit 19-8 and 20-2, which lists the Level of Service (LOS) thresholds for signalized and unsignalized intersections.

**Table 1 – Level of Service Criteria**

| Level of Service (LOS) | Control Delay per Vehicle (s/veh) | |
|---|---|---|
| | Signalized Intersection | Unsignalized Intersection |
| A | ≤ 10 | ≤ 10 |
| B | > 10-20 | > 10-15 |
| C | > 20-35 | > 15-25 |
| D | > 35-55 | > 25-35 |
| E | > 55-80 | > 35-50 |
| F | > 80 | > 50 |

See **Table 2** and **Table 3** for the existing level of service and delay. See **Figure 6** for the existing AM and PM peak hour capacity analysis. See **Figure 7** for the existing Saturday MD peak hour capacity analysis. The detailed capacity analysis sheets can be found in **Appendix E**.

## Table 2 – Existing Level of Service and Delay (1 of 2)

| Intersection | Existing | | | | | |
|---|---|---|---|---|---|---|
| | AM Peak | | PM Peak | | Sat MD Peak | |
| | LOS | DELAY | LOS | DELAY | LOS | DELAY |
| Ellsworth Road and Serenity Avenue / Ray Road North (1) - *Signalized* | | | | | | |
| Overall Intersection | D | 41.1 | C | 29.3 | - | - |
| Eastbound Left | D | 46.2 | C | 20.8 | - | - |
| Eastbound Shared Through-Right | D | 38.9 | C | 29.0 | - | - |
| Westbound Left | D | 42.9 | C | 34.0 | - | - |
| Westbound Shared Through-Right | D | 39.8 | B | 15.8 | - | - |
| Northbound Left | B | 18.8 | C | 30.5 | - | - |
| Northbound Through | C | 25.6 | C | 20.4 | - | - |
| Northbound Right | B | 18.4 | B | 17.1 | - | - |
| Southbound Left | C | 25.7 | C | 24.2 | - | - |
| Southbound Through | D | 45.2 | D | 38.8 | - | - |
| Southbound Right* | F | 130.5 | C | 28.7 | - | - |
| Ellsworth Road and Ray Road South (2) - *Signalized* | | | | | | |
| Overall Intersection | C | 25.6 | B | 19.9 | - | - |
| Westbound Dual Left | D | 51.1 | C | 23.8 | - | - |
| Westbound Right* | E | 59.6 | C | 26.7 | - | - |
| Northbound Through | B | 18.7 | C | 24.7 | - | - |
| Northbound Right | B | 13.2 | C | 29.9 | - | - |
| Southbound Left | B | 15.5 | D | 36.1 | - | - |
| Southbound Through | A | 8.5 | A | 0.4 | - | - |
| Ellsworth Road and Cadence Parkway (3) - *Signalized* | | | | | | |
| Overall Intersection | B | 19.5 | B | 13.5 | - | - |
| Westbound Dual Left | D | 37.3 | D | 38.1 | - | - |
| Westbound Right* | E | 75.2 | D | 45.0 | - | - |
| Northbound Through | B | 12.0 | B | 10.9 | - | - |
| Northbound Right | A | 8.7 | B | 10.3 | - | - |
| Southbound Left | D | 42.9 | D | 39.3 | - | - |
| Southbound Through | A | 5.2 | A | 0.4 | - | - |
| Ellsworth Road and SR-24 WB Ramps (4) - *Signalized* | | | | | | |
| Overall Intersection | B | 18.2 | B | 18.4 | B | 16.7 |
| Westbound Left** | E | 66.0 | D | 38.5 | C | 31.8 |
| Westbound Through | A | 1.2 | A | 0.3 | A | 0.5 |
| Westbound Right | A | 2.2 | A | 0.7 | A | 1.3 |
| Northbound Dual Left | D | 37.3 | C | 27.1 | C | 28.7 |
| Northbound Through | A | 0.7 | A | 5.0 | A | 5.9 |
| Southbound Through | D | 40.0 | D | 37.2 | C | 30.2 |
| Southbound Dual Right | A | 4.3 | A | 6.5 | A | 4.6 |
| Ellsworth Road and SR-24 EB Ramps (5) - *Signalized* | | | | | | |
| Overall Intersection | C | 34.9 | D | 35.4 | D | 42.8 |
| Eastbound Left | D | 44.4 | D | 47.3 | D | 51.9 |
| Eastbound Shared Thru-Left | D | 44.6 | D | 47.4 | D | 51.1 |
| Eastbound Dual Right* | A | 8.4 | D | 52.9 | E | 75.8 |
| Northbound Through | D | 50.7 | B | 19.6 | B | 16.4 |
| Northbound Right | A | 0.0 | A | 0.0 | A | 0.1 |
| Southbound Dual Left** | F | 95.5 | E | 76.4 | E | 56.8 |
| Southbound Through | A | 1.2 | A | 0.3 | A | 0.6 |
| Ellsworth Road and Williams Field Road (6) - *Signalized* | | | | | | |
| Overall Intersection | C | 30.5 | C | 29.4 | D | 43.1 |
| Eastbound Dual Left** | A | 0.0 | A | 0.0 | E | 67.7 |
| Eastbound Through | A | 0.0 | A | 0.0 | D | 46.1 |
| Eastbound Right | A | 0.0 | A | 0.0 | D | 46.1 |
| Westbound Dual Left** | E | 60.7 | E | 59.8 | E | 68.6 |
| Westbound Through | A | 0.0 | A | 0.0 | A | 0.0 |
| Westbound Right | C | 34.0 | D | 36.7 | F | 93.4 |
| Northbound Left** | A | 0.0 | A | 0.0 | E | 68.3 |
| Northbound Through | D | 41.9 | D | 47.1 | D | 45.2 |
| Northbound Right | A | 0.0 | C | 26.1 | C | 29.6 |
| Southbound Dual Left** | E | 59.3 | D | 54.6 | E | 60.1 |
| Southbound Through | B | 11.7 | B | 12.7 | C | 23.2 |
| Southbound Shared Through-Right | A | 0.0 | A | 0.0 | C | 23.6 |

*HCM method does not account for right turns on red, the LOS in synchro is lower.
**Low volume with high cycle lengths causes the delay/vehicle to be higher than expected.

## Table 3 – Existing Level of Service and Delay (2 of 2)

| Intersection | Existing | | | | | |
|---|---|---|---|---|---|---|
| | AM Peak | | PM Peak | | Sat MD Peak | |
| | LOS | DELAY | LOS | DELAY | LOS | DELAY |
| Ellsworth Road and Legacy Avenue (7) - *Signalized* | | | | | | |
| Overall Intersection | C | 31.8 | A | 1.7 | C | 25.8 |
| Westbound Shared Left-Left-Through | A | 0.0 | D | 35.1 | D | 39.3 |
| Westbound Right | C | 34.5 | D | 35.2 | D | 39.1 |
| Northbound Through | D | 36.3 | A | 1.0 | C | 29.5 |
| Northbound Right | A | 0.0 | A | 0.3 | C | 23.6 |
| Southbound Dual Left** | E | 61.8 | E | 57.1 | D | 49.1 |
| Southbound Through | C | 25.2 | A | 0.7 | B | 14.8 |
| Ellsworth Road and Pecos Road North (8) - *Signalized* | | | | | | |
| Overall Intersection | C | 33.4 | C | 26.2 | - | - |
| Westbound Left | D | 49.4 | D | 46.0 | - | - |
| Westbound Right* | E | 59.1 | D | 48.2 | - | - |
| Northbound Through | D | 40.8 | C | 24.7 | - | - |
| Northbound Shared Through-Right | D | 42.1 | C | 24.9 | - | - |
| Southbound Left | C | 31.1 | D | 44.7 | - | - |
| Southbound Through | B | 17.8 | C | 24.0 | - | - |
| Williams Field Road and Legacy Drive (9) - *Signalized* | | | | | | |
| Overall Intersection | A | 2.3 | A | 6.5 | C | 25.4 |
| Eastbound Through | A | 3.7 | A | 0.4 | C | 20.5 |
| Eastbound Right | A | 3.7 | A | 0.2 | B | 16.0 |
| Westbound Left | A | 2.0 | A | 2.8 | B | 13.0 |
| Westbound Through | A | 0.1 | A | 0.1 | A | 8.4 |
| Northbound Left | C | 31.4 | D | 54.4 | D | 45.2 |
| Northbound Right | C | 30.4 | D | 51.7 | C | 24.7 |
| Williams Field Road and Legacy Park Driveway (10) - *Unsignalized* | | | | | | |
| Northbound Right* | A | 8.5 | A | 9.9 | E | 47.5 |
| Westbound Left** | A | 7.3 | A | 9.2 | A | 9.6 |
| Williams Field Road and SR-24 EB Ramps (11) - *Signalized* | | | | | | |
| Overall Intersection*** | B | 18.4 | F | 123.3 | D | 45.8 |
| Eastbound Through | D | 37.3 | C | 33.0 | D | 45.1 |
| Eastbound Right | A | 0.3 | A | 0.2 | A | 1.0 |
| Westbound Dual Left | C | 22.1 | C | 24.5 | D | 45.9 |
| Westbound Through | A | 3.8 | A | 6.8 | C | 25.4 |
| Southbound Left | B | 12.0 | B | 12.9 | B | 13.2 |
| Southbound Shared Left-Through-Through-Right | C | 19.6 | F | 149.6 | D | 53.3 |
| Williams Field Road and SR-24 WB Ramps (12) - *Signalized* | | | | | | |
| Overall Intersection*** | F | 86.1 | C | 28.7 | E | 65.8 |
| Eastbound Dual Left | D | 51.3 | D | 53.8 | E | 63.9 |
| Eastbound Through | C | 27.9 | C | 26.8 | C | 22.5 |
| Westbound Through | D | 39.3 | D | 52.4 | D | 43.9 |
| Westbound Right | F | 142.0 | D | 43.9 | E | 72.7 |
| Northbound Left | B | 11.5 | B | 10.2 | C | 21.2 |
| Northbound Shared Through-Through-Right | F | 80.1 | C | 21.8 | E | 78.4 |
| Williams Field Road and Crismon Road (13) - *Unsignalized* | | | | | | |
| Eastbound Left | A | 8.4 | A | 8.3 | - | - |
| Southbound Left | B | 14.5 | C | 17.1 | - | - |
| Southbound Right | B | 12.6 | B | 10.9 | - | - |
| Williams Field Road and Signal Butte Road (14) - *Signalized* | | | | | | |
| Overall Intersection | D | 39.9 | D | 37.6 | - | - |
| Eastbound Left | A | 9.9 | A | 8.8 | - | - |
| Eastbound Through | B | 11.2 | A | 9.3 | - | - |
| Eastbound Right | B | 11.4 | A | 9.2 | - | - |
| Westbound Left | B | 12.6 | B | 11.7 | - | - |
| Westbound Through | B | 14.0 | B | 12.6 | - | - |
| Westbound Right | B | 14.0 | B | 12.4 | - | - |
| Northbound Left | D | 36.4 | D | 40.7 | - | - |
| Northbound Through | D | 50.5 | D | 47.7 | - | - |
| Northbound Shared Through-Right | D | 50.3 | D | 47.6 | - | - |
| Southbound Left | D | 38.0 | D | 39.3 | - | - |
| Southbound Through | D | 44.0 | D | 49.4 | - | - |
| Southbound Right | D | 49.4 | D | 47.1 | - | - |

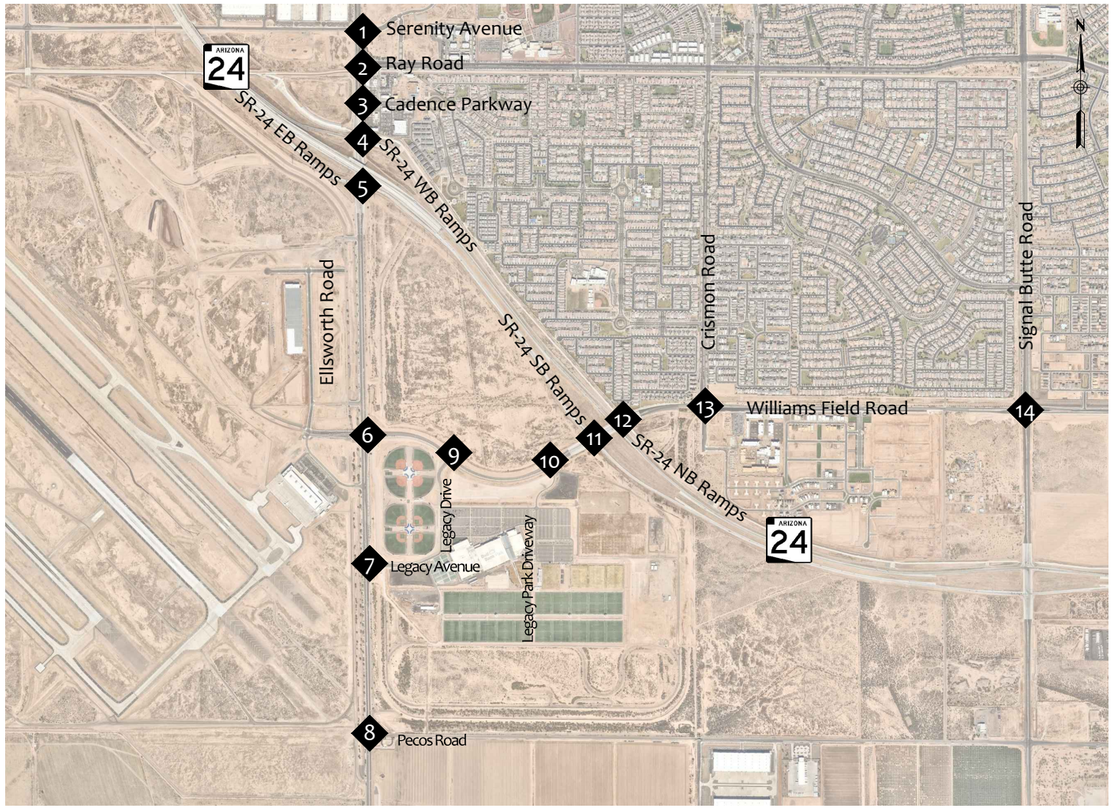
*HCM method does not account for right turns on red, the LOS in synchro is lower.
**Low volume with high cycle lengths causes the delay/vehicle to be higher than expected.
***Include mainline volumes along SR 24, which will be eliminated when mainline is constructed.

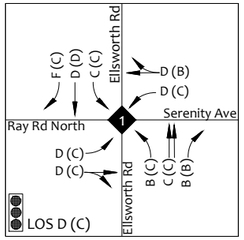
LEGEND

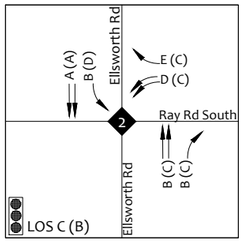
AM (PM) Peak Hour Capacity Analysis

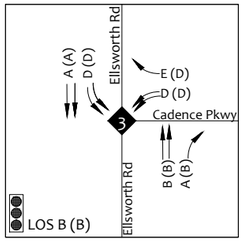
Intersection

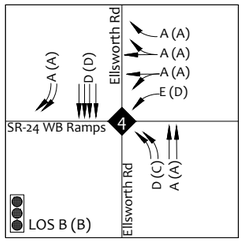
Lane Configuration

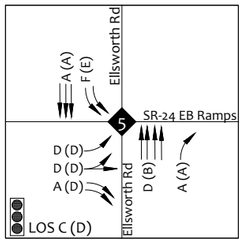


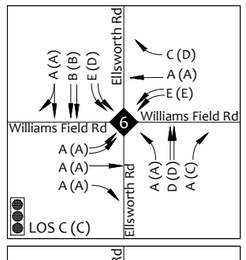



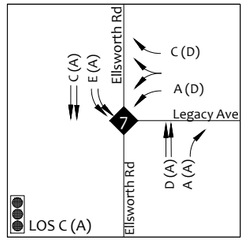



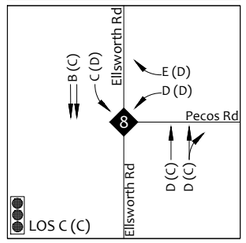



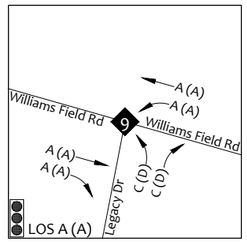



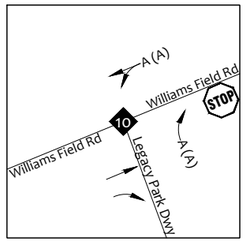



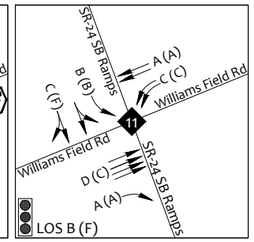



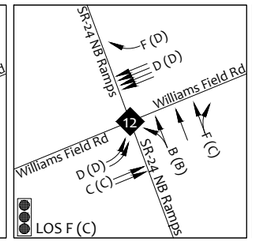



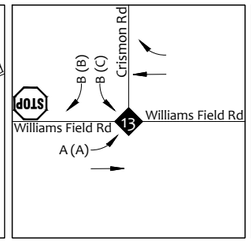



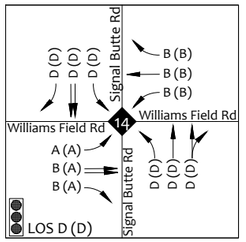
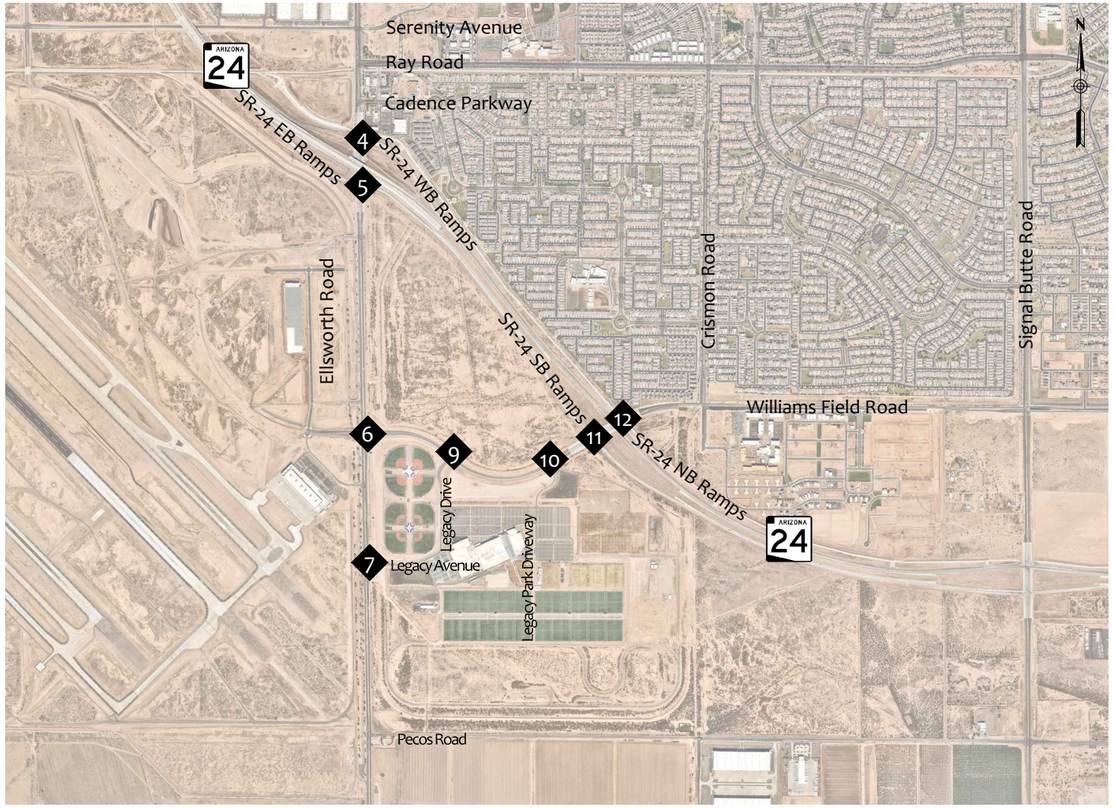
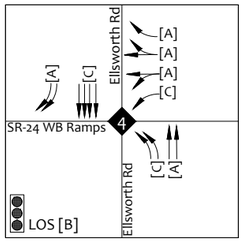



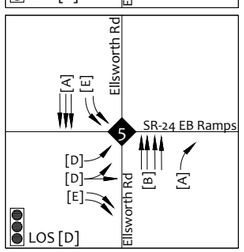

FIGURE 6 | EXISTING CAPACITY ANALYSIS (WEEKDAY)

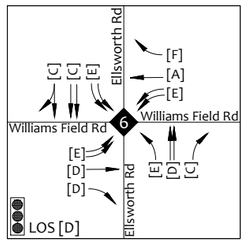
LEGEND

| | |
|---|---|
| [Saturday MD] | Peak Hour Capacity Analysis |
| X | Intersection |
| | Lane Configuration |



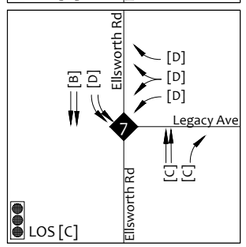
















FIGURE 7 | EXISTING CAPACITY ANALYSIS (SATURDAY)

# 5. PROJECTED TRAFFIC

## 5.1. TRIP GENERATION

The trip generation for the proposed Legacy Park and Gateway Crossing developments were calculated utilizing the Institute of Transportation Engineers (ITE) publication entitled *Trip Generation, 12th Edition.* The ITE rates are based on studies that measured the trip generation characteristics for various types of land uses. The rates are expressed in terms of trips per unit land use type. This publication is considered to be the standard for the transportation engineering profession.

### 5.1.1. INTERNAL CAPTURE

Given the mixed-use nature of both the Legacy Park and Gateway Crossing developments, which include residential, commercial, hotel, and office land uses, it is anticipated that some of the trips will be internal, i.e. beginning and ending within the development. Based on the NCHRP Report 684 – Enhancing Internal Trip Capture Estimation of Mixed-Use Developments, the internal capture rates for trip origins and trip destinations within a multi-use development were applied for weekday AM and PM hours. Internal capture was considered for each development (Legacy Park and Gateway Crossing) individually. Internal capture for Saturday trips were calculated using NCHRP Report 684, using the PM internal capture totals, since they most closely reflect the Saturday peak period.

### 5.1.2. PEDESTRIAN INTERNACTION WITH ARIZONA ATHLETIC GROUNDS

In addition to internal trips within each development, the proposed pedestrian connectivity between each development (Legacy Park and Gateway Crossing) and the adjacent Arizona Athletic Grounds is anticipated to facilitate some level of trip interaction between sites. A pedestrian underpass is planned beneath Williams Field Road, which will provide a direct connection for pedestrians traveling between Legacy Park and Arizona Athletic Grounds. Based on the planned pedestrian connectivity and the complementary nature of land uses between the developments, a 5 percent reduction was applied to the commercial and hotel trip generation for Legacy Park. To reflect the closer proximity of the Gateway Crossing development, a 10 percent reduction was applied to the commercial (except for the discount superstore and the gas station) and hotel trip generation for Gateway Crossing. These interaction rates represent trips that may occur between the developments on the pedestrian infrastructure, including sidewalks, internal walkways, and pedestrian underpass throughout both the Legacy Park and Gateway Crossing developments.

### 5.1.3. PASS-BY TRIPS

Pass-by trips are intermediate stops on the way from an origin to a primary trip destination without a route diversion. Pass-by trips are diverted from the existing traffic passing the site on an adjacent street or roadway that offers direct access to the generator. These trips are not considered to add new traffic to the adjacent street network and may be reduced from the total external trips

generated by the proposed development. Pass-by rates were applied to the Weekday, AM Peak Hour and PM Peak Hour trips. These rates are based on data provided in the *ITE Trip Generation, 12th Edition.* For the purposes of this report, daily pass-by rates were determined based on an average of the AM and PM peak hour rates.

### 5.1.4. LEGACY PARK 'CORE' – TRIP GENERATION

The 'CORE' component of the proposed Legacy Park development will include the following land uses and quantities:

**Legacy Park 'CORE' – 2029**

- Retail 411,400 square feet
- Office 161,000 square feet
- Resort Hotel 600 rooms
- Mid-rise multifamily 770 dwelling units

The above represents only the 'CORE' component of the proposed Legacy Park development. The total trip generation for the 'CORE' is shown in **Table 8**. Due to the greater number of data sources and higher average study size, Saturday rates for ITE Land Use Code 710 were taken from ITE Trip Generation, 11th Edition. Detailed trip generation calculations can be found in **Appendix F**.

**Table 4 – Trip Generation – Proposed Legacy Park 'CORE' (Weekday)**

| Land Use | ITE Code | Qty | Unit | Weekday | AM Peak Hour | | | PM Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Total | Total | In | Out | Total | In | Out |
| Shopping Center | 820 | 411.4 | 1000 SF GLA | 14,971 | 384 | 238 | 146 | 1,343 | 658 | 685 |
| General Office Building | 710 | 161 | 1000 SF GFA | 1,203 | 200 | 176 | 24 | 191 | 30 | 161 |
| Resort Hotel | 330 | 600 | Rooms | 1,602 | 198 | 139 | 59 | 234 | 101 | 133 |
| Mid-Rise Residential with 1st-Floor Commercial | 221/231 | 770 | Dwelling Units | 3,434 | 262 | 79 | 183 | 308 | 216 | 92 |
| Total | | | | 21,210 | 1,044 | 632 | 412 | 2,076 | 1,005 | 1,071 |
| *Internal Capture* | | | | 2,935 | 70 | 35 | 35 | 438 | 219 | 219 |
| *Pedestrian Interaction with AAG* | | | | 737 | 29 | 19 | 10 | 79 | 38 | 41 |
| *Pass-by* | | | | 1,937 | 0 | 0 | 0 | 203 | 103 | 100 |
| **Total** | | | | **15,601** | **945** | **578** | **367** | **1,356** | **645** | **711** |

*ITE Land Use 221 was used for weekday rates in place of ITE Land Use 231, where weekday rates for 231 were not provided

The proposed Legacy Park 'CORE' is anticipated to generate a total of 15,601 new weekday trips, with 945 new trips occurring during the AM peak hour and 1,356 new trips occurring during the PM peak hour.

**Table 5 – Trip Generation – Proposed Legacy Park 'CORE' (Saturday)**

| Land Use | ITE Code | Qty | Unit | Saturday | Peak Hour of Generator | | |
|---|---|---|---|---|---|---|---|
| | | | | Total | Total | In | Out |
| Shopping Center | 820 | 411.4 | 1000 SF GLA | 16,910 | 1,778 | 907 | 871 |
| General Office Building | 710 | 161 | 1000 SF GFA | 356 | 85 | 46 | 39 |
| Resort Hotel | 330 | 600 | Rooms | 2,190 | 186 | 93 | 93 |
| Multifamily Housing (Mid-Rise) | 221 | 770 | Dwelling Units | 3,311 | 277 | 141 | 136 |
| | | | Total | 22,767 | 2,326 | 1,187 | 1,139 |
| | | | *Internal Capture* | 3,771 | 370 | 185 | 185 |
| | | | *Pedestrian Interaction with AAG* | 851 | 99 | 50 | 49 |
| | | | *Pass-by* | 5,341 | 469 | 242 | 227 |
| | | | **Total** | **12,804** | **1,388** | **710** | **678** |

*ITE Land Use 221 was used for weekday rates in place of ITE Land Use 231, where weekday rates for 231 were not provided
**Saturday rates for ITE Land Use 710 were obtained from ITE Trip Generation, 11th Edition.

The proposed Legacy Park 'CORE' is anticipated to generate a total of 12,804 new Saturday daily trips, with 1,388 new trips occurring during the MD peak hour.

### 5.1.5. LEGACY PARK FULL BUILDOUT– TRIP GENERATION

The full buildout of the proposed Legacy Park development will include the following land uses and quantities:

**Legacy Park (Full Buildout) – 2044**

- Retail 436,400 square feet
- Office 3,675,967 square feet
- Resort Hotel 750 rooms
- Mid-rise multifamily 2,321 dwelling units

The above represents the full buildout of the proposed Legacy Park development. The total trip generation for the full buildout is shown in **Table 8**. Detailed trip generation calculations can be found in **Appendix F**.

### Table 6 – Trip Generation – Proposed Legacy Park Full Buildout (Weekday)

| Land Use | ITE Code | Qty | Unit | Weekday | AM Peak Hour | | | PM Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Total | Total | In | Out | Total | In | Out |
| Shopping Center | 820 | 436.40 | 1000 SF GLA | 15,881 | 399 | 247 | 152 | 1,397 | 685 | 712 |
| General Office Building | 710 | 3,675.97 | 1000 SF GFA | 22,925 | 4,137 | 3,641 | 496 | 3,670 | 587 | 3,083 |
| Resort Hotel | 330 | 750 | Rooms | 2,003 | 248 | 174 | 74 | 293 | 126 | 167 |
| Mid-Rise Residential with 1st-Floor Commercial | 221/231 | 1,107 | Dwelling Units | 4,937 | 376 | 113 | 263 | 443 | 310 | 133 |
| Multifamily Housing (Mid-Rise) | 221 | 1,214 | Dwelling Units | 5,506 | 502 | 115 | 387 | 440 | 282 | 158 |
| | | | Total | 51,252 | 5,662 | 4,290 | 1,372 | 6,243 | 1,990 | 4,253 |
| | | | *Internal Capture* | 8,115 | 428 | 214 | 214 | 806 | 403 | 403 |
| | | | *Pedestrian Interaction with AAG* | 627 | 21 | 12 | 4 | 84 | 40 | 44 |
| | | | *Pass-by* | 1,616 | 0 | 0 | 0 | 184 | 97 | 87 |
| | | | **Total** | **40,894** | **5,213** | **4,064** | **1,154** | **5,169** | **1,450** | **3,719** |

*ITE Land Use 221 was used for weekday rates in place of ITE Land Use 231, where weekday rates for 231 were not provided

The full buildout of the proposed Legacy Park development is anticipated to generate a total of 40,894 new weekday trips, with 4,064 new trips occurring during the AM peak hour and 5,169 new trips occurring during the PM peak hour.

### Table 7 – Trip Generation – Proposed Legacy Park (Saturday)

| Land Use | ITE Code | Qty | Unit | Saturday | Peak Hour of Generator | | |
|---|---|---|---|---|---|---|---|
| | | | | Total | Total | In | Out |
| Shopping Center | 820 | 436.4 | 1000 SF GLA | 17,768 | 1,852 | 945 | 907 |
| General Office Building | 710 | 3676 | 1000 SF GFA | 8,124 | 1,948 | 1,052 | 896 |
| Resort Hotel | 330 | 750 | Rooms | 2,738 | 233 | 116 | 117 |
| Mid-Rise Residential with 1st-Floor Commercial | 221 | 1107 | Dwelling Units | 4,760 | 399 | 203 | 196 |
| Multifamily Housing (Mid-Rise) | 221 | 1214 | Dwelling Units | 5,220 | 437 | 223 | 214 |
| | | | Total | 38,610 | 4,869 | 2,539 | 2,330 |
| | | | *Internal Capture* | 9,208 | 938 | 469 | 469 |
| | | | *Pedestrian Interaction with AAG* | 792 | 104 | 53 | 51 |
| | | | *Pass-by* | 4,827 | 414 | 219 | 195 |
| | | | **Total** | **23,783** | **3,413** | **1,798** | **1,615** |

*ITE Land Use 221 was used for weekday rates in place of ITE Land Use 231, where weekday rates for 231 were not provided
**Saturday rates for ITE Land Use 710 were obtained from ITE Trip Generation, 11th Edition.

The full buildout of the proposed Legacy Park development is anticipated to generate a total of 23,783 new Saturday daily trips, with 3,413 new trips occurring during the MD peak hour.

### 5.1.6. GATEWAY CROSSING FULL BUILDOUT – TRIP GENERATION

The proposed Gateway Crossing development will include the following land uses and quantities:

**Gateway Crossing (Full Buildout) – 2028**

- Discount superstore — *Anchor 1* — 166,000 square feet; 28 fueling positions
- Retail — *Shops A and B* — 27,950 square feet
- Fast-food restaurants — *P1, P3, and P4* — 1,747 square feet
- High-volume fast-food — *P2* — 4,626 square feet
- Hotels — *Hotels A and B* — 212 rooms

The above represents the full buildout of the proposed Gateway Crossing development. It should be noted that the AM peak hour for ITE Land Use Code 929 – High-Volume Fast-Food Restaurant was not included, because the anticipated end-user of the restaurant does not operate during the AM peak hour. The total trip generation for the proposed Gateway Crossing development is shown in **Table 8**. Detailed trip generation calculations can be found in **Appendix F**.

**Table 8 – Trip Generation – Proposed Gateway Crossing (Weekday)**

| Land Use | ITE Code | Qty | Unit | Weekday | AM Peak Hour | | | PM Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Total | Total | In | Out | Total | In | Out |
| Free-Standing Discount Superstore | 813 | 166 | 1000 SF GFA | 8,386 | 312 | 175 | 137 | 717 | 351 | 366 |
| Hotel | 310 | 212 | Rooms | 1,238 | 72 | 38 | 34 | 100 | 51 | 49 |
| Strip Retail Plaza (<40k) | 822 | 27.95 | 1000 SF GLA | 1,522 | 110 | 60 | 50 | 176 | 88 | 88 |
| Fast-Food Restaurant with Drive-Through Window | 934 | 1.747 | 1000 SF GFA | 783 | 58 | 30 | 28 | 55 | 29 | 26 |
| High-Volume Fast-Food Restaurant | 929 | 4.626 | 1000 SF GFA | 3,022 | 0 | 0 | 0 | 270 | 135 | 135 |
| Gasoline/Service Station | 944 | 28 | Vehicle Fueling Positions | 4,816 | 317 | 158 | 159 | 398 | 199 | 199 |
| Total | | | | 19,767 | 869 | 461 | 408 | 1,716 | 853 | 863 |
| *Internal Capture* | | | | 2,204 | 54 | 27 | 27 | 300 | 150 | 150 |
| *Pedestrian Interaction with AAG* | | | | 525 | 24 | 13 | 11 | 62 | 31 | 31 |
| *Pass-by* | | | | 4,905 | 208 | 102 | 106 | 534 | 268 | 266 |
| **Total** | | | | **12,133** | **583** | **319** | **264** | **820** | **404** | **416** |

The proposed Gateway Crossing development is anticipated to generate a total of 12,133 new weekday trips, with 583 new trips occurring during the AM peak hour and 820 new trips occurring during the PM peak hour.

**Table 9 – Trip Generation – Proposed Gateway Crossing (Saturday)**

| Land Use | ITE Code | Qty | Unit | Saturday | Peak Hour of Generator | | |
|---|---|---|---|---|---|---|---|
| | | | | Total | Total | In | Out |
| Free-Standing Discount Superstore | 813 | 166 | 1000 SF GFA | 9,901 | 886 | 443 | 443 |
| Hotel | 310 | 212 | Rooms | 1,467 | 100 | 51 | 49 |
| Strip Retail Plaza (<40k) | 822 | 27.95 | 1000 SF GLA | 1,975 | 185 | 95 | 90 |
| Fast-Food Restaurant with Drive-Through Window | 934 | 1.747 | 1000 SF GFA | 912 | 89 | 45 | 44 |
| High-Volume Fast-Food Restaurant | 929 | 4.626 | 1000 SF GFA | 3,861 | 345 | 173 | 172 |
| Gasoline/Service Station | 944 | 28 | Vehicle Fueling Positions | 3,332 | 341 | 174 | 167 |
| Total | | | | 21,448 | 1,946 | 981 | 965 |
| *Internal Capture* | | | | *4,397* | *389* | *195* | *194* |
| *Pedestrian Interaction with AAG* | | | | *539* | *464* | *37* | *35* |
| *Pass-by* | | | | *5,560* | *464* | *238* | *226* |
| **Total** | | | | **10,952** | **629** | **511** | **510** |

The proposed Gateway Crossing development is anticipated to generate a total of 10,952 new Saturday daily trips, with 629 new trips occurring during the MD peak hour.

## 5.2. TRIP DISTRIBUTION AND ASSIGNMENT

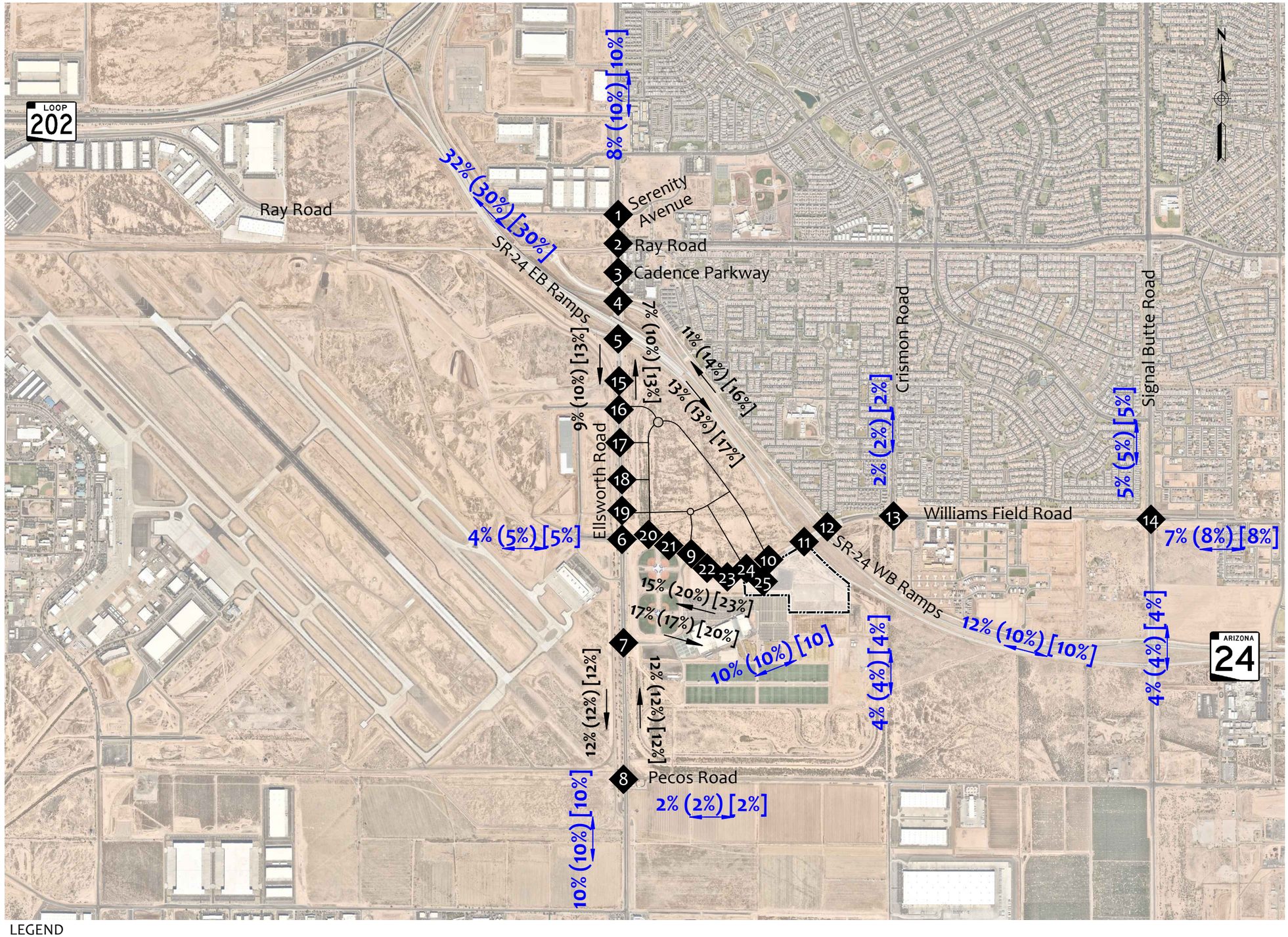
The trip distribution procedure determines the general pattern of travel for vehicles entering and exiting the proposed development. The trip distribution for the proposed development is largely based on the distribution of the existing traffic with adjustments to account for the anticipated changes roadway connections and traffic patterns along the surrounding roadway network.

The trip assignment was generally based on proximity of the driveways, permitted turn movements, as well as ease and probability of use respective to each land use within the site.

The trip distribution for the proposed Gateway Crossing development is shown in **Figure 8**. The weekday new site generated traffic volumes are shown in **Figure 9**, the Saturday new site generated traffic volumes are shown in **Figure 10**, and the pass-by traffic volumes are shown in **Figure 11.**

The trip distribution for the 'CORE' component of the proposed Legacy Park development is shown in **Figure 12**. The weekday new site generated traffic volumes are shown in **Figure 13**, the Saturday new site generated traffic volumes are shown in **Figure 14**, and the pass-by traffic volumes are shown in **Figure 15.**

The trip distribution for the full buildout of the proposed Legacy Park development is shown in **Figure 16**. The weekday new site generated traffic volumes are shown in **Figure 17**, the Saturday new site generated traffic volumes are shown in **Figure 18**, and the pass-by traffic volumes are shown in **Figure 19.**




LEGEND

| | |
|---|---|
| XX% (XX%) [XX%] | AM (PM) [Sat MD] Trip Distribution |
| XX% (XX%) [XX%] | AM (PM) [Sat MD] Trip Assignment |
| X | Intersection |

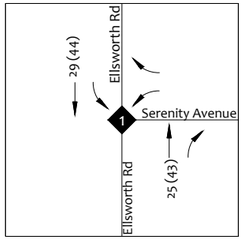
FIGURE 8 | TRIP DISTRIBUTION (GATEWAY CROSSING)

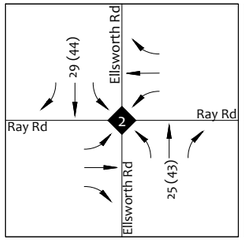
LEGEND

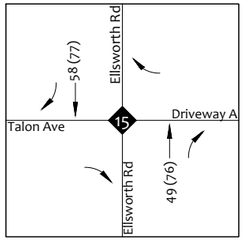
AM (PM) Peak Hour Traffic Volumes

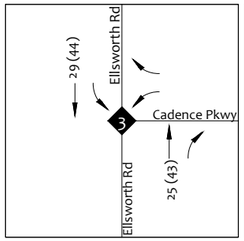
X Intersection

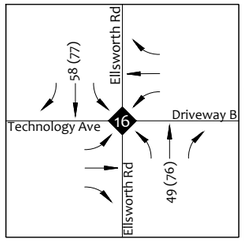
<X,XXX> Average Daily Traffic

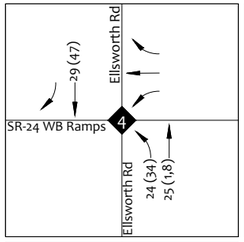


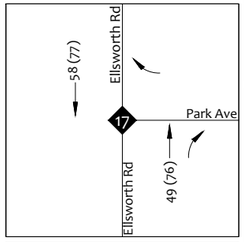



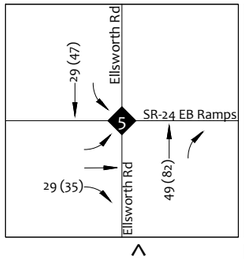



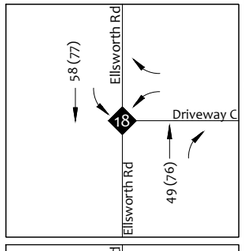

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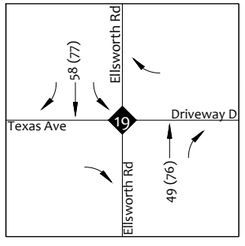


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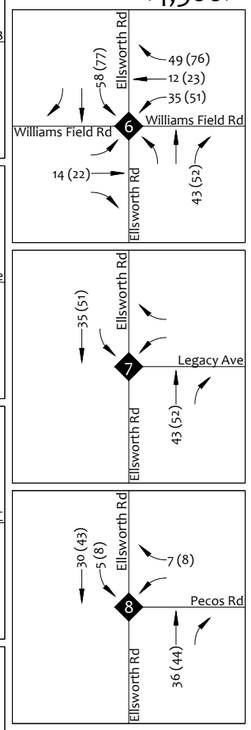
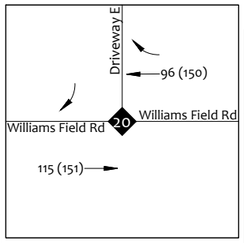
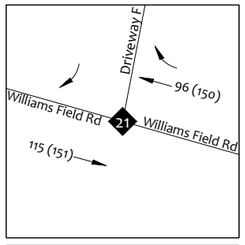


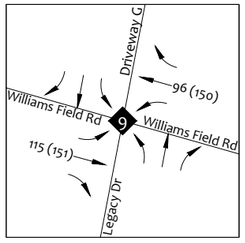



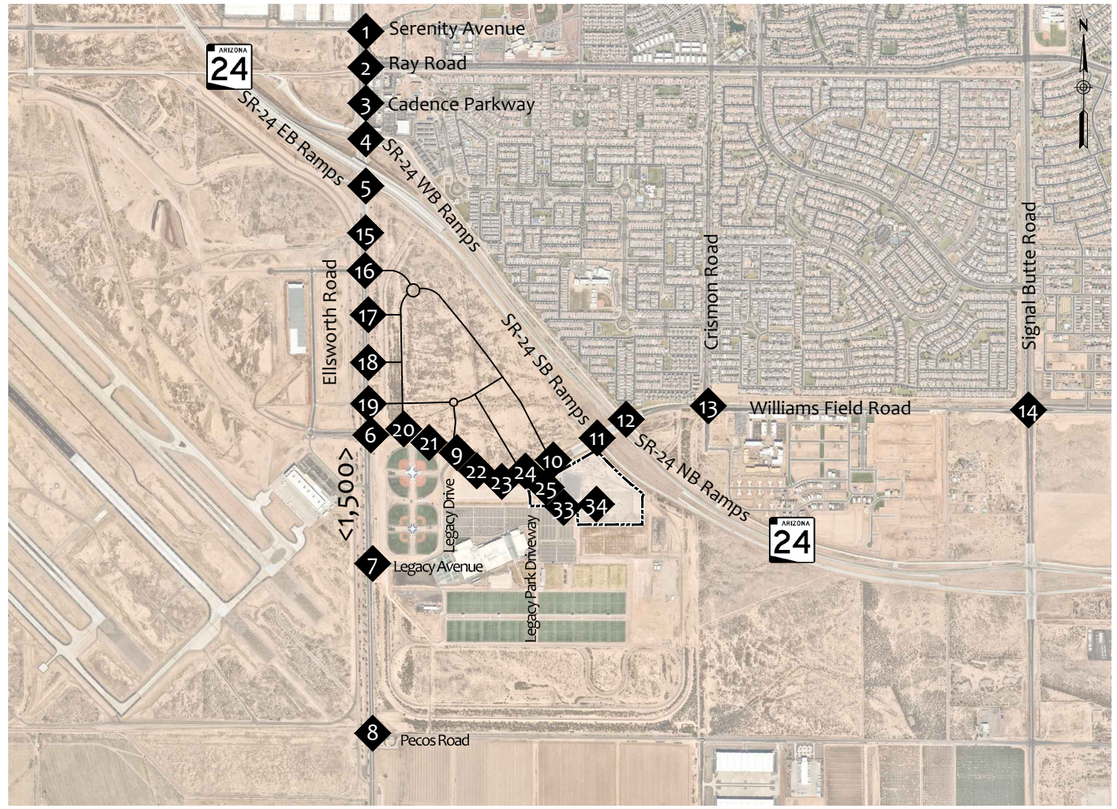



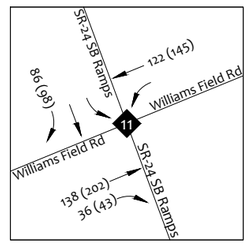


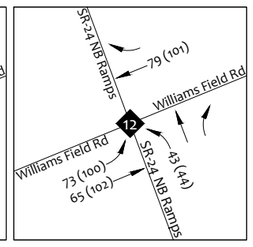


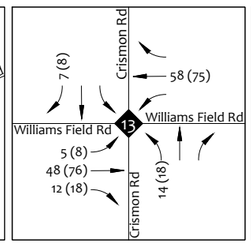


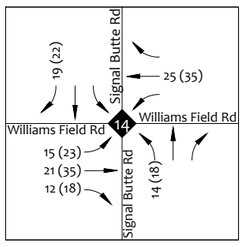



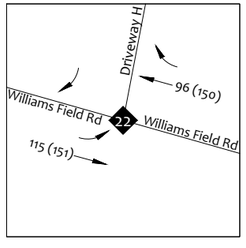



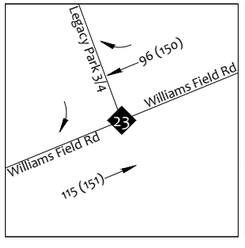



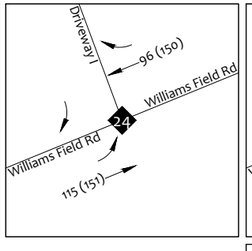



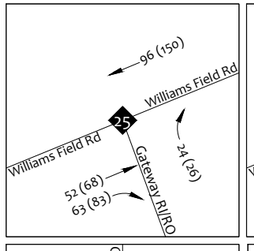



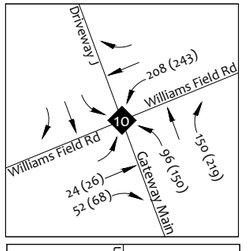



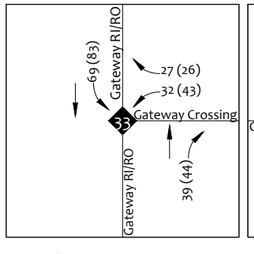



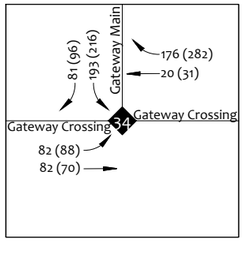
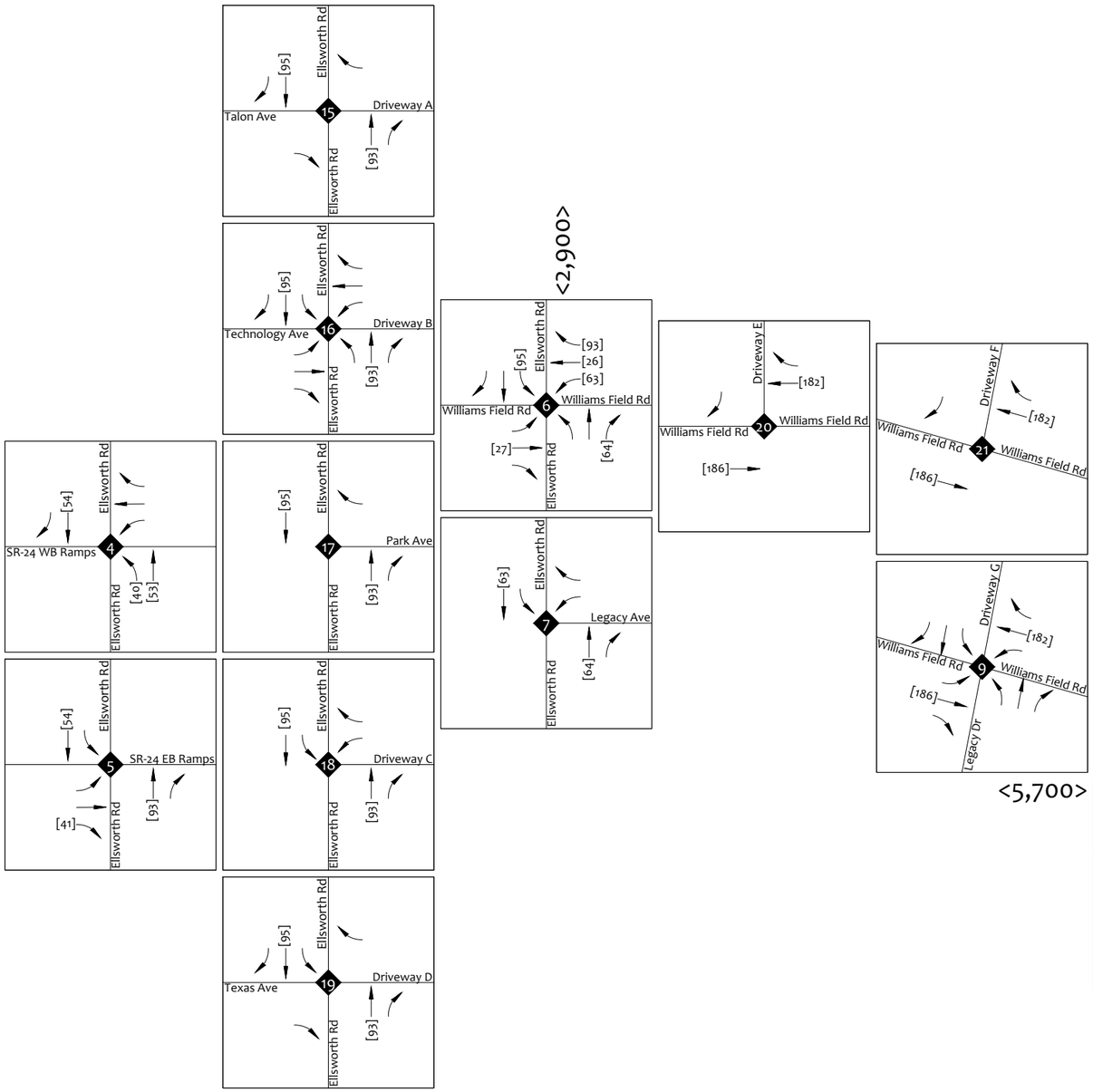
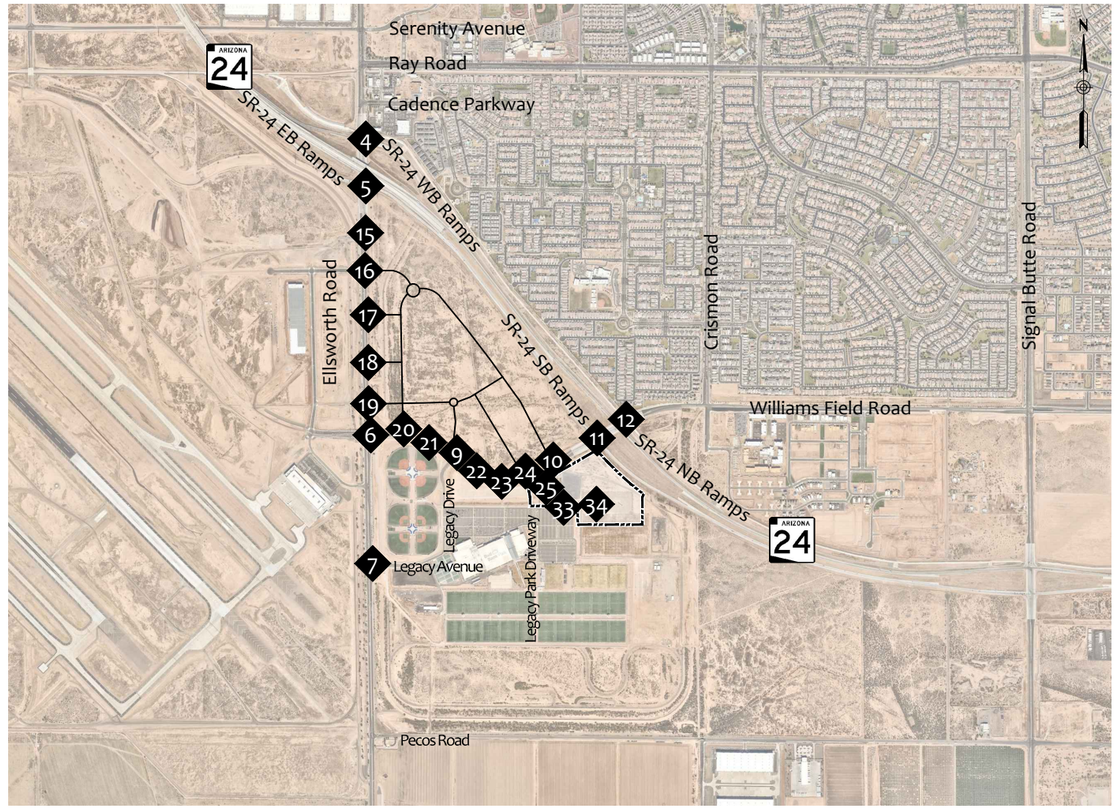



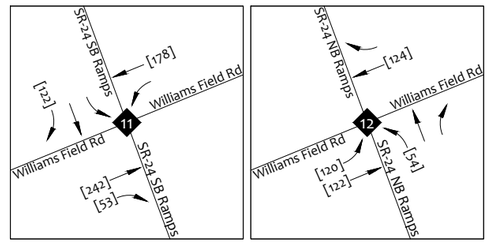

FIGURE 9 | GATEWAY CROSSING TRAFFIC VOLUMES (WEEKDAY)

LEGEND

| | |
|---|---|
| [Saturday MD] | Peak Hour Traffic Volumes |
| X | Intersection |
| <X,XXX> | Average Daily Traffic |



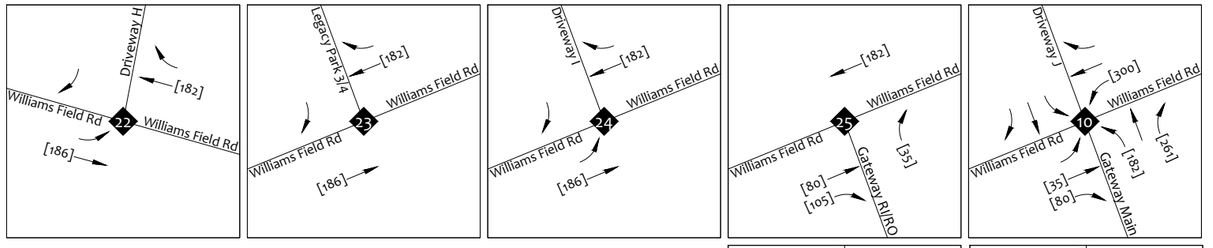
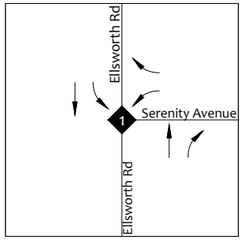



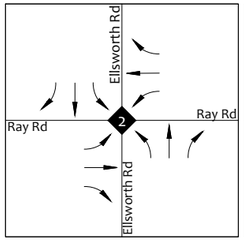

FIGURE 10 | GATEWAY CROSSING TRAFFIC VOLUMES (SATURDAY)

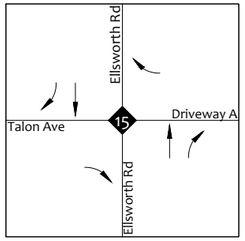
## LEGEND

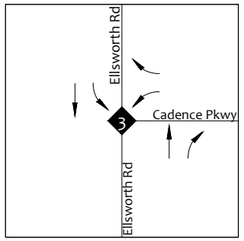
AM (PM) [Saturday MD] Peak Hour Traffic Volumes

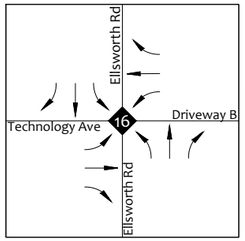
X Intersection

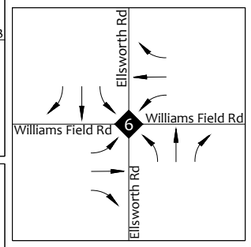


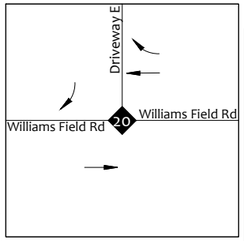



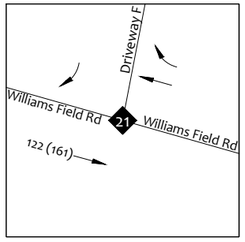



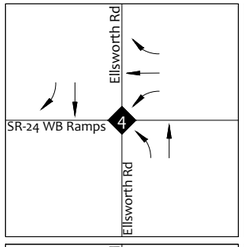



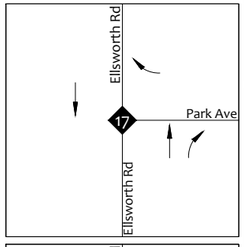



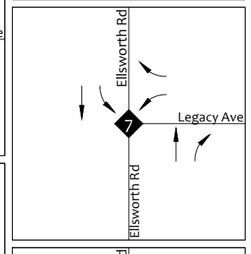



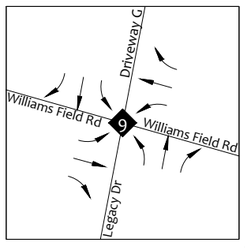



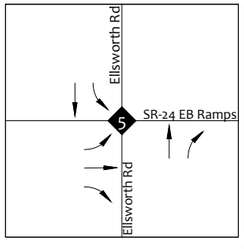



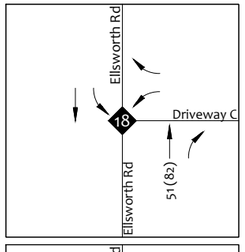



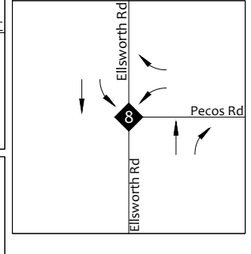



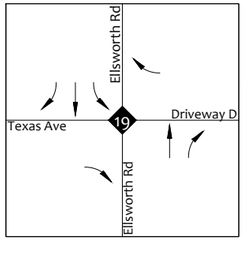



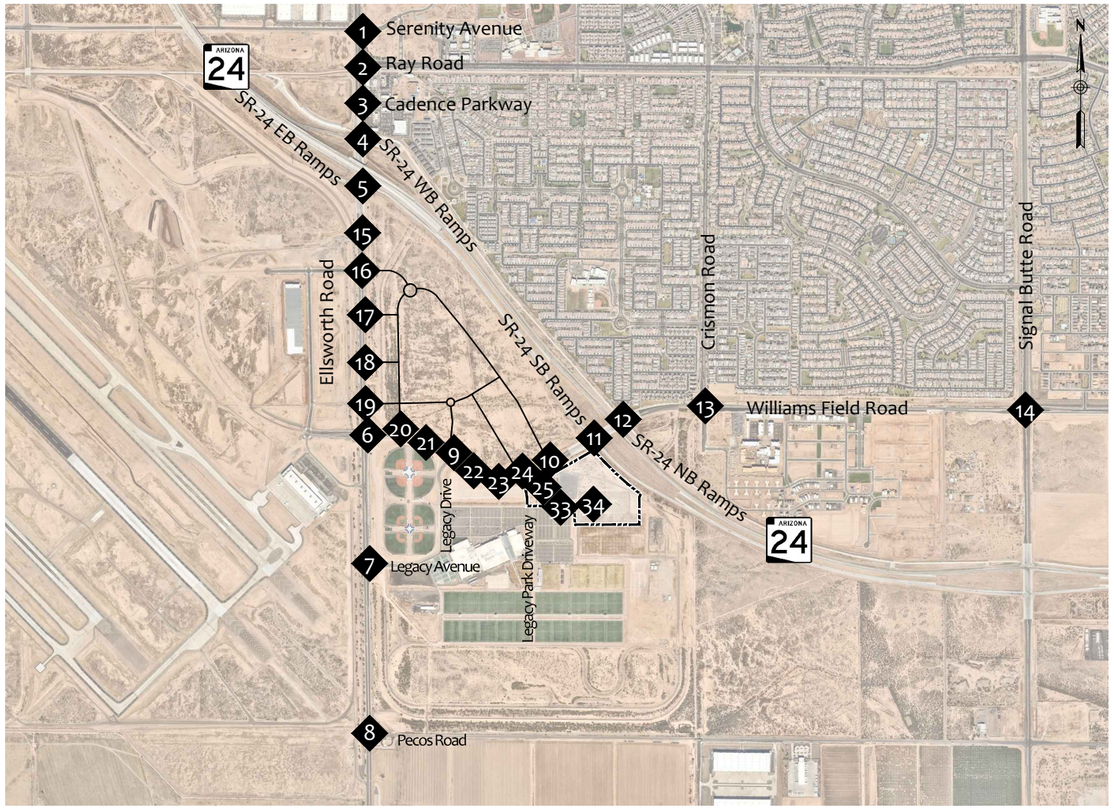



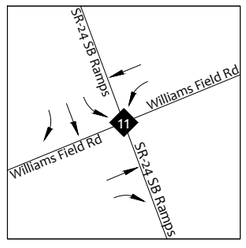



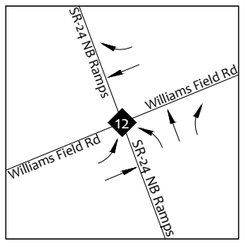



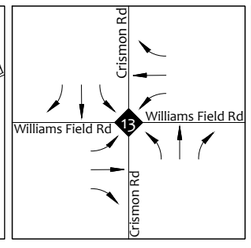



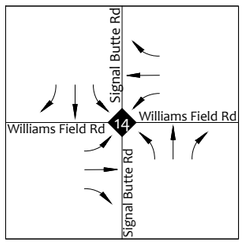



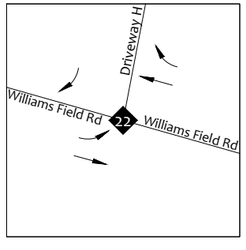



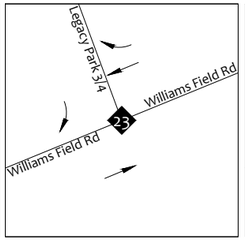



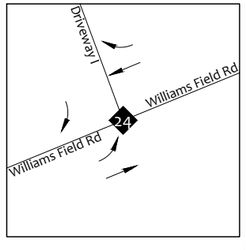



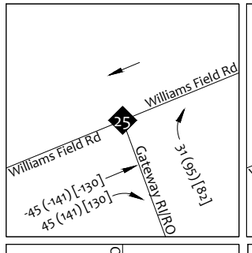



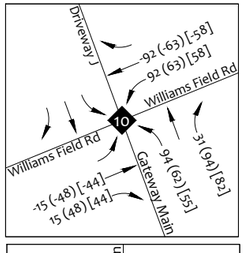



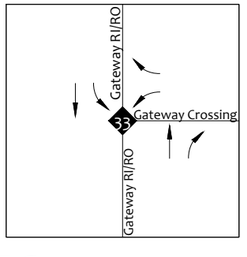



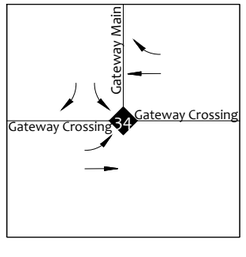
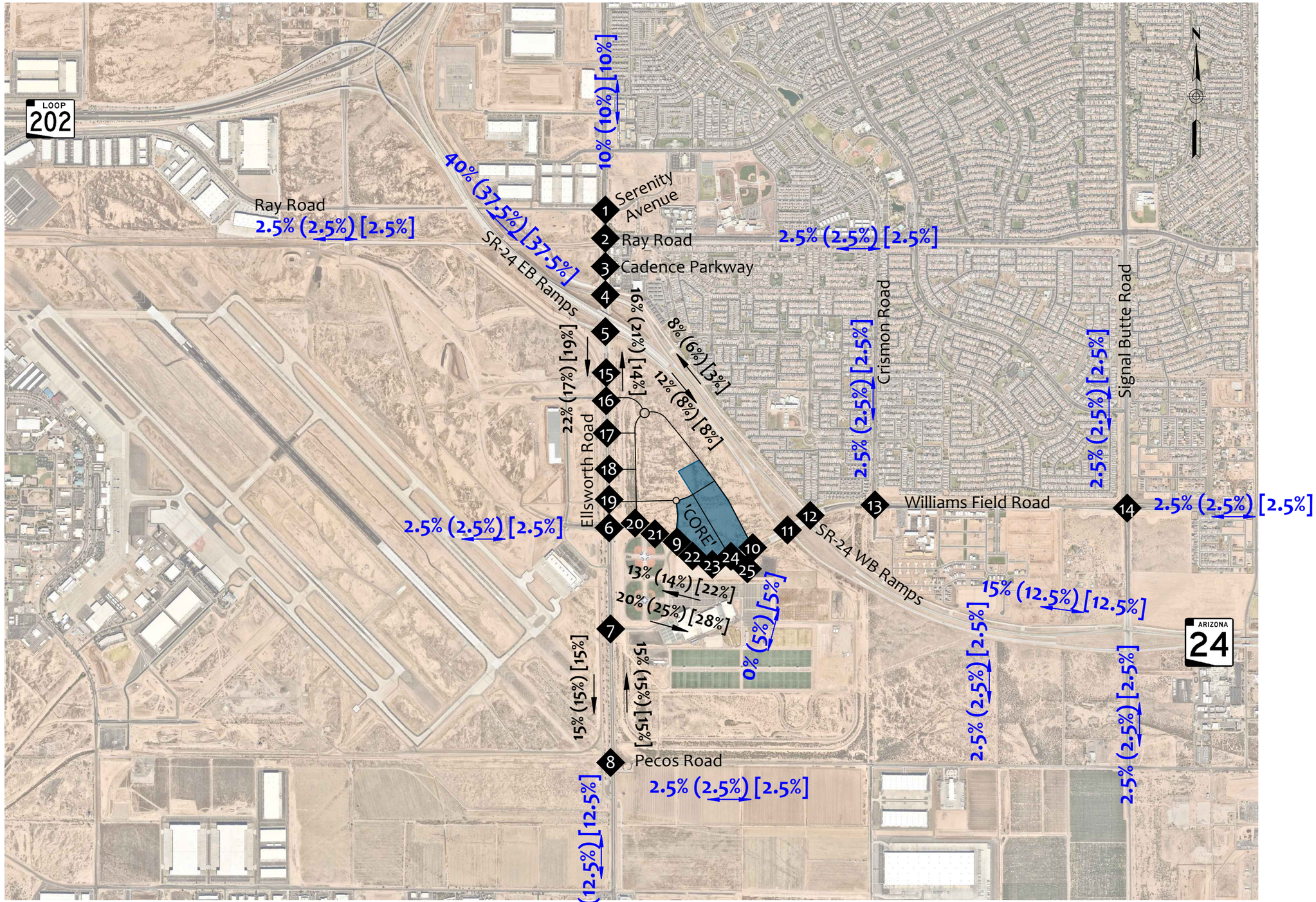




FIGURE 11 | GATEWAY CROSSING PASS-BY TRAFFIC VOLUMES




LEGEND

| | |
|---|---|
| XX% (XX%) [XX%] | AM (PM) [Sat MD] Trip Distribution |
| XX% (XX%) [XX%] | AM (PM) [Sat MD] Trip Assignment |
| X | Intersection |

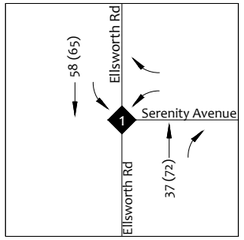
FIGURE 12 | TRIP DISTRIBUTION (LEGACY PARK 'CORE') - YEAR 2029

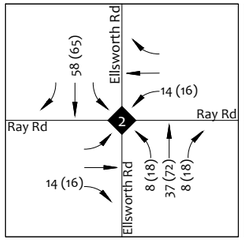
LEGEND

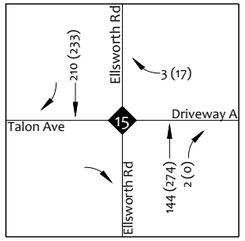
AM (PM) Peak Hour Traffic Volumes

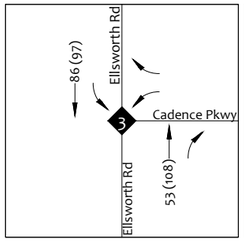
X Intersection

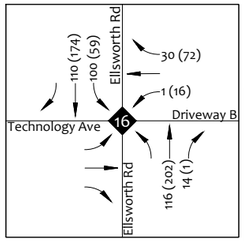
<X,XXX> Average Daily Traffic

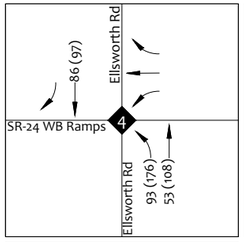


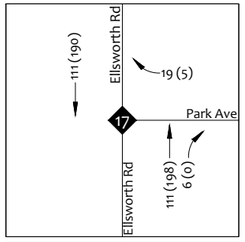



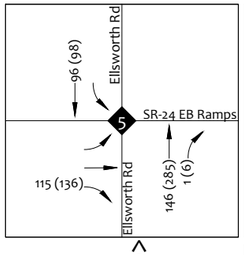



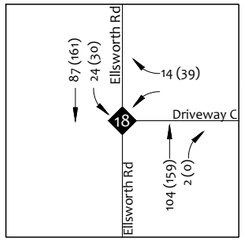



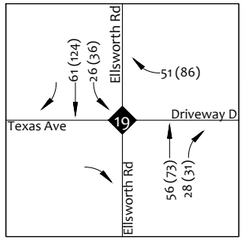

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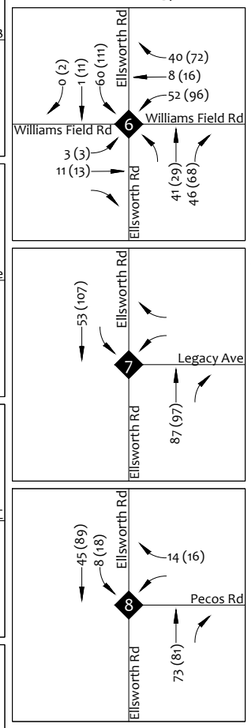
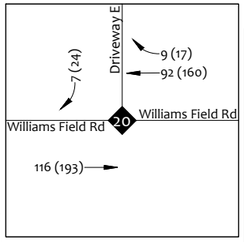
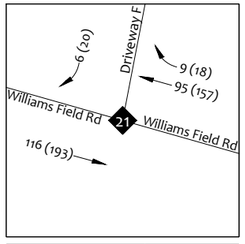
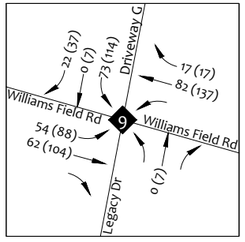


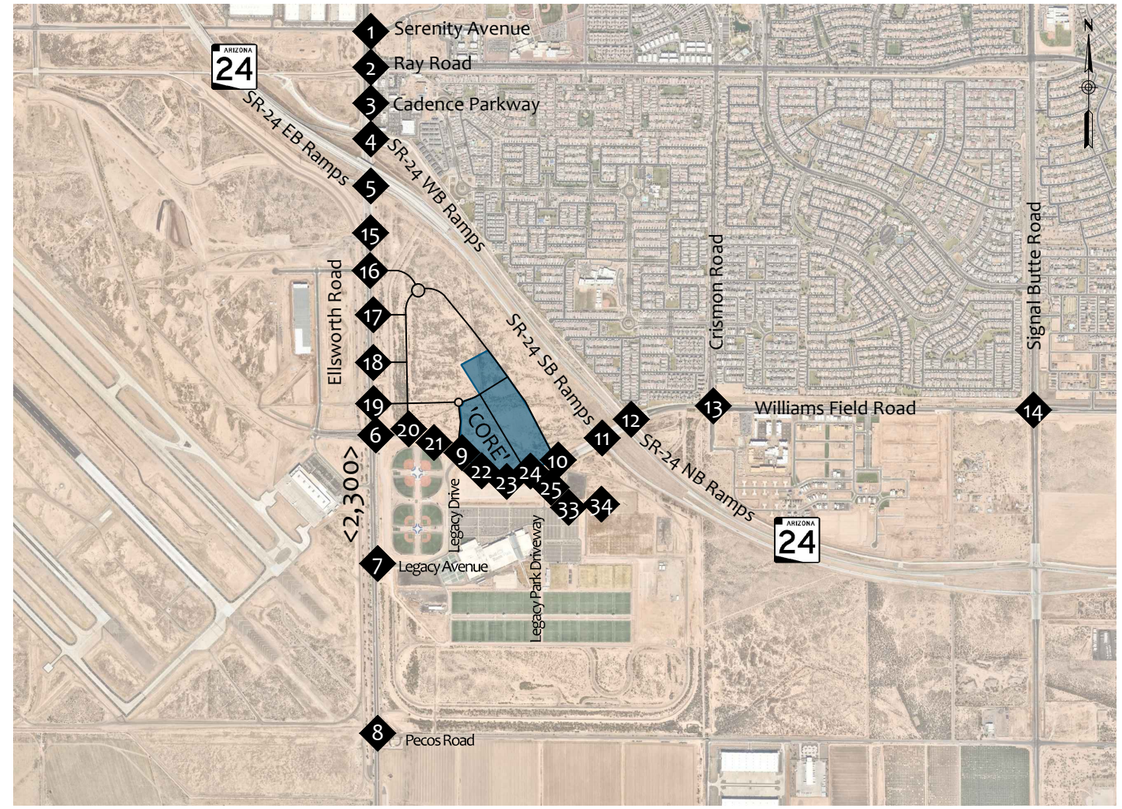



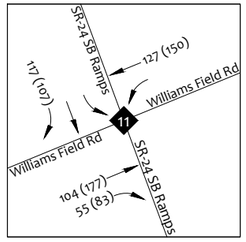



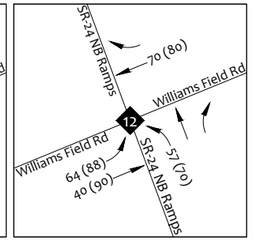


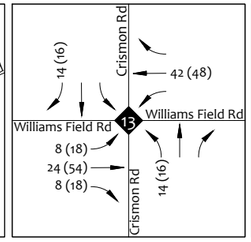


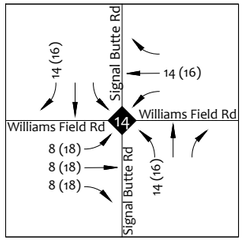


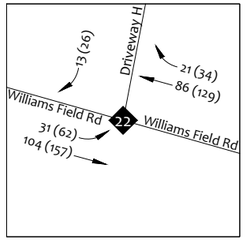



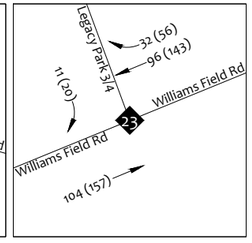



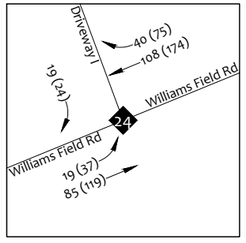



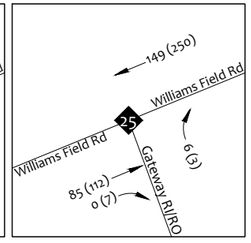



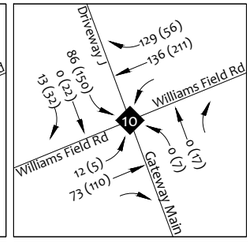



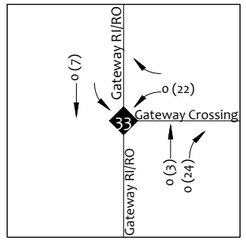



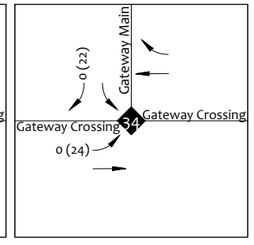
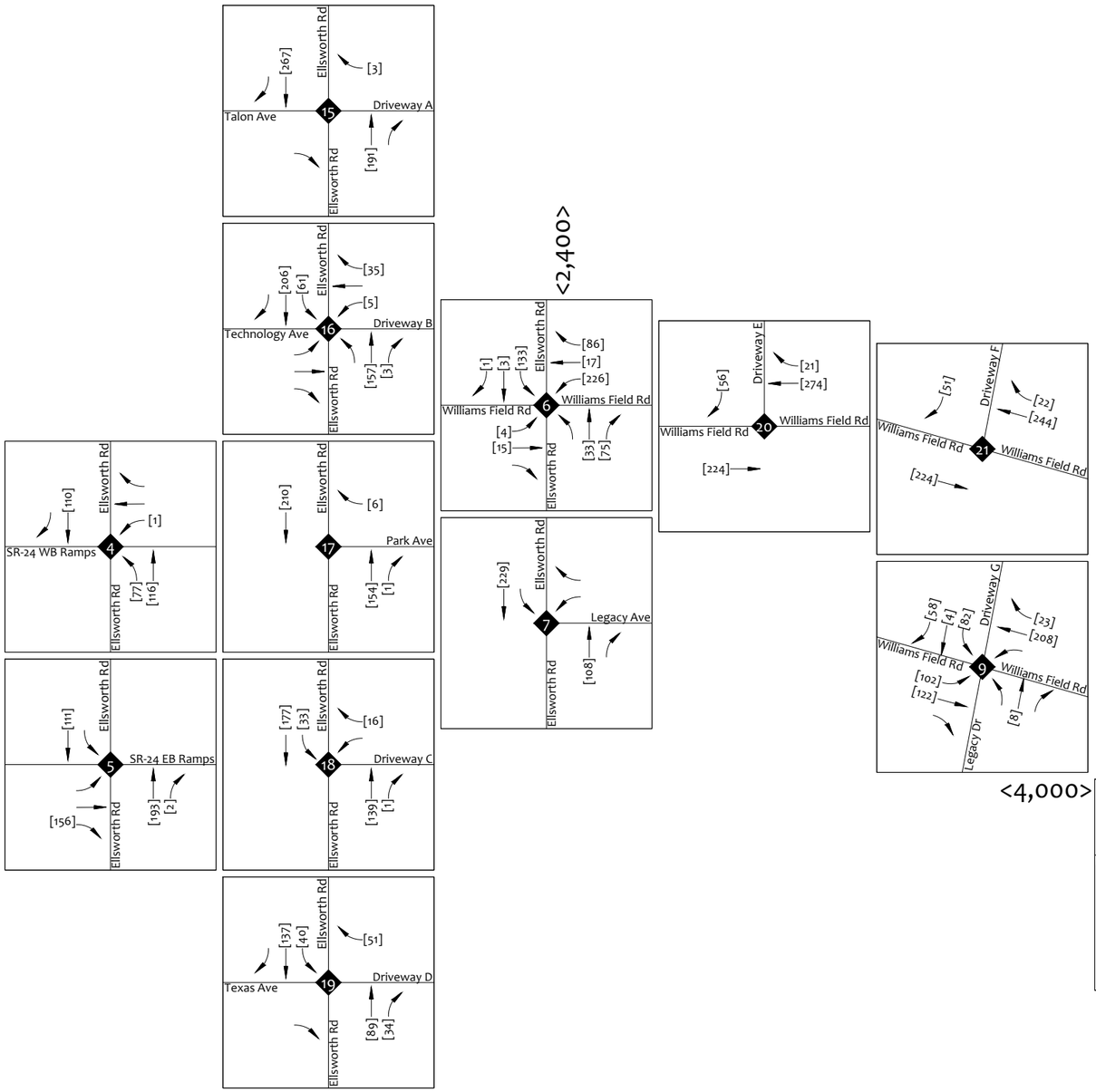




FIGURE 13 | LEGACY PARK 'CORE' TRAFFIC VOLUMES (WEEKDAY)

LEGEND

| | |
|---|---|
| [Saturday MD] | Peak Hour Traffic Volumes |
| X | Intersection |
| <X,XXX> | Average Daily Traffic |



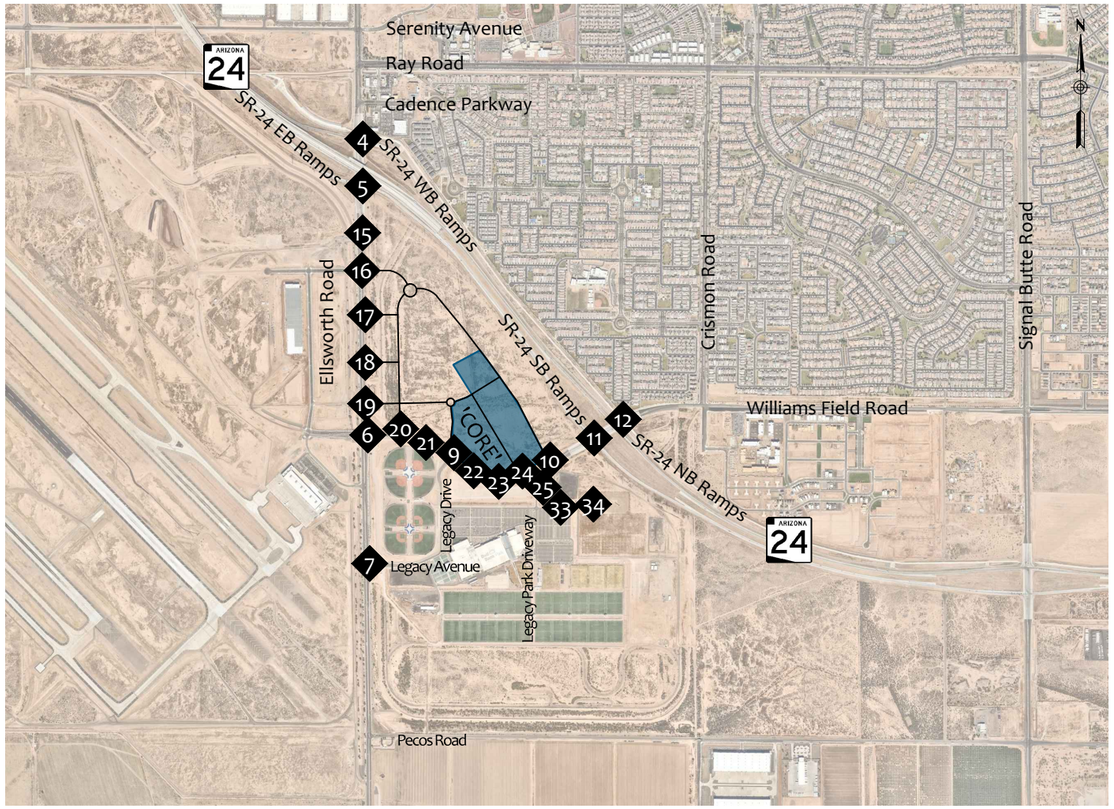
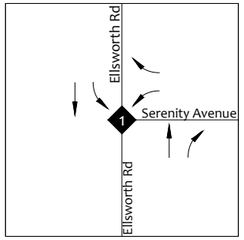



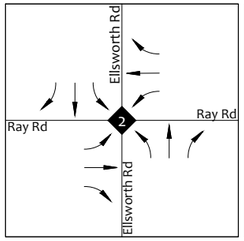

FIGURE 14 | LEGACY PARK 'CORE' TRAFFIC VOLUMES (SATURDAY)

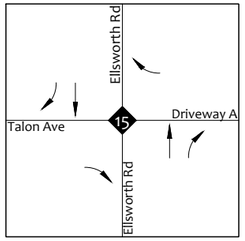
## LEGEND

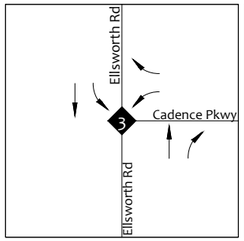
AM (PM) [Saturday MD] Peak Hour Traffic Volumes

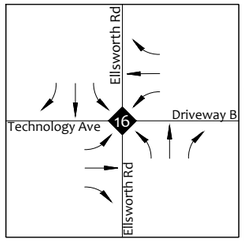
X Intersection

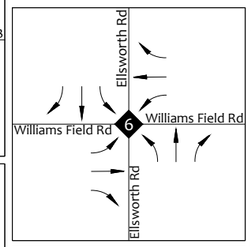


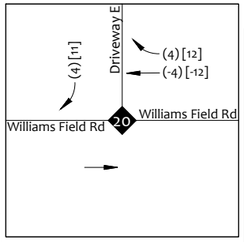



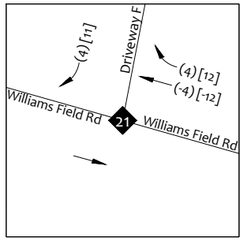



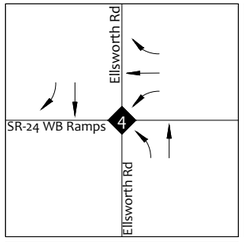



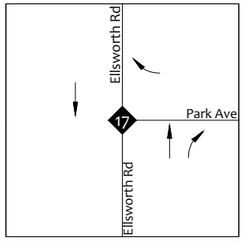



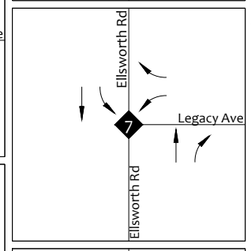



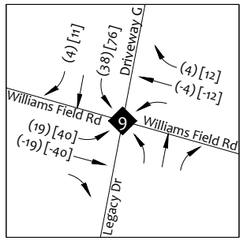



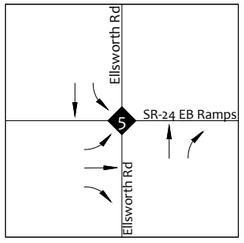



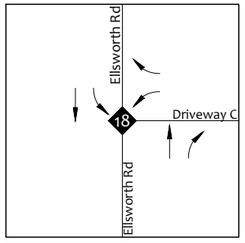



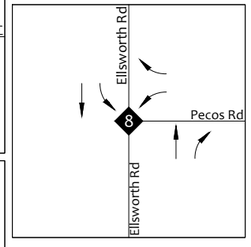



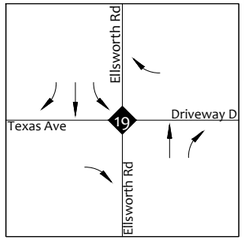



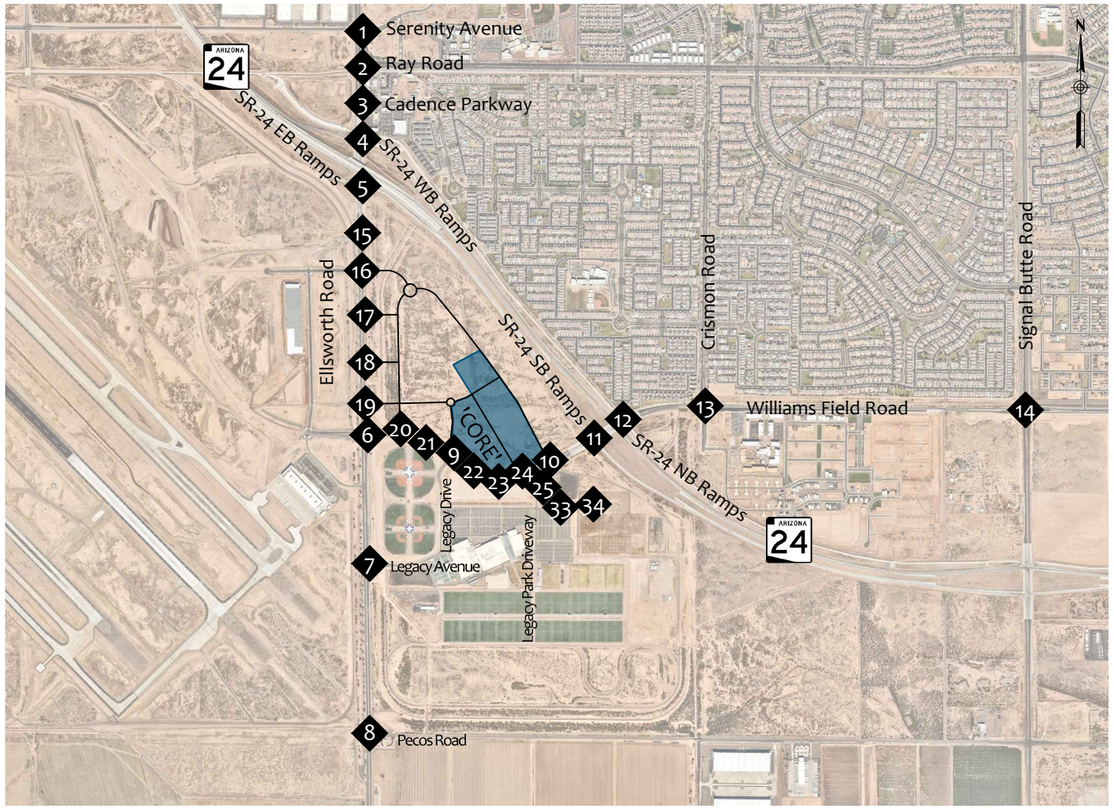



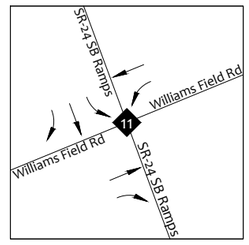



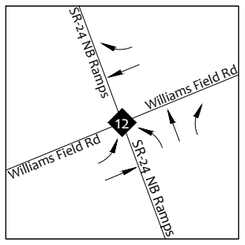



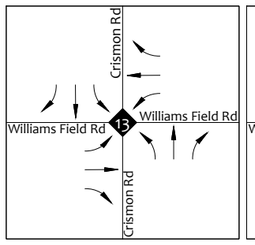



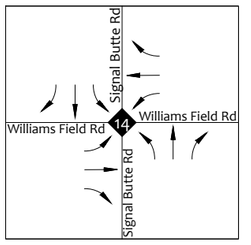



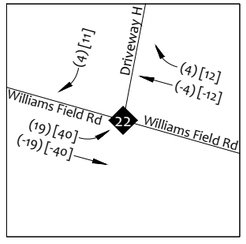



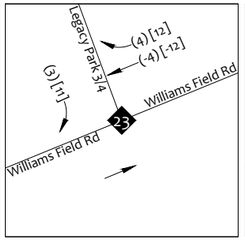



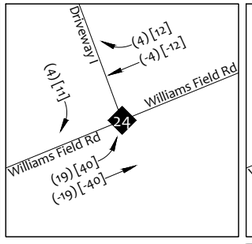



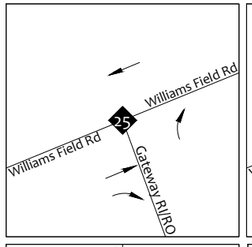



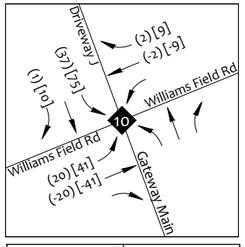



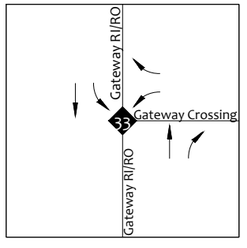



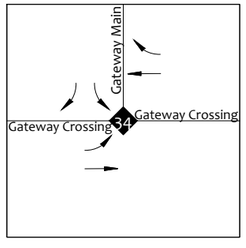
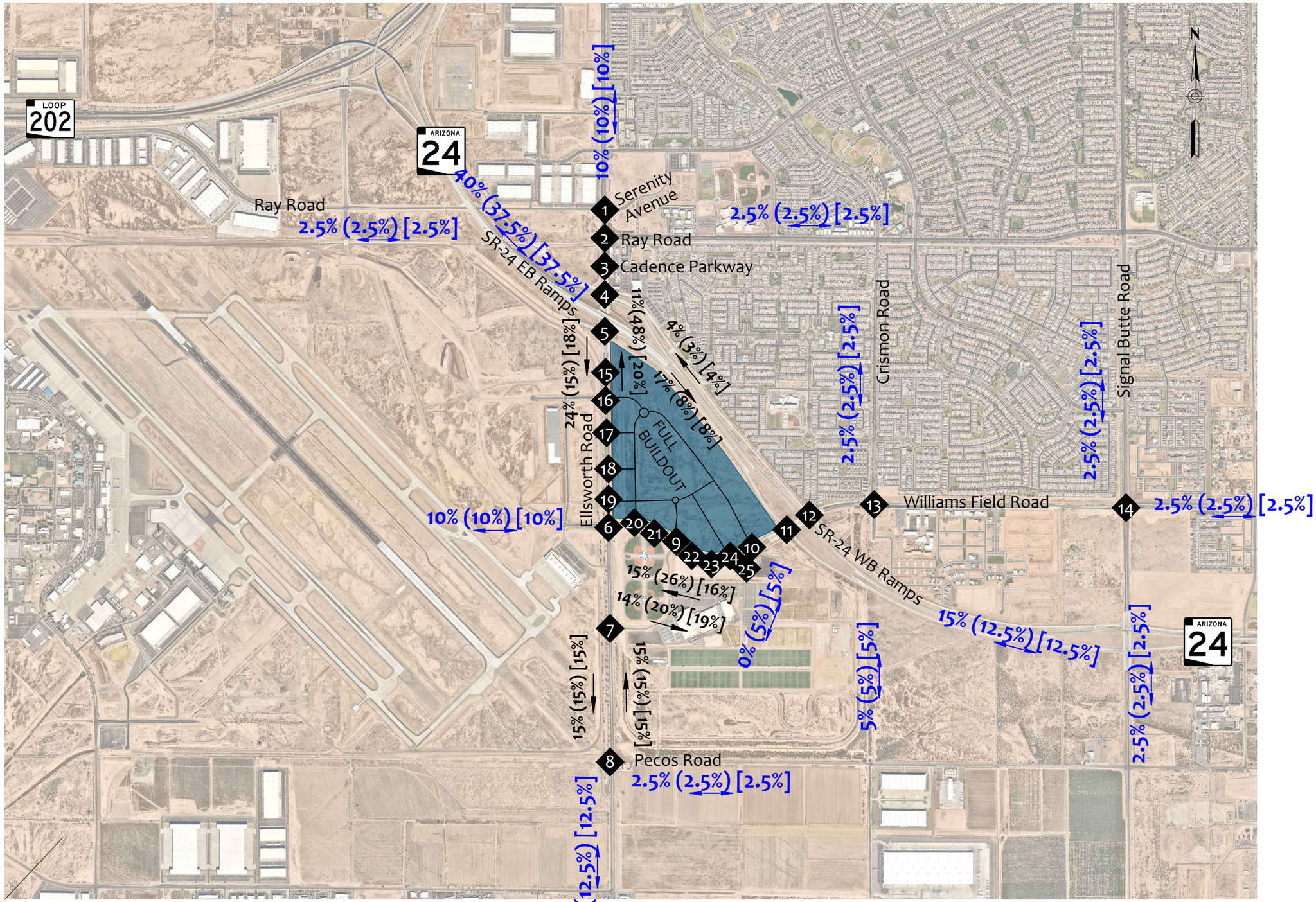




FIGURE 15 | LEGACY PARK 'CORE' PASS-BY TRAFFIC VOLUMES




LEGEND

| | |
|---|---|
| XX% (XX%) [XX%] | AM (PM) [Sat MD] Trip Distribution |
| XX% (XX%) [XX%] | AM (PM) [Sat MD] Trip Assignment |
| X | Intersection |

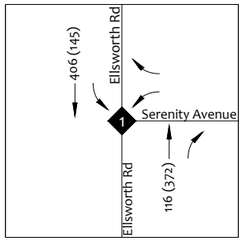
FIGURE 16 | TRIP DISTRIBUTION (LEGACY PARK) - YEAR 2044

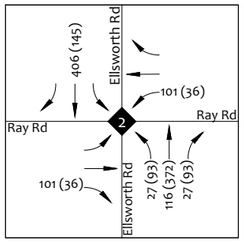
LEGEND

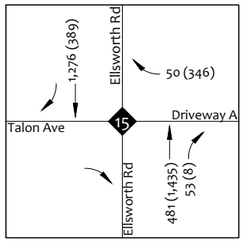
AM (PM) Peak Hour Traffic Volumes

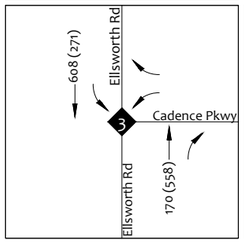
X Intersection

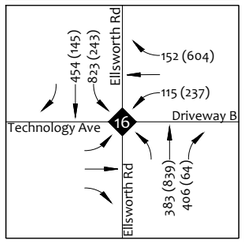
<X,XXX> Average Daily Traffic

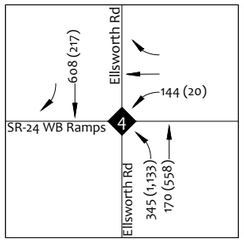


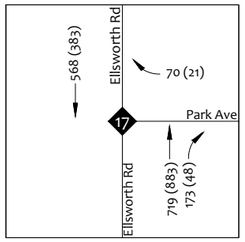



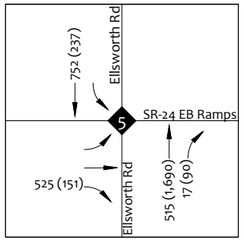



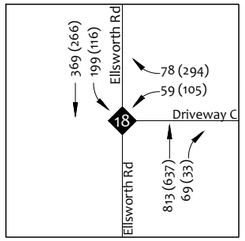



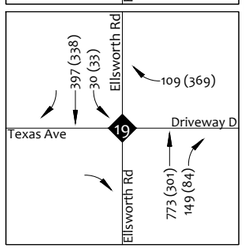

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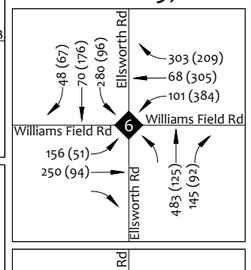
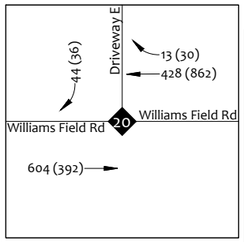
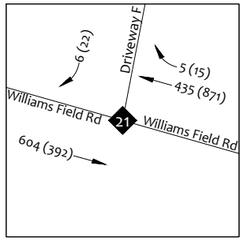
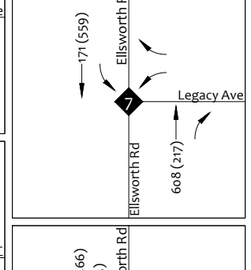
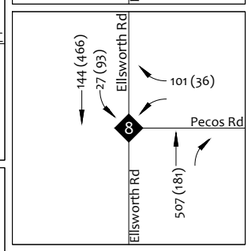
<9,200>

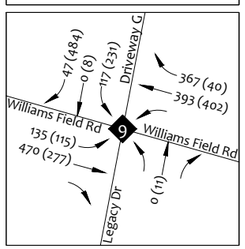


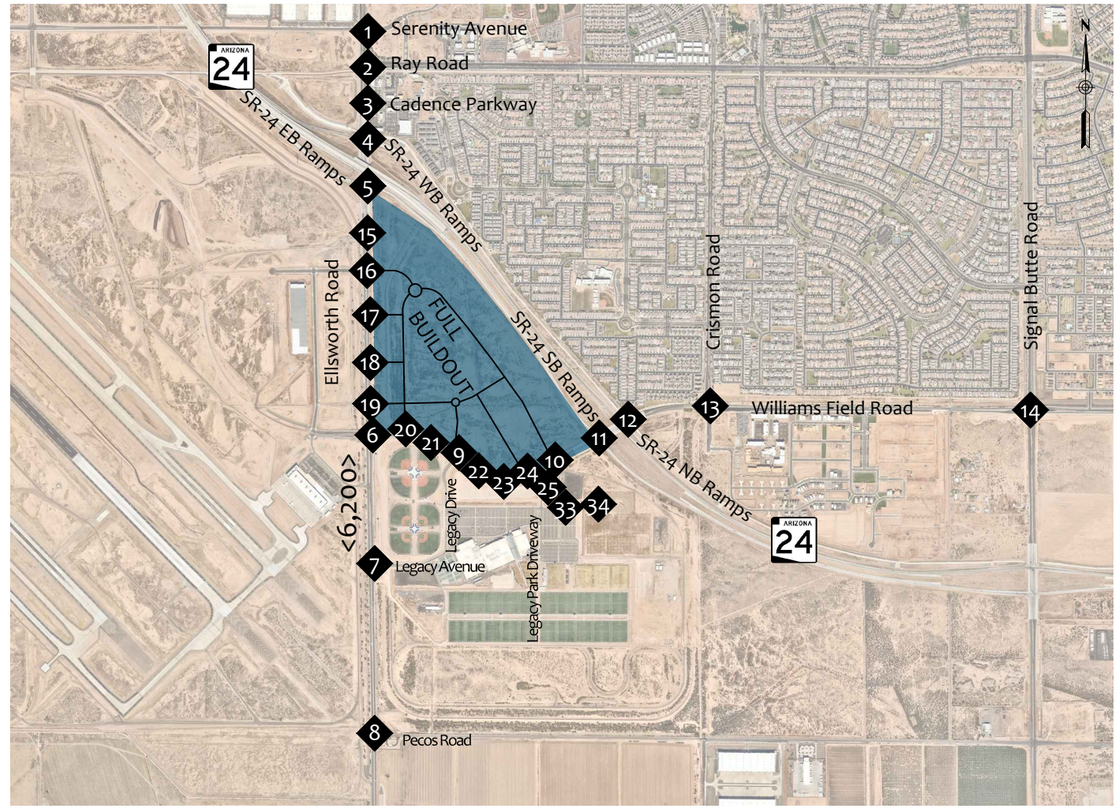



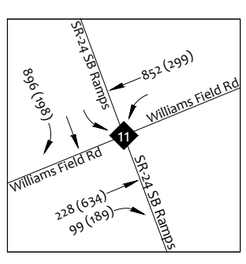



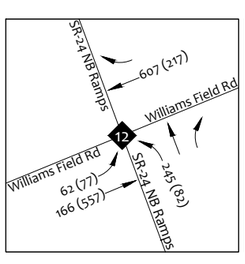



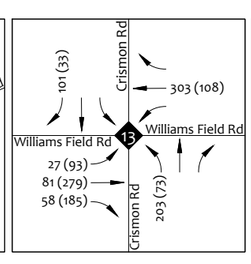



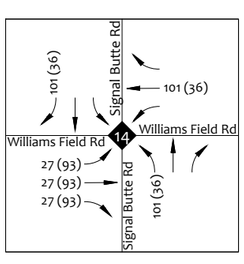



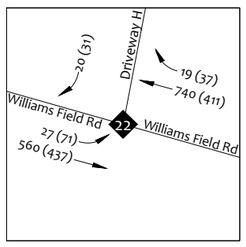



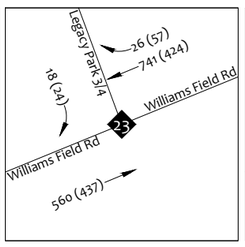



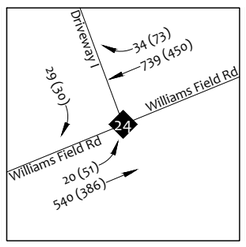



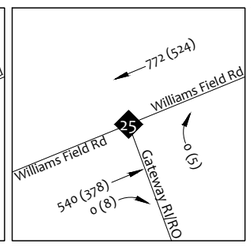



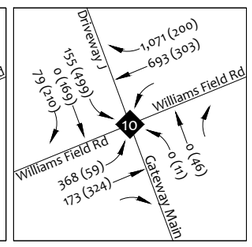



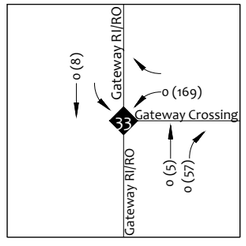



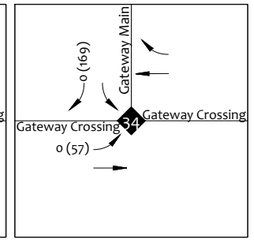
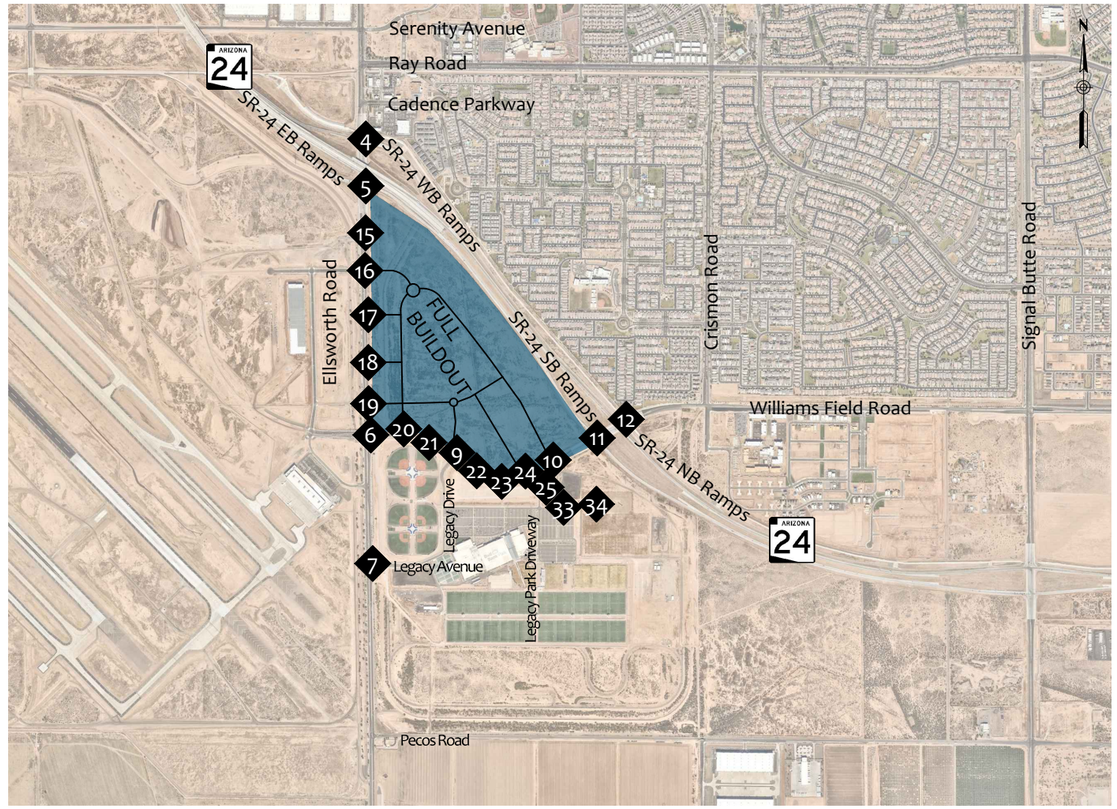
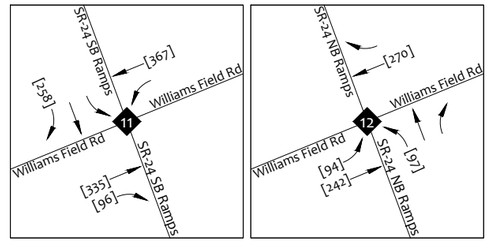




FIGURE 17 | LEGACY PARK 2044 TRAFFIC VOLUMES (WEEKDAY)

LEGEND

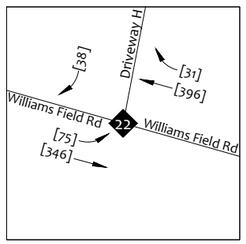
| | |
|---|---|
| [Saturday MD] | Peak Hour Traffic Volumes |
| X | Intersection |
| <X,XXX> | Average Daily Traffic |

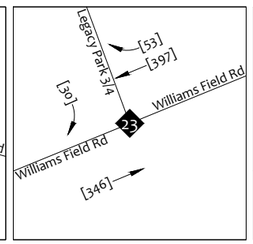


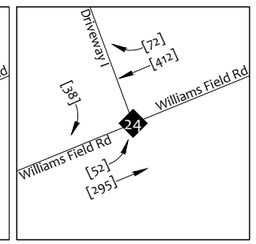



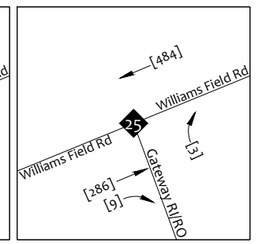


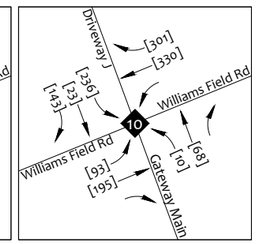


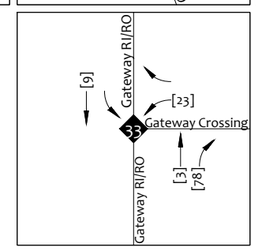


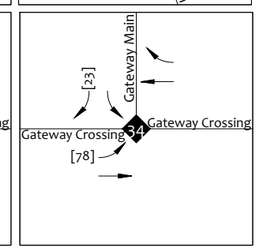
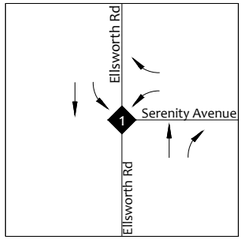



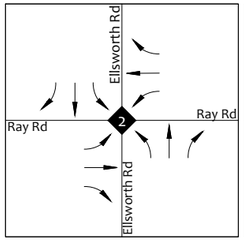

FIGURE 18 | LEGACY PARK 2044 TRAFFIC VOLUMES (SATURDAY)

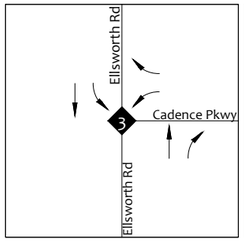
## LEGEND

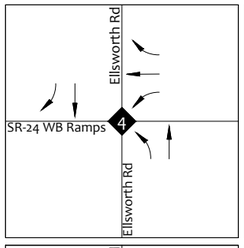
AM (PM) [Saturday MD] Peak Hour Traffic Volumes

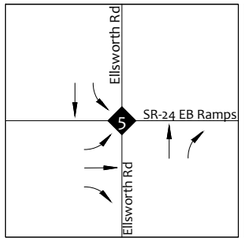
X Intersection



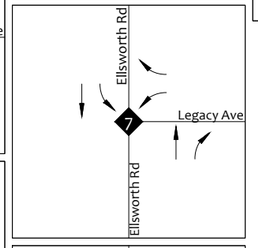



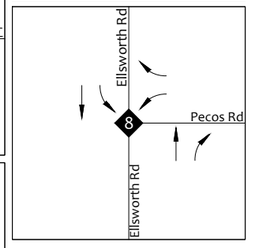



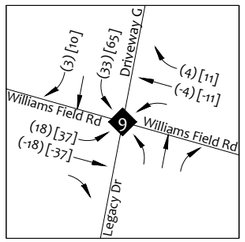



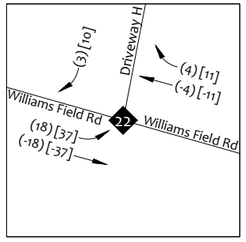


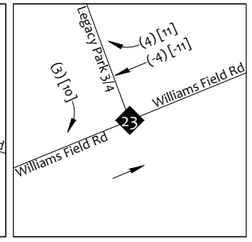


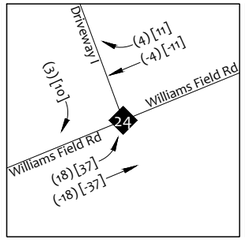


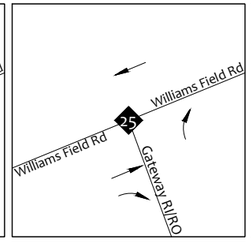



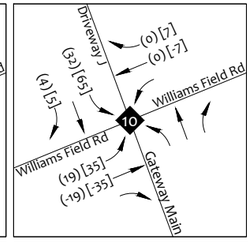



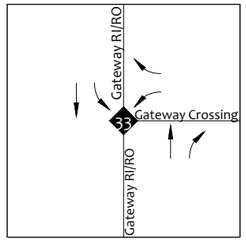



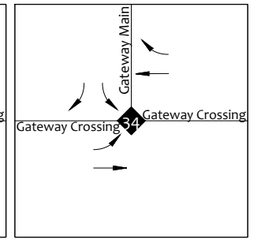



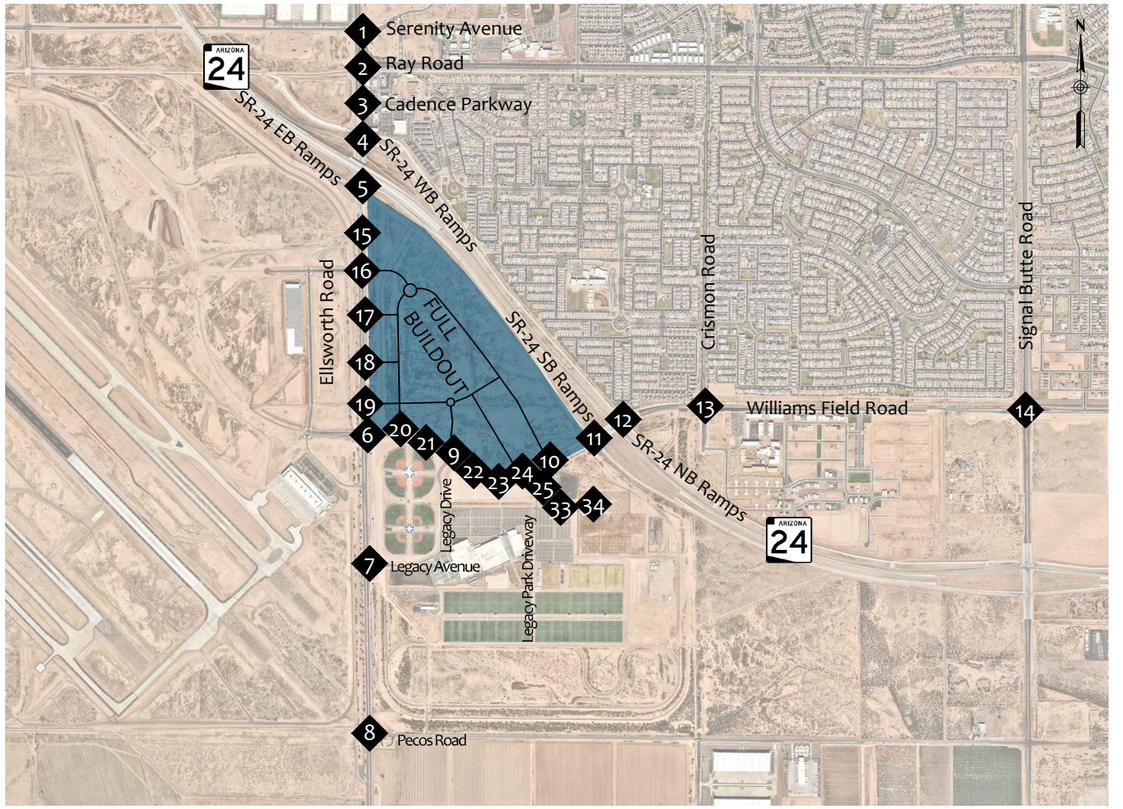



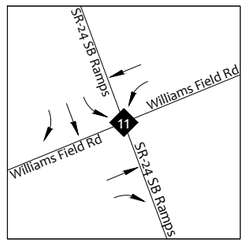



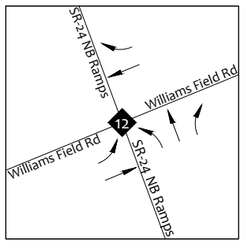



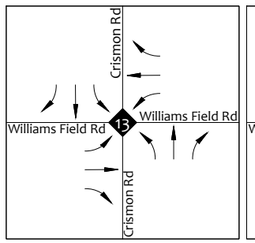



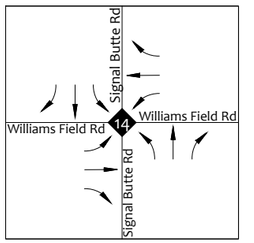



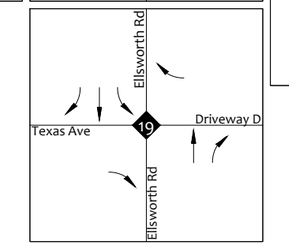













FIGURE 19 | LEGACY PARK 2044 PASS-BY TRAFFIC VOLUMES

# 6. FUTURE CONDITIONS – YEAR 2029 (OPENING YEAR)

As detailed in **Section 2**, construction of the proposed Gateway Crossing is anticipated to begin in 2026, with an anticipated opening year of 2028. The 'CORE' component of the proposed Legacy Park development is anticipated to open in 2029. This section provides the year 2029 analysis, detailing the traffic operations with the build out of the proposed Legacy Park 'CORE' and Gateway Crossing developments and their impact on the surrounding roadway network.

## 6.1. YEAR 2029 FUTURE ROADWAY NETWORK

The following roadway network improvements are assumed to be built out by the year 2029:

### 6.1.1. 2029 ROADWAY IMPROVEMENTS

The following are the roadway improvements planned for the area:

**SR-24**
According to the Arizona Department of Transportation (ADOT), lanes will be added to the mainline SR-24, within the study area, with construction starting in late 2026. For the purposes of the year 2029 analysis, it is assumed that mainline SR-24 would be constructed within the study area and past the SR-24 and Williams Field Road traffic interchange (TI).

**Ellsworth Road**
*City of Mesa Capital Improvement Program Fiscal Years 2023 – 2027*, CP0969 – Ellsworth Road from City Limits to Ray Road is currently underway. The project description states "Ellsworth Road widening from Ray Road to Germann Road. This will provide three lanes in each direction with bike lanes and new asphalt pavement.", with a project schedule ending in spring 2025. For the purposes of the year 2029 analysis, it is assumed Ellsworth Road from the newly realigned Ray Road to Pecos Road will have three (3) through lanes for each direction of travel.

**Crismon Road**
As of October 2024, Crismon Road, within the study area, has two termini. Approximately 730 feet south of Williams Field Road, Crismon Road terminates. Additionally, south of SR-24, Crismon Road only exists south of Pecos Road North. Per discussions with the City of Mesa, it is assumed that by the year 2029, Crismon Road will be extended from Williams Field Road to Pecos Road North via an overpass. Crismon Road will provide two (2) through lanes for each direction of travel.

With the construction of Crimson Road, south of Williams Field Road, it was also assumed that Arizona Athletic Grounds will be able to construct additional access locations for the facility, offering direct access to Crismon Road. These additional access locations would help

relieve some of the existing congestion related to the parking for the soccer fields located on the east side of the facility. A portion of the existing traffic volumes were redistributed for the purposes of this analysis.

The following are the intersection improvements assumed to be implemented by the year 2029:

**Ellsworth Road and Williams Field Road (6)**
The eastbound and westbound approaches will provide two (2) dedicated left turn lanes, two (2) through lanes, and one (1) dedicated right turn lane. The northbound approach is assumed to provide two (2) dedicated left turn lanes, three (3) through lanes, and one (1) dedicated right turn lane. The southbound approach will provide two (2) dedicated left turn lanes, two (2) through lanes, and one (1) shared through-right turn lane.

**Ellsworth Road and Pecos Road North (8)**
The westbound approach will provide one (1) dedicated left turn lane and one (1) dedicated right turn lane. The northbound approach is assumed to provide three (3) through lanes and one (1) dedicated right turn lane. The southbound approach will provide one (1) dedicated left turn lane and three (3) through lanes.

**Williams Field Road and Crismon Road (13) – *Signalized Intersection***
As part of the City of Mesa Capital Improvement Project CP1067, new traffic signals will be installed at the intersection of Williams Field Road and Crismon Road by the end of 2025. All four (4) approaches will provide one (1) dedicated left turn lane, two (2) through lanes and one (1) dedicated right turn lane.

Williams Field Road was assumed to provide three (3) through lanes in each direction of travel by the year 2029.

### 6.1.2. 2029 DRIVEWAYS

The following are the intersections to be implemented by the proposed Legacy Park 'CORE' and Gateway Crossing developments by year 2029:

**Williams Field Road and Legacy Drive / Driveway G (9) – *Signalized Intersection***
*The existing leg of this intersection, the Legacy Drive access to AAG is being realigned with the development of Legacy Park. The intent of this is to provide better access to both the existing and future development in the area.*

The northbound approach will provide two (2) dedicated left turn lanes, and one (1) shared through-right turn lane. The southbound approach will provide one (1) dedicated left turn lane, and one (1) shared through -right turn lane. The eastbound approach will provide one (1) dedicated left turn lane, three (3) through lanes and one (1) dedicated right turn lane. The

westbound approach will provide two (2) dedicated left turn lanes, three (3) through lanes, and one (1) dedicated right turn lane.

**Williams Field Road and Gateway Main Driveway / Driveway J (10) – *Signalized Intersection***
The northbound approach will provide one (1) dedicated left turn lane, one (1) shared through-right turn lane, and one (1) dedicated right turn lane. The southbound approach will provide two (2) dedicated left turn lanes and one (1) shared through-right turn lane. The eastbound approach will provide two (2) dedicated left turn lanes, three (3) through lanes, and one (1) dedicated right turn lane. The westbound approach will provide two (2) dedicated left turn lanes, three (3) through lanes, and one (1) dedicated right turn slip lane.

**Ellsworth Road and Talon Avenue / Driveway A (15) – *Stop-Controlled Intersection***
The northbound approach will provide three (3) through lanes and one (1) dedicated right turn lane. The southbound approach will provide two (2) through lanes and one (1) shared through-right turn lane. The eastbound and westbound approaches each will provide one (1) dedicated right turn lane.

**Ellsworth Road and Technology Avenue / Driveway B (16) – *Signalized Intersection***
The northbound approach will provide one (1) dedicated left turn lane, three (3) through lanes, and one (1) dedicated right turn lane. The southbound approach will provide two (2) dedicated left turn lane, three (3) through lanes, and one (1) dedicated right turn lane. The eastbound approach will provide one (1) dedicated left turn lane, one (1) through lane, and one (1) dedicated right turn lane. The westbound approach will provide one (1) dedicated left turn lane, one (1) shared through-right turn lane, and one (1) dedicated right turn lane.

**Ellsworth Road and Park Avenue (17) – *Stop-Controlled Intersection***
The northbound approach will provide three (3) through lanes and one (1) dedicated right turn lane. The southbound approach will provide three (3) through lanes. The westbound approach will provide one (1) dedicated right turn lane.

**Ellsworth Road and Driveway C (18) – *Stop-Controlled Intersection***
The northbound approach will provide three (3) through lanes and one (1) dedicated right turn lane. The southbound approach will provide one (1) dedicated left turn lane and three (3) through lanes. The westbound approach will provide one (1) dedicated left turn lane and one (1) dedicated right turn lane.

*As detailed in **Section 11**, a traffic signal is not warranted at this location for the year 2029 build conditions, with the buildout of the Legacy Park 'CORE' development. For year 2029 build conditions, Ellsworth Road and Driveway C (18) was analyzed as a stop-controlled intersection with the stop control on the westbound approach.*

**Ellsworth Road and Pennsylvania Avenue / Driveway D (19) – *Stop-Controlled Intersection***
The northbound approach will provide three (3) through lanes and one (1) dedicated right turn lane. The southbound approach will provide one (1) dedicated left turn lane, two (2) through lanes, and one (1) shared through-right turn lane. The westbound and eastbound approaches each will provide one (1) dedicated right turn lane.

**Williams Field Road and Driveway E (20) – *Stop-Controlled Intersection***
The southbound approach will provide one (1) dedicated right turn lane. The eastbound approach will provide three (3) through lanes. The westbound approach will provide three (3) through lanes and one (1) dedicated right turn lane.

**Williams Field Road and Driveway F (21) – *Stop-Controlled Intersection***
The southbound approach will provide one (1) dedicated right turn lane. The eastbound approach will provide three (3) through lanes. The westbound approach will provide three (3) through lanes and one (1) dedicated right turn lane.

**Williams Field Road and Legacy ¾ (22) – *Stop-Controlled Intersection***
The southbound approach will provide one (1) dedicated right turn lane. The eastbound approach will provide one (1) dedicated left turn lane and three (3) through lanes. The westbound approach will provide three (3) through lanes and one (1) dedicated right turn lane.

**Williams Field Road and Driveway H (23) – *Stop-Controlled Intersection***
The southbound approach will provide one (1) dedicated right turn lane. The eastbound approach will provide three (3) through lanes. The westbound approach will provide three (3) through lanes and one (1) dedicated right turn lane.

**Williams Field Road and Main Street / Driveway I (24) – *Stop-Controlled Intersection***
The southbound approach will provide one (1) dedicated right turn lane. The eastbound approach will provide one (1) dedicated left turn lane and three (3) through lanes. The westbound approach will provide three (3) through lanes and one (1) dedicated right turn lane.

**Williams Field Road and Gateway RI/RO (25)– *Stop-Controlled Intersection***
The northbound approach will provide one (1) dedicated right turn lane. The eastbound approach will provide three (3) through lanes and one (1) dedicated right turn lane. The westbound approach will provide three (3) through lanes.

It is important to note that all roadway infrastructure associated with the Legacy Park development is anticipated to be constructed with the 'CORE' component by year 2029.

### 6.1.3. 2029 INTERNAL INTERSECTIONS

The following are the internal intersections to be implemented by the proposed Legacy Park 'CORE' and Gateway Crossing developments by year 2029:

**Legacy Parkway and Peak View Road (26) – *Roundabout***
This will be a two (2)lane roundabout with all approaches yielding. The southbound approach will provide one (1) dedicated left turn lane and one (1) shared left-right turn lane. The northbound approach will provide one (1) shared left-right turn lane. The westbound approach will provide two (2) shared through-left turn lanes.

**Park View Road and Park View Avenue (27) – *Stop-Controlled Intersection***
The northbound approach will provide one (1) shared left-through lane. The southbound approach will provide one (1) shared through-right turn lane. The eastbound approach will provide one (1) shared left-right turn lane. The stop control will be in the eastbound direction.

**Park View Road and Pacific Avenue (28) – *Stop-Controlled Intersection***
The northbound approach will provide one (1) shared left-through lane. The southbound approach will provide one (1) shared through-right turn lane. The eastbound approach will provide one (1) dedicated left turn lane and one (1) dedicated right turn lane. The stop control will be in the eastbound direction.

**Park View Road and Pennsylvania Avenue (29) – *Stop-Controlled Intersection***
All approaches will provide one (1) shared left-through-right turn lane. The stop control will be in the eastbound and westbound direction.

**Legacy Drive and Pennsylvania Avenue (30) – *Roundabout***
This will be a one (1) lane roundabout with all approaches yielding. The northbound approach will provide one (1) shared left-right turn lane. The eastbound approach will provide one (1) shared through-right turn lane. The westbound approach will provide one (1) shared through-left turn lanes.

**Legacy Parkway and Pennsylvania Avenue (31) – *Stop-Controlled Intersection***
The northbound approach will provide one (1) dedicated left turn lane and one (1) through lane. The southbound approach will provide one (1) shared through-right turn lane. The eastbound approach will provide one (1) dedicated left turn lane and one (1) dedicated right turn lane. The stop control will be in the eastbound direction. *Note that the northbound and southbound approaches will be designed to provide two (2) through lanes in the future.*

**Legacy Parkway and Full Access (32) – *Stop-Controlled Intersection***
The northbound approach will provide one (1) dedicated left turn lane and one (1) through lane. The southbound approach will provide one (1) shared through-right turn lane. The eastbound approach will provide one (1) dedicated left turn lane and one (1) dedicated right turn lane. The stop control will be in the eastbound direction. *Note that the northbound and southbound approaches will be designed to provide two (2) through lanes in the future.*

## 6.2. YEAR 2029 BACKGROUND TRAFFIC VOLUMES

According to the 2023 Maricopa Association of Governments (MAG) socioeconomic projections within the study area of Regional Analysis Zone 322 (RAZ 322), it is estimated that in the year 2022 the population of the study area was approximately 57,756. MAG estimates that the 2040 population of the surrounding area will be approximately 68,881. This results in an approximate annual growth rate of 0.98%. Therefore, a 1.0% annual growth rate was utilized. See **Appendix I** for the MAG socioeconomic projections.

At this time, the potential for expansion at the Arizona Athletic Grounds facility is not known. For the year 2029 analysis, ingress and egress turning movements associated with the existing Arizona Athletic Grounds were not grown. For the Saturday MD peak hour, a portion of existing traffic volumes at Williams Field Road and Gateway Main Driveway (10) associated with the Arizona Athletic Grounds sports event were adjusted to use the future right-in, right-out driveway at Williams Field Road and Gateway RI/RO (25). This portion of the turning movements was adjusted to reflect the anticipated future traffic volumes that would utilize a more direct secondary access to the eastern portion of the Arizona Athletic Grounds property.

Additionally, based on discussions with the City of Mesa, the construction of direct access along Crismon Road from the Arizona Athletic Grounds will act as a reliever to the existing facility traffic volumes. In order to assess these proposed improvements to the Arizona Athletic Grounds, the existing traffic volumes occurring at the intersection of Williams Field Road and Legacy Park Driveway (10) were redistributed. See **Appendix G** for redistribution figures.

As detailed in **Section 6.1.1**, the SR-24 will have added lanes by the year 2029. Thus, the through volumes experienced at the SR-24 and Williams Field Road TI will pass under the interchange on the mainline SR-24 and were removed.

Traffic volumes generated by surrounding developments were included in the year 2029 background traffic volumes. Phase 1 (year 2026) of the Gateway East mixed-use development, located on the northwest corner of Ellsworth Road and Gateway Boulevard/Williams Field Road, were included in the year 2029 background traffic volumes. Additionally, trips generated by the proposed developments on the northwest and northeast corners of Pecos Road and Crismon Road were included as background volumes. The surrounding weekday PM traffic volumes were deemed

appropriate to be used in the Saturday MD analysis. See **Appendix H**Appendix G for the relevant studies.

The year 2029 weekday and Saturday background traffic volumes are shown in **Figure 20** and **Figure 21**, respectively.

## 6.3. YEAR 2029 BUILD TRAFFIC VOLUMES

To determine the year 2029 weekday build traffic volumes, the Gateway Crossing pass-by traffic (**Figure 11**), Legacy Park 'CORE' pass-by traffic (**Figure 15**), the Gateway Crossing weekday traffic volumes (**Figure 9**), and the Legacy Park 'CORE' weekday traffic volumes (**Figure 13**) are added to the year 2029 weekday background traffic (**Figure 20**). This represents the year 2029 weekday traffic volumes with the build out of the proposed Gateway Crossing and Legacy Park 'CORE' developments. The year 2029 weekday build traffic volumes are shown in **Figure 22**.

To determine the year 2029 Saturday build traffic volumes, the Gateway Crossing pass-by traffic (**Figure 11**), the Legacy Park 'CORE' pass-by traffic (**Figure 15**), the Gateway Crossing Saturday traffic volumes (**Figure 10**), and the Legacy Park 'CORE' Saturday traffic volumes (**Figure 14**) are added to the year 2029 Saturday background traffic (**Figure 21**). This represents the year 2029 Saturday traffic volumes with the build out of the proposed Gateway Crossing and Legacy Park 'CORE' developments. The year 2029 Saturday build traffic volumes are shown in **Figure 23**.

## 6.4. YEAR 2029 NO BUILD CAPACITY ANALYSIS

The capacity and level of service for the study area intersections were evaluated for the year 2029 no build scenario. The corresponding weekday and Saturday traffic volumes are shown in **Figure 20** and **Figure 21**, respectively. Signal timing splits were optilized and adjusted for future traffic volumes. A Peak Hour Factor (PHF) of 0.92 was utilized for future conditions, except for Saturday MD conditions at sports complex intersections where the existing PHF was less than 0.92. In this case, the existing PHF was used.

See **Table 10**, **Table 11**, **Table 12**, and **Table 13** for the year 2029 no build level of service and delay. The year 2029 no build capacity analysis sheets can be found in **Appendix J**.

## 6.5. YEAR 2029 BUILD CAPACITY ANALYSIS

The year 2029 build capacity analysis was completed for the study intersections and driveways during the AM and PM peak hour as well as the Saturday MD peak hour. The analysis for the study area intersections was completed using the methodology described in **Section 4.2**. Signal timing splits were optimized for the future traffic volumes, and a peak hour factor (PHF) of 0.92 was used

for future conditions, except for Saturday MD conditions at sports complex intersections where the existing PHF was less than 0.92. In this case, the existing PHF was used.

The capacity and level of service for the study area intersections were evaluated for the year 2029 weekday build traffic volumes (**Figure 22**) and the year 2029 Saturday build traffic volumes (**Figure 23**).

The year 2029 build capacity analysis sheets can be found in **Appendix K**.

The results of the 2029 weekday and Saturday build capacity analysis (level of service) are shown in **Figure 24** and **Figure 25**, respectively. See **Table 10**, **Table 11**, **Table 12**, and **Table 13** for the year 2029 build level of service and delay.

The reuslts of the 2029 weekday and Saturday build capacity analysis show that all intersections operate at acceptable levels of service, or at the same level of service as the no build condition with the exception of the following:

**Ellsworth Road and SR-24 EB Ramps (5)**

- Overall intersection opearates at LOS E and F, during the PM and Saturday MD peak hour.
- Eastbound dual right operates at LOS F during the PM and Saturday MD peak hour.

  *It should be noted that the HCM method of analysis does not factor in or account for right turn on red movements. The Synchro results for this movement operate at acceptable levels of service. This movement is also what causes the interseciton to operates at a poor level of service, so if the right turns on red were factored in the overall intersection capacity would improve as well.*

**Williams Field Road and Legacy Drive (9)**

- Northbound dual lefts operate at LOS E during the AM peak hour.

  *It should be noted that for low-volume movements at intersections with longer cycle lengths, the reported average delay per vehicle for minor-street movements may be disproportionately high and may not be representative of typical operating conditions.*

- Soutbound through-right opreates at LOS E during the Saturday MD peak hour.

  *It should be noted that the HCM method of analysis does not factor in or account for right turn on red movements. The Synchro results for this movement operate at acceptable levels of service.*

**Williams Field Road and Gateway Main Driveway/Driveway J (10)**

- Eastbound dual left operates at LOS E during the AM and Saturday MD peak hours.

  *It should be noted that for low-volume movements at intersections with longer cycle lengths, the reported average delay per vehicle for minor-street movements may be disproportionately high and may not be representative of typical operating conditions.*

## Table 10 – Year 2029 Level of Service and Delay (1 of 4)

| Intersection | YEAR 2029 - *No Build* | | | | | | YEAR 2029 - BUILD | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AM Peak | | PM Peak | | Sat MD Peak | | AM Peak | | PM Peak | | Sat MD Peak | |
| | LOS | DELAY | LOS | DELAY | LOS | DELAY | LOS | DELAY | LOS | DELAY | LOS | DELAY |
| Ellsworth Road and Serenity Avenue (1) - *Signalized* | | | | | | | | | | | | |
| Overall Intersection | A | 3.6 | A | 0.9 | - | - | A | 4.4 | A | 1.7 | - | - |
| Westbound Left | C | 30.3 | D | 39.8 | - | - | C | 25.8 | C | 30.2 | - | - |
| Westbound Right | C | 22.9 | A | 0.0 | - | - | C | 21.4 | A | 0.0 | - | - |
| Northbound Through | A | 0.2 | A | 0.1 | - | - | A | 0.4 | A | 0.2 | - | - |
| Nortbound Right | A | 0.1 | A | 0.0 | - | - | A | 0.1 | A | 0.0 | - | - |
| Southbound Left | A | 2.4 | A | 0.8 | - | - | A | 4.6 | A | 2.2 | - | - |
| Southbound Through | A | 3.0 | A | 1.2 | - | - | A | 5.9 | A | 2.9 | - | - |
| Ellsworth Road and Ray Road South (2) - *Signalized* | | | | | | | | | | | | |
| Overall Intersection | D | 44.7 | D | 42.3 | - | - | C | 30.7 | C | 27.9 | - | - |
| Eastbound Dual Left | D | 48.3 | D | 40.9 | - | - | D | 46.1 | D | 51.1 | - | - |
| Eastbound Through | D | 37.5 | C | 32.4 | - | - | D | 37.0 | D | 41.7 | - | - |
| Eastbound Right | D | 41.4 | D | 41.8 | - | - | D | 39.8 | D | 41.0 | - | - |
| Westbound Dual Left | D | 54.7 | E | 55.6 | - | - | D | 54.9 | D | 53.0 | - | - |
| Westbound Through | D | 39.7 | D | 42.4 | - | - | D | 40.6 | D | 41.3 | - | - |
| Westbound Right | D | 49.5 | D | 48.6 | - | - | D | 51.3 | D | 44.2 | - | - |
| Northbound Right | D | 54.7 | D | 50.7 | - | - | D | 45.1 | D | 53.8 | - | - |
| Northbound Through | D | 42.7 | D | 37.9 | - | - | B | 10.8 | B | 10.4 | - | - |
| Northbound Right | C | 25.3 | D | 36.0 | - | - | A | 6.5 | A | 8.3 | - | - |
| Southbound Left | D | 50.4 | E | 55.2 | - | - | D | 50.4 | D | 54.5 | - | - |
| Southbound Through | C | 31.5 | D | 46.8 | - | - | C | 25.5 | A | 9.8 | - | - |
| Southbound Right | D | 48.4 | C | 21.8 | - | - | C | 28.8 | A | 5.5 | - | - |
| Ellsworth Road and Cadence Parkway (3) - *Signalized* | | | | | | | | | | | | |
| Overall Intersection | C | 29.4 | C | 22.6 | - | - | B | 11.4 | A | 8.3 | - | - |
| Westbound Dual Left | C | 33.3 | C | 32.7 | - | - | C | 34.2 | C | 34.3 | - | - |
| Westbound Right | D | 40.2 | C | 34.2 | - | - | D | 41.4 | D | 36.1 | - | - |
| Northbound Through | C | 27.5 | C | 27.5 | - | - | A | 7.3 | A | 1.0 | - | - |
| Northbound Right | C | 22.8 | C | 27.8 | - | - | A | 6.1 | A | 1.8 | - | - |
| Southbound Left | D | 54.5 | D | 55.0 | - | - | D | 40.5 | D | 54.7 | - | - |
| Southbound Through | C | 25.7 | A | 6.5 | - | - | A | 0.2 | A | 0.3 | - | - |
| Ellsworth Road and SR-24 WB Ramps (4) - *Signalized* | | | | | | | | | | | | |
| Overall Intersection | C | 27.3 | B | 18.4 | C | 27.7 | C | 27.8 | C | 31.9 | C | 25.0 |
| Westbound Left | C | 32.2 | C | 31.8 | C | 30.0 | D | 39.0 | C | 33.4 | D | 36.1 |
| Westbound Through | A | 0.2 | A | 0.1 | A | 0.2 | A | 0.3 | A | 0.2 | A | 0.3 |
| Westbound Right | A | 0.6 | A | 0.4 | A | 0.7 | A | 0.8 | A | 0.4 | A | 0.9 |
| Northbound Dual Left | D | 50.7 | C | 24.7 | D | 49.1 | D | 53.0 | D | 53.2 | D | 42.5 |
| Northbound Through | A | 3.4 | A | 3.4 | A | 4.3 | A | 1.0 | A | 2.5 | A | 2.8 |
| Southbound Through | D | 44.7 | D | 42.4 | D | 53.3 | D | 48.8 | D | 53.6 | D | 50.3 |
| Southbound Dual Right | B | 19.7 | A | 6.7 | A | 7.0 | B | 11.1 | B | 14.5 | A | 6.0 |
| Ellsworth Road and SR-24 EB Ramps (5) - *Signalized* | | | | | | | | | | | | |
| Overall Intersection | C | 23.8 | D | 45.3 | C | 32.0 | C | 28.3 | E | 76.8 | F | 89.2 |
| Eastbound Left | C | 29.6 | C | 25.2 | C | 21.6 | C | 28.2 | C | 30.2 | D | 50.1 |
| Eastbound Shared Thru-Left | C | 29.7 | C | 25.2 | C | 21.6 | C | 28.3 | C | 30.3 | D | 49.8 |
| Eastbound Dual Right* | B | 16.4 | F | 86.1 | D | 36.1 | C | 25.5 | F | 166.2 | F | 199.2 |
| Northbound Through | C | 30.5 | C | 20.5 | D | 40.1 | C | 35.0 | C | 32.8 | D | 42.9 |
| Northbound Right | A | 0.0 | A | 0.0 | A | 0.1 | A | 0.0 | A | 0.0 | A | 0.1 |
| Southbound Dual Left** | F | 84.9 | F | 89.1 | F | 93.3 | F | 84.4 | E | 77.9 | E | 62.4 |
| Southbound Through | A | 1.9 | A | 1.4 | A | 2.1 | A | 1.9 | A | 1.6 | A | 1.7 |

*HCM method does not account for right turns on red, the LOS in synchro is lower.
**Low volume with high cycle lengths causes the delay/vehicle to be higher than expected.

## Table 11 – Year 2029 Level of Service and Delay (2 of 4)

| Intersection | YEAR 2029 - *No Build* | | | | | | YEAR 2029 - BUILD | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AM Peak | | PM Peak | | Sat MD Peak | | AM Peak | | PM Peak | | Sat MD Peak | |
| | LOS | DELAY | LOS | DELAY | LOS | DELAY | LOS | DELAY | LOS | DELAY | LOS | DELAY |
| Ellsworth Road and Williams Field Road (6) - *Signalized* | | | | | | | | | | | | |
| Overall Intersection | A | 6.4 | C | 25.0 | C | 25.2 | C | 30.7 | C | 32.8 | D | 37.8 |
| Eastbound Dual Left** | E | 57.9 | E | 58.6 | E | 59.7 | D | 53.4 | E | 64.2 | E | 60.9 |
| Eastbound Through | D | 47.6 | D | 46.1 | D | 37.8 | D | 54.7 | D | 47.5 | D | 54.8 |
| Eastbound Right | D | 47.9 | D | 46.1 | D | 37.9 | D | 54.8 | D | 47.1 | D | 54.6 |
| Westbound Dual Left** | E | 59.0 | E | 58.0 | E | 61.1 | D | 54.7 | D | 55.0 | E | 71.9 |
| Westbound Through | D | 48.0 | D | 46.4 | D | 35.4 | D | 52.6 | D | 40.2 | D | 41.9 |
| Westbound Right | D | 43.4 | C | 33.9 | C | 25.4 | D | 40.3 | C | 29.3 | D | 39.6 |
| Northbound Left** | E | 56.2 | E | 59.5 | E | 56.9 | D | 50.2 | E | 60.8 | E | 57.7 |
| Northbound Through | A | 1.1 | D | 43.0 | C | 31.9 | C | 25.5 | D | 54.9 | C | 32.8 |
| Northbound Right | A | 0.0 | C | 28.2 | C | 20.5 | A | 2.4 | D | 39.6 | C | 24.7 |
| Southbound Dual Left** | E | 55.8 | D | 51.5 | D | 51.6 | D | 54.9 | D | 53.8 | D | 54.3 |
| Southbound Through | A | 1.0 | A | 2.7 | A | 3.4 | C | 29.6 | A | 6.3 | C | 23.0 |
| Southbound Shared Through-Right | A | 1.9 | A | 5.0 | A | 6.1 | C | 31.0 | B | 11.1 | C | 24.9 |
| Ellsworth Road and Legacy Avenue (7) - *Signalized* | | | | | | | | | | | | |
| Overall Intersection | A | 5.9 | A | 1.7 | C | 23.4 | A | 9.8 | A | 1.4 | C | 34.3 |
| Westbound Shared Left-Left-Through | A | 0.0 | D | 35.1 | D | 36.6 | A | 0.0 | D | 52.3 | D | 45.0 |
| Westbound Right | C | 34.5 | D | 35.2 | D | 36.5 | C | 34.5 | D | 52.7 | D | 44.5 |
| Northbound Through | A | 1.7 | A | 0.6 | C | 23.9 | A | 1.6 | A | 0.2 | C | 32.9 |
| Northbound Right | A | 0.0 | A | 0.6 | C | 21.9 | A | 0.0 | A | 0.2 | C | 28.3 |
| Southbound Dual Left** | E | 61.0 | E | 56.8 | D | 54.1 | E | 61.1 | E | 56.5 | D | 46.3 |
| Southbound Through | B | 11.8 | A | 0.9 | B | 13.5 | C | 21.5 | A | 0.3 | C | 31.5 |
| Ellsworth Road and Pecos Road North (8) - *Signalized* | | | | | | | | | | | | |
| Overall Intersection | B | 17.2 | B | 15.1 | - | - | C | 21.7 | C | 27.1 | - | - |
| Westbound Left | D | 43.7 | D | 46.6 | - | - | D | 38.7 | D | 41.5 | - | - |
| Westbound Right | D | 51.3 | D | 51.4 | - | - | D | 45.3 | D | 46.6 | - | - |
| Northbound Through | B | 19.0 | B | 17.2 | - | - | C | 25.8 | C | 27.0 | - | - |
| Northbound Shared Through-Right | A | 9.6 | B | 10.5 | - | - | B | 11.8 | B | 15.0 | - | - |
| Southbound Left | C | 25.0 | D | 35.3 | - | - | C | 31.1 | D | 50.1 | - | - |
| Southbound Through | A | 9.0 | A | 8.4 | - | - | B | 11.7 | C | 23.2 | - | - |
| Williams Field Road and Legacy Drive (9) - *Signalized* | | | | | | | | | | | | |
| Overall Intersection | A | 0.7 | A | 4.6 | C | 32.5 | A | 7.2 | B | 13.5 | D | 41.7 |
| Eastbound Left | - | - | - | - | - | - | A | 4.8 | B | 14.5 | C | 23.8 |
| Eastbound Through | A | 0.2 | A | 0.5 | C | 34.5 | A | 0.1 | A | 2.7 | D | 44.0 |
| Eastbound Right | A | 0.0 | A | 0.1 | C | 22.4 | A | 0.0 | A | 2.8 | D | 42.8 |
| Westbound Dual Left | A | 1.9 | A | 2.5 | C | 21.6 | E | 58.1 | D | 41.5 | D | 49.7 |
| Westbound Through | A | 0.3 | A | 0.1 | A | 0.4 | A | 0.1 | A | 0.1 | C | 33.6 |
| Westbound Right | - | - | - | - | - | - | A | 0.0 | A | 0.1 | C | 29.1 |
| Northbound Dual Left** | C | 31.6 | D | 54.8 | D | 53.4 | E | 67.4 | D | 44.9 | D | 47.8 |
| Northbound Right (No Build) / *Through-Right (Build)* | C | 31.2 | D | 52.4 | C | 34.9 | D | 54.2 | D | 46.6 | D | 44.6 |
| Southbound Left | - | - | - | - | - | - | D | 49.3 | D | 44.8 | D | 44.7 |
| Southbound Through-Right* | - | - | - | - | - | - | D | 49.6 | D | 54.0 | E | 57.9 |

*HCM method does not account for right turns on red, the LOS in synchro is lower.
**Low volume with high cycle lengths causes the delay/vehicle to be higher than expected.

## Table 12 – Year 2029 Level of Service and Delay (3 of 4)

| Intersection | YEAR 2029 - *No Build* | | | | | | YEAR 2029 - BUILD | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AM Peak | | PM Peak | | Sat MD Peak | | AM Peak | | PM Peak | | Sat MD Peak | |
| | LOS | DELAY | LOS | DELAY | LOS | DELAY | LOS | DELAY | LOS | DELAY | LOS | DELAY |
| Williams Field Road and Gateway Main Driveway / Driveway J (10) - Unsignalized (No Build) / *Signalized (Build)* | | | | | | | | | | | | |
| Overall Intersection | - | - | - | - | - | - | C | 24.5 | C | 27.7 | C | 32.8 |
| Eastbound Dual Left** | - | - | - | - | - | - | E | 60.2 | D | 51.7 | E | 60.6 |
| Eastbound Through | - | - | - | - | - | - | A | 0.1 | A | 1.8 | D | 49.2 |
| Eastbound Right | - | - | - | - | - | - | A | 0.2 | A | 2.1 | D | 45.0 |
| Westbound Left (No Build) / *Dual Left (Build)* | A | 7.5 | A | 8.9 | B | 11.4 | D | 52.5 | D | 53.7 | C | 32.6 |
| Westbound Through | - | - | - | - | - | - | A | 0.1 | A | 9.3 | A | 3.3 |
| Westbound Right | - | - | - | - | - | - | A | 0.0 | A | 0.0 | A | 0.0 |
| Northbound Left | - | - | - | - | - | - | D | 44.7 | D | 41.5 | C | 31.7 |
| Northbound Shared Through-Right | - | - | - | - | - | - | A | 0.0 | A | 0.0 | A | 0.0 |
| Northbound Right | A | 8.9 | A | 10.0 | C | 23.8 | D | 41.1 | D | 41.1 | C | 23.2 |
| Southbound Dual Left | - | - | - | - | - | - | D | 53.2 | D | 50.9 | D | 51.8 |
| Southbound Shared Through-Right | - | - | - | - | - | - | D | 51.2 | D | 51.3 | D | 40.1 |
| Williams Field Road and SR-24 EB Ramps (11) - *Signalized* | | | | | | | | | | | | |
| Overall Intersection | B | 18.4 | B | 15.2 | C | 22.0 | C | 27.6 | C | 21.5 | C | 25.9 |
| Eastbound Through | A | 6.3 | C | 24.0 | C | 29.5 | D | 55.0 | C | 30.9 | D | 39.0 |
| Eastbound Right | A | 0.3 | A | 2.7 | A | 6.7 | B | 19.7 | A | 8.9 | A | 9.4 |
| Westbound Dual Left** | E | 60.8 | D | 39.9 | E | 56.8 | D | 41.2 | D | 44.2 | E | 55.3 |
| Westbound Through | A | 9.9 | B | 18.7 | B | 19.2 | C | 31.7 | C | 20.8 | C | 28.5 |
| Southbound Left | D | 35.3 | B | 14.3 | C | 24.6 | B | 10.7 | C | 21.8 | B | 16.3 |
| Southbound Shared Left-Through-Through-Right | B | 15.9 | A | 5.8 | A | 7.8 | A | 3.1 | B | 14.8 | B | 13.2 |
| Williams Field Road and SR-24 WB Ramps (12) - *Signalized* | | | | | | | | | | | | |
| Overall Intersection | B | 10.9 | B | 16.4 | C | 26.9 | C | 28.0 | C | 29.5 | C | 28.2 |
| Eastbound Dual Left | D | 40.0 | C | 32.3 | D | 54.9 | C | 26.3 | D | 51.4 | D | 52.3 |
| Eastbound Through | A | 7.7 | A | 2.8 | A | 1.3 | B | 10.1 | A | 8.2 | A | 5.2 |
| Westbound Through | A | 5.9 | C | 29.7 | C | 21.7 | D | 41.7 | D | 54.2 | C | 29.0 |
| Westbound Right | A | 6.5 | A | 8.9 | B | 10.5 | C | 27.9 | C | 28.2 | C | 30.3 |
| Northbound Left** | E | 60.8 | E | 59.7 | E | 61.1 | D | 53.6 | C | 34.4 | D | 53.6 |
| Northbound Shared Through-Through-Right | A | 0.2 | A | 0.1 | A | 0.1 | A | 0.1 | A | 0.0 | A | 0.1 |
| Williams Field Road and Crismon Road (13) - *Signalized* | | | | | | | | | | | | |
| Overall Intersection | C | 30.9 | C | 23.5 | - | - | C | 28.4 | C | 27.6 | - | - |
| Eastbound Left | C | 20.3 | B | 18.2 | - | - | B | 18.1 | C | 30.7 | - | - |
| Eastbound Through | C | 28.3 | A | 1.4 | - | - | A | 1.2 | B | 18.4 | - | - |
| Eastbound Right | A | 0.0 | A | 0.0 | - | - | A | 1.1 | C | 20.1 | - | - |
| Westbound Left | A | 0.0 | A | 0.0 | - | - | A | 0.0 | A | 0.0 | - | - |
| Westbound Through | C | 26.7 | C | 26.5 | - | - | C | 27.0 | D | 46.1 | - | - |
| Westbound Right | C | 24.7 | C | 24.8 | - | - | C | 24.0 | D | 39.7 | - | - |
| Northbound Left | C | 24.8 | C | 24.8 | - | - | C | 25.5 | B | 16.4 | - | - |
| Northbound Through | A | 0.0 | A | 0.0 | - | - | A | 0.0 | A | 0.0 | - | - |
| Northbound Right | A | 0.0 | A | 0.0 | - | - | A | 0.0 | A | 0.0 | - | - |
| Southbound Left | C | 24.4 | C | 26.8 | - | - | C | 26.1 | B | 15.7 | - | - |
| Southbound Through | A | 0.0 | A | 0.0 | - | - | A | 0.0 | A | 0.0 | - | - |
| Southbound Right | D | 43.7 | D | 41.1 | - | - | D | 51.8 | C | 24.3 | - | - |

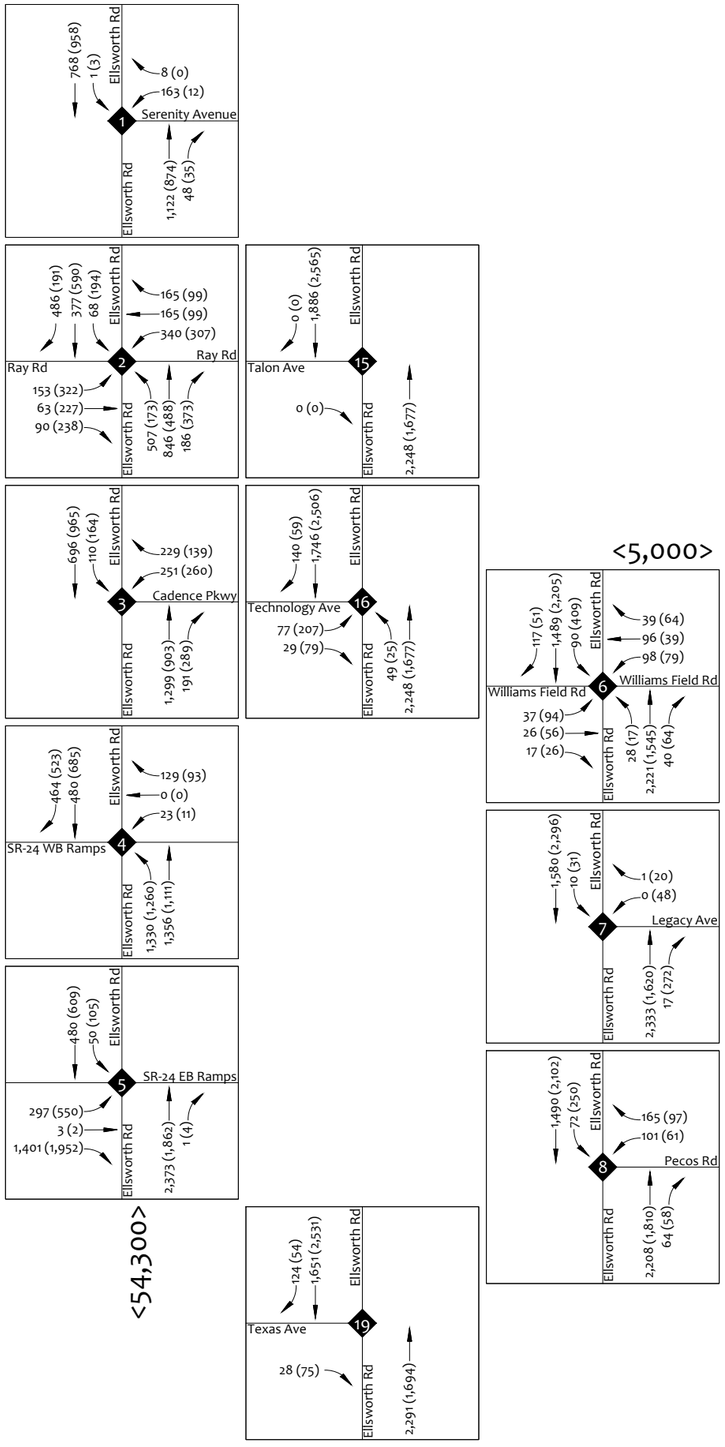
**Low volume with high cycle lengths causes the delay/vehicle to be higher than expected.

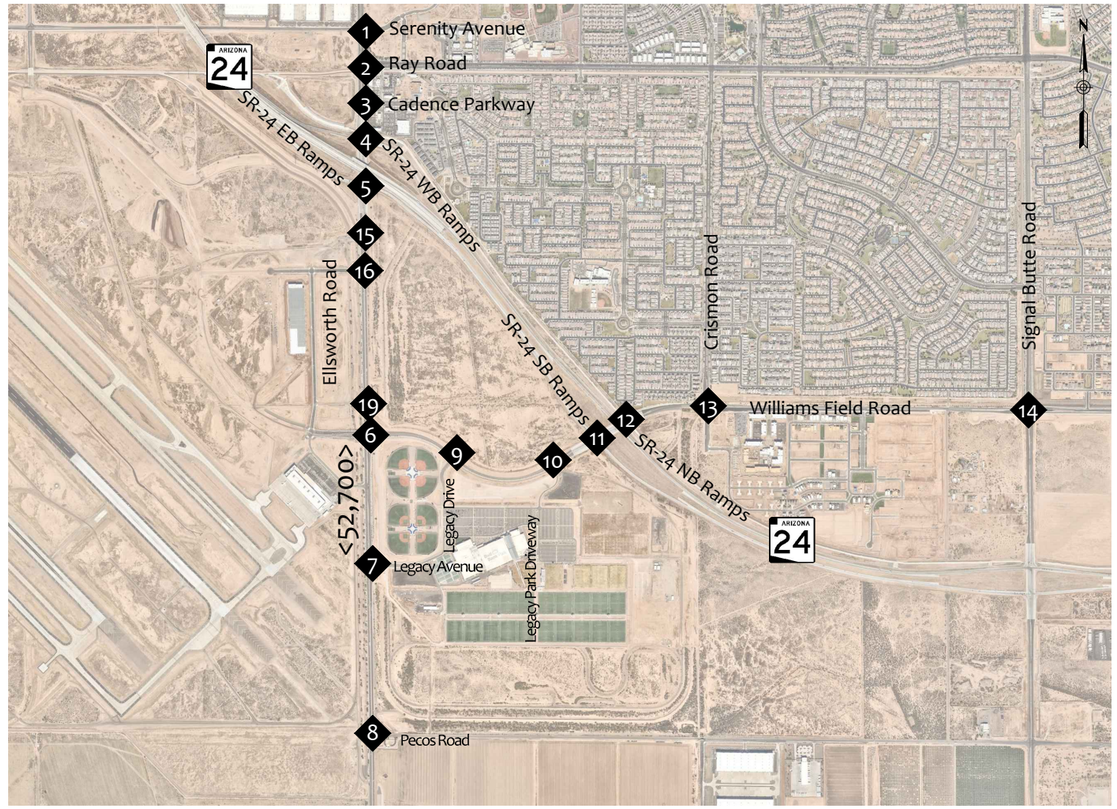
## Table 13 – Year 2029 Level of Service and Delay (4 of 4)

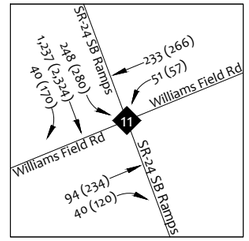
| Intersection | YEAR 2029 - *No Build* | | | | | | YEAR 2029 - BUILD | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AM Peak | | PM Peak | | Sat MD Peak | | AM Peak | | PM Peak | | Sat MD Peak | |
| | LOS | DELAY | LOS | DELAY | LOS | DELAY | LOS | DELAY | LOS | DELAY | LOS | DELAY |
| Williams Field Road and Signal Butte Road (14) - *Signalized* | | | | | | | | | | | | |
| Overall Intersection | C | 30.6 | C | 29.7 | - | - | D | 37.2 | C | 34.3 | - | - |
| Eastbound Left | B | 17.7 | B | 15.3 | - | - | B | 11.3 | B | 10.4 | - | - |
| Eastbound Through | B | 19.3 | B | 16.2 | - | - | B | 12.5 | B | 11.0 | - | - |
| Eastbound Right | B | 19.4 | B | 15.9 | - | - | B | 12.7 | B | 10.9 | - | - |
| Westbound Left | C | 21.0 | B | 18.7 | - | - | B | 14.0 | B | 13.0 | - | - |
| Westbound Through | C | 23.2 | C | 20.1 | - | - | B | 15.9 | B | 14.3 | - | - |
| Westbound Right | C | 23.0 | B | 19.7 | - | - | B | 15.5 | B | 13.8 | - | - |
| Northbound Left | C | 24.8 | C | 29.2 | - | - | C | 35.0 | D | 38.2 | - | - |
| Northbound Through | D | 35.4 | C | 34.1 | - | - | D | 47.4 | D | 44.1 | - | - |
| Northbound Shared Through-Right | D | 35.2 | C | 34.1 | - | - | D | 47.3 | D | 44.1 | - | - |
| Southbound Left | C | 26.0 | C | 28.1 | - | - | D | 36.8 | D | 37.6 | - | - |
| Southbound Through | C | 31.2 | D | 35.9 | - | - | D | 43.1 | D | 49.0 | - | - |
| Southbound Right | D | 35.1 | C | 35.0 | - | - | D | 52.1 | D | 49.5 | - | - |
| Ellsworth Road and Talon Avenue / Driveway A (15) - *Unsignalized* | | | | | | | | | | | | |
| Eastbound Right | A | 0.0 | A | 0.0 | A | 0.0 | A | 0.0 | A | 0.0 | A | 0.0 |
| Westbound Right | - | - | - | - | - | - | B | 11.9 | B | 11.4 | B | 10.9 |
| Ellsworth Road and Driveway B (16) - *Signalized* | | | | | | | | | | | | |
| Overall Intersection | C | 22.0 | C | 23.3 | C | 32.8 | C | 21.9 | D | 36.4 | D | 42.7 |
| Eastbound Left | D | 44.4 | D | 49.3 | D | 53.3 | D | 46.8 | D | 44.0 | D | 37.5 |
| Eastbound Through | - | - | - | - | - | - | A | 0.0 | A | 0.0 | A | 0.0 |
| Eastbound Right | D | 42.1 | D | 41.2 | D | 43.2 | D | 47.0 | D | 42.6 | C | 34.2 |
| Westbound Left | - | - | - | - | - | - | D | 51.3 | D | 49.1 | D | 44.1 |
| Westbound Shared Through-Right | - | - | - | - | - | - | A | 0.0 | A | 0.0 | A | 0.0 |
| Westbound Right | - | - | - | - | - | - | D | 52.2 | D | 52.3 | D | 45.6 |
| Northbound Left | B | 17.8 | C | 27.3 | C | 23.8 | B | 17.1 | C | 29.4 | C | 30.8 |
| Northbound Through | B | 10.2 | A | 0.6 | B | 17.8 | B | 17.4 | C | 34.5 | D | 49.0 |
| Northbound Right | - | - | - | - | - | - | A | 7.5 | B | 14.1 | C | 21.1 |
| Southbound Dual Left | - | - | - | - | - | - | C | 31.7 | C | 21.5 | C | 23.4 |
| Southbound Through | C | 34.5 | C | 34.0 | D | 40.5 | C | 24.6 | C | 34.0 | D | 35.8 |
| Southbound Shared Through-Right | D | 35.8 | D | 38.0 | D | 42.7 | C | 26.1 | D | 42.2 | D | 45.3 |
| Ellsworth Road and Park Avenue (17) - *Unsignalized* | | | | | | | | | | | | |
| Westbound Right | - | - | - | - | - | - | B | 12.2 | B | 11.1 | B | 10.9 |
| Ellsworth Road and Driveway C (18) - *Unsignalized* | | | | | | | | | | | | |
| Westbound Left | - | - | - | - | - | - | A | 0.0 | A | 0.0 | A | 0.0 |
| Westbound Right | - | - | - | - | - | - | B | 12.1 | B | 11.5 | B | 11.0 |
| Southbound Left | - | - | - | - | - | - | D | 31.2 | C | 18.0 | C | 17.5 |
| Ellsworth Road and Pennsylvania Avenue / Driveway D (19) - *Unsignalized* | | | | | | | | | | | | |
| Eastbound Right | B | 10.7 | B | 13.4 | B | 12.6 | B | 11.0 | B | 13.8 | B | 12.9 |
| Westbound Right | - | - | - | - | - | - | B | 12.7 | B | 11.9 | B | 11.3 |
| Southbound Left | - | - | - | - | - | - | D | 29.7 | C | 17.8 | C | 18.3 |
| Williams Field Road and Driveway E (20) - *Unsignalized* | | | | | | | | | | | | |
| Southbound Right | - | - | - | - | - | - | A | 9.3 | A | 9.5 | B | 10.2 |
| Williams Field Road and Driveway F (21) - *Unsignalized* | | | | | | | | | | | | |
| Southbound Right | - | - | - | - | - | - | A | 9.2 | A | 9.3 | B | 10.2 |
| Williams Field Road and Legacy Park 3/4 (22) - *Unsignalized* | | | | | | | | | | | | |
| Eastbound Left | - | - | - | - | - | - | A | 9.4 | B | 10.2 | B | 10.8 |
| Southbound Right | - | - | - | - | - | - | A | 9.3 | A | 9.4 | A | 9.9 |
| Williams Field Road and Driveway H (23) - *Unsignalized* | | | | | | | | | | | | |
| Southbound Right | - | - | - | - | - | - | A | 9.3 | A | 9.4 | A | 9.8 |
| Williams Field Road and Driveway I (24) - *Unsignalized* | | | | | | | | | | | | |
| Eastbound Left | - | - | - | - | - | - | A | 9.6 | B | 10.4 | B | 11.2 |
| Southbound Right | - | - | - | - | - | - | A | 9.3 | A | 9.5 | A | 9.8 |
| Williams Field Road and Gateway RI/RO (25) - *Unsignalized* | | | | | | | | | | | | |
| Northbound Right | - | - | - | - | - | - | A | 9.4 | B | 10.5 | B | 11.4 |

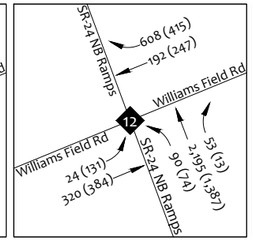
LEGEND

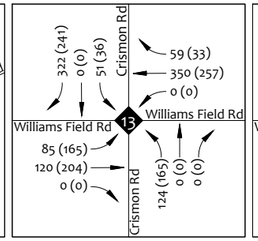
| | |
|---|---|
| AM (PM) | Peak Hour Traffic Volumes |
| X | Intersection |
| <X,XXX> | Average Daily Traffic |

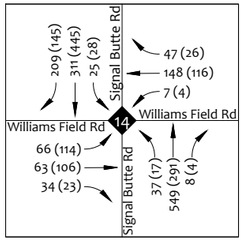




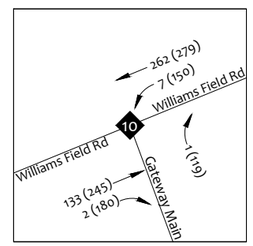
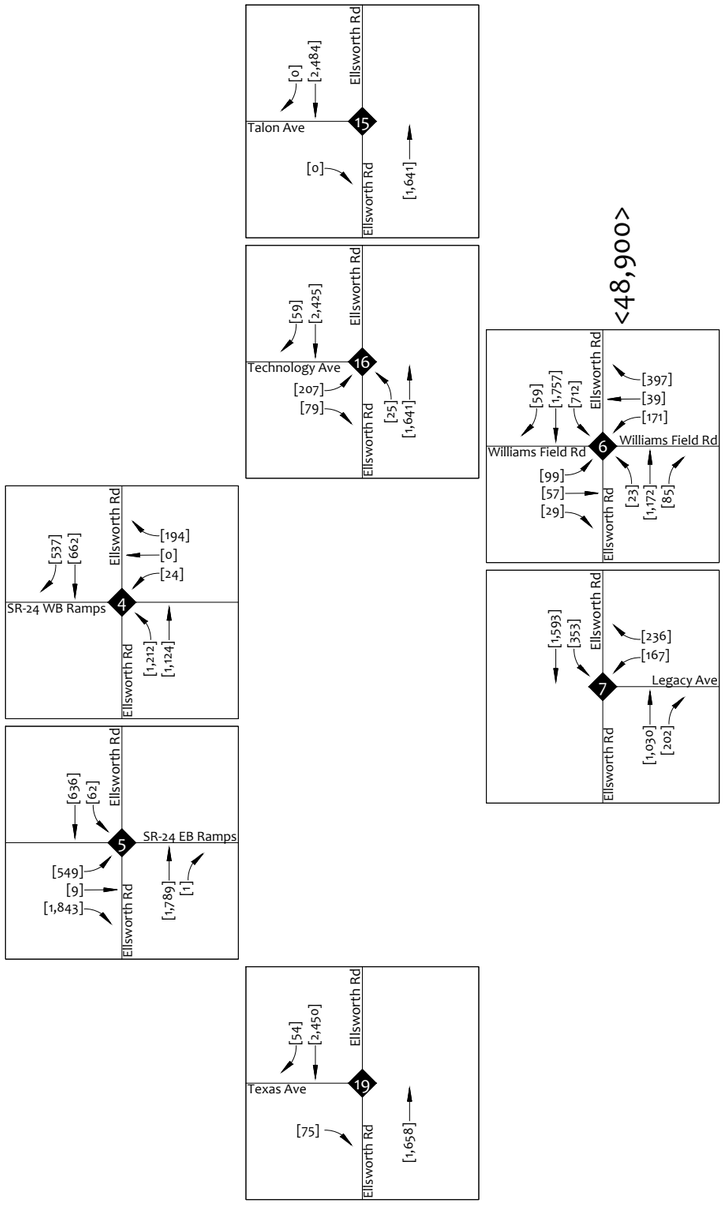
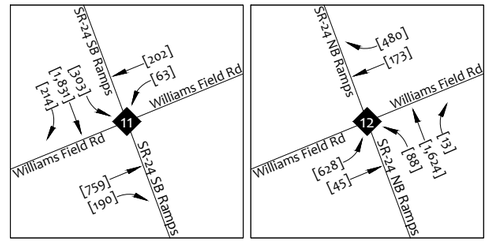




FIGURE 20 | YEAR 2029 BACKGROUND TRAFFIC VOLUMES (WEEKDAY)

LEGEND

| | |
|---|---|
| [Saturday MD] | Peak Hour Traffic Volumes |
| X | Intersection |
| <X,XXX> | Average Daily Traffic |









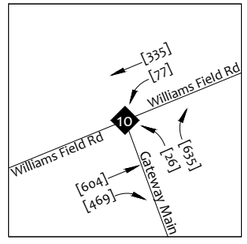
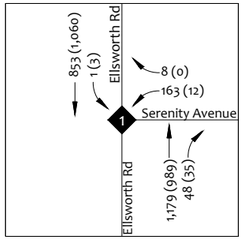
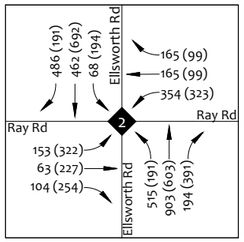


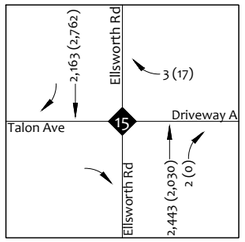

FIGURE 21 | YEAR 2029 BACKGROUND TRAFFIC VOLUMES (SATURDAY)

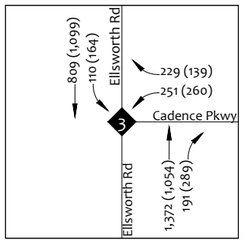
LEGEND

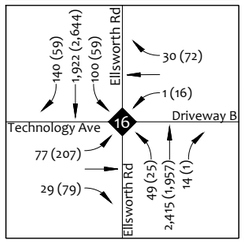
| | |
|---|---|
| AM (PM) | Peak Hour Traffic Volumes |
| X | Intersection |
| <X,XXX> | Average Daily Traffic |

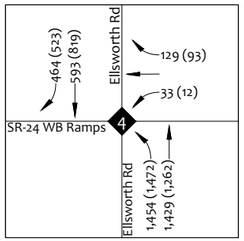


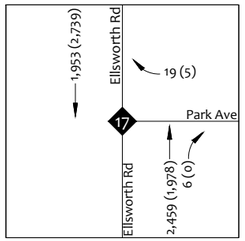



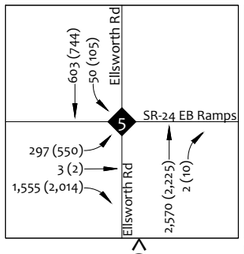



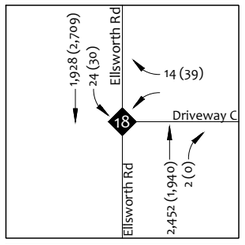



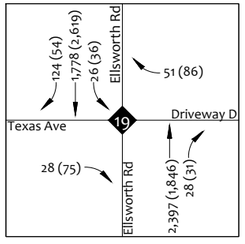

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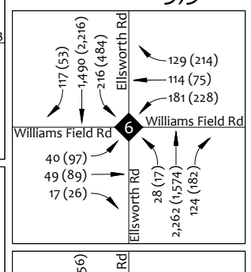
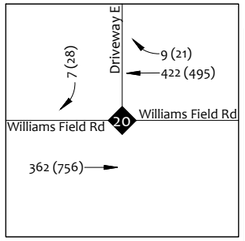
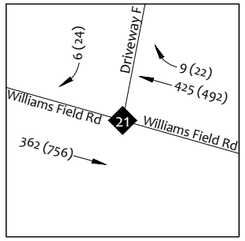
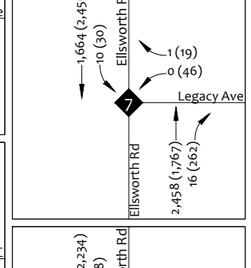
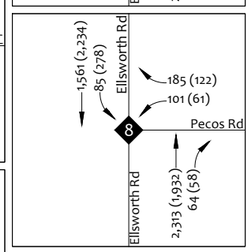
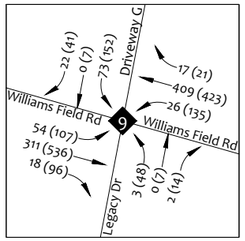


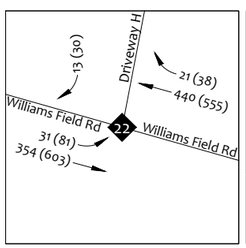



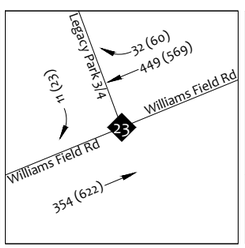



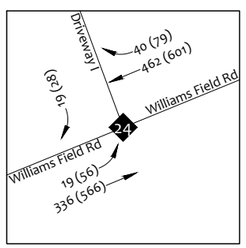



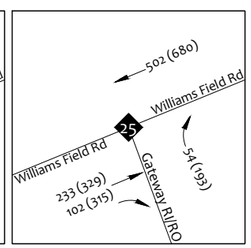



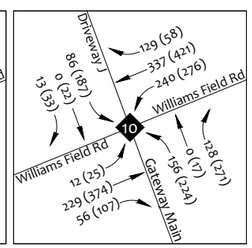



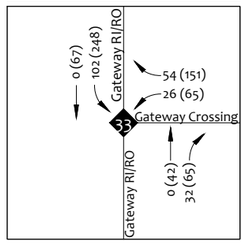



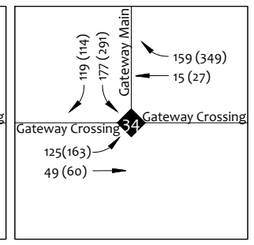



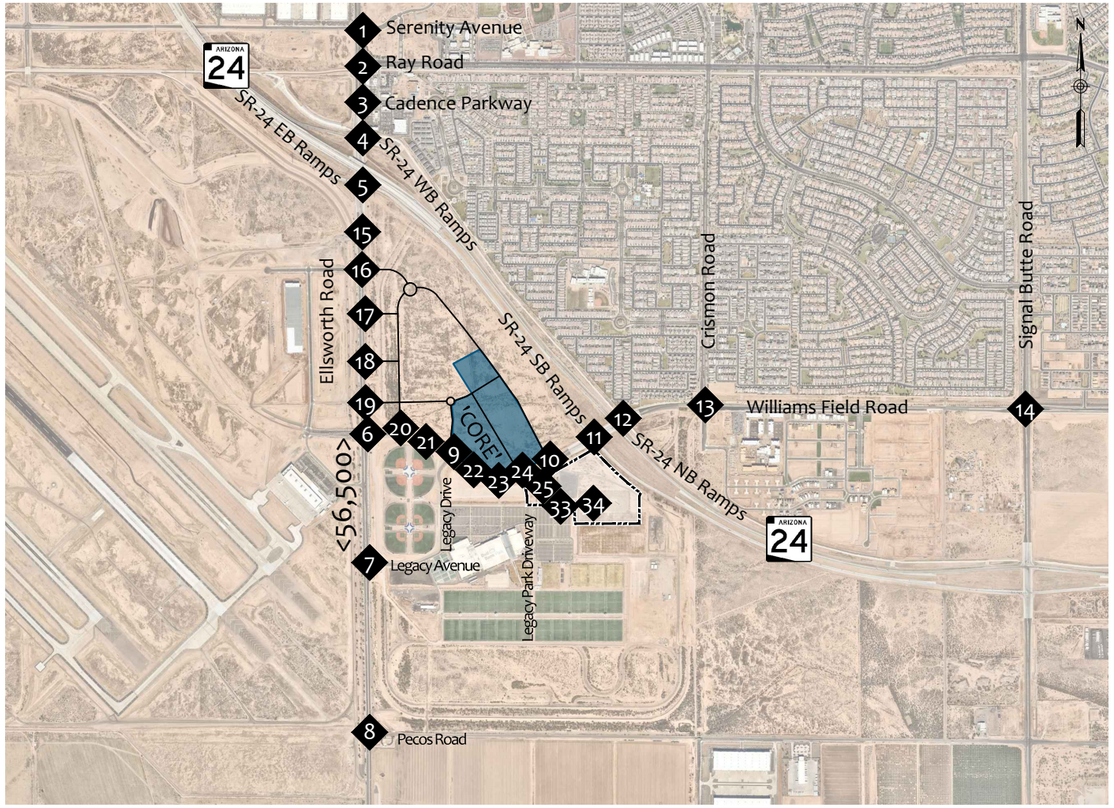



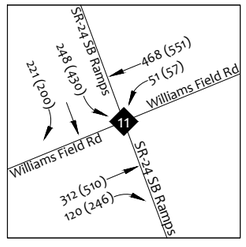



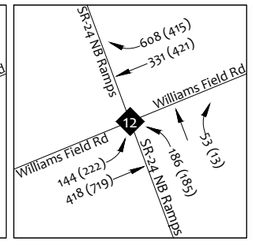



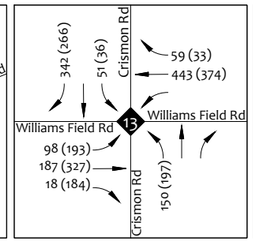



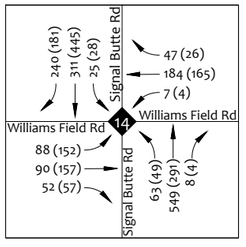
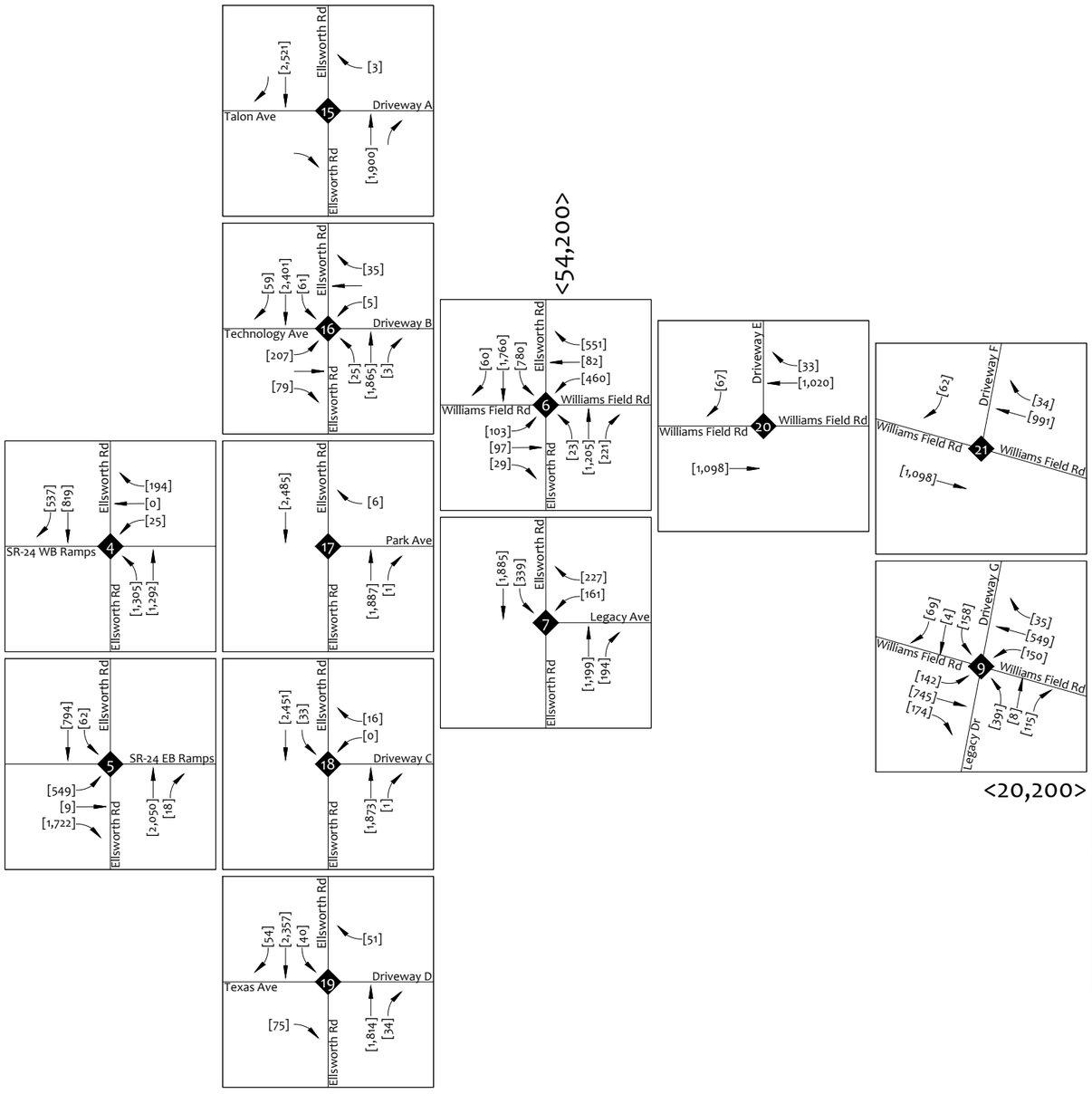
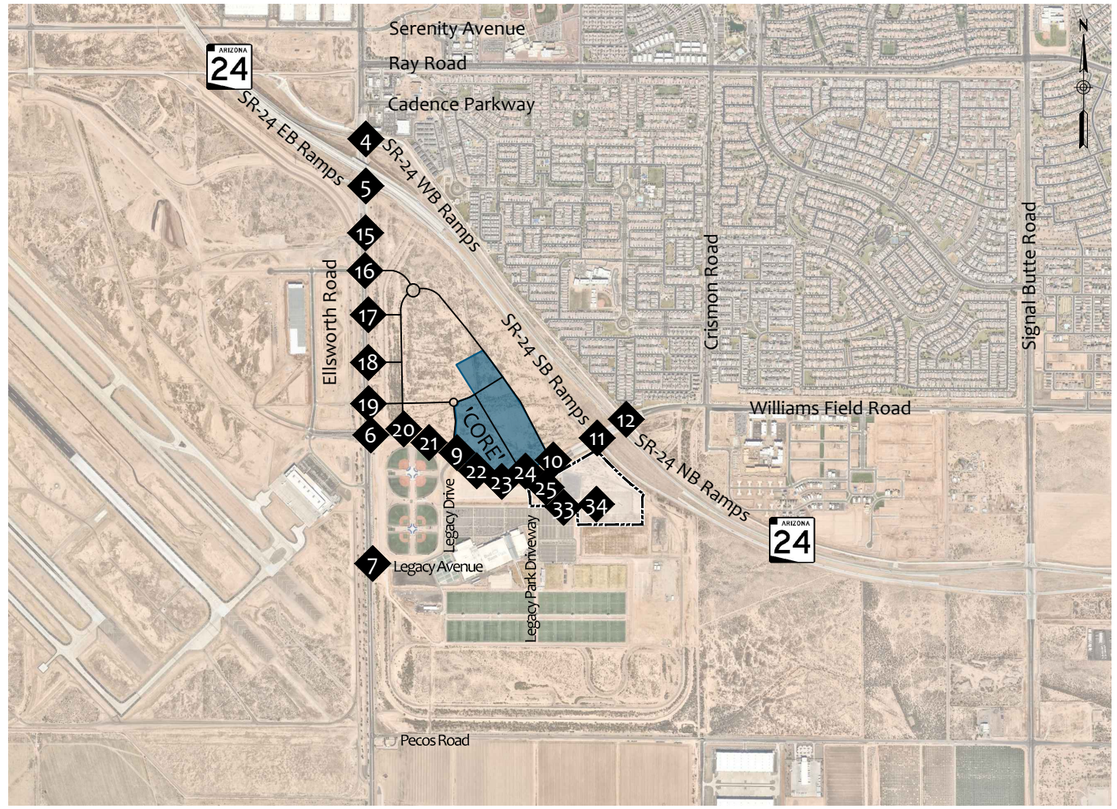



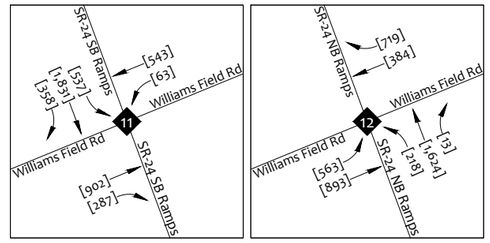

FIGURE 22 | YEAR 2029 BUILD TRAFFIC VOLUMES (WEEKDAY)

LEGEND

| | |
|---|---|
| [Saturday MD] | Peak Hour Traffic Volumes |
| X | Intersection |
| <X,XXX> | Average Daily Traffic |

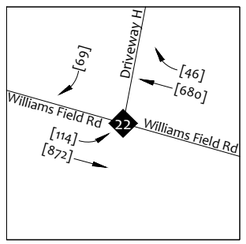


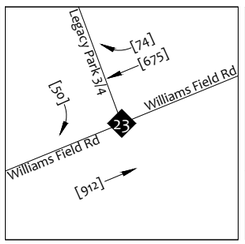



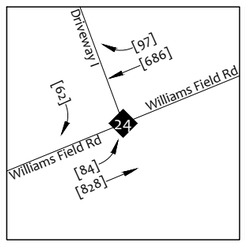



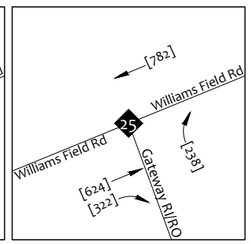


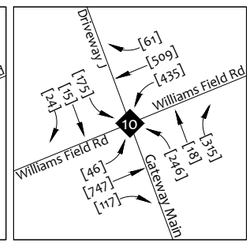


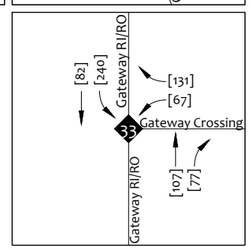


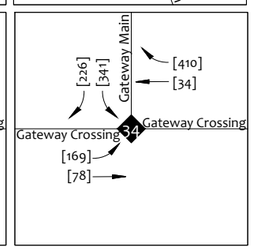



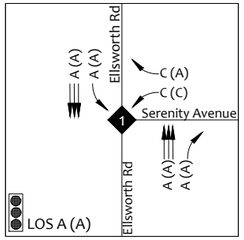

FIGURE 23 | YEAR 2029 BUILD TRAFFIC VOLUMES (SATURDAY)

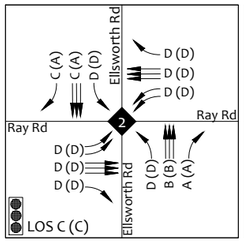
LEGEND

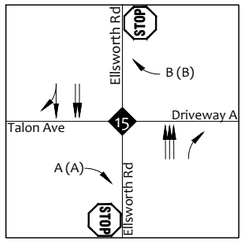
AM (PM) Peak Hour Capacity Analysis

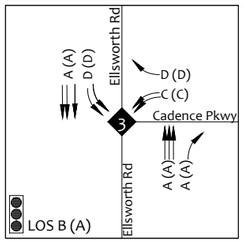
Intersection

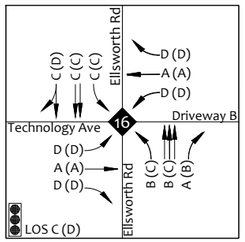
Lane Configuration

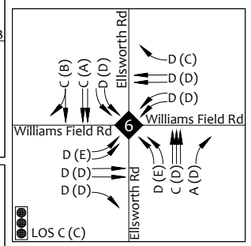


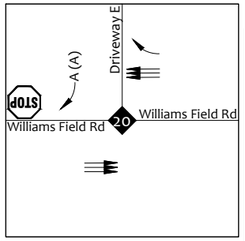



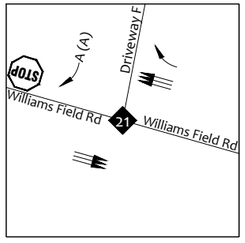



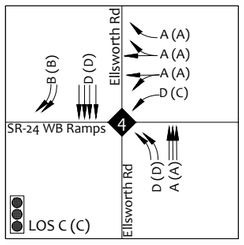



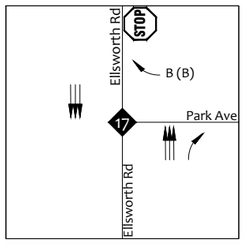



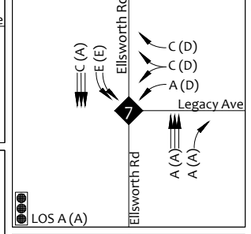



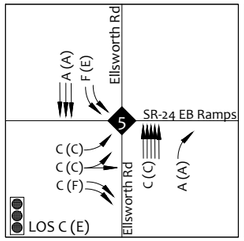



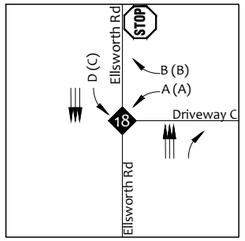



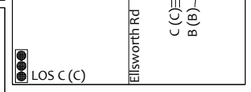



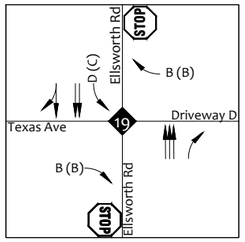


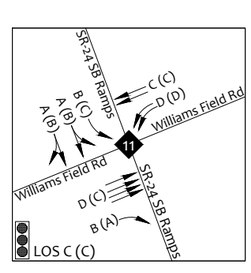


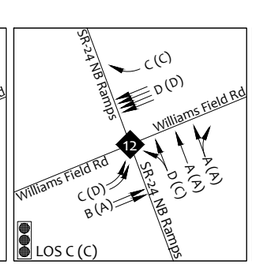


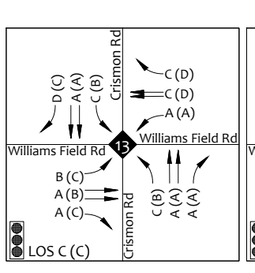



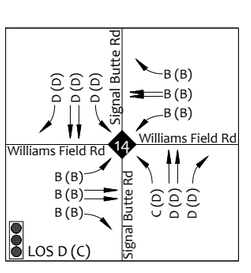



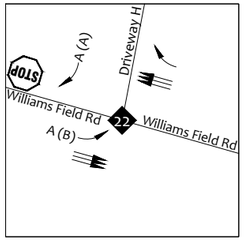



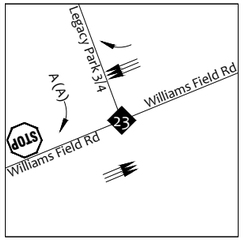


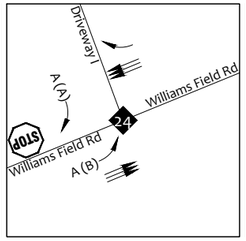



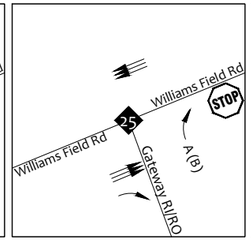



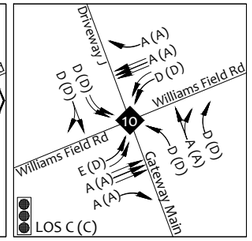



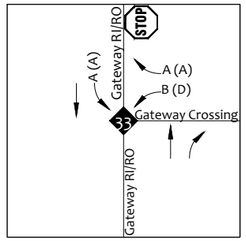



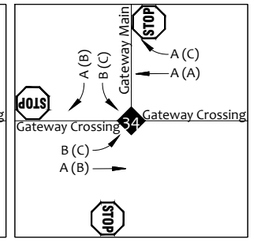



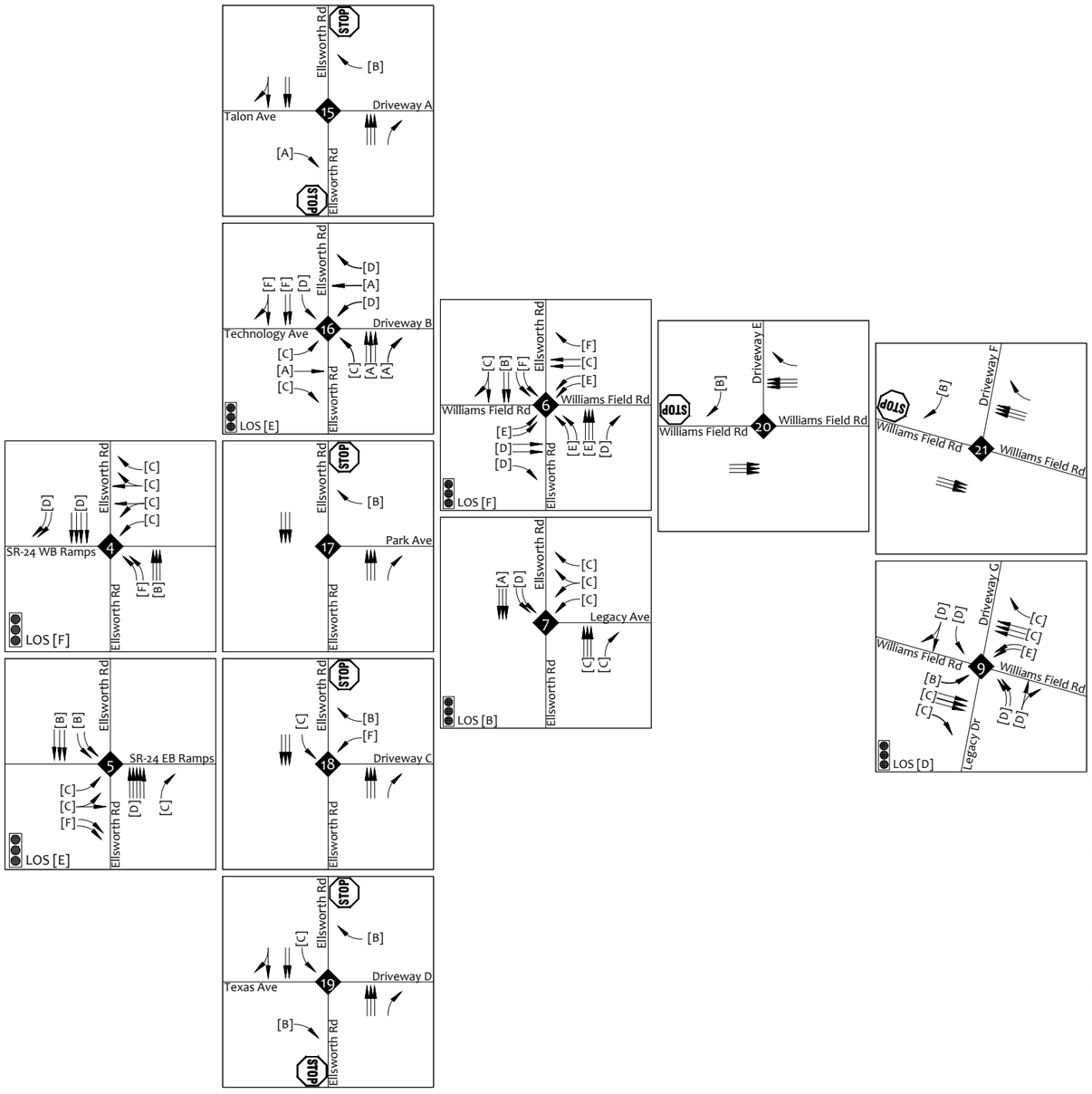

FIGURE 24 | YEAR 2029 BUILD CAPACITY ANALYSIS (WEEKDAY)

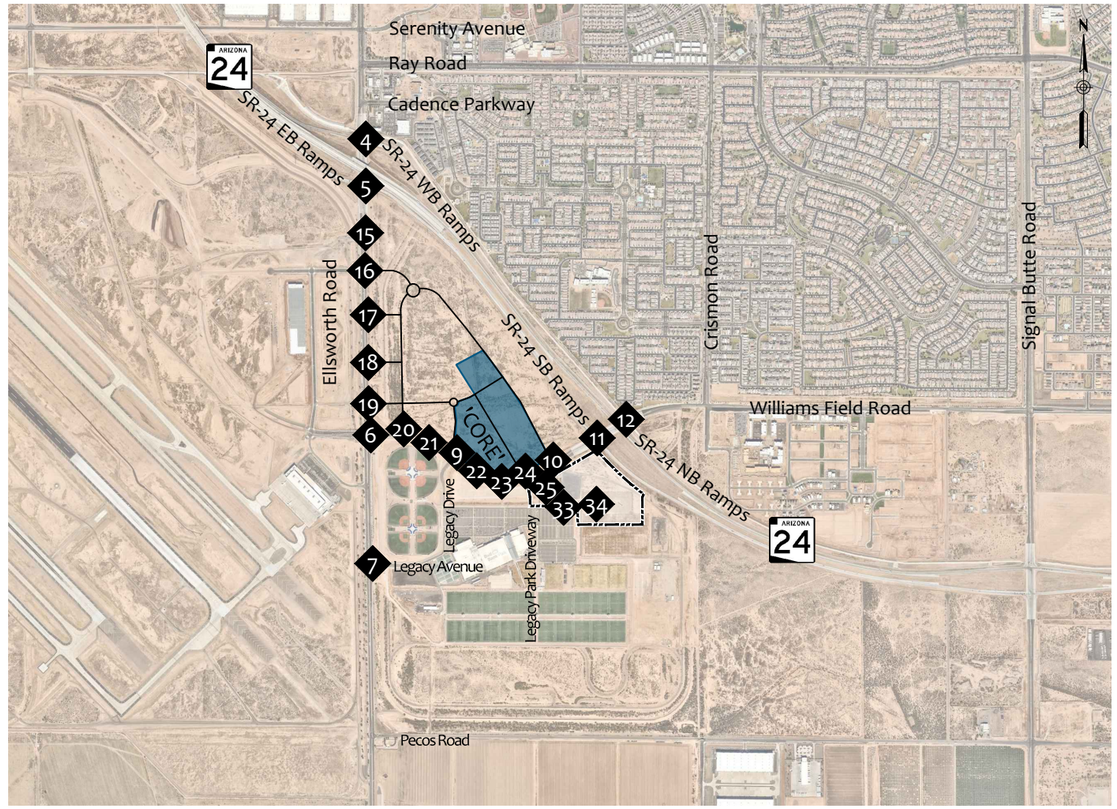
LEGEND

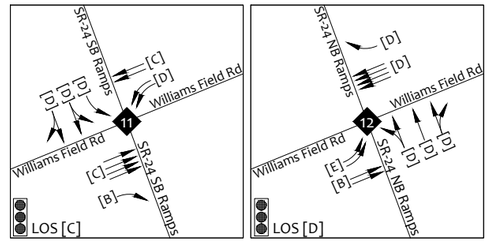
[Saturday MD] Peak Hour Capacity Analysis

Intersection

Lane Configuration



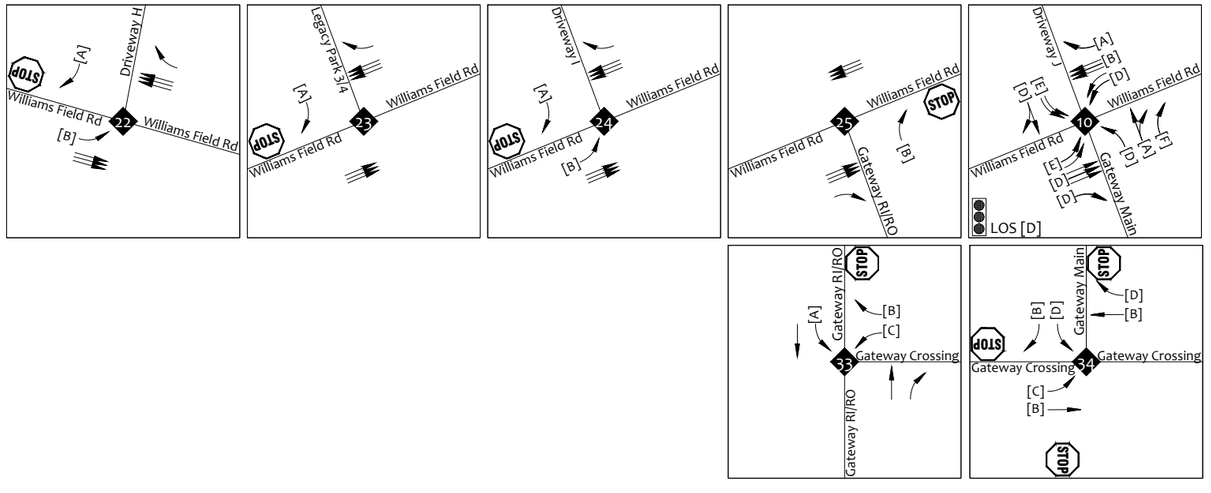




FIGURE 25 | YEAR 2029 BUILD CAPACITY ANALYSIS (SATURDAY)

# 7. FUTURE CONDITIONS – YEAR 2044 (OPENING + 10 YEARS)

As detailed in **Section 2**, the full buildout of the Legacy Park development is anticipated by the year 2044. This section provides the year 2044 analysis, detailing the traffic operations with the full build out of the proposed Legacy Park and Gateway Crossing developments and their impact on the surrounding roadway network.

## 7.1. YEAR 2044 FUTURE ROADWAY NETWORK

Roadway network improvements detailed in **Section 6.1** were assumed for the year 2044 analysis.

### 7.1.1. 2044 ROADWAY IMPROVEMENTS

No additional roadway improvements outside of those detailed in **Section 6.1.1** were considered for the year 2044.

### 7.1.2. 2044 DRIVEWAYS

**Ellsworth Road and Driveway C (18) – *Signalized Intersection**
The northbound approach will provide three (3) through lanes and one (1) dedicated right turn lane. The southbound approach will provide one (1) dedicated left turn lane and three (3) through lanes. The westbound approach will provide one (1) dedicated left turn lane and one (1) dedicated right turn lane.

*As detailed in **Section 11**, a traffic signal is warranted at this location for the year 2044 build conditions, with the full buildout of the Legacy Park development. For year 2044 build conditions, Ellsworth Road and Driveway C (18) was analyzed as an actuated-coordinated traffic signal with a 110-second cycle length.*

## 7.2. YEAR 2044 BACKGROUND TRAFFIC VOLUMES

As discussed in **Section 6.2**, a 1.0% annual growth rate was utilized based on MAG socioeconomic projections. See **Appendix I** for the MAG socioeconomic projections.

At this time, the potential for expansion at the Arizona Athletic Grounds facility is not known. For the year 2044 analysis, the ingress and egress turning movements associated with the existing Arizona Athletic Grounds were grown by 5%. Additionally, the Saturday MD peak hour turning movements associated with the Arizona Athletic Grounds were adjusted to use the additional driveway, Williams Field Road and Gateway RI/RO (25), as described in **Section 6.2**.

As discussed in **Section 6.2**, the through volumes experienced at the SR-24 and Williams Field Road TI were removed.

Similar to the process described in **Section 6.2**, the trips generated by the proposed Gateway East mixed-use development were included as background volumes. Full buildout (year 2043) site traffic volumes associated with the Gateway East mixed-use development were considered for the year 2044 background traffic volumes. Additionally, trips generated by the proposed developments on the northwest and northeast corners of Pecos Road and Crismon Road were included as background volumes. The surrounding weekday PM traffic volumes were deemed appropriate to be used in the Saturday MD analysis. See **Appendix G** for the relevant studies.

The year 2044 weekday and Saturday background traffic volumes are shown in **Figure 26** and **Figure 27**, respectively.

## 7.3. YEAR 2044 BUILD TRAFFIC VOLUMES

To determine the year 2044 weekday build traffic volumes, the year Gateway Crossing pass-by traffic (**Figure 11**), Legacy Park 'CORE' pass-by traffic (**Figure 15**), the Gateway Crossing weekday traffic volumes (**Figure 9**), and the year 2044 Legacy Park weekday traffic volumes (**Figure 17**) are added to the year 2044 weekday background traffic (**Figure 26**). This represents the year 2044 weekday traffic volumes with the build out of the proposed Gateway Crossing and Legacy Park 'CORE' developments. The year 2044 weekday build traffic volumes are shown in **Figure 28**.

To determine the year 2044 Saturday build traffic volumes, the Gateway Crossing pass-by traffic (**Figure 11**), the Legacy Park 'CORE' pass-by traffic (**Figure 15**), the Gateway Crossing Saturday traffic volumes (**Figure 10**), and the year 2044 Legacy Park Saturday traffic volumes (**Figure 18**) are added to the year 2044 Saturday background traffic (**Figure 27**). This represents the year 2044 Saturday traffic volumes with the build out of the proposed Gateway Crossing and Legacy Park 'CORE' developments. The year 2044 Saturday build traffic volumes are shown in **Figure 29**.

## 7.4. YEAR 2044 NO BUILD CAPACITY ANALYSIS

The capacity and level of service for the study area intersections were evaluated for the year 2044 no build scenario. The corresponding weekday and Saturday traffic volumes are shown in **Figure 26** and **Figure 27**, respectively. Signal timing splits were optilized and adjusted for future traffic volumes. A Peak Hour Factor (PHF) of 0.92 was utilized for future conditions, except for Saturda MD conditions at sports complex intersections where the existing PHF was less than 0.92. In this case, the existing PHF was used.

See **Table 14**, **Table 15**, **Table 16**, and **Table 17** for the year 2044 no build level of service and delay. The year 2044 no build capacity analysis sheets can be found in **Appendix L**.

## 7.5. YEAR 2044 BUILD CAPACITY ANALYSIS

The year 2044 build capacity analysis was completed for the study intersections and driveways during the AM and PM peak hour as well as the Saturday MD peak hour. The analysis for the study area intersections were evaluated using the methodology described in **Section 4.2**. Signal timing splits were optimized for the future traffic volumes, and a peak hour factor (PHF) of 0.92 was used for future conditions, except for Saturday MD conditions at sports complex intersections where the existing PHF was less than 0.92. In this case, the existing PHF was used.

The capacity and level of service for the study area intersections were evaluated for the year 2044 weekday build traffic volumes (**Figure 28**) and the year 2044 Saturday build traffic volumes (**Figure 29**).

The year 2044 build capacity analysis sheets can be found in **Appendix M**.

The results of the 2044 weekday and Saturday build capacity analysis (level of service) are shown in **Figure 30** and **Figure 31**, respectively. See **Table 14**, **Table 15**, **Table 16**, and **Table 17** for the year 2044 build level of service and delay.

The reuslts of the 2044 weekday and Saturday build capacity analysis show that all intersections operate at acceptable levels of service, or at the same level of service as the no build condition with the exception of the following:

**Ellsworth Road and Ray Road South (2)**

- Eastbound right operates at LOS E during the AM and PM peak hour.

  *It should be noted that the HCM method of analysis does not factor in or account for right turn on red movements. The Synchro results for this movement operate at acceptable levels of service.*

**Ellsworth Road and SR-24 WB Ramps (4)**

- Overall intersection operates at LOS E and F during the AM, PM and Saturday MD peak hours.
- Northbound dual lefts operate at LOS F during the AM, PM and Saturday MD peak hours.
- Southbound thorugh operates at LOS F during the Saturday MD peak hour.

  *It should be noted that the failing movemenst at this interseciton is primarly due to the high northbound and southbound traffic volumes along Ellsworth Road.*

  *The volumes along Ellsworth Road are projected to increase from approximately 49,200 vehicles per day (vpd) to 83,500 vpd by the year 2044. This represents an overall increase of*

*approximately 69.0 percent over the 18-year period, equivalent to an average annual growth rate of approximately 3.0 percent.*

*While the southeast Mesa area is anticipated to experience continued growth, it is reasonable to expect that additional roadway infrastructure and regional connections will be developed over the same period to accommodate and distribute future traffic demand. Currently, Ellsworth Road serves as a primary north-south connection between SR 24 and the southwest Valley. As SR 24 is extended eastward and additional roadway connections are established, regional traffic patterns will change and are expected to become more distributed throughout the roadway network.*

*Therefore, the projected 2044 traffic volumes along Ellsworth Road may represent a agreessive growth scenario. The resulting traffic volumes at intersections along Ellsworth Road, and the associated capacity deficiencies identified in the analysis, may be influenced by the relatively high level of projected growth assumed for this corridor. Actual future traffic volumes may be lower if regional roadway improvements provide additional routes for travel through the area.*

### Ellsworth Road and SR-24 EB Ramps (5)

- Overall intersection operates at LOS F during the AM peak hour.
- Eastbound left operates at LOS E during the PM peak hour.
- Eastboudn dual right operates at LOS F during the AM peak hour.
- Northbound thorugh operates at LOS F during the PM peak hour.

*It should be noted that the failing movemenst at this interseciton is primarly due to the high northbound and southbound traffic volumes along Ellsworth Road.*

### Ellsworth Road and Williams Field Road (6)

- Overall intersection operates at LOS F during the AM peak hour.
- Eastbound through operates at LOS E during the PM and Satruday MD peak hours.
- Eastbound right operates at LOS F and E during the PM and Saturday MD peak hours.
- Westbound through operates at LOS E during the PM and Saturday MD peak hours.
- Westbound right operates at LOS E and F during the AM and Saturday MD peak hours.
- Norhtbound left operates at LOS E during the AM peak hour.
- Norhtbound through operates at LOS F during the AM and Saturday MD peak hours.
- Northboudn right operates at LOS E during the Saturday MD peak hour.
- Southbound dual left operates at LOS F during the AM peak hour.
- Southbound through operates at LOS E and F during the AM and Saturday MD peak hours.
- Southbound shared through-right operates at LOS F during the AM peak hour.

*It should be noted that the failing movemenst at this interseciton is primarly due to the high northbound and southbound traffic volumes along Ellsworth Road.*

### Ellsworth Road and Legacy Avenue (7)

- Southbound dual left operate at LOS E during the PM peak hour.
- Southbound thorugh operates at LOS E during the PM peak hour.

*It should be noted that the failing movemenst at this interseciton is primarly due to the high northbound and southbound traffic volumes along Ellsworth Road.*

### Ellsworth Road and Pecos Road North (8)

- Overall intersection operates at LOS F during the AM peak hour.
- Westbound right operates at LOS E during the AM and PM peak hours.
- Norhtbound thorugh operates at LOS F during the AM peak hour.
- Southbound left operates at LOS E during the PM peak hour.

*It should be noted that the failing movemenst at this interseciton is primarly due to the high northbound and southbound traffic volumes along Ellsworth Road.*

### Williams Field Road and Legacy Drive (9)

- Northbound right operates at LOS E during the Saturday MD peak hour.
- Soutbound through-right opreates at LOS E during the Saturday MD peak hour.

*It should be noted that the HCM method of analysis does not factor in or account for right turn on red movements. The Synchro results for this movement operate at acceptable levels of service.*

### Williams Field Road and Gateway Main Driveway/Driveway J (10)

- Eastbound dual left operates at LOS E during the PM and Saturday MD peak hours.

*It should be noted that for low-volume movements at intersections with longer cycle lengths, the reported average delay per vehicle for minor-street movements may be disproportionately high and may not be representative of typical operating conditions.*

- Soutbound through-right opreates at LOS E during the Saturday MD peak hour.

*It should be noted that the HCM method of analysis does not factor in or account for right turn on red movements. The Synchro results for this movement operate at acceptable levels of service.*

### Williams Field Road and SR-24 WB Ramps (12)

- Westbound right opreates at LOS F during the Saturday MD peak hour.

*It should be noted that the HCM method of analysis does not factor in or account for right turn on red movements. The Synchro results for this movement operate at acceptable levels of service.*

**Ellsworth Road and Driveway B (16)**

- Overall intersection operates at LOS F during the AM, PM and Saturday MD peak hours.
- Eastbound right operates at LOS E during the PM peak hour.
- Westbound right operates at LOS E and F during the AM and PM peak hours.
- Norhtbound left operates at LOS E during the PM peak hour.
- Norhtbound through operates at LOS F during the AM, PM and Saturday MD peak hours.
- Southbound dual left operates at LOS Fand E during the AM, PM and Saturday MD peak hours.
- Southbound through operates at LOS E and F during the AM, PM and Saturday MD peak hours.
- Southbound shared through-right operates at LOS E and F during the AM, PM and Saturday MD peak hours.

*It should be noted that the failing movemenst at this interseciton is primarly due to the high northbound and southbound traffic volumes along Ellsworth Road.*

**Ellsworth Road and Driveway C (18)**

- Westbound right operates at LOS F during the PM peak hour.
- Norhtbound through operates at LOS F during the AM, and PM peak hours.
- Southbound dual left operates at LOS Fand E during the AM and Saturday MD peak hours.

*It should be noted that the failing movemenst at this interseciton is primarly due to the high northbound and southbound traffic volumes along Ellsworth Road.*

**Ellsworth Road and Pennsylvania Avenue/Driveway D (19)**

- Southbound left operates at LOS Fand E during the AM, PM and Saturday MD peak hours.

*It should be noted that the failing movemenst at this interseciton is primarly due to the high northbound and southbound traffic volumes along Ellsworth Road.*

## Table 14 – Year 2044 Level of Service and Delay (1 of 4)

| Intersection | YEAR 2044 - *No Build* | | | | | | YEAR 2044 - BUILD | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AM Peak | | PM Peak | | Sat MD Peak | | AM Peak | | PM Peak | | Sat MD Peak | |
| | LOS | DELAY | LOS | DELAY | LOS | DELAY | LOS | DELAY | LOS | DELAY | LOS | DELAY |
| Ellsworth Road and Serenity Avenue (1) - *Signalized* | | | | | | | | | | | | |
| Overall Intersection | A | 3.8 | A | 1.5 | - | - | A | 3.9 | A | 1.6 | - | - |
| Westbound Left | C | 29.5 | D | 38.3 | - | - | C | 29.5 | D | 38.3 | - | - |
| Westbound Right | C | 22.0 | A | 0.0 | - | - | C | 22.0 | A | 0.0 | - | - |
| Northbound Through | A | 0.3 | A | 1.2 | - | - | A | 0.3 | A | 1.4 | - | - |
| Nortbound Right | A | 0.1 | A | 0.9 | - | - | A | 0.1 | A | 0.9 | - | - |
| Southbound Left | A | 2.7 | A | 1.5 | - | - | A | 2.7 | A | 1.9 | - | - |
| Southbound Through | A | 3.5 | A | 1.3 | - | - | A | 4.1 | A | 1.4 | - | - |
| Ellsworth Road and Ray Road South (2) - *Signalized* | | | | | | | | | | | | |
| Overall Intersection | E | 55.8 | D | 48.9 | - | - | D | 46.9 | D | 49.0 | - | - |
| Eastbound Dual Left | D | 52.8 | D | 54.6 | - | - | D | 49.8 | D | 54.6 | - | - |
| Eastbound Through | D | 43.0 | D | 36.9 | - | - | D | 44.1 | D | 36.1 | - | - |
| Eastbound Right* | D | 47.2 | D | 53.4 | - | - | E | 70.0 | E | 58.0 | - | - |
| Westbound Dual Left | D | 54.5 | D | 55.0 | - | - | D | 53.1 | D | 55.0 | - | - |
| Westbound Through | D | 40.3 | D | 35.7 | - | - | D | 37.7 | C | 33.8 | - | - |
| Westbound Right | D | 53.3 | D | 39.8 | - | - | D | 47.6 | D | 37.4 | - | - |
| Northbound Right | D | 53.6 | D | 50.3 | - | - | D | 37.1 | D | 51.2 | - | - |
| Northbound Through | D | 39.8 | D | 50.4 | - | - | D | 44.6 | D | 50.2 | - | - |
| Northbound Right | B | 19.1 | D | 52.9 | - | - | B | 17.4 | D | 51.3 | - | - |
| Southbound Left | E | 59.7 | D | 50.1 | - | - | E | 58.5 | D | 52.4 | - | - |
| Southbound Through | C | 33.4 | D | 50.4 | - | - | C | 33.7 | D | 49.7 | - | - |
| Southbound Right* | F | 127.5 | C | 32.5 | - | - | F | 82.4 | C | 29.4 | - | - |
| Ellsworth Road and Cadence Parkway (3) - *Signalized* | | | | | | | | | | | | |
| Overall Intersection | C | 30.5 | C | 31.3 | - | - | B | 14.4 | C | 33.2 | - | - |
| Westbound Dual Left | D | 36.5 | D | 44.8 | - | - | D | 37.9 | D | 38.1 | - | - |
| Westbound Right | D | 48.1 | D | 50.0 | - | - | D | 51.3 | D | 41.0 | - | - |
| Northbound Through | C | 28.2 | D | 44.4 | - | - | A | 5.3 | D | 46.0 | - | - |
| Northbound Right | C | 22.2 | D | 47.3 | - | - | A | 3.5 | D | 39.5 | - | - |
| Southbound Left | D | 54.2 | D | 35.5 | - | - | D | 49.0 | D | 52.7 | - | - |
| Southbound Through | C | 25.5 | A | 8.0 | - | - | B | 12.3 | B | 12.2 | - | - |
| Ellsworth Road and SR-24 WB Ramps (4) - *Signalized* | | | | | | | | | | | | |
| Overall Intersection | D | 37.6 | C | 33.5 | C | 26.2 | E | 61.8 | F | 111.7 | F | 154.2 |
| Westbound Left | D | 40.9 | C | 33.1 | D | 36.8 | D | 54.6 | D | 49.5 | C | 27.4 |
| Westbound Through | A | 0.4 | A | 0.2 | A | 0.4 | B | 13.0 | A | 0.7 | A | 2.1 |
| Westbound Right | A | 1.1 | A | 0.5 | A | 1.1 | A | 1.9 | A | 1.4 | A | 2.3 |
| Northbound Dual Left**** | E | 66.0 | D | 49.1 | D | 44.1 | F | 108.1 | F | 233.8 | F | 379.7 |
| Northbound Through | A | 1.0 | A | 4.9 | A | 3.7 | A | 0.7 | A | 1.6 | A | 8.0 |
| Southbound Through**** | E | 76.2 | E | 64.6 | D | 54.6 | F | 103.4 | E | 73.9 | F | 125.9 |
| Southbound Dual Right | C | 33.8 | C | 21.7 | A | 6.6 | C | 30.0 | C | 32.3 | A | 6.7 |
| Ellsworth Road and SR-24 EB Ramps (5) - *Signalized* | | | | | | | | | | | | |
| Overall Intersection**** | D | 39.4 | F | 107.8 | E | 68.1 | F | 100.8 | F | 165.0 | E | 67.8 |
| Eastbound Left | C | 28.6 | D | 36.4 | C | 30.5 | C | 31.9 | E | 75.0 | D | 38.6 |
| Eastbound Shared Thru-Left | C | 28.5 | D | 36.4 | C | 30.4 | C | 31.7 | E | 75.5 | D | 38.4 |
| Eastbound Dual Right* | C | 26.1 | F | 247.5 | F | 143.1 | F | 193.5 | F | 324.2 | F | 187.2 |
| Northbound Through**** | E | 55.7 | B | 18.8 | C | 33.7 | F | 88.8 | F | 128.8 | A | 7.2 |
| Northbound Right | A | 0.0 | A | 0.1 | A | 0.2 | A | 0.5 | B | 12.8 | A | 0.0 |
| Southbound Dual Left**** | F | 85.5 | E | 77.7 | F | 81.8 | F | 82.6 | E | 73.6 | F | 82.2 |
| Southbound Through | A | 1.5 | A | 1.4 | A | 2.0 | A | 4.7 | A | 2.4 | A | 4.9 |

*HCM method does not account for right turns on red, the LOS in synchro is lower.
****High volumes along Ellsworth bring intersections and movements beyond capacity.

## Table 15 – Year 2044 Level of Service and Delay (2 of 4)

| Intersection | YEAR 2044 - *No Build* | | | | | | YEAR 2044 - BUILD | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AM Peak | | PM Peak | | Sat MD Peak | | AM Peak | | PM Peak | | Sat MD Peak | |
| | LOS | DELAY | LOS | DELAY | LOS | DELAY | LOS | DELAY | LOS | DELAY | LOS | DELAY |
| Ellsworth Road and Williams Field Road (6) - *Signalized* | | | | | | | | | | | | |
| Overall Intersection**** | B | 19.8 | E | 59.2 | E | 79.6 | F | 195.2 | F | 82.0 | F | 142.5 |
| Eastbound Dual Left | E | 58.1 | E | 67.7 | E | 68.2 | F | 270.7 | F | 316.2 | E | 80.0 |
| Eastbound Through | D | 46.6 | D | 44.5 | D | 39.3 | D | 45.1 | E | 67.9 | E | 58.9 |
| Eastbound Right | D | 46.9 | D | 52.4 | D | 42.3 | D | 40.4 | F | 80.4 | E | 62.4 |
| Westbound Dual Left | E | 63.6 | E | 55.3 | E | 60.7 | E | 61.5 | F | 81.0 | E | 73.1 |
| Westbound Through | E | 76.5 | D | 50.1 | D | 50.1 | D | 53.8 | E | 56.0 | E | 56.2 |
| Westbound Right | D | 43.3 | C | 27.1 | D | 40.2 | E | 59.8 | D | 42.5 | F | 174.9 |
| Northbound Left | D | 51.9 | E | 62.0 | F | 179.5 | E | 62.9 | F | 156.4 | F | 177.5 |
| Northbound Through | B | 12.9 | E | 58.2 | D | 50.6 | F | 311.9 | D | 40.2 | F | 163.7 |
| Northbound Right | A | 0.0 | C | 33.7 | B | 19.9 | C | 31.5 | C | 27.1 | E | 55.1 |
| Southbound Dual Left | D | 53.7 | F | 82.4 | F | 234.3 | F | 526.5 | F | 412.5 | F | 321.0 |
| Southbound Through | A | 2.7 | D | 53.8 | D | 50.1 | E | 73.1 | B | 12.8 | F | 102.9 |
| Southbound Shared Through-Right | A | 5.2 | E | 68.6 | E | 61.4 | F | 85.7 | C | 21.7 | F | 118.4 |
| Ellsworth Road and Legacy Avenue (7) - *Signalized* | | | | | | | | | | | | |
| Overall Intersection | A | 3.9 | A | 1.6 | C | 22.7 | B | 12.1 | C | 34.3 | B | 16.5 |
| Westbound Shared Left-Left-Through | A | 0.0 | D | 35.1 | D | 39.8 | A | 0.0 | D | 35.1 | D | 39.8 |
| Westbound Right | D | 42.5 | D | 35.3 | D | 39.6 | D | 46.8 | D | 35.3 | D | 39.6 |
| Northbound Through | A | 1.2 | A | 1.1 | C | 24.3 | B | 19.2 | A | 0.4 | C | 27.3 |
| Northbound Right | A | 0.0 | A | 0.5 | C | 20.6 | A | 0.0 | A | 0.1 | C | 20.2 |
| Southbound Dual Left**** | E | 59.9 | D | 46.3 | D | 51.4 | E | 58.2 | E | 55.7 | D | 44.7 |
| Southbound Through**** | A | 7.7 | A | 0.6 | B | 13.2 | A | 0.1 | E | 59.0 | A | 0.2 |
| Ellsworth Road and Pecos Road North (8) - *Signalized* | | | | | | | | | | | | |
| Overall Intersection**** | C | 23.2 | C | 26.6 | - | - | F | 90.8 | D | 38.1 | - | - |
| Westbound Left | D | 44.6 | D | 47.9 | - | - | D | 38.4 | D | 50.5 | - | - |
| Westbound Right* | D | 54.9 | D | 53.9 | - | - | E | 60.5 | E | 75.1 | - | - |
| Northbound Through | C | 28.9 | C | 27.0 | - | - | F | 145.3 | D | 46.7 | - | - |
| Northbound Shared Through-Right | A | 9.7 | B | 13.1 | - | - | B | 13.0 | B | 14.9 | - | - |
| Southbound Left | C | 34.1 | D | 50.8 | - | - | D | 43.6 | E | 73.4 | - | - |
| Southbound Through | A | 10.0 | C | 22.1 | - | - | B | 14.4 | C | 25.4 | - | - |
| Williams Field Road and Legacy Drive (9) - *Signalized* | | | | | | | | | | | | |
| Overall Intersection**** | A | 1.0 | A | 4.0 | E | 77.2 | D | 36.1 | C | 33.2 | B | 19.0 |
| Eastbound Left | - | - | - | - | - | - | C | 27.3 | C | 26.1 | B | 16.8 |
| Eastbound Through | A | 0.5 | A | 1.3 | F | 112.0 | B | 15.0 | C | 23.0 | A | 9.7 |
| Eastbound Right | A | 0.0 | A | 0.1 | A | 0.1 | B | 12.3 | B | 17.7 | A | 7.9 |
| Westbound Dual Left | A | 1.9 | A | 2.8 | E | 67.1 | D | 53.9 | D | 55.0 | D | 39.2 |
| Westbound Through | A | 1.0 | A | 8.6 | C | 30.0 | D | 46.8 | C | 34.7 | A | 1.8 |
| Westbound Right | - | - | - | - | - | - | D | 52.6 | C | 27.6 | A | 1.4 |
| Northbound Dual Left | C | 31.6 | D | 54.9 | F | 90.2 | C | 29.1 | E | 57.6 | D | 53.4 |
| Northbound Right (No Build) / *Through-Right (Build)* * | C | 31.2 | D | 52.3 | D | 36.6 | C | 29.0 | C | 31.1 | E | 61.5 |
| Southbound Left | - | - | - | - | - | - | D | 45.9 | C | 23.5 | D | 44.5 |
| Southbound Through-Right* | - | - | - | - | - | - | D | 54.0 | D | 54.9 | E | 57.6 |
| Williams Field Road and Gateway Main Driveway / Driveway J (10) - Unsignalized (No Build) / *Signalized (Build)* | | | | | | | | | | | | |
| Overall Intersection | - | - | - | - | - | - | D | 35.2 | D | 40.8 | D | 42.7 |
| Eastbound Dual Left** | - | - | - | - | - | - | D | 46.3 | E | 62.9 | E | 62.4 |
| Eastbound Through | - | - | - | - | - | - | C | 27.3 | D | 54.2 | D | 50.6 |
| Eastbound Right | - | - | - | - | - | - | C | 25.2 | D | 45.8 | D | 39.2 |
| Westbound Left (No Build) / *Dual Left (Build)* | A | 7.9 | B | 12.0 | D | 26.3 | D | 49.7 | D | 46.1 | D | 52.5 |
| Westbound Through | - | - | - | - | - | - | C | 29.7 | B | 11.2 | C | 21.7 |
| Westbound Right | - | - | - | - | - | - | A | 0.0 | A | 0.0 | A | 0.0 |
| Northbound Left | - | - | - | - | - | - | D | 38.5 | D | 44.4 | D | 41.4 |
| Northbound Shared Through-Right | - | - | - | - | - | - | A | 0.0 | A | 0.0 | A | 0.0 |
| Northbound Right***** | A | 9.6 | B | 14.2 | F | 370.8 | D | 36.0 | C | 31.8 | C | 33.8 |
| Southbound Dual Left | - | - | - | - | - | - | D | 49.6 | D | 47.7 | D | 53.6 |
| Southbound Shared Through-Right* | - | - | - | - | - | - | D | 43.2 | D | 54.0 | E | 63.7 |

*HCM method does not account for right turns on red, the LOS in synchro is lower.
**Low volume with high cycle lengths causes the delay/vehicle to be higher than expected.
****High volumes along Ellsworth bring intersections and movements beyond capacity.
*****Does not include additional lanes along Williams Field, although volumes were increased.

## Table 16 – Year 2044 Level of Service and Delay (3 of 4)

| Intersection | YEAR 2044 - *No Build* | | | | | | YEAR 2044 - BUILD | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AM Peak | | PM Peak | | Sat MD Peak | | AM Peak | | PM Peak | | Sat MD Peak | |
| | LOS | DELAY | LOS | DELAY | LOS | DELAY | LOS | DELAY | LOS | DELAY | LOS | DELAY |
| Williams Field Road and SR-24 EB Ramps (11) - *Signalized* | | | | | | | | | | | | |
| Overall Intersection | C | 21.7 | C | 20.3 | C | 30.3 | D | 48.5 | B | 18.7 | B | 19.0 |
| Eastbound Through | B | 16.1 | C | 31.5 | D | 50.8 | D | 48.9 | C | 22.7 | B | 16.6 |
| Eastbound Right | A | 9.4 | A | 8.8 | B | 15.5 | C | 23.9 | B | 10.3 | A | 4.0 |
| Westbound Dual Left** | E | 56.4 | D | 47.8 | D | 48.0 | C | 23.4 | C | 34.9 | D | 39.5 |
| Westbound Through | C | 27.6 | C | 20.6 | C | 22.4 | D | 53.3 | A | 6.6 | A | 8.7 |
| Southbound Left | B | 19.4 | C | 31.2 | C | 23.8 | C | 31.5 | D | 43.1 | D | 48.4 |
| Southbound Shared Left-Through-Through-Right | A | 9.3 | B | 11.9 | A | 9.3 | D | 53.6 | C | 28.4 | C | 32.4 |
| Williams Field Road and SR-24 WB Ramps (12) - *Signalized* | | | | | | | | | | | | |
| Overall Intersection | C | 25.1 | C | 23.9 | C | 34.6 | C | 27.3 | C | 26.3 | D | 43.8 |
| Eastbound Dual Left | D | 53.0 | D | 53.0 | D | 53.4 | D | 43.0 | D | 53.2 | D | 53.0 |
| Eastbound Through | B | 14.7 | A | 6.1 | A | 5.8 | A | 5.2 | C | 31.7 | A | 9.5 |
| Westbound Through | C | 22.9 | C | 34.4 | D | 36.7 | D | 40.6 | C | 24.6 | C | 33.9 |
| Westbound Right* | B | 17.0 | B | 19.7 | C | 31.4 | B | 15.8 | A | 8.9 | F | 100.4 |
| Northbound Left | D | 54.7 | D | 38.5 | D | 52.6 | D | 49.4 | C | 27.2 | D | 47.5 |
| Northbound Shared Through-Through-Right | A | 0.1 | A | 0.0 | A | 0.0 | C | 26.0 | B | 13.5 | C | 22.8 |
| Williams Field Road and Crismon Road (13) - *Signalized* | | | | | | | | | | | | |
| Overall Intersection | C | 30.1 | C | 24.6 | - | - | D | 47.3 | D | 39.7 | - | - |
| Eastbound Left | B | 18.5 | B | 16.4 | - | - | D | 39.1 | C | 33.7 | - | - |
| Eastbound Through | A | 1.5 | A | 0.2 | - | - | D | 36.8 | D | 38.7 | - | - |
| Eastbound Right | A | 0.0 | A | 0.0 | - | - | C | 34.6 | D | 41.7 | - | - |
| Westbound Left | A | 0.0 | A | 0.0 | - | - | A | 0.0 | A | 0.0 | - | - |
| Westbound Through | C | 27.8 | C | 25.4 | - | - | D | 52.4 | D | 41.8 | - | - |
| Westbound Right | C | 24.6 | C | 23.0 | - | - | C | 33.0 | C | 34.0 | - | - |
| Northbound Left | C | 25.3 | C | 27.7 | - | - | D | 54.0 | D | 50.0 | - | - |
| Northbound Through | A | 0.0 | A | 0.0 | - | - | A | 0.0 | A | 0.0 | - | - |
| Northbound Right | A | 0.0 | A | 0.0 | - | - | A | 0.0 | A | 0.0 | - | - |
| Southbound Left | C | 24.8 | C | 29.7 | - | - | C | 24.7 | C | 30.5 | - | - |
| Southbound Through | A | 0.0 | A | 0.0 | - | - | A | 0.0 | A | 0.0 | - | - |
| Southbound Right | D | 53.1 | D | 53.8 | - | - | D | 49.1 | C | 32.9 | - | - |
| Williams Field Road and Signal Butte Road (14) - *Signalized* | | | | | | | | | | | | |
| Overall Intersection | C | 32.2 | C | 30.2 | - | - | C | 33.5 | C | 32.5 | - | - |
| Eastbound Left | B | 17.6 | B | 15.7 | - | - | B | 18.5 | C | 22.0 | - | - |
| Eastbound Through | B | 19.3 | B | 16.8 | - | - | B | 19.6 | C | 25.4 | - | - |
| Eastbound Right | B | 19.3 | B | 16.0 | - | - | B | 19.9 | C | 25.8 | - | - |
| Westbound Left | C | 20.6 | B | 18.7 | - | - | C | 20.8 | C | 22.6 | - | - |
| Westbound Through | C | 23.8 | C | 20.6 | - | - | C | 25.1 | C | 31.3 | - | - |
| Westbound Right | C | 22.9 | B | 19.8 | - | - | C | 32.9 | C | 29.2 | - | - |
| Northbound Left | C | 25.6 | C | 29.7 | - | - | C | 27.6 | C | 28.7 | - | - |
| Northbound Through | D | 39.1 | D | 36.8 | - | - | D | 35.5 | D | 35.9 | - | - |
| Northbound Shared Through-Right | D | 38.9 | D | 36.7 | - | - | D | 35.5 | D | 35.8 | - | - |
| Southbound Left | C | 27.1 | C | 28.4 | - | - | C | 29.2 | C | 26.3 | - | - |
| Southbound Through | C | 32.9 | D | 37.8 | - | - | D | 35.3 | D | 39.4 | - | - |
| Southbound Right | D | 38.3 | D | 36.5 | - | - | D | 55.0 | D | 41.7 | - | - |
| Ellsworth Road and Talon Avenue / Driveway A (15) - *Unsignalized* | | | | | | | | | | | | |
| Eastbound Right | B | 11.9 | B | 15.0 | B | 13.9 | C | 17.1 | C | 17.7 | C | 16.5 |
| Westbound Right* | - | - | - | - | - | - | C | 15.8 | F | 155.1 | B | 14.8 |

*HCM method does not account for right turns on red, the LOS in synchro is lower.
**Low volume with high cycle lengths causes the delay/vehicle to be higher than expected.
****High volumes along Ellsworth bring intersections and movements beyond capacity.

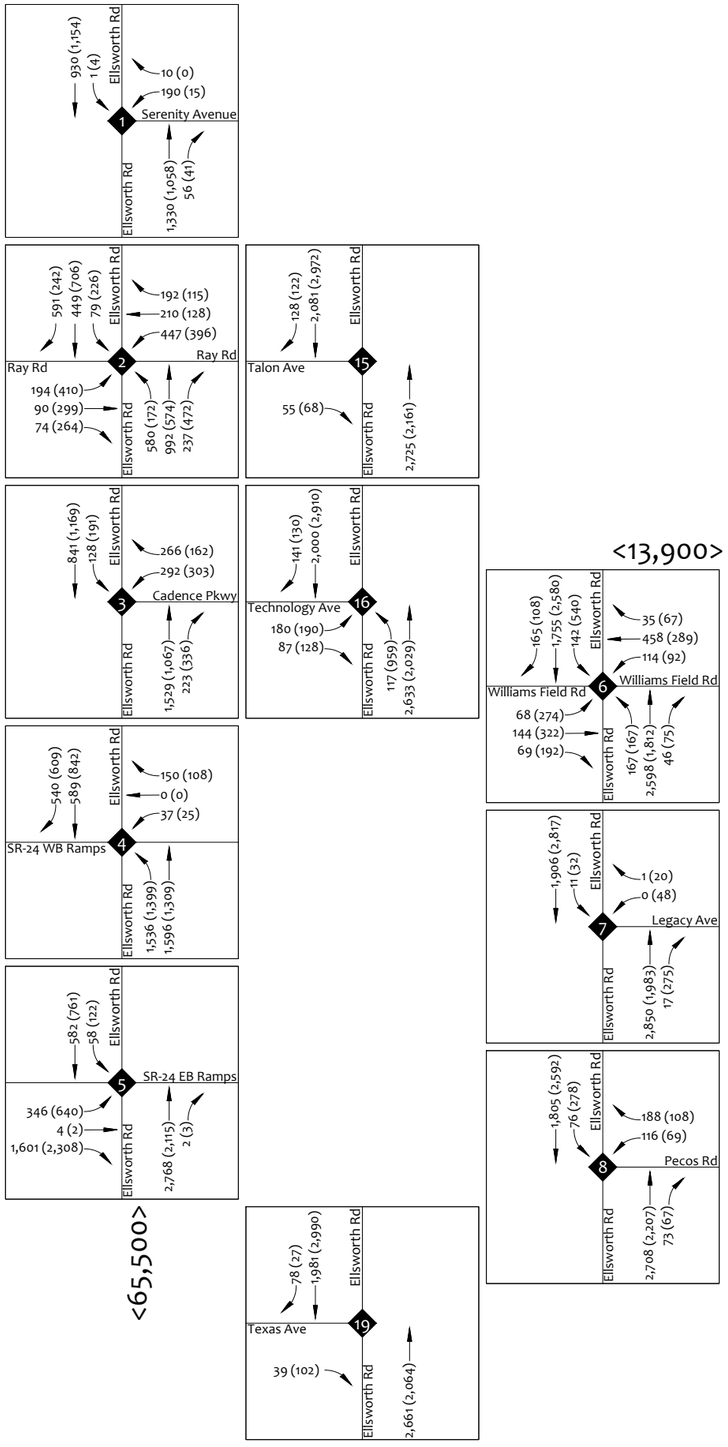
## Table 17 – Year 2044 Level of Service and Delay (4 of 4)

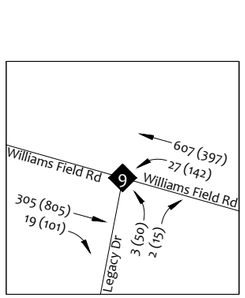
| Intersection | YEAR 2044 - *No Build* | | | | | | YEAR 2044 - BUILD | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AM Peak | | PM Peak | | Sat MD Peak | | AM Peak | | PM Peak | | Sat MD Peak | |
| | LOS | DELAY | LOS | DELAY | LOS | DELAY | LOS | DELAY | LOS | DELAY | LOS | DELAY |
| Ellsworth Road and Driveway B (16) - *Signalized* | | | | | | | | | | | | |
| Overall Intersection***** | C | 21.7 | C | 34.5 | C | 32.6 | F | 153.8 | F | 191.4 | F | 155.7 |
| Eastbound Left | D | 51.1 | D | 53.2 | D | 53.2 | D | 52.1 | D | 39.9 | C | 34.3 |
| Eastbound Through | - | - | - | - | - | - | A | 0.0 | A | 0.0 | A | 0.0 |
| Eastbound Right | D | 44.5 | D | 48.6 | D | 48.6 | D | 50.0 | E | 55.3 | D | 42.7 |
| Westbound Left | - | - | - | - | - | - | D | 47.8 | D | 38.5 | D | 38.3 |
| Westbound Shared Through-Right | - | - | - | - | - | - | A | 0.0 | A | 0.0 | A | 0.0 |
| Westbound Right | - | - | - | - | - | - | E | 58.6 | F | 312.9 | D | 50.6 |
| Northbound Left | C | 34.5 | D | 46.1 | D | 42.3 | D | 47.7 | E | 68.0 | C | 28.9 |
| Northbound Through | A | 3.5 | A | 0.8 | B | 19.7 | F | 151.5 | F | 197.7 | F | 168.1 |
| Northbound Right | - | - | - | - | - | - | C | 22.0 | C | 28.7 | A | 8.9 |
| Southbound Dual Left | - | - | - | - | - | - | F | 603.0 | F | 160.3 | E | 70.8 |
| Southbound Through | D | 39.2 | D | 50.5 | D | 37.0 | E | 56.1 | F | 192.2 | F | 185.8 |
| Southbound Shared Through-Right* | D | 41.3 | E | 62.9 | D | 44.1 | E | 73.3 | F | 207.5 | F | 202.0 |
| Ellsworth Road and Park Avenue (17) - *Unsignalized* | | | | | | | | | | | | |
| Westbound Right | - | - | - | - | - | - | C | 18.5 | C | 19.8 | C | 16.6 |
| Ellsworth Road and Driveway C (18) - *Signalized* | | | | | | | | | | | | |
| Overall Intersection | - | - | - | - | - | - | E | 62.7 | E | 68.5 | C | 33.9 |
| Westbound Left | - | - | - | - | - | - | D | 48.5 | D | 49.7 | D | 44.3 |
| Westbound Right* | - | - | - | - | - | - | D | 50.1 | F | 201.5 | D | 53.2 |
| Northbound Through**** | - | - | - | - | - | - | F | 101.4 | F | 113.8 | D | 52.4 |
| Northbound Right | - | - | - | - | - | - | A | 3.3 | A | 7.3 | A | 5.7 |
| Southbound Left | - | - | - | - | - | - | F | 86.0 | D | 51.5 | E | 79.3 |
| Southbound Through | - | - | - | - | - | - | A | 7.5 | A | 9.1 | B | 10.8 |
| Ellsworth Road and Pennsylvania Avenue / Driveway D (19) - *Unsignalized* | | | | | | | | | | | | |
| Eastbound Right | B | 11.5 | C | 16.2 | B | 14.8 | B | 12.5 | C | 19.6 | C | 16.2 |
| Westbound Right | - | - | - | - | - | - | C | 21.0 | D | 31.1 | B | 14.1 |
| Southbound Left**** | - | - | - | - | - | - | F | 1213.4 | E | 39.7 | E | 42.7 |
| Williams Field Road and Driveway E (20) - *Unsignalized* | | | | | | | | | | | | |
| Southbound Right | - | - | - | - | - | - | B | 10.3 | B | 10.6 | B | 10.9 |
| Williams Field Road and Driveway F (21) - *Unsignalized* | | | | | | | | | | | | |
| Southbound Right | - | - | - | - | - | - | A | 10.0 | B | 10.4 | B | 10.7 |
| Williams Field Road and Legacy Park 3/4 (22) - *Unsignalized* | | | | | | | | | | | | |
| Eastbound Left | - | - | - | - | - | - | B | 14.3 | B | 13.4 | B | 14.5 |
| Southbound Right | - | - | - | - | - | - | B | 10.4 | A | 10.0 | B | 10.2 |
| Williams Field Road and Driveway H (23) - *Unsignalized* | | | | | | | | | | | | |
| Southbound Right | - | - | - | - | - | - | B | 10.3 | B | 10.1 | B | 10.2 |
| Williams Field Road and Driveway I (24) - *Unsignalized* | | | | | | | | | | | | |
| Eastbound Left | - | - | - | - | - | - | B | 14.9 | B | 13.9 | B | 14.7 |
| Southbound Right | - | - | - | - | - | - | B | 10.3 | B | 10.1 | B | 10.3 |
| Williams Field Road and Gateway RI/RO (25) - *Unsignalized* | | | | | | | | | | | | |
| Northbound Right | - | - | - | - | - | - | A | 9.8 | B | 11.5 | B | 12.8 |

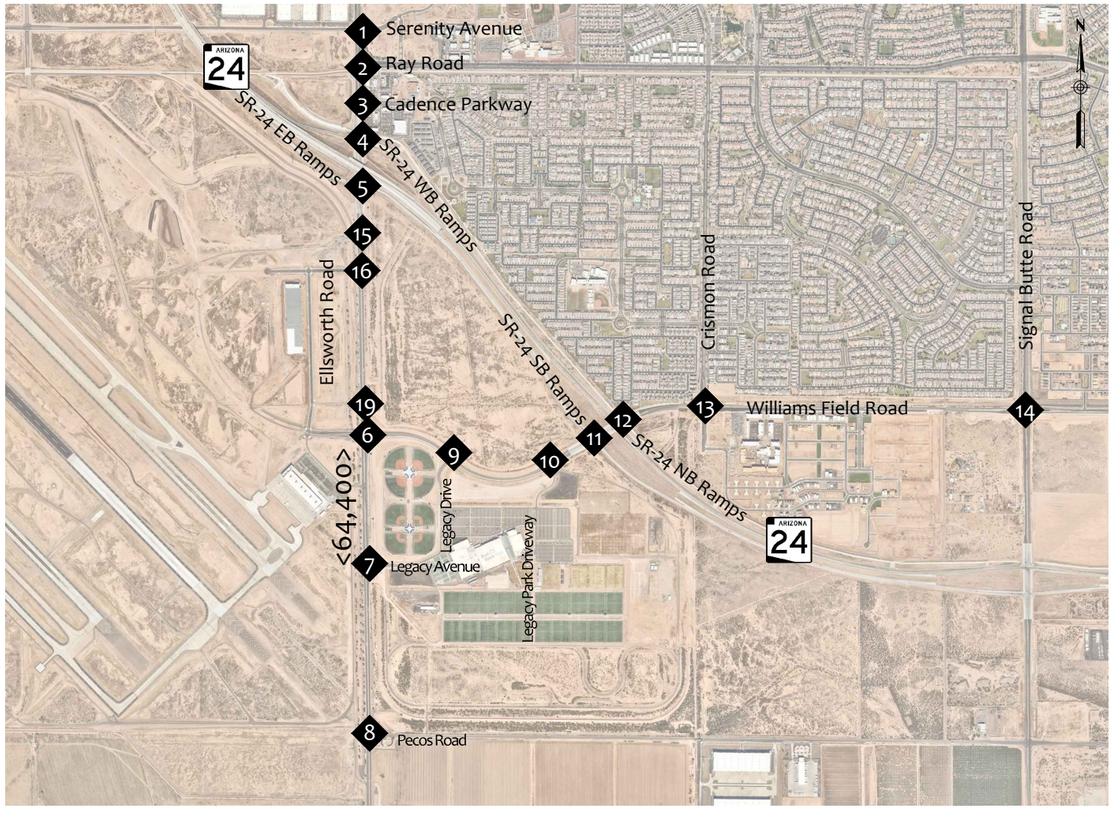
*HCM method does not account for right turns on red, the LOS in synchro is lower.
****High volumes along Ellsworth bring intersections and movements beyond capacity.

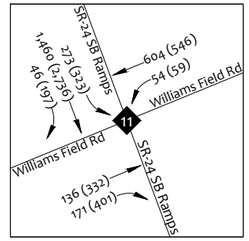
LEGEND

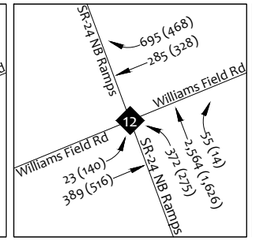
| | |
|---|---|
| AM (PM) | Peak Hour Traffic Volumes |
| X | Intersection |
| <X,XXX> | Average Daily Traffic |

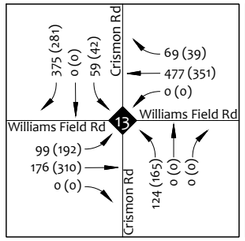


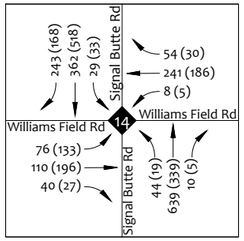



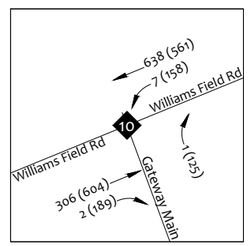
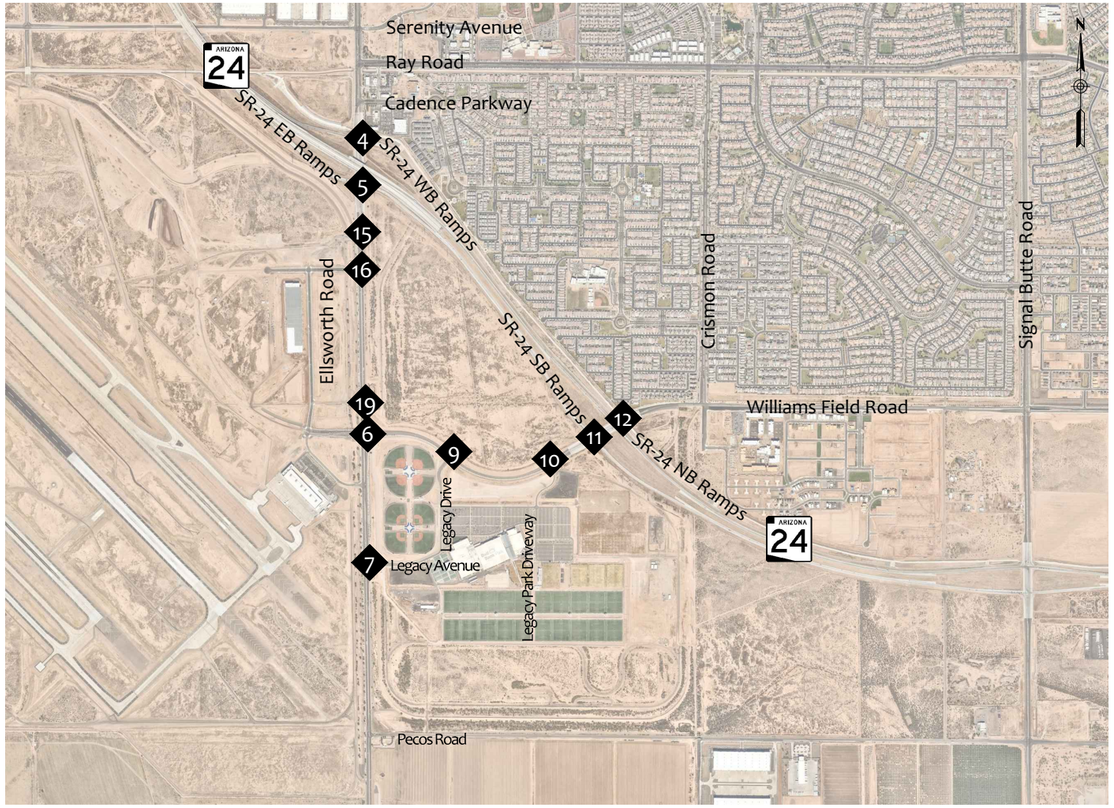
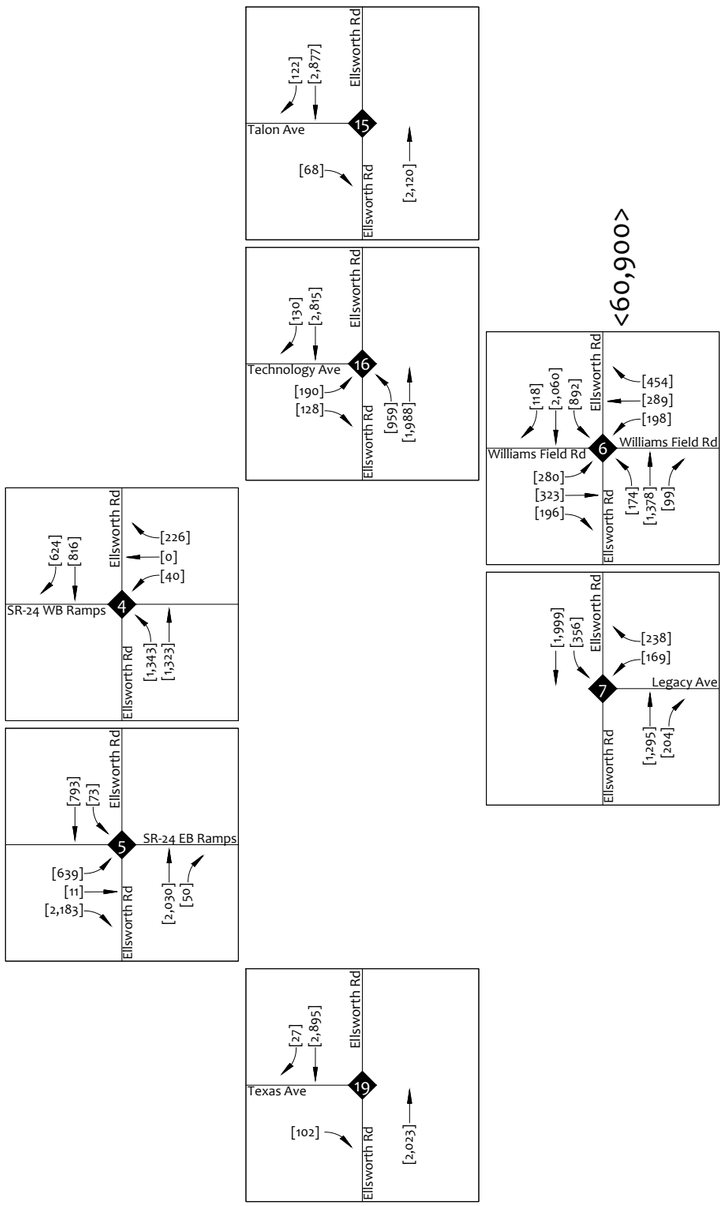



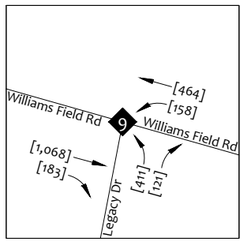

FIGURE 26 | YEAR 2044 BACKGROUND TRAFFIC VOLUMES (WEEKDAY)

LEGEND

| | |
|---|---|
| [Saturday MD] | Peak Hour Traffic Volumes |
| X | Intersection |
| <X,XXX> | Average Daily Traffic |

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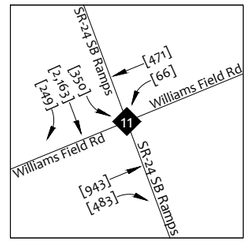
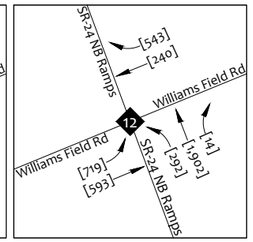


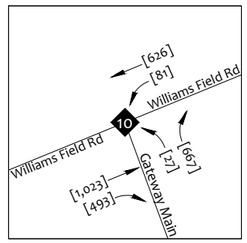



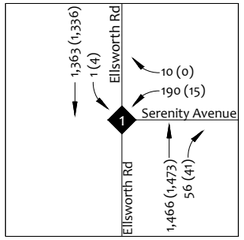

FIGURE 27 | YEAR 2044 BACKGROUND TRAFFIC VOLUMES (SATURDAY)

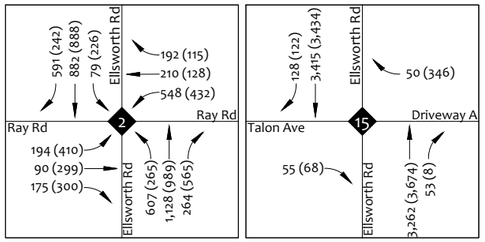
LEGEND

AM (PM) Peak Hour Traffic Volumes

X Intersection

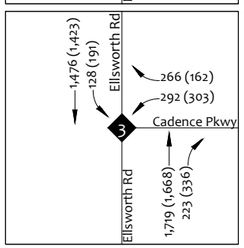
<X,XXX> Average Daily Traffic

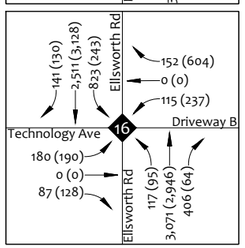


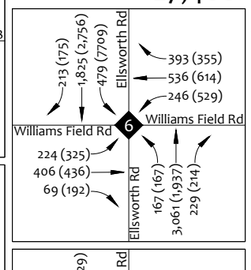



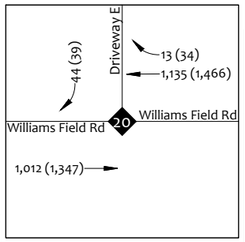


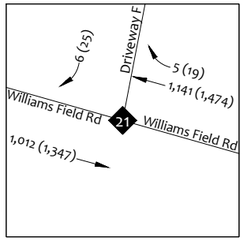


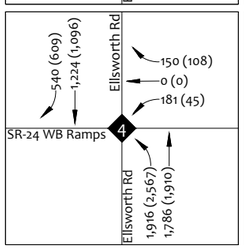


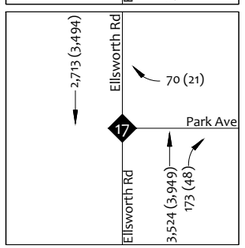



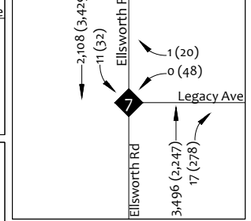



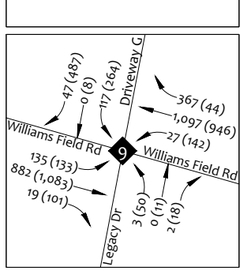



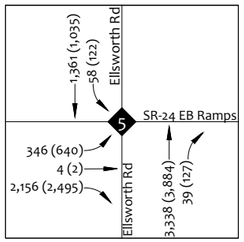



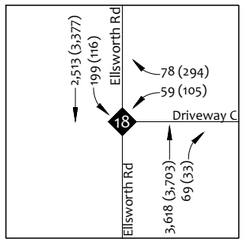



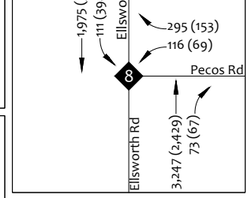



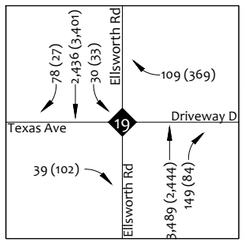

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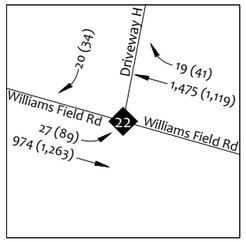
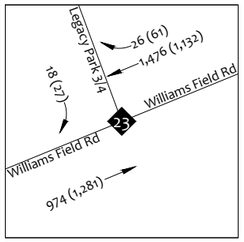
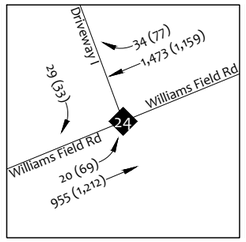
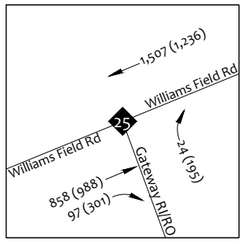
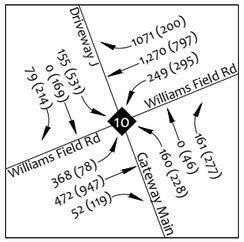
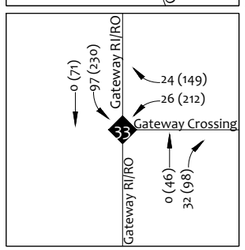


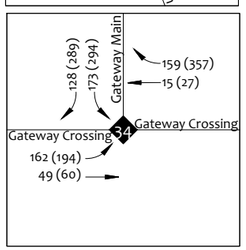



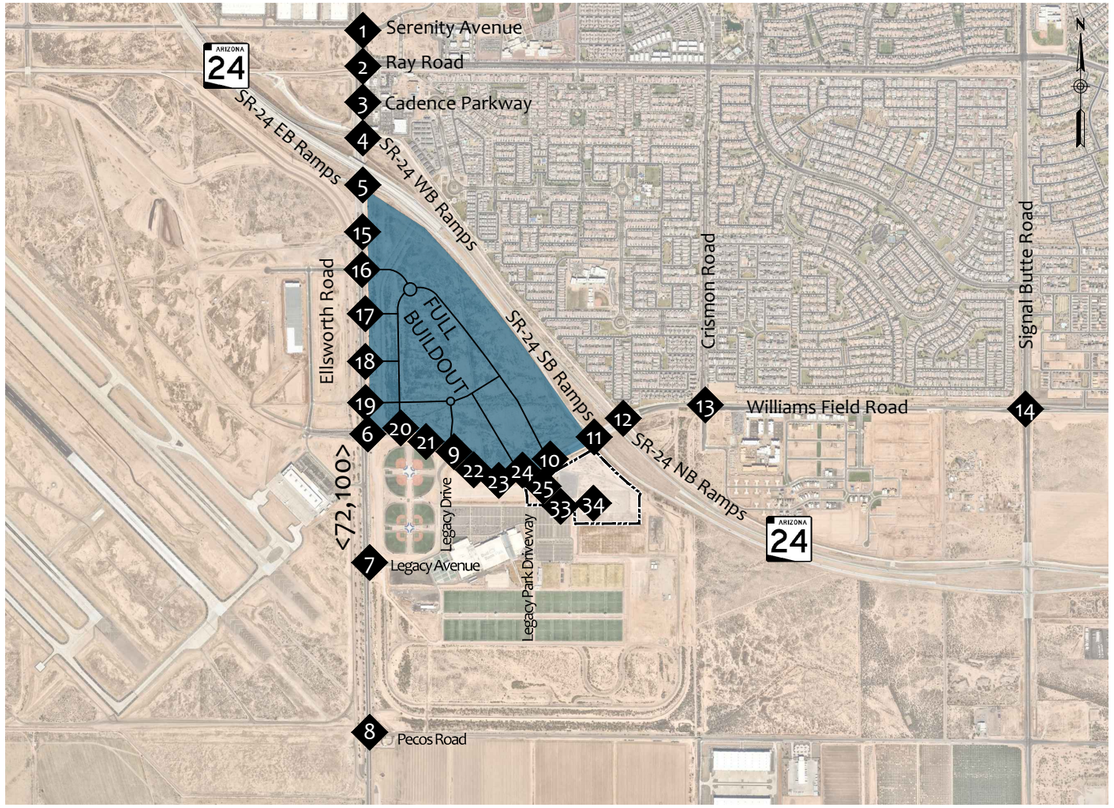



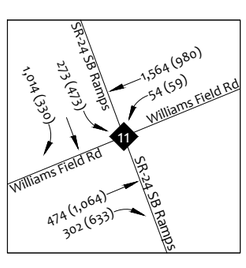



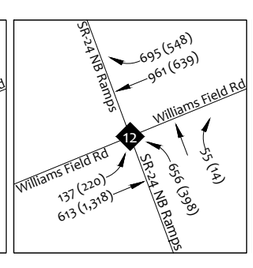



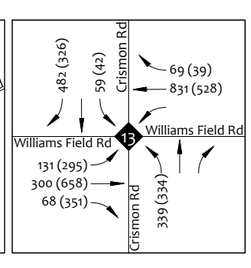



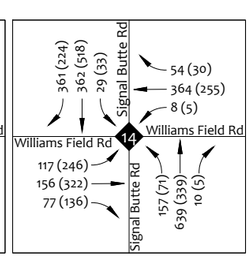
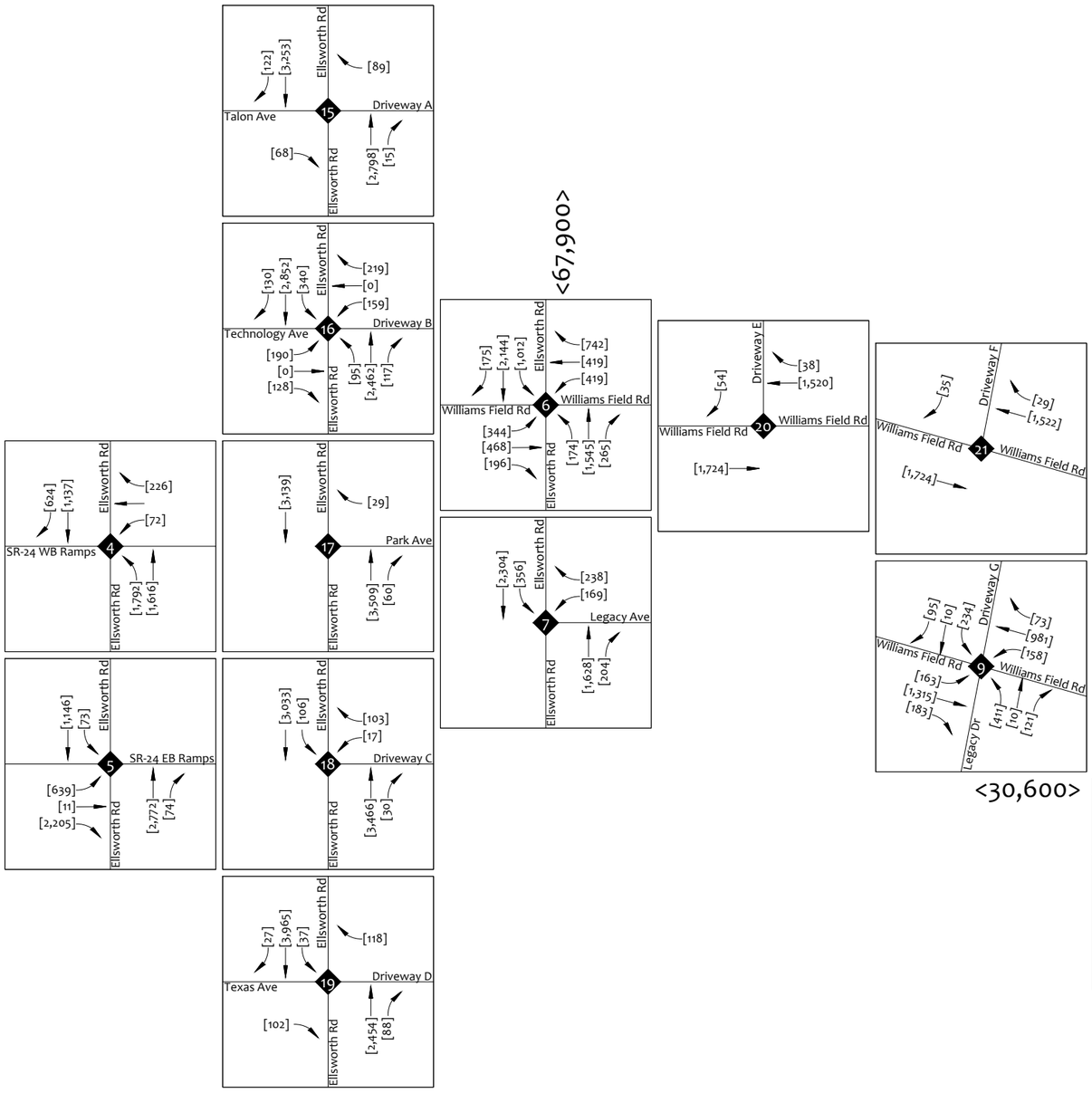
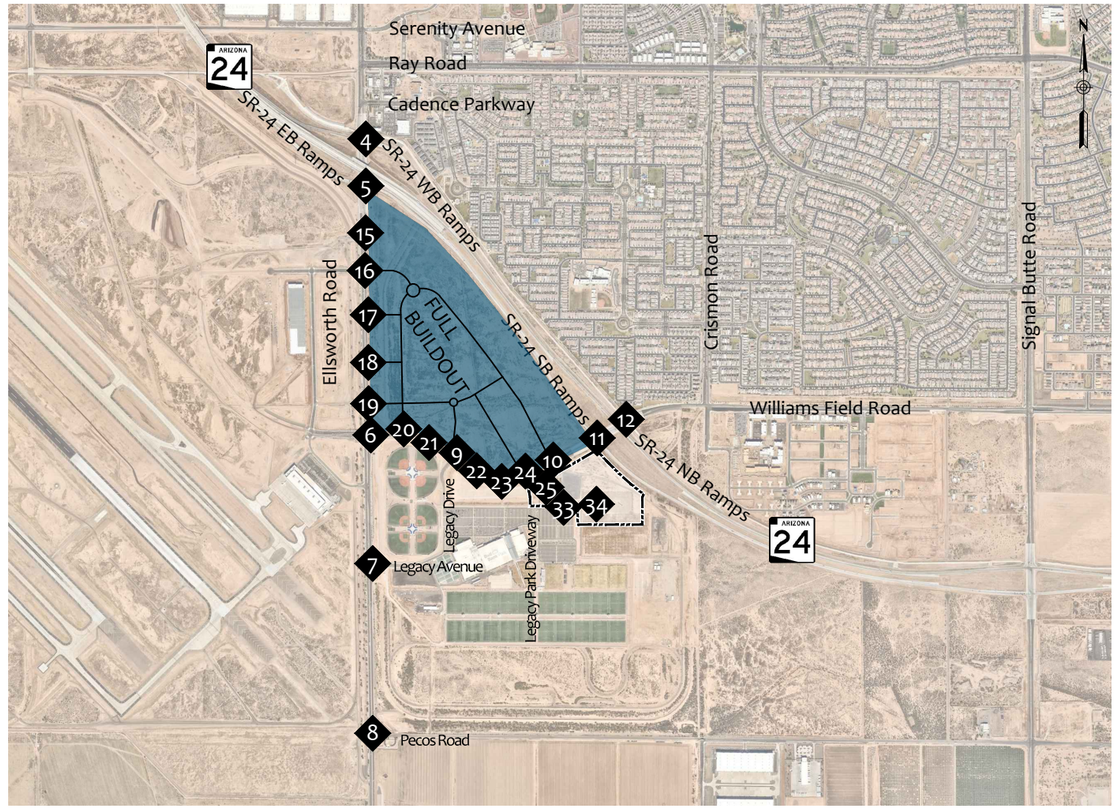



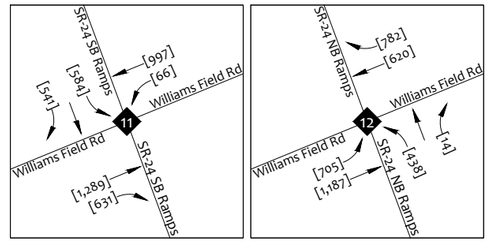

FIGURE 28 | YEAR 2044 BUILD TRAFFIC VOLUMES (WEEKDAY)

LEGEND

| | |
|---|---|
| [Saturday MD] | Peak Hour Traffic Volumes |
| X | Intersection |
| <X,XXX> | Average Daily Traffic |

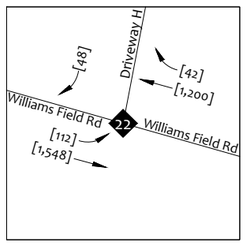


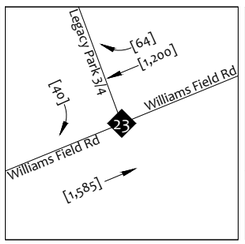



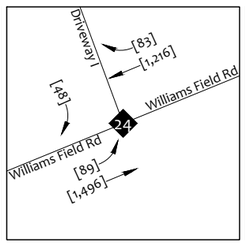



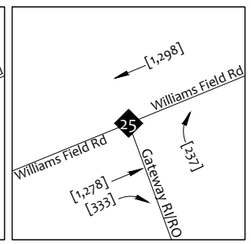


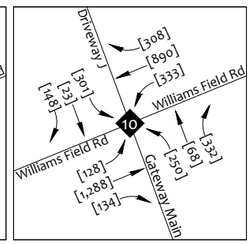


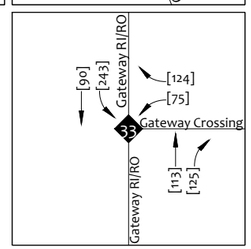


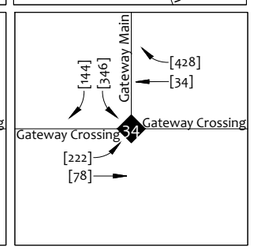



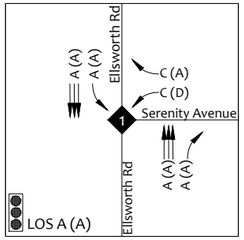

FIGURE 29 | YEAR 2044 BUILD TRAFFIC VOLUMES (SATURDAY)

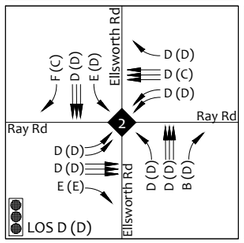
LEGEND

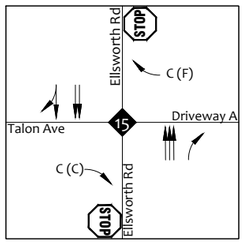
AM (PM) Peak Hour Capacity Analysis

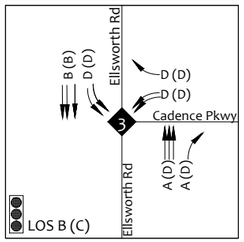
Intersection

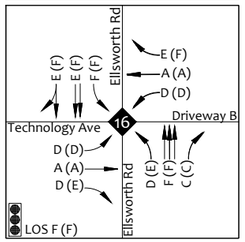
Lane Configuration

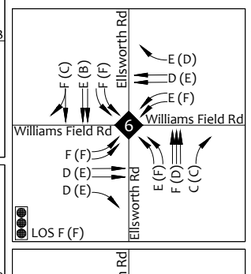


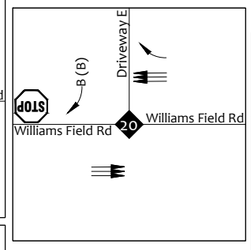



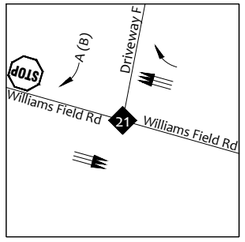



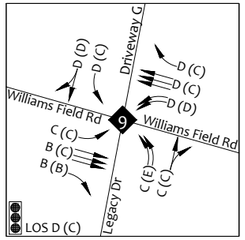



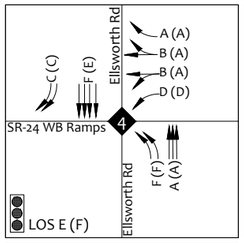



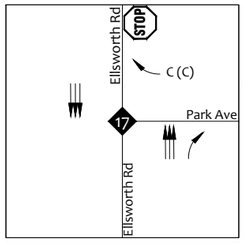



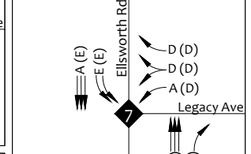



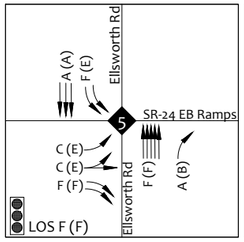



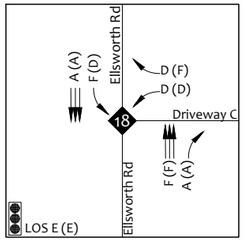



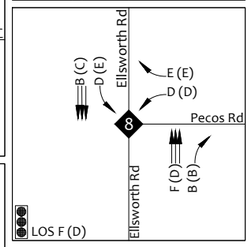



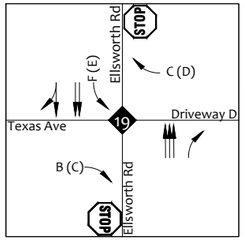



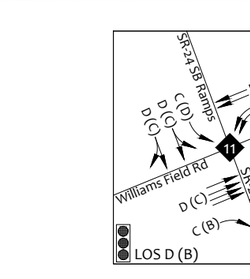



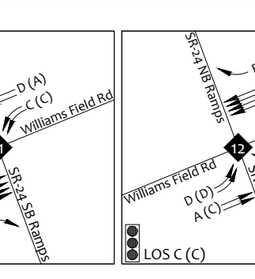



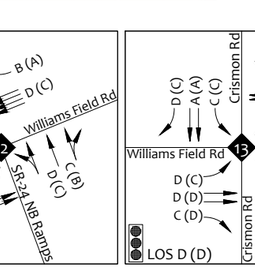



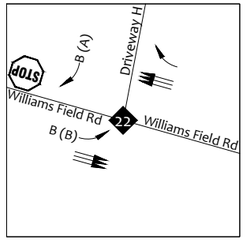


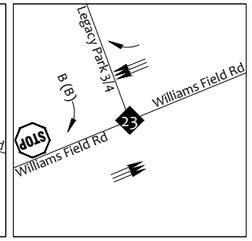


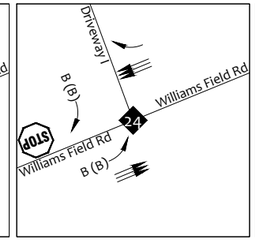


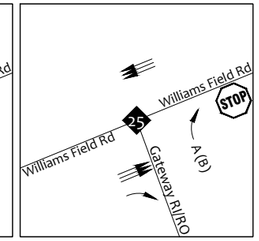



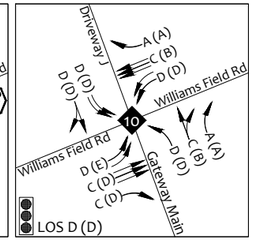



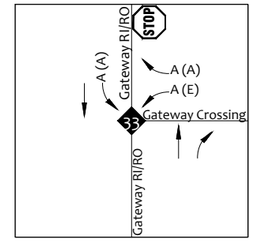



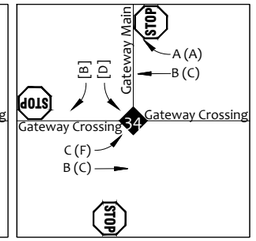



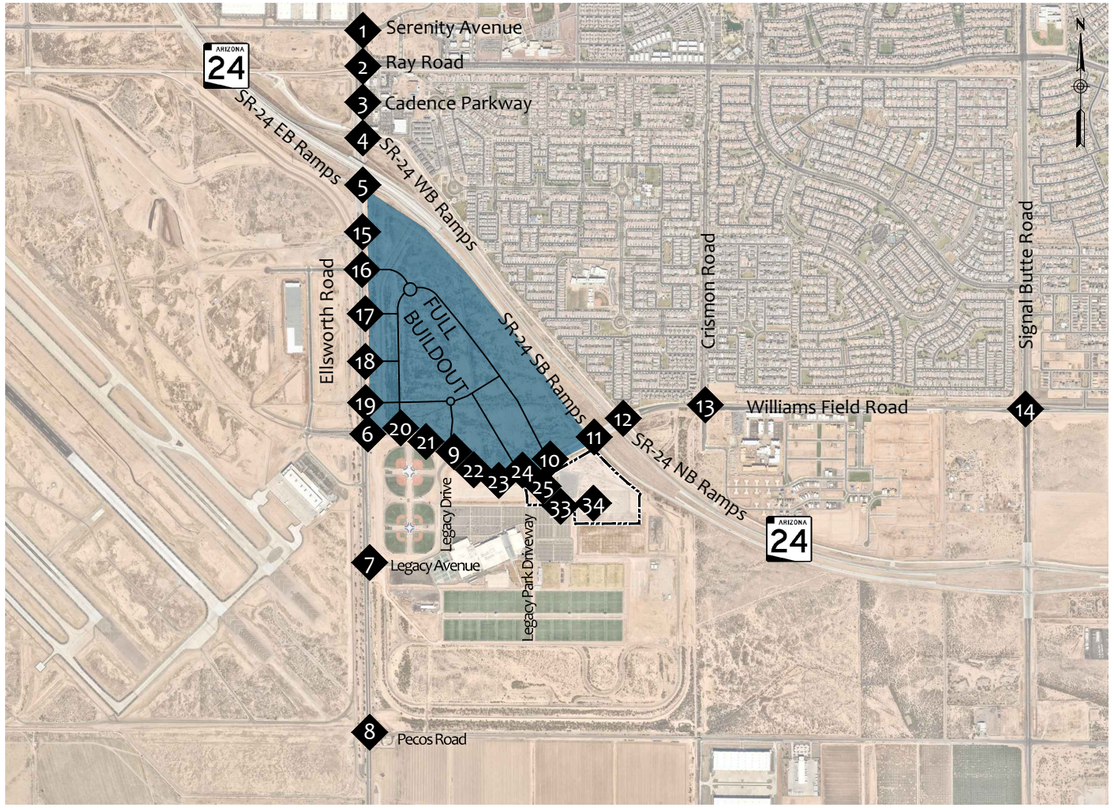
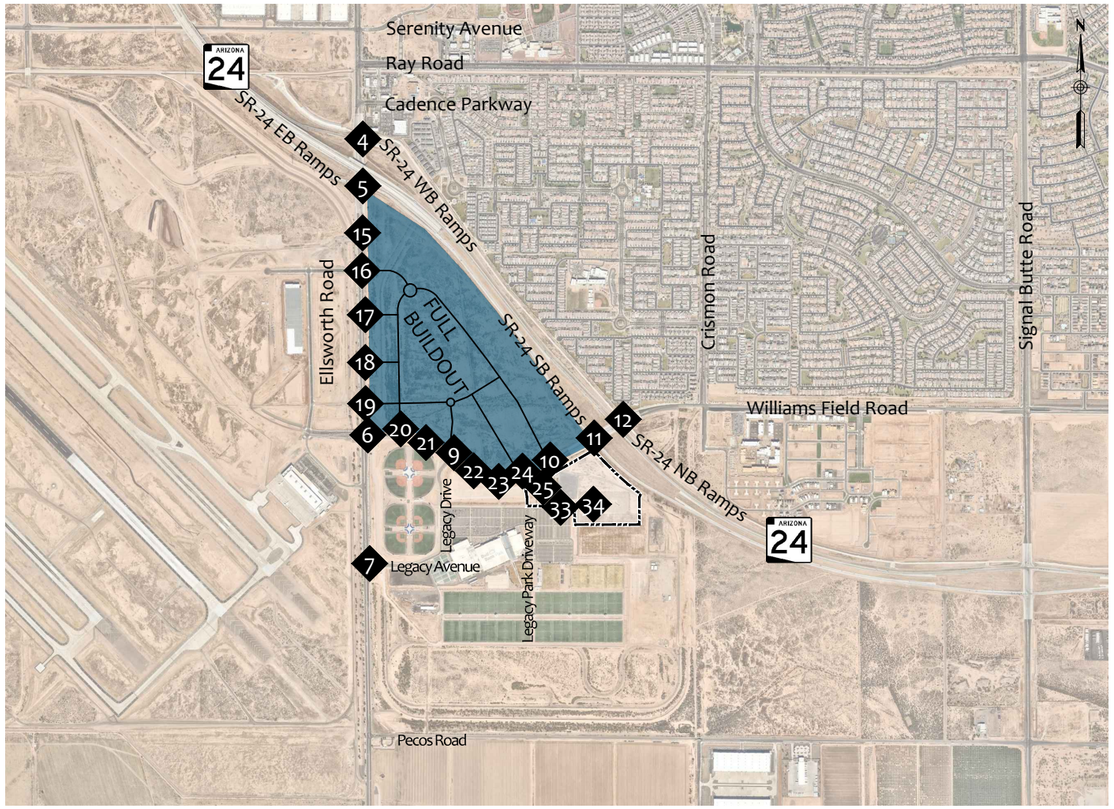
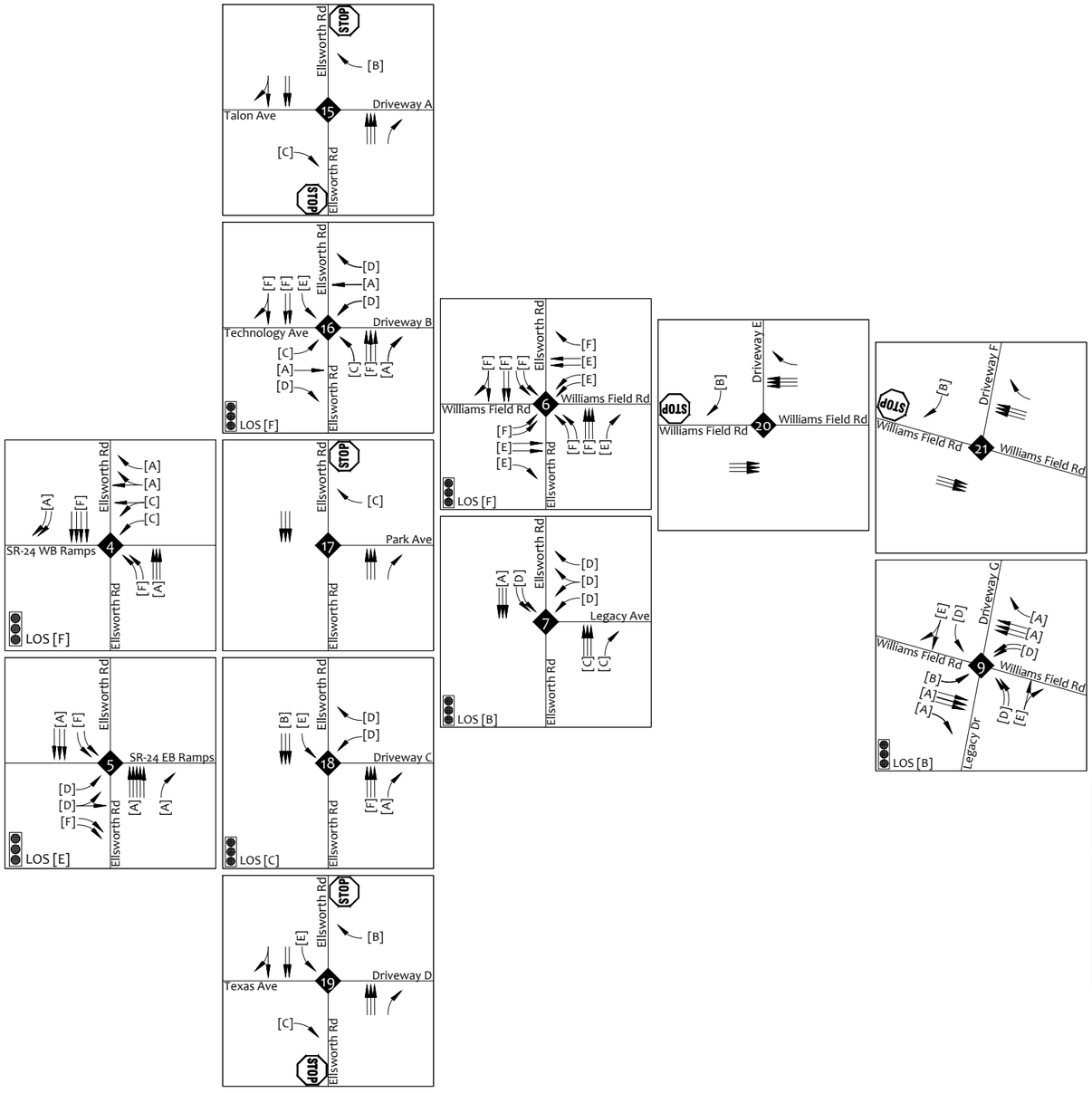




FIGURE 30 | YEAR 2044 BUILD CAPACITY ANALYSIS (WEEKDAY)

LEGEND

| | |
|---|---|
| [Saturday MD] | Peak Hour Capacity Analysis |
| X | Intersection |
| | Lane Configuration |



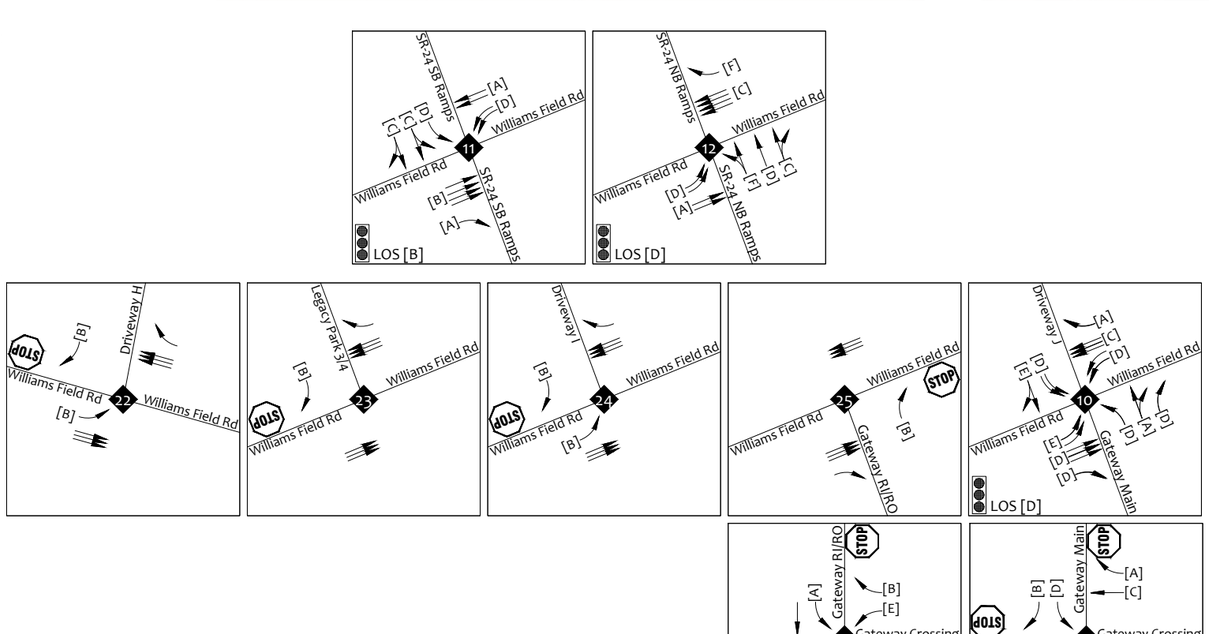




FIGURE 31 | YEAR 2044 BUILD CAPACITY ANALYSIS (SATURDAY)

# 8. ARIZONA ATHLETIC GROUNDS

Arizona Athletic Grounds is a large multi-sport and entertainment complex located on the southeast corner of William Fields Road and Ellsworth Road in Mesa, Arizona. The facility consists of a combination of indoor and outdoor athletic facilities designed to accommodate a variety of organized sports activities. The site includes multiple outdoor playing fields and a large indoor fieldhouse supporting basketball, volleyball, and similar court sports, along with associated parking and spectator amenities. The facility operates as a high-intensity, event-driven land use, generating concentrated traffic demand during peak periods associated with tournaments, league play, and special events. As a result, the complex represents a significant trip generator within the study area, with distinct temporal variations in traffic patterns, particularly during weekend and evening peak periods.

To account for the significant impacts of the existing Arizona Athletic Grounds, traffic counts were collected on Saturday, January 24, 2026, six hours of typical Saturday turning movement counts were obtained during the AM (6:30 to 8:30 am), MD (1:30 to 3:30 pm), and PM (6:00 to 8:00 pm) peak hours.

The intent of the weekend traffic counts was to collect existing traffic data for a 'typical' weekend at the facility. Arizona Athletic Grounds provided a schedule of events planned for the weekend that counts were collected. See **Appendix N** for weekend schedule.

Arizona Athletic Grounds provided visitor numbers for each month of 2025, which are shown in **Table 18** below.

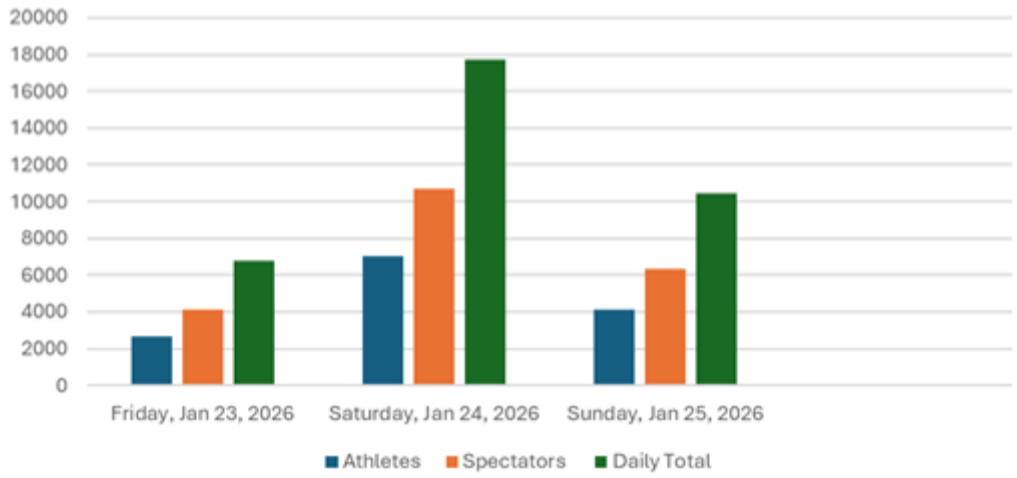
**Table 18 – AAG 2025 Visitor Numbers**

| Month | Visitors | Rank |
|---|---|---|
| **January** | **368,413** | **2** |
| February | 316,835 | 3 |
| March | 297,487 | 4 |
| April | 250,631 | 6 |
| May | 120,732 | 11 |
| June | 188,753 | 9 |
| July | 88,614 | 12 |
| August | 132,571 | 10 |
| September | 200,126 | 8 |
| October | 226,879 | 7 |
| November | 259,010 | 5 |
| December | 415,254 | 1 |
| **2025 Average** | **238,775** | |

As detailed in **Table 18** above, January was the second-busiest month of 2025 for Arizona Athletic Grounds. For the year 2025, the month of January had approximately 54.3% higher visitation than the yearly average visitation for Arizona Athletic Grounds.

Additionally, Arizona Athletic Grounds provided an estimate of the weekend attendance projections based on the planned events for the weekend of data collection, shown in **Figure 32** below.

**Figure 32 – AAG Weekend Attendance Projections**




It is observed in **Figure 32** above that Saturday was anticipated to be the busiest day of the selected weekend. Based on the data provided by Arizona Athletic Grounds, the traffic counts collected on Saturday, January 24, 2026 should be considered higher than average due to consideration of the month (January) and day (Saturday) selected for data collection.

# 9. INTERNAL ROADWAYS

## 9.1. INTERNAL ROADWAY SIZING

This section analyzes the roadway sizing of the internal collector streets. Appendix A: Mesa Street Typologies of the City of Mesa *Transportation Master Plan*, dated 2024, defines roadway capacity according to roadway setting, functional classification, number of lanes, and presence of a median. Relevant information from Appendix A: Mesa Street Typologies is shown below in **Table 19**.

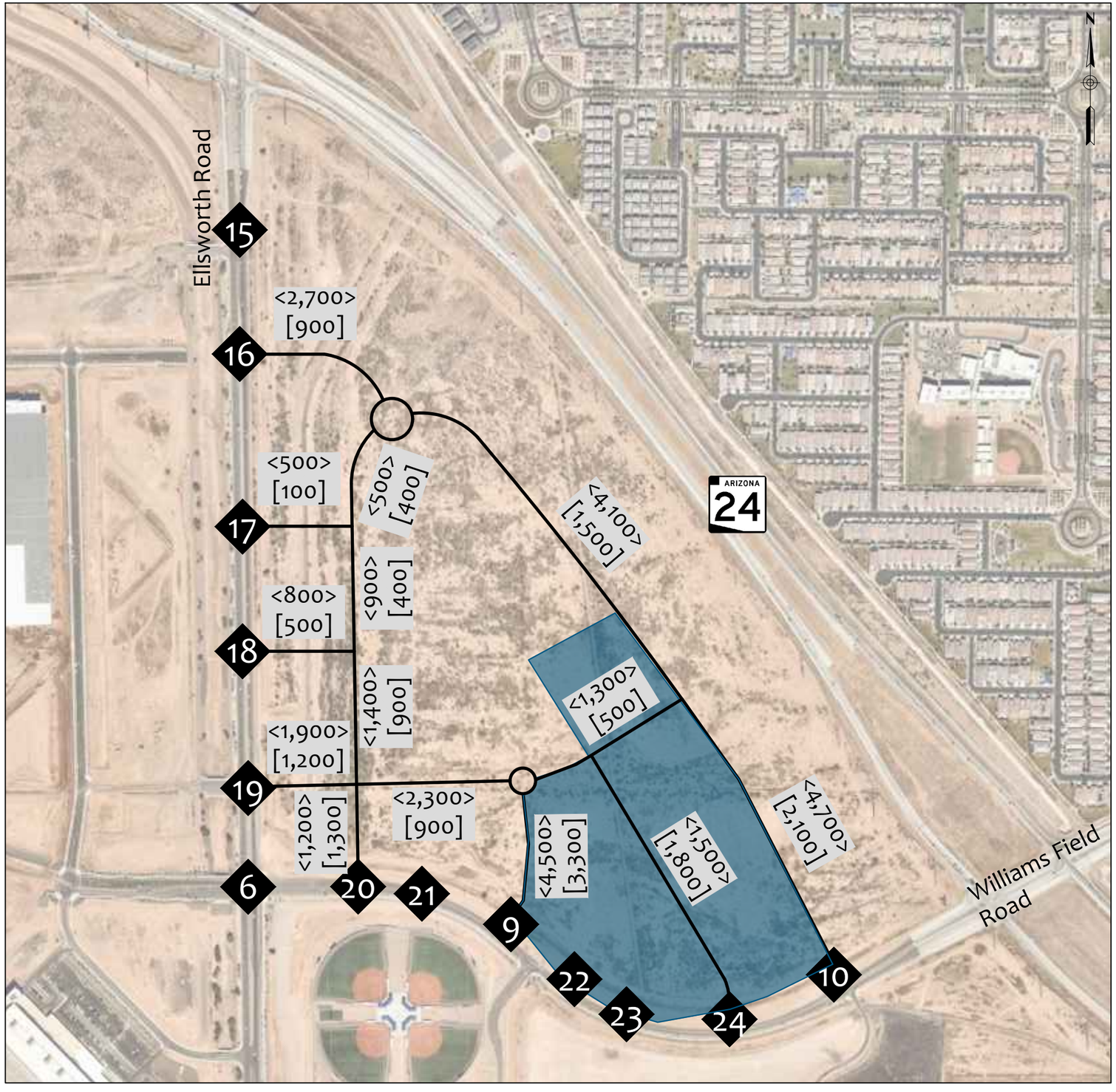
**Table 19 – Capacity of City of Mesa Street Typologies**

| Functional Classification | Setting | # Lanes | Median | Capacity (vpd) |
|---|---|---|---|---|
| Collectors | Employment / Activity Center | 2 | Unmarked | 3,000 |
| | | 2 | Undivided | 12,000 |
| | | 2 | Center | 20,000 |
| | | 4 | Center | 30,000 |
| | | 6 | Center | > 30,000 |

As detailed in this section, internal roadways will be built out to a two-lane divided major collector for year 2029 with the Legacy Park 'CORE' component. Legacy Street will be built out to a four-lane divided major collector for the year 2044 upon full buildout of the Legacy Park development.

The daily traffic volumes of internal roadways were determined using trip generation for the proposed Legacy Park 'CORE' phase and full buildout as well as the trip distributions shown in **Figure 12** and **Figure 16**. The internal collector roadway system and corresponding ADTs for year 2029 ('CORE') and year 2044 (full buildout) are shown in **Figure 33** and **Figure 34**, respectively.

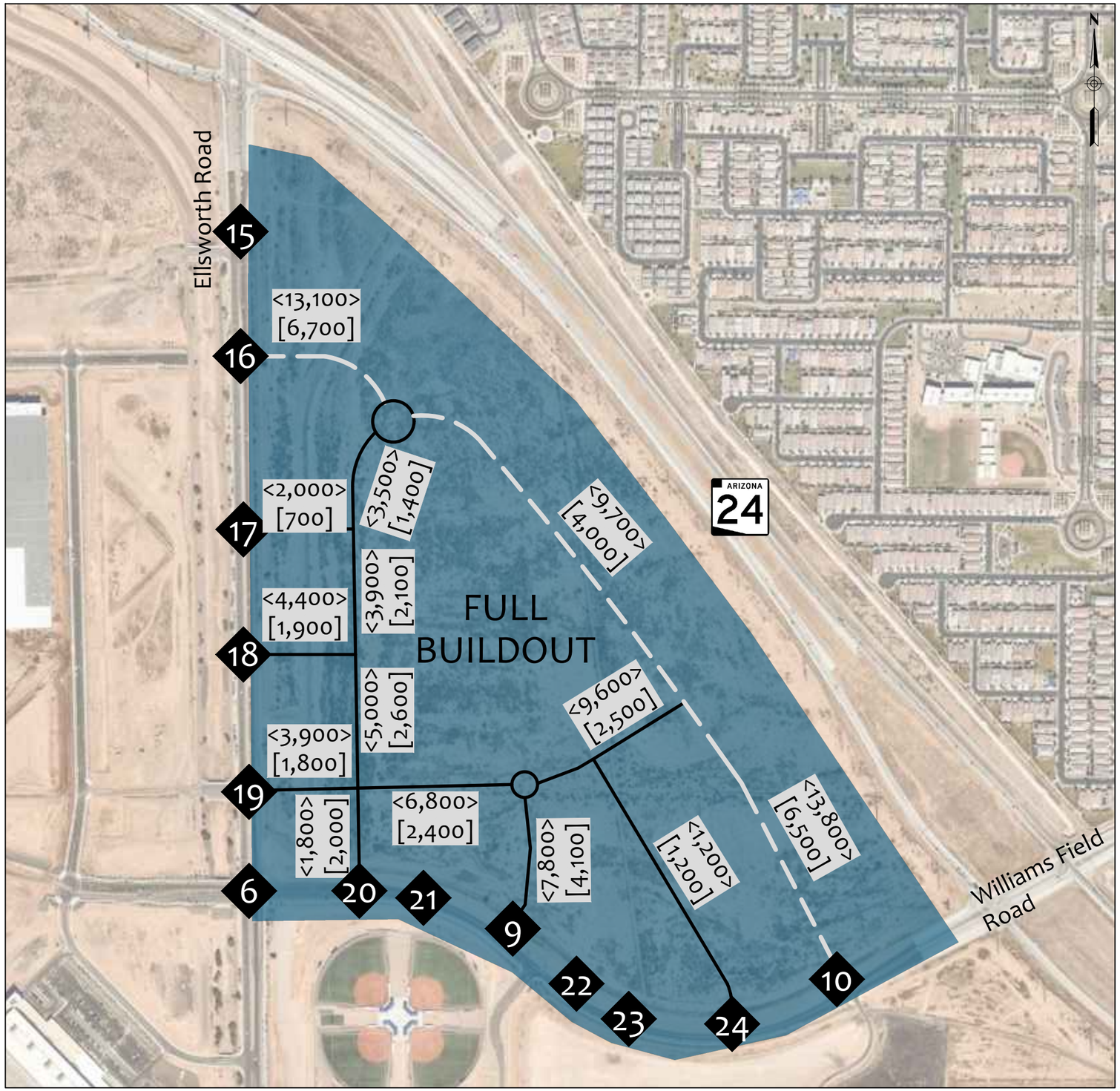
As shown in **Figure 33** and **Figure 34**, all internal collector roadways have daily traffic volumes in accordance with the Mesa Street Typologies for both the proposed 'CORE' and full buildout stages of development.




LEGEND

| | |
|---|---|
| <X,XXX> | Weekday Average Daily Traffic |
| [X,XXX] | Saturday Average Daily Traffic |
| X | Intersection |
| | Two-lane Divided Collector |
| | Four-lane Divided Collector |

FIGURE 33 | YEAR 2029 INTERNAL ROADWAY SIZING




LEGEND

| | |
|---|---|
| <X,XXX> | Weekday Average Daily Traffic |
| [X,XXX] | Saturday Average Daily Traffic |
| X | Intersection |
| | Two-lane Divided Collector |
| | Four-lane Divided Collector |

FIGURE 34 | YEAR 2044 INTERNAL ROADWAY SIZING

## 9.2. INTERNAL INTERSECTIONS CAPACITY ANALYSIS

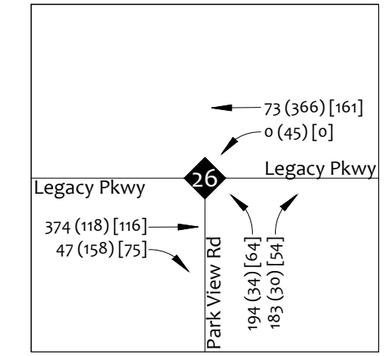
This section analyzes the roadway capacity of the internal intersections of Legacy Park at full buildout (year 2044 build). The analysis for the study area intersections was completed using the methodology described in **Section 4.2**. A peak hour factor (PHF) of 0.92 was used for future conditions.

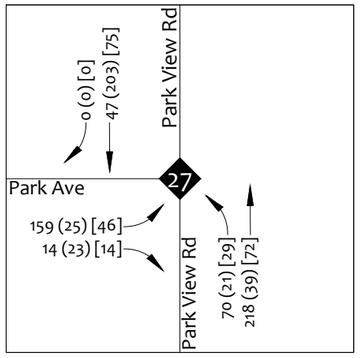
The capacity and level of service for the internal intersections of Legacy Park (**Figure 36**) were evaluated for the year 2044 weekday build traffic volumes and the year 2044 Saturday build traffic volumes, both shown in **Figure 35**. See **Table 20** for the year 2044 build level of service and delay for the internal intersections of the proposed Legacy Park.

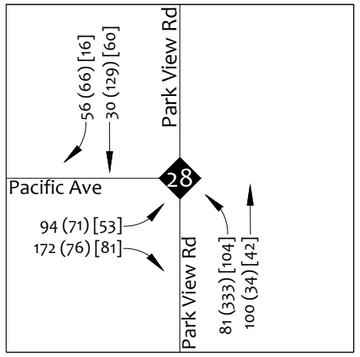
The year 2044 build capacity analysis sheets for the internal intersections can be found in **Appendix M**.

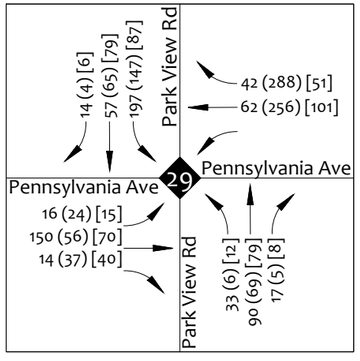
## Table 20 – Year 2044 Level of Service and Delay (Internal Intersections)

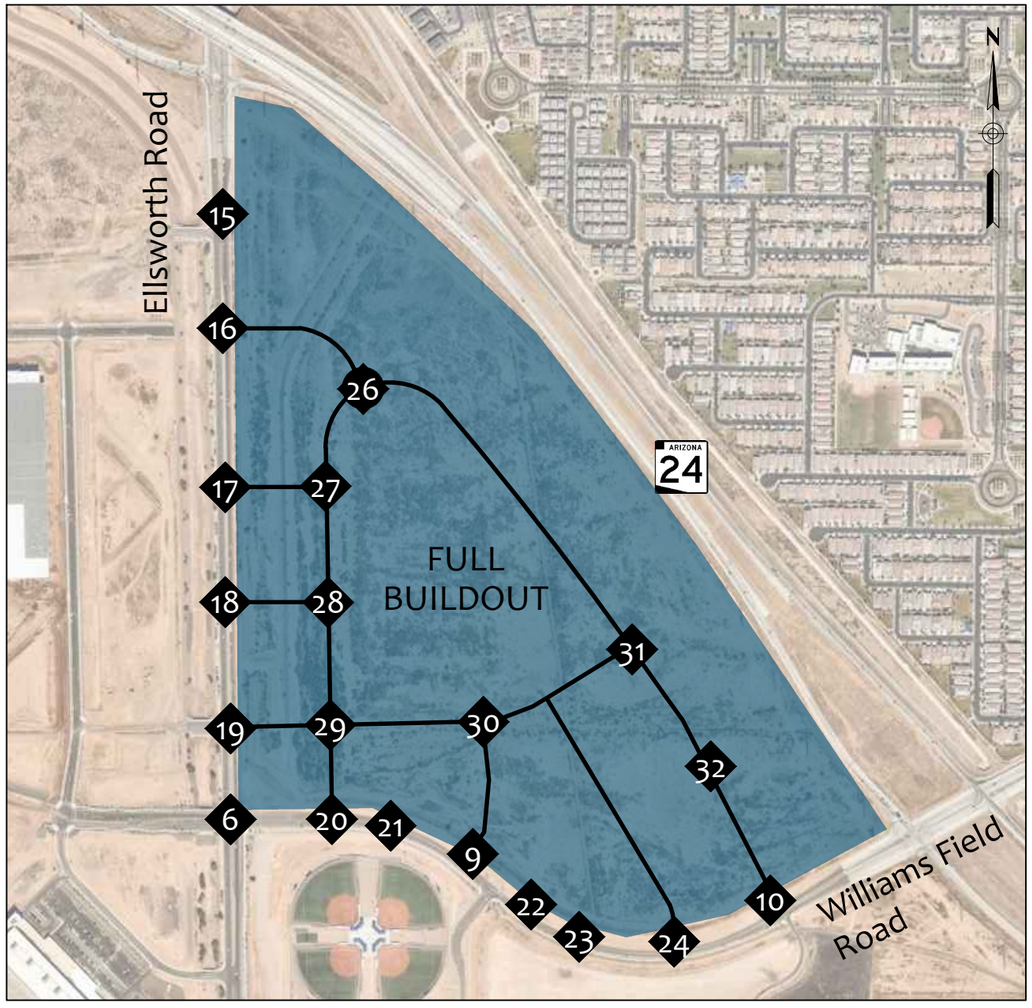
| Intersection | Year 2044 - BUILD | | | | | |
|---|---|---|---|---|---|---|
| | AM Peak | | PM Peak | | Sat MD Peak | |
| | LOS | DELAY | LOS | DELAY | LOS | DELAY |
| Legacy Parkway and Park View Road (26) - *Unsignalized Roundabout* | | | | | | |
| Overall Intersection | A | 5.9 | A | 4.4 | A | 3.6 |
| Northbound Shared Left-Right | A | 3.3 | A | 3.1 | A | 2.8 |
| Westbound Left | A | 3.7 | A | 5.3 | A | 3.8 |
| Westbound Shared Through-Right | A | 4.3 | A | 3.7 | A | 3.4 |
| Eastbound Left | A | 3.8 | A | 3.7 | A | 3.1 |
| Eastbound Shared Through-Right | A | 8.4 | A | 3.4 | A | 3.7 |
| Park View Road and Park Avenue (27) - *Unsignalized* | | | | | | |
| Overall Intersection | A | 6.0 | A | 2.1 | A | 4.1 |
| Northbound Left | A | 7.4 | A | 7.7 | A | 7.4 |
| Eastbound Shared Left-Right | B | 14.6 | B | 10.3 | A | 9.8 |
| Park View Road and Pacific Avenue (28) - *Unsignalized* | | | | | | |
| Overall Intersection | A | 7.0 | A | 8.9 | A | 6.2 |
| Northbound Left | A | 7.5 | A | 8.6 | A | 7.6 |
| Eastbound Shared Left-Right | B | 11.8 | C | 23.6 | B | 10.6 |
| Park View Road and Pennsylvania Avenue (29) - *Unsignalized* | | | | | | |
| Overall Intersection | A | 9.5 | A | 9.6 | A | 6.7 |
| Northbound Shared Left-Through-Right | A | 9.3 | C | 18.1 | B | 12.0 |
| Eastbound Shared Left-Through-Right | A | 9.7 | A | 8.8 | A | 7.6 |
| Westbound Shared Left-Through-Right | A | 8.7 | A | 0.0 | A | 0.0 |
| Southbound Shared Left-Through-Right | A | 9.8 | D | 34.7 | B | 13.9 |
| Legacy Drive and Pennsylvania Avenue (30) - *Unsignalized Roundabout* | | | | | | |
| Overall Intersection | A | 7.2 | B | 12.6 | A | 4.0 |
| Eastbound Shared Left-Through-Right | A | 5.4 | A | 7.0 | A | 4.0 |
| Westbound Shared Left-Through-Right | A | 3.3 | B | 14.9 | A | 3.9 |
| Northbound Shared Left-Through-Right | A | 9.4 | A | 3.6 | A | 4.0 |
| Legacy Parkway and Pennsylvania Avenue (31) - *Unsignalized* | | | | | | |
| Overall Intersection | A | 9.9 | A | 1.1 | A | 1.7 |
| Northbound Left | A | 0.0 | A | 8.0 | A | 7.4 |
| Eastbound Shared Left-Right | C | 15.8 | B | 10.6 | A | 9.3 |
| Legacy Parkway and Full Access Driveway (32) - *Unsignalized* | | | | | | |
| Overall Intersection | A | 1.3 | A | 2.4 | A | 3.1 |
| Northbound Left | A | 7.4 | A | 8.3 | A | 7.5 |
| Eastbound Shared Left-RIght | A | 9.3 | B | 10.5 | A | 9.4 |
| Gateway Crossing and Gateway RI/RO (33) - *Unsignalized* | | | | | | |
| Overall Intersection | A | 6.7 | B | 13.1 | A | 6.6 |
| Westbound Left | B | 10.3 | D | 34.5 | C | 23.4 |
| Westbound Right | A | 8.5 | A | 9.6 | A | 10.0 |
| Southbound Left | A | 7.4 | A | 8.1 | A | 8.5 |
| Gateway Crossing and Gateway Main Driveway (34) - *Unsignalized* | | | | | | |
| Overall Intersection | B | 10.3 | C | 17.8 | D | 25.6 |
| Eastbound Left | B | 11.5 | C | 16.1 | C | 18.7 |
| Eastbound Through | A | 8.9 | B | 10.8 | B | 11.5 |
| Westbound Through | A | 8.6 | A | 10.0 | B | 10.3 |
| Westbound Right | A | 9.3 | C | 20.3 | D | 31.3 |
| Southbound Left | B | 11.7 | C | 21.2 | D | 33.6 |
| Southbound Right | A | 8.8 | B | 14.7 | B | 11.4 |



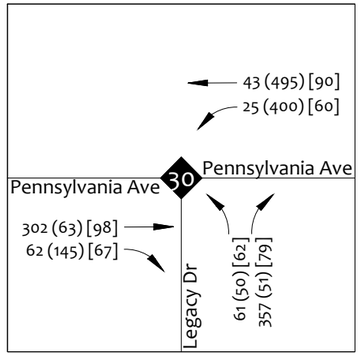



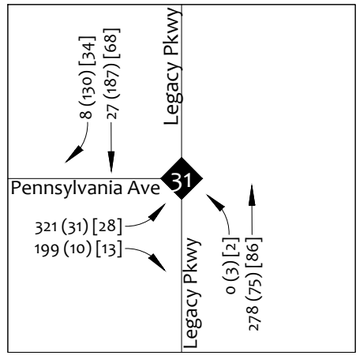




LEGEND

| | |
|---|---|
| AM (PM) [Sat MD] | Peak Hour Traffic Volumes |
| X | Intersection |



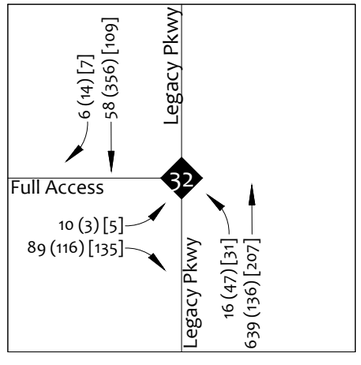
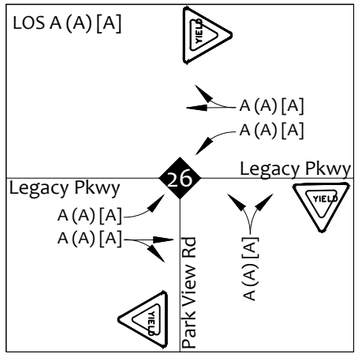
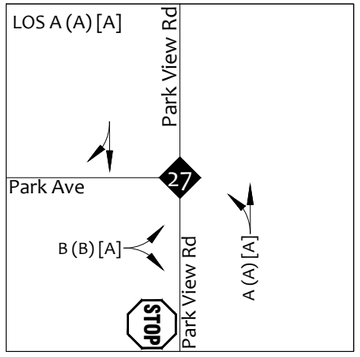
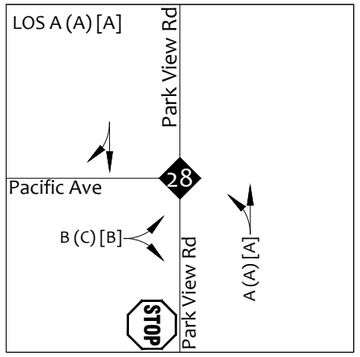
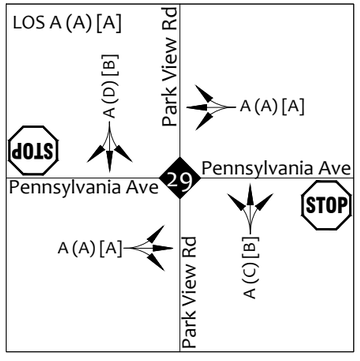



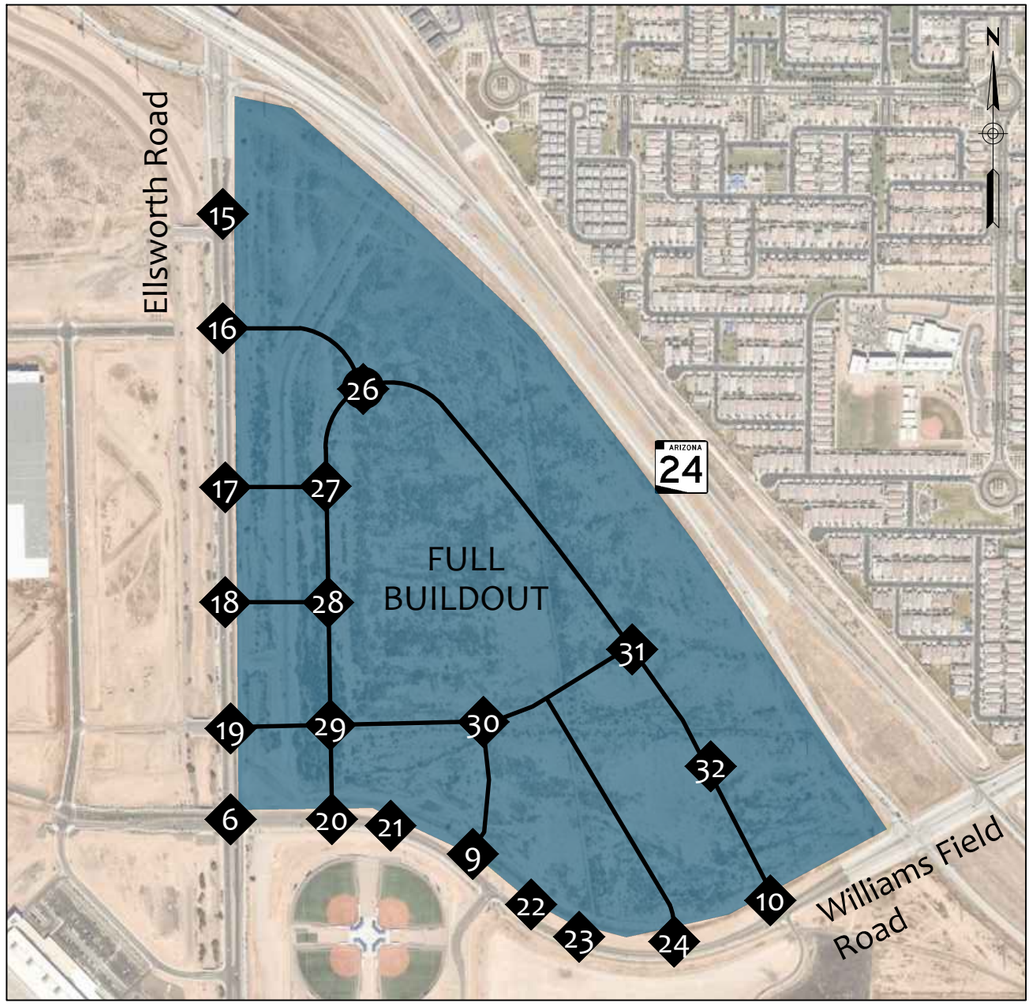

FIGURE 35 | YEAR 2044 INTERNAL INTERSECTION TRAFFIC VOLUMES



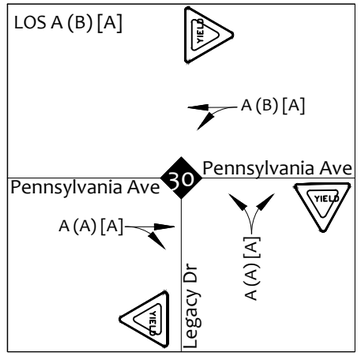



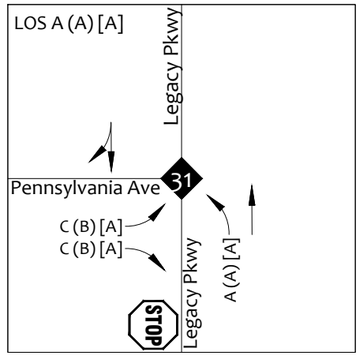




LEGEND

| | |
|---|---|
| AM (PM) [Sat MD] | Peak Hour Capacity Analysis |
| | Intersection |
| | Lane Configuration |



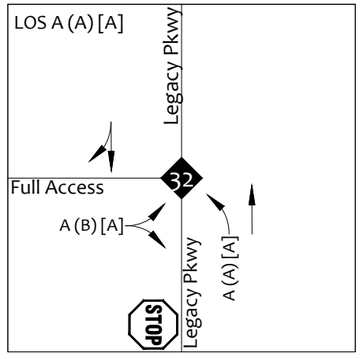




FIGURE 36 | YEAR 2044 INTERNAL INTERSECTION CAPACITY ANALYSIS

# 10. TURN LANE ANALYSIS

This section evaluates the need for left and right turn deceleration lanes. According to the 2025 City of Mesa *Engineering & Design Standards*,

> Section 208.4, "A dedicated right-turn lane or deceleration lane added at the entrance of a development is beneficial in that it allows entering vehicles to slow down and complete a right turn out of the through traffic flow, reducing the disruption to through traffic cause by driveway activity, and reducing the potential for rear-end crashes."
>
> 208.4.1, "Generally, deceleration lanes should be provided at retail sites with 40,000 gross square feet or more of building area. … Industrial parks with 200,000 gross square feet or more of building area, business parks and general office buildings with 100,000 gross square feet or more, and medical office buildings with 40,000 gross square feet or more should provide deceleration lanes."

The build out of the proposed Legacy Park and Gateway Crossing developments meets the criteria listed above and proposes the following left and right turn lanes at the entrances of the developments along both Ellsworth Road and Williams Field Road.

## 10.1. LEFT TURN LANES – OFF-SITE

- Williams Field Road and Driveway G (9) *EB, WB*
- Williams Field Road and Gateway Main Driveway / Driveway J (10) *EB, WB*
- Ellsworth Road and Driveway B (16) *SB*
- Ellsworth Road and Driveway C (18) *SB*
- Ellsworth Road and Driveway D (19) *SB*
- Williams Field Road and Legacy Park 3/4 (22) *EB*
- Williams Field Road and Main Street / Driveway I (24) *EB*

## 10.2. RIGHT TURN LANES – OFF-SITE

- Williams Field Road and Driveway G (9) *WB*
- Williams Field Road and Gateway Main Driveway / Driveway J (10) EB, *WB*
- Ellsworth Road and Driveway A (15) *NB*
- Ellsworth Road and Driveway B (16) *NB*
- Ellsworth Road and Park Avenue (17) *NB*
- Ellsworth Road and Driveway C (18) *NB*
- Ellsworth Road and Driveway D (19) *NB*
- Williams Field Road and Driveway E (20) *WB*
- Williams Field Road and Legacy Park 3/4 (22) *WB*
- Williams Field Road and Main Street / Driveway I (24) *WB*

- Williams Field Road and Gateway RI/RO (25) *WB*

## 10.3.TURN BAY STORAGE LENGTHS

The queuing analysis was performed using the method described in the City of Mesa *Engineering & Design Standards,* Section 204.4.19 Queuing Analysis. As indicated in Section 6-1.417, the design of turn bays shall be per the AASHTO Method and per the 95$^{th}$ percentile queue lengths from the level-of-service analysis. For un-signalized intersections, the following criteria for turn bay storage lengths are utilized:

- Average peak hour turning volume
- 2 minute queue interval
- Queue factor of two (2)
- Design vehicle length: 25 feet

For signalized intersections, the following criteria for turn bay storage lengths are utilized:

- Average peak hour turning volume
- 120 second cycle length
- Queue factor of two (2)
- Design vehicle length: 25 feet

Based on the estimated 2044 build traffic volumes, the queueing analysis for the turn lanes associated with the site traffic volumes were determined. The average volume between AM and PM peak hours was utilized for the calculations. For dual turn bays, the reported/recommended storage length is *per lane*. See **Table 21** for the calculated and recommended turn bay storage for each required turn lane.

See Error! Reference source not found. for detailed queue reports.

## Table 21 – Turn Bay Storage Lengths (1 of 2)

| Intersection | Movement | Existing Storage Length | Weekday - Average Peak Hour Volume | Saturday - Peak Hour Volume | Cycle Length (s) | AASHTO Method (Weekday) | AASHTO Method (Saturday) | Weekday | Saturday | Turn Bay Storage Recommended |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Synchro 95th Percentile | Synchro 95th Percentile | |
| Ellsworth Road and SR-24 WB Ramps (4) | Northbound Dual Left | 820' ea | 2,242 | 1,792 | 120 | 2825' | 2250' | 1050' | 950' | **Existing [1]** |
| | Westbound Dual Left | 370' ea | 113 | 72 | 120 | 150' | 100' | 50' | 75' | **Existing** |
| Ellsworth Road and SR-24 EB Ramps (5) | Northbound Right | 300' | 83 | 74 | 120 | 125' | 100' | 25' | 0' | **Existing** |
| | Eastbound Dual Right | 360' ea | 2,326 | 2,205 | 120 | 2925' | 2775' | 1700' | 1625' | **Existing [1]** |
| Ellsworth Road and Williams Field Road (6) | Northbound Right | 250' | 222 | 265 | 120 | 300' | 350' | 75' | 175' | **Existing** |
| | Southbound Dual Left | 250' ea | 594 | 1,012 | 120 | 750' | 1275' | 600' | 950' | **Existing** |
| | Westbound Dual Left | 250' ea | 388 | 419 | 120 | 500' | 525' | 300' | 200' | **Existing** |
| | Westbound Right | 250' | 212 | 742 | 120 | 275' | 950' | 325' | 925' | **Existing** |
| Ellsworth Road and Legacy Avenue (7) | Northbound Right | 155' | 148 | 204 | 120 | 200' | 275' | 125' | 100' | **Existing** |
| | Southbound Left | 300' ea | 22 | 356 | 120 | 50' | 450' | 25' | 150' | **Existing** |
| | Westbound Left | 245' ea | 24 | 169 | 120 | 50' | 225' | 50' | 125' | **Existing** |
| | Westbound Right | 245' | 11 | 238 | 120 | 25' | 300' | 25' | 125' | **Existing** |
| Ellsworth Road and Pecos Road North (8) | Southbound Left | 145' | 253 | 56 | 120 | 325' | - | 325' | - | **Existing [1]** |
| | Westbound Right | 90' | 135 | 82 | 120 | 175' | - | 125' | - | **Existing [1]** |
| Williams Field Road and Legacy Drive / Driveway G (9) | Northbound Dual Left | *Future* | 27 | 411 | 120 | 50' | 525' | 50' | 250' | **345' ea** |
| | Northbound Right | *Future* | 10 | 121 | 120 | 25' | 175' | 50' | 25' | **345'** |
| | Southbound Left | *Future* | 191 | 234 | 120 | 250' | 300' | 175' | 175' | **175'** |
| | Southbound Right | *Future* | 267 | 95 | 120 | 350' | 125' | 175' | 75' | **175'** |
| | Eastbound Left | *Future* | 134 | 163 | 120 | 175' | 225' | 25' | 50' | **245'** |
| | Eastbound Right | *Future* | 60 | 183 | 120 | 75' | 250' | 0' | 25' | **150'** |
| | Westbound Left | *Future* | 85 | 158 | 120 | 125' | 200' | 100' | 100' | **195' ea** |
| | Westbound Right | *Future* | 206 | 73 | 120 | 275' | 100' | 75' | 0' | **140'** |
| Williams Field Road and Gateway Main Driveway / Driveway J (10) | Northbound Left | *Future* | 194 | 250 | 120 | 250' | 325' | 200' | 300' | **235'** |
| | Northbound Right | *Future* | 219 | 332 | 120 | 275' | 425' | 75' | 150' | **340'** |
| | Southbound Dual Left | *Future* | 343 | 301 | 120 | 450' | 400' | 250' | 175' | **245' ea** |
| | Southbound Right | *Future* | 147 | 148 | 120 | 200' | 200' | 350' | 75' | **Trap Lane [2]** |
| | Eastbound Dual Left | *Future* | 223 | 128 | 120 | 300' | 175' | 200' | 75' | **125' ea** |
| | Eastbound Right | *Future* | 86 | 134 | 120 | 125' | 175' | 75' | 50' | **150'** |
| | Westbound Dual Left | *Future* | 272 | 333 | 120 | 350' | 425' | 250' | 250' | **125' ea** |
| | Westbound Right | *Future* | 636 | 308 | 120 | 800' | 400' | 350' | 50' | **325'** |
| Williams Field Road and SR-24 SB Ramps (11) | Southbound Right | 400' | 672 | 541 | 120 | 850' | 700' | 200' | 200' | **Existing** |
| | Eastbound Right | 285' | 344 | 631 | 120 | 450' | 800' | 75' | 75' | **Existing** |
| Williams Field Road and SR-24 NB Ramps (12) | Northbound Left | 380' | 527 | 438 | 120 | 675' | 550' | 875' | 625' | **Existing [1]** |
| | Eastbound Dual Left | 655' ea | 458 | 705 | 120 | 575' | 900' | 175' | 750' | **Existing** |
| Williams Field Road and Crismon Road (13) | Northbound Left | 150' | 337 | 515 | 120 | 425' | - | 300' | - | **Existing [3]** |
| | Southbound Right | 250' | 193 | 55 | 120 | 250' | - | 375' | - | **Existing [3]** |
| | Eastbound Left | 245' | 213 | 51 | 120 | 275' | - | 275' | - | **Existing [3]** |
| | Eastbound Right | *Future* | 210 | 336 | 120 | 275' | - | 50' | - | **Existing [3]** |
| Williams Field Road and Signal Butte Road (14) | Northbound Left | 250' | 114 | - | 120 | 150' | - | 100' | - | **Existing** |
| | Southbound Right | 250' | 293 | - | 120 | 375' | - | 75' | - | **Existing** |
| | Eastbound Left | 250' | 182 | - | 120 | 250' | - | 225' | - | **Existing** |
| | Eastbound Right | 250' | 107 | - | 120 | 150' | - | 100' | - | **Existing** |

**[1] At the time of traffic counts, the mainline SR-24 freeway was not constructed. Once the highway project is finished, it is anticipated that through volumes and, in some cases, turning movements at the traffic interchanges will reduce greatly, decreasing the queue of the on- and off-ramps.**
**[2] Through lane becomes the turn lane due to proposed geometry.**
**[3] Turn lane storage legnths will be designed and finalized with final design of Williams Field Road and Crismon intersection.**

## Table 22 – Turn Bay Storage Lengths (2 of 2)

| Intersection | Movement | Existing Storage Length | Weekday - Average Peak Hour Volume | Saturday - Peak Hour Volume | Cycle Length (s) | AASHTO Method (Weekday) | AASHTO Method (Saturday) | Weekday | Saturday | Turn Bay Storage Recommended |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Synchro 95th Percentile | Synchro 95th Percentile | |
| Ellsworth Road and Driveway A (15) | Westbound Right | *Future* | 59 | 89 | Stop-Controlled | 75' | 125' | 200' | 25' | **On-Site** |
| Williams Field Road and Driveway B (16) | Northbound Right | *Future* | 235 | 117 | 120 | 300' | 150' | 50' | 0' | **150'** |
| | Southbound Dual Left | *Future* | 533 | 340 | 120 | 675' | 425' | 425' | 150' | **400' ea** |
| | Westbound Left | *Future* | 176 | 159 | 120 | 225' | 200' | 175' | 125' | **175'** |
| | Westbound Right | *Future* | 378 | 219 | 120 | 475' | 275' | 200' | 25' | **175' ea** |
| Ellsworth Road and Park Avenue (17) | Westbound Right | *Future* | 46 | 29 | Stop-Controlled | 75' | 50' | 25' | 25' | **Trap Lane [2]** |
| Williams Field Road and Driveway C (18) | Northbound Right | *Future* | 51 | 30 | 120 | 75' | 50' | 25' | 25' | **150'** |
| | Southbound Left | *Future* | 158 | 106 | 120 | 200' | 150' | 75' | 25' | **200'** |
| | Westbound Left | *Future* | 82 | 17 | 120 | 125' | 25' | 125' | 50' | **100'** |
| | Westbound Right | *Future* | 186 | 103 | 120 | 250' | 150' | 275' | 75' | **Trap Lane [2]** |
| Ellsworth Road and Driveway D (19) | Southbound Left | *Future* | 32 | 37 | Yield | 50' | 50' | 100' | 25' | **165'** |
| | Westbound Right | *Future* | 239 | 118 | Stop-Controlled | 300' | 150' | 125' | 25' | **Trap Lane [2]** |
| Williams Field Road and Driveway E (20) | Southbound Right | *Future* | 42 | 54 | Stop-Controlled | 75' | 75' | 25' | 25' | **Trap Lane [2]** |
| Williams Field Road and Driveway F (21) | Southbound Right | *Future* | 16 | 35 | Stop-Controlled | 25' | 50' | 25' | 25' | **On-Site** |
| Williams Field Road and Legacy Park 3/4 (22) | Southbound Right | *Future* | 27 | 48 | Stop-Controlled | 50' | 75' | 25' | 25' | **On-Site** |
| | Eastbound Left | *Future* | 58 | 112 | Yield | 75' | 150' | 25' | 25' | **100'** |
| Williams Field Road and Driveway H (23) | Southbound Right | *Future* | 23 | 40 | Stop-Controlled | 50' | 50' | 25' | 25' | **On-Site** |
| Williams Field Road and Driveway I (24) | Southbound Right | *Future* | 31 | 48 | Stop-Controlled | 50' | 75' | 25' | 25' | **120'** |
| | Eastbound Left | *Future* | 45 | 89 | Yield | 75' | 125' | 25' | 25' | **250'** |
| Williams Field Road and Gateway RI/RO (25) | Northbound Right | *Future* | 110 | 237 | Stop-Controlled | 150' | 300' | 50' | 150' | **Trap Lane [2]** |
| Legacy Parkway and Park View Road (26) | Northbound Shared Left-Right | *Future* | 196 | 101 | Yield | 250' | 150' | 25' | 0' | **Trap Lane [2]** |
| | Eastbound Thru | *Future* | 237 | 96 | Yield | 300' | 125' | 25' | 0' | **Trap Lane [2]** |
| | Eastbound Shared Thru-Right | *Future* | 94 | 71 | Yield | 125' | 100' | 0' | 0' | **Trap Lane [2]** |
| | Westbound Thru | *Future* | 187 | 134 | Yield | 250' | 175' | 25' | 0' | **Trap Lane [2]** |
| | Westbound Shared Left-Thru | *Future* | 18 | 0 | Yield | 25' | 0' | 0' | 0' | **Trap Lane [2]** |
| Park View Road and Park Avenue (27) | Eastbound Shared Left-Right | *Future* | 210 | 66 | Stop-Controlled | 275' | 100' | 25' | 25' | **Trap Lane [2]** |
| Park View Road and Pacific Avenue (28) | Eastbound Left | *Future* | 20 | 15 | Stop-Controlled | 25' | 25' | 50' | 25' | **100'** |
| | Eastbound Right | *Future* | 26 | 40 | Stop-Controlled | 50' | 50' | 25' | 25' | **Trap Lane [2]** |
| Park View Road and Texas Avenue (29) | Northbound Shared Left-Thru-Right | *Future* | 310 | 141 | Stop-Controlled | 400' | 200' | 25' | 25' | **Trap Lane [2]** |
| | Southbound Shared Left-Thru-Right | *Future* | 0 | 0 | Stop-Controlled | 0' | 0' | 100' | 50' | **Trap Lane [2]** |
| Legacy Drive and Texas Avenue (30) | Northbound Shared Left-Right | *Future* | 5 | 3 | Yield | 25' | 25' | 50' | 0' | **Trap Lane [2]** |
| | Eastbound Shared Thru-Right | *Future* | 436 | 176 | Yield | 550' | 225' | 25' | 0' | **Trap Lane [2]** |
| | Westbound Shared Left-Thru | *Future* | 582 | 149 | Yield | 750' | 200' | 175' | 0' | **Trap Lane [2]** |
| Legacy Parkway and Texas Avenue (31) | Eastbound Left | *Future* | 226 | 28 | Stop-Controlled | 300' | 50' | 100' | 25' | **Trap Lane [2]** |
| | Eastbound Right | *Future* | 135 | 13 | Stop-Controlled | 175' | 25' | 50' | 25' | **75'** |
| Legacy Parkway and Full Access (32) | Eastbound Shared Left-Right | *Future* | 65 | 140 | Stop-Controlled | 100' | 175' | 25' | 25' | **Trap Lane [2]** |
| Gateway Crossing and Gateway RI/RO (33) | Westbound Left | *Future* | 88 | 75 | Stop-Controlled | 125' | 100' | 225' | 125' | **On-Site** |
| | Westbound Right | *Future* | 119 | 130 | Stop-Controlled | 150' | 175' | 25' | 25' | **On-Site** |
| Gateway Crossing and Gateway Main Driveway (34) | Southbound Left | *Future* | 234 | 346 | Yield | 300' | 450' | 25' | 25' | **On-Site** |
| | Southbound Right | *Future* | 196 | 128 | Yield | 250' | 175' | 0' | 0' | **On-Site** |
| | Eastbound Left | *Future* | 178 | 222 | Stop-Controlled | 225' | 300' | 175' | 425' | **On-Site** |
| | Westbound Right | *Future* | 255 | 410 | Stop-Controlled | 325' | 525' | 50' | 25' | **On-Site** |

**[1] At the time of traffic counts, the mainline SR-24 freeway was not constructed. Once the highway project is finished, it is anticipated that through volumes and, in some cases, turning movements at the traffic interchanges will reduce greatly, decreasing the queue of the on- and off-ramps.**
**[2] Through lane becomes the turn lane due to proposed geometry.**
**[3] Turn lane storage legnths will be designed and finalized with final design of Williams Field Road and Crismon intersection.**

# 11. TRAFFIC SIGNAL WARRANT ANALYSIS

A signal warrant analysis is included for the following intersections that will be impacted as part of the year 2029 ('CORE') and year 2044 (full buildout) analysis:

- Ellsworth Road and Driveway C (18)

The warrant analysis is based on the signal warrants defined in the 2009 Manual on Uniform Traffic Control Devices (MUTCD). See **Appendix M** for the detailed traffic signal warrant analysis.

### Signal Warrants

**Warrant 1** is the predominant criteria used and is based on minimum traffic volumes that must be present on both the major and minor streets. There are two conditions established for the 8-hour signal warrant. Condition A requires a large volume of intersecting traffic. Condition B requires a large volume of major street traffic, which limits the ability of the side street to enter or cross the major street. To satisfy the 8-hour signal warrant, either Condition A, Condition B, or 80% of the volume requirements for BOTH Condition A and Condition B must be met for at least 8 hours of the day.

**Warrant 2** is a 4-hour warrant requiring higher traffic volumes than the 8-hour warrant and is intended to be applied where the volume of intersection traffic is the principal reason for traffic signal installation.

**Warrant 3** is a peak hour warrant that, according to MUTCD, shall be used only in "unusual cases" and applies to land uses that attract or discharge large numbers of vehicles over a short time, i.e. office complexes, manufacturing plants, or industrial complexes.

**Warrants 4, 5, and 6** are associated with high pedestrian areas, school crossing areas and coordinated signal systems, and therefore, were not applicable to this situation.

**Warrant 7** is a crash experience warrant and is for locations where the severity and frequency of crashes are the principal reasons to consider a traffic signal. This warrant requires five or more crashes in a 12-month period that can be corrected by a traffic signal. Warrant 7 was not evaluated.

**Warrant 8 and 9** are associated with roadway networks and intersections near a grade crossing; and therefore, were not applicable to this situation.

**Summary**

The 24-hour and peak hour traffic volumes were utilized to evaluate signal warrants 1, 2, and 3 using the year 2029 and year 2044 traffic volumes with the proposed development. See summary in **Table 23** below. See **Appendix O** for the detailed traffic signal warrant analysis.

**Table 23 – Signal Warrant Analysis Summary**

| Year | Intersection | Warrant 1 Critera Met? | Warrant 2 Critera Met? | Warrant 3 Critera Met? |
|---|---|---|---|---|
| 2029 Build | Ellsworth Road and Driveway C (18) | **NO** | **NO** | **NO** |
| 2044 Build | Ellsworth Road and Driveway C (18) | **YES** | **YES** | **YES** |

As shown in **Table 23**, based on traffic volume warrants, a traffic signal is warranted at the following intersections at the following horizon years:

- Ellsworth Road and Driveway C (18) *Year 2044 Build*

It is recommended for the City of Mesa continue to monitor this intersection for change in traffic patterns, including traffic volumes, delays and safety. Should conditions change, the traffic signal warrant should be reevaluated.

## 12. SIGHT DISTANCE

The purpose of adequate sight distance is to provide drivers with a clear view of signs, vehicles, and roadway conditions. Adequate sight distance is necessary to allow vehicles to safely perform turning movements.

The City of Mesa *Engineering & Design Standards* dated August 2025, Section 211 provides guidelines for intersection and driveway sight distance. The sight distance varies with the design speed limit and the number of lanes.

As the Legacy Park site plan is refined, the sight distance should be verified at all site intersections and driveways, per City of Mesa requirements.

# 13. RECOMMENDATIONS AND CONCLUSIONS

The proposed Legacy Park development, which contains two (2) phases, will include the following land uses and quantities:

**Legacy Park 'CORE' – 2029**

- Retail 411,400 square feet
- Office 161,000 square feet
- Resort Hotel 600 rooms
- Mid-rise multifamily 770 dwelling units

**Legacy Park (Full Buildout) – 2044**

- Retail 436,400 square feet
- Office 3,675,967 square feet
- Resort Hotel 750 rooms
- Mid-rise multifamily 2,321 dwelling units

The proposed Legacy Park developments will be integrated with and closely related to the proposed Gateway Crossing development, located on the southwest corner of Williams Field Road and State Route 24 (SR-24).

The proposed Gateway Crossing development will include the following land uses and quantities:

**Gateway Crossing (Full Buildout) – 2028**

| | | |
|---|---|---|
| • Discount superstore | *Anchor 1* | 166,000 square feet<br>28 fueling positions |
| • Retail | *Shops A and B* | 27,950 square feet |
| • Fast-food restaurants | *P1, P3, and P4* | 1,747 square feet |
| • High-volume fast-food | *P2* | 4,626 square feet |
| • Hotels | *Hotels A and B* | 212 rooms |

**Recommendations**

In addition to the future roadway network assumed to be built out by year 2029 as described in **Section 6.1**, the following are the recommendations/improvements with the build out of the proposed developments:

**Williams Field Road and Legacy Drive / Driveway G (9) – *Signalized Intersection***

*The existing leg of this intersection, the Legacy Drive access to AAG is being realigned with the development of Legacy Park. The intent of this is to provide better access to both the existing and future development in the area.*

The northbound approach will provide two (2) dedicated left turn lanes, and one (1) shared through-right turn lane. The southbound approach will provide one (1) dedicated left turn lane, and one (1) shared through -right turn lane. The eastbound approach will provide one (1) dedicated left turn lane, three (3) through lanes and one (1) dedicated right turn lane. The westbound approach will provide two (2) dedicated left turn lanes, three (3) through lanes, and one (1) dedicated right turn lane.

**Williams Field Road and Gateway Main Driveway / Driveway J (10) – *Signalized Intersection***
A traffic signal will be installed with the buildout of the proposed site in anticipation of the year 2029 traffic volumes for both the Legacy Park 'CORE' component and the Gateway Crossing development. The northbound approach will provide one (1) dedicated left turn lane, one (1) shared through-right turn lane, and one (1) dedicated right turn lane. The southbound approach will provide two (2) left turn lanes and one (1) shared through-right turn lane. The eastbound and westbound approaches will provide two (2) left turn lanes, three (3) through lanes, and one (1) dedicated right turn lane, with the westbound approach having a channelized right turn lane anticipated to free flow into the proposed Legacy Park site. Additionally, there will be two (2) northbound and southbound receiving lanes. A westbound dual left turn lane will be constructed at the intersection.

**Ellsworth Road and Driveway C (18) – *Signalized Intersection***
A traffic signal will be installed by year 2044 in anticipation of the year 2044 traffic volumes, for which a signal is warranted. The westbound approach will provide one (1) dedicated left turn lane and one (1) dedicated right turn lane. A northbound right turn deceleration lane will be installed by year 2029.

**Legacy Park – Half Street Improvements**
Half street improvements for the project frontage along the east side of Ellsworth Road and the north side of Williams Field Road.

**Legacy Park – Access Points**
Buildout of the five (5) access points along Ellsworth Road and the seven (7) access points along Williams Field Road detailed in **Section 2.1.1**.

**Legacy Park - Internal Intersections**
Buildout of the internal intersections detailed in **Section 2.1.1**.

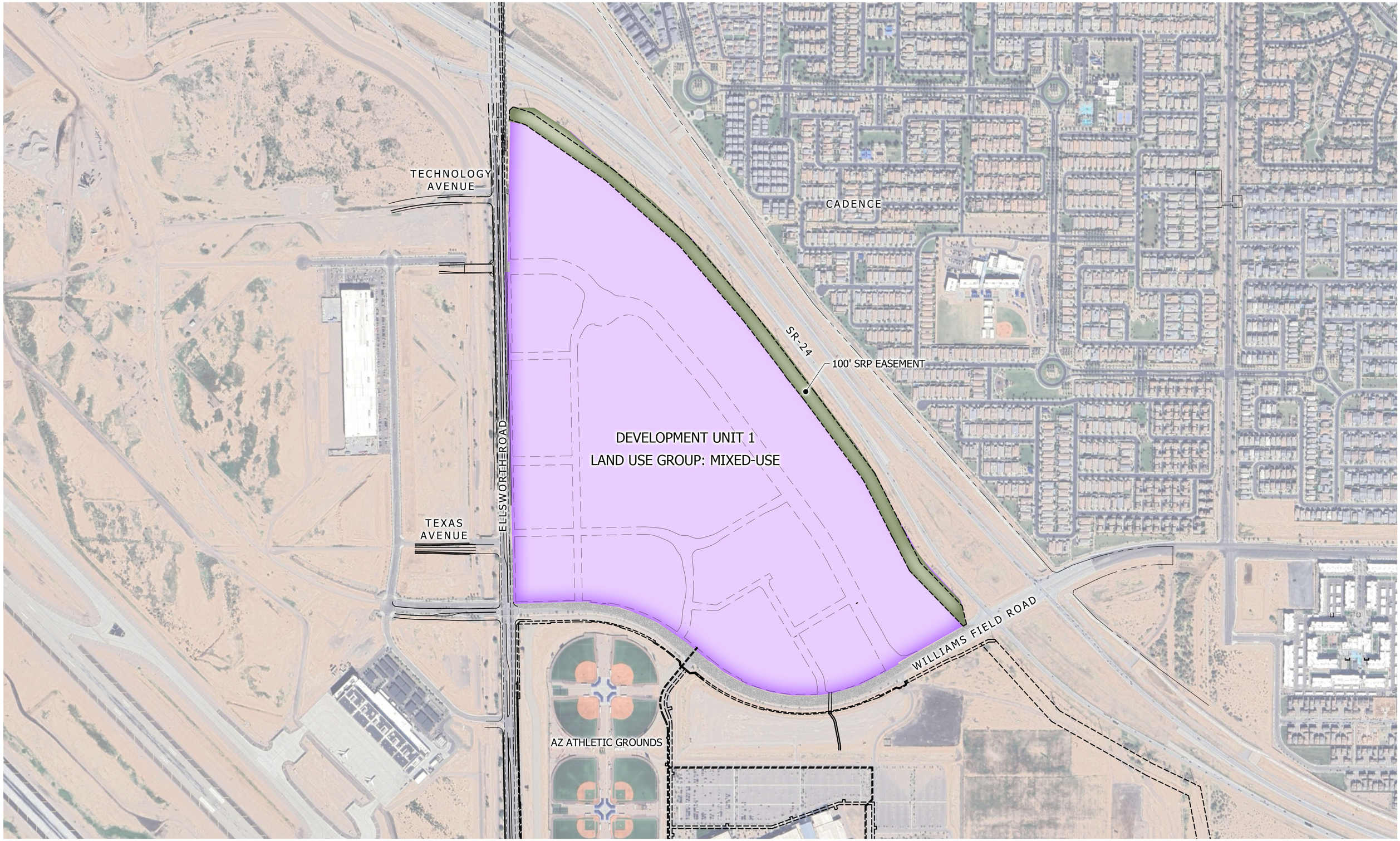
**Gateway Crossing – Half Street Improvements**
Half street improvements for the project frontage along the south side of Williams Field Road.

**Gateway Crossing – Access Points**
Buildout of the two (2) access points along Williams Field Road detailed in **Section 2.1.1**.

**Gateway Crossing - Internal Intersections**
Buildout of the internal intersections detailed in **Section 2.1.1**.

This Traffic Impact Study will need to be updated if there are land use changes for where the new land use creates different travel patterns based on higher trip generation or different trip assignment (in/out) than currently modeled. The City Traffic Engineer can request an update based on these changes in land use.

# Appendix A – Proposed Site Plan




# LEGACY PARK

Community and Development Unit Plan

600' 1,200' 1,800'

Plan Scale 1:600 Date: 03-27-2026

ABLASTUDIO.COM

ABLA

# Appendix B – Parcel Information

## 313-25-859S

## Commercial Parcel

This is a Commercial parcel located at 6321 S ELLSWORTH RD MESA 85212. The current owner is PACIFIC PROVING LLC. It was last sold on 06/01/2004 for $45,000,000. Its current year full cash value is $202,691,605.

- MAPS
- PICTOMETRY
- $ VIEW/PAY TAX BILL
- DEED
- OWNER
- VALUATIONS
- ADDITIONAL INFO
- MAP FERRET
- REGISTER RENTAL
- PRINT DETAILS

## PROPERTY INFORMATION

6321 S ELLSWORTH RD MESA 85212

| MCR # |
| --- |

| Description |
| --- |
| A POR OF LAND WI/IN SEC 34 & W2 OF SEC 35 DAF COM NW COR SD SEC 34 TH S 01D 09M E 396.98F TH N 88D 50M E 60F POB TH S 46D 15M E 14.12F TH N 88D 39M E 460.56F TH CURV RAD 1230F ARC 99.44F TH S 03D 16M W 10F TH CURV RAD 1220F ARC 766.46F TH S 50D 43M E 283F TH CURV RAD 1090F ARC 1303.28F TH N 60D 46M E 202.36F TH S 28D 54M E 137.83F TH N 62D 24M E 333.41F TH N 67D 38M E 120.37F TH N 62D 24M E 168.55F TH S 42D 18M E 793.39F TH S 60D 22M E 824.06F TH S 64D 14M E 489.96F TH S 06D 41M E 158.81F TH E 190.67F TH S 943.31F TH W 1161.37F TH N 07D 47M W 655.99F TH N 58D 43M W 539.48F TH S 1754.09F TH W 2692.11F TH N 44D 34M W 1358.41F TH N 01D 10M W 228.88F TH N 01D 09M W 2245.44F POB EX A POR OF LAND WI/IN SW4 SEC 34 DAF COM W4 COR SD SEC 34 TH S 01D 10M E 235.80F TH N 88D 49M E 65F POB TH N 01D 10M W 31.89F TH N 88D 49M E 92F TH S 01D 10M E 75F TH S 88D 49M W 51.23F TH N 44D 34M W 59.33F POB & EX A POR OF LAND WI/IN NW4 SEC 34 DAF COM W4 COR SD SEC 34 TH N 01D 09M W 753.16F TH N 88D 50M E 65F POB TH N 01D 09M W 75F TH N 88D 50M E 92F TH S 01D 09M E 75F TH S 88D 50M W 92F POB & EX A POR OF LAND WI/IN NW4 SEC 34 P/F 2021-0445753 & EX TH PT W2 SEC 34 P/F 21-1174012 & EX PCL LD WI/IN N2 SEC 34 P/F 2021-0967909 |

| Lat/Long |
| --- |
| \| |

| Lot Size |
| --- |
| 12,441,234 sq ft. |
| **Lot #** |
| **High School District** |
| QUEEN CREEK UNIFIED #95 |
| **Elementary School District** |
| QUEEN CREEK UNIFIED SCHOOL DISTRICT |
| **Local Jurisdiction** |
| MESA |
| **S/T/R** ⓘ |
| 34 1S 7E |
| **Market Area/Neighborhood** |
| 28/003 |
| **Subdivision (0 Parcels)** |

## OWNER INFORMATION

PACIFIC PROVING LLC

| Mailing Address |
| --- |
| 2801 E. CAMELBACK RD STE 450, PHOENIX, AZ 85016 |
| **Deed Number** |
| 20040748707 |
| **Last Deed Date** |
| 06/30/2004 |
| **Sale Date** |
| 06/01/2004 |
| **Sale Price** |
| $45,000,000 |

## VALUATION INFORMATION

We provide valuation information for the past 5 years. For mobile display, we only show 1 year of valuation information. Should you need more data, please look at our data sales.

The Valuation Information displayed below may not reflect the taxable value used on the tax bill due to any special valuation relief program. CLICK HERE TO PAY YOUR TAXES OR VIEW YOUR TAX BILL

| Tax Year |
| --- |
| 2025 |
| **Full Cash Value** ⓘ |
| $202,691,605 |
| **Limited Value** ⓘ |

| |
|---|
| $116,920,431 |
| **Legal Class** |
| M |
| **Description** |
| MIXED LEGAL CLASS |
| **Assessment Ratio** |
| 15.89% |
| **Assessed LPV** |
| $18,577,605 |
| **Property Use Code** |
| 2570 |
| **PU Description** |
| Amusement/Recreation |
| **Tax Area Code** |
| 951006 |
| **Valuation Source** |
| Notice |

## ADDITIONAL PROPERTY INFORMATION

Additional property data.

| Description | Imp # | Occupancy | Rank | CCI | Age | Sq Ft. |
|---|---|---|---|---|---|---|
| Site Improvements | null | 163 | 2 | D | 3 | 1 |
| Fieldhouse | 000101 | 486 | 3 | S | 4 | 216,293 |
| Fieldhouse | 000102 | 486 | 3 | S | 4 | 182,876 |
| Fieldhouse | 000201 | 486 | 3 | S | 4 | 79,023 |
| Equipment (Shop) Building | 000301 | 470 | 3 | S | 4 | 3,564 |

| |
|---|
| **Construction Year** |
| 2021 |
| **Weighted Construction Year** |
| 2021 |
| **Improvement Quality** |
| S (2) |
| **Pool** |
| No |
| **Living Area** |
| **Patio(s)** |
| Covered: 0 \| Uncovered: 0 |
| **Exterior Wall Type** |
| Single Metal On Steel Frame |
| **Roof Type** |
| **Bath Fixtures** |
| 0 |

| Garage Stalls |
| --- |
| 0 |

| Carport Stalls |
| --- |
| 0 |

## MAP FERRET MAPS

Mapferret maps, also known as MapId maps, pdf maps, or output maps are now available here without having to search.

Parcel Maps (9)

Book/Map Maps (38)

**CAUTION! USERS SHOULD INDEPENDENTLY RESEARCH AND VERIFY INFORMATION ON THIS WEBSITE BEFORE RELYING ON IT.**

The Assessor's Office has compiled information on this website that it uses to identify, classify, and value real and personal property. Please contact the Maricopa County S.T.A.R. Center at (602) 506-3406 if you believe any information is incomplete, out of date, or incorrect so that appropriate corrections can be addressed. Please note that a statutory process is also available to correct errors pursuant to Arizona Revised Statutes 42-16254.

The Assessor does not guarantee that any information provided on this website is accurate, complete, or current. In many instances, the Assessor has gathered information from independent sources and made it available on this site, and the original information may have contained errors and omissions. Errors and omissions may also have occurred in the process of gathering, interpreting, and reporting the information. Information on the website is not updated in "real time". In addition, users are cautioned that the process used on this site to illustrate the boundaries of the adjacent parcels is not always consistent with the recorded documents for such parcels. The parcel boundaries depicted on this site are for illustrative purposes only, and the exact relationship of adjacent parcels should be independently researched and verified. The information provided on this site is not the equivalent of a title report or a real estate survey. Users should independently research, investigate and verify all information before relying on it or in the preparation of legal documents.

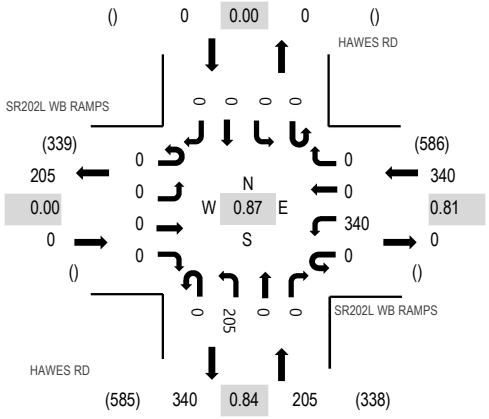
By using this website, you acknowledge having read the above and waive any right you may have to claim against Maricopa County, its officers, employees, and contractors arising out of my reliance on or the use of the information provided on this website.

# Appendix C – Traffic Count Data

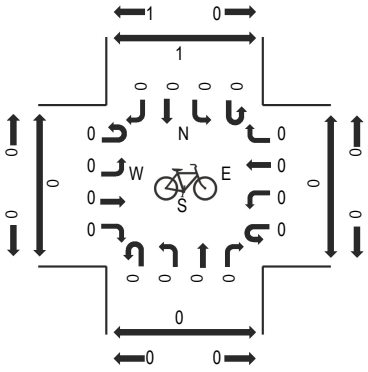
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

**Location:** 1 HAWES RD & SR202L WB RAMPS AM
**Date:** Tuesday, April 2, 2024
**Peak Hour:** 07:15 AM - 08:15 AM
**Peak 15-Minutes:** 07:45 AM - 08:00 AM

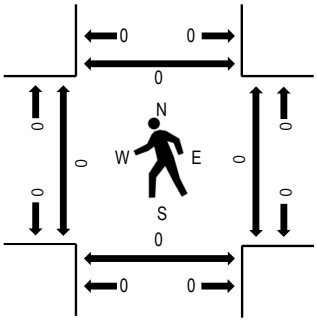
## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles




## Peak Hour - Pedestrians




Note: Total study counts contained in parentheses.

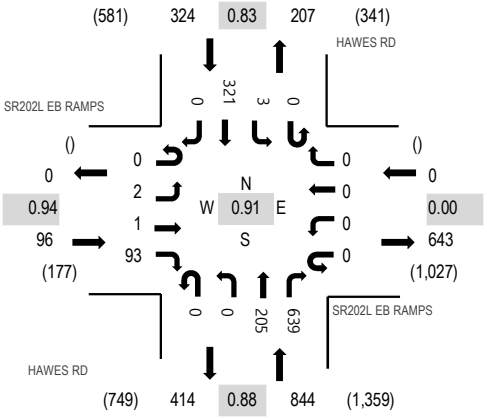
## Traffic Counts - Motorized Vehicles

| Interval Start Time | SR202L WB RAMPS Eastbound | | | | SR202L WB RAMPS Westbound | | | | HAWES RD Northbound | | | | HAWES RD Southbound | | | | | Rolling Hour | Pedestrian Crossings | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | Total | | West | East | South | North |
| 7:00 AM | 0 | 0 | 0 | 0 | 0 | 70 | 1 | 0 | 0 | 37 | 0 | 0 | 0 | 0 | 0 | 0 | 108 | 534 | 0 | 0 | 0 | 0 |
| 7:15 AM | 0 | 0 | 0 | 0 | 0 | 71 | 0 | 0 | 0 | 61 | 0 | 0 | 0 | 0 | 0 | 0 | 132 | 545 | 0 | 0 | 0 | 0 |
| 7:30 AM | 0 | 0 | 0 | 0 | 0 | 81 | 0 | 0 | 0 | 57 | 0 | 0 | 0 | 0 | 0 | 0 | 138 | 504 | 0 | 0 | 0 | 0 |
| 7:45 AM | 0 | 0 | 0 | 0 | 0 | 105 | 0 | 0 | 0 | 51 | 0 | 0 | 0 | 0 | 0 | 0 | 156 | 464 | 0 | 0 | 0 | 0 |
| 8:00 AM | 0 | 0 | 0 | 0 | 0 | 83 | 0 | 0 | 0 | 36 | 0 | 0 | 0 | 0 | 0 | 0 | 119 | 390 | 0 | 0 | 0 | 0 |
| 8:15 AM | 0 | 0 | 0 | 0 | 0 | 57 | 0 | 0 | 0 | 34 | 0 | 0 | 0 | 0 | 0 | 0 | 91 | | 0 | 0 | 0 | 0 |
| 8:30 AM | 0 | 0 | 0 | 0 | 0 | 62 | 0 | 0 | 0 | 36 | 0 | 0 | 0 | 0 | 0 | 0 | 98 | | 0 | 0 | 0 | 0 |
| 8:45 AM | 0 | 0 | 0 | 0 | 0 | 56 | 0 | 0 | 0 | 26 | 0 | 0 | 0 | 0 | 0 | 0 | 82 | | 0 | 0 | 0 | 0 |
| Count Total | 0 | 0 | 0 | 0 | 0 | 585 | 1 | 0 | 0 | 338 | 0 | 0 | 0 | 0 | 0 | 0 | 924 | | 0 | 0 | 0 | 0 |
| Peak Hour | 0 | 0 | 0 | 0 | 0 | 340 | 0 | 0 | 0 | 205 | 0 | 0 | 0 | 0 | 0 | 0 | 545 | | 0 | 0 | 0 | 0 |

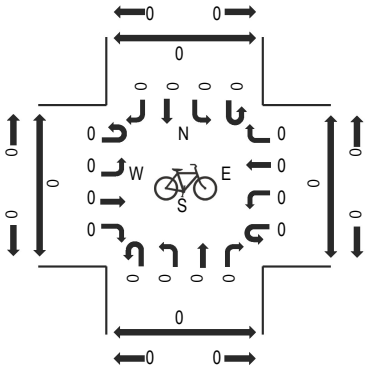
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

**Location:** 2 HAWES RD & SR202L EB RAMPS AM
**Date:** Tuesday, April 2, 2024
**Peak Hour:** 07:00 AM - 08:00 AM
**Peak 15-Minutes:** 07:30 AM - 07:45 AM

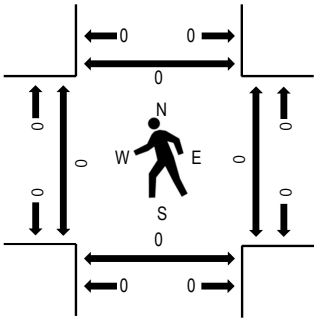
## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles




## Peak Hour - Pedestrians




Note: Total study counts contained in parentheses.

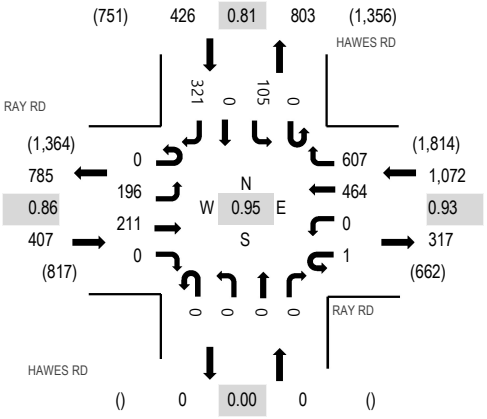
## Traffic Counts - Motorized Vehicles

| Interval Start Time | SR202L EB RAMPS Eastbound | | | | SR202L EB RAMPS Westbound | | | | HAWES RD Northbound | | | | HAWES RD Southbound | | | | | Rolling Hour | Pedestrian Crossings | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | Total | | West | East | South | North |
| 7:00 AM | 0 | 0 | 0 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 39 | 167 | 0 | 0 | 70 | 0 | 298 | 1,264 | 0 | 0 | 0 | 0 |
| 7:15 AM | 0 | 0 | 0 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 62 | 161 | 0 | 2 | 69 | 0 | 316 | 1,238 | 0 | 0 | 0 | 0 |
| 7:30 AM | 0 | 1 | 0 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 55 | 186 | 0 | 0 | 81 | 0 | 348 | 1,143 | 0 | 0 | 0 | 0 |
| 7:45 AM | 0 | 1 | 1 | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 49 | 125 | 0 | 1 | 101 | 0 | 302 | 995 | 0 | 0 | 0 | 0 |
| 8:00 AM | 0 | 0 | 0 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 38 | 127 | 0 | 1 | 84 | 0 | 272 | 853 | 0 | 0 | 0 | 0 |
| 8:15 AM | 0 | 0 | 0 | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 32 | 108 | 0 | 0 | 57 | 0 | 221 | | 0 | 0 | 0 | 0 |
| 8:30 AM | 0 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 38 | 88 | 0 | 0 | 59 | 0 | 200 | | 0 | 0 | 0 | 0 |
| 8:45 AM | 0 | 1 | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 59 | 0 | 1 | 55 | 0 | 160 | | 0 | 0 | 0 | 0 |
| Count Total | 0 | 3 | 1 | 173 | 0 | 0 | 0 | 0 | 0 | 0 | 338 | 1,021 | 0 | 5 | 576 | 0 | 2,117 | | 0 | 0 | 0 | 0 |
| Peak Hour | 0 | 2 | 1 | 93 | 0 | 0 | 0 | 0 | 0 | 0 | 205 | 639 | 0 | 3 | 321 | 0 | 1,264 | | 0 | 0 | 0 | 0 |

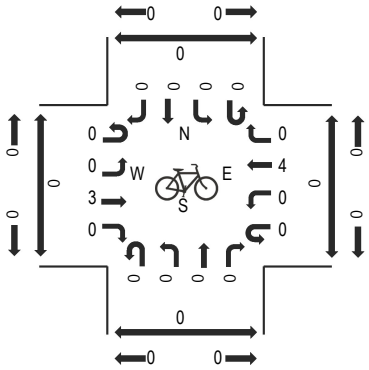
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

**Location:** 3 HAWES RD & RAY RD AM
**Date:** Tuesday, April 2, 2024
**Peak Hour:** 07:15 AM - 08:15 AM
**Peak 15-Minutes:** 07:30 AM - 07:45 AM

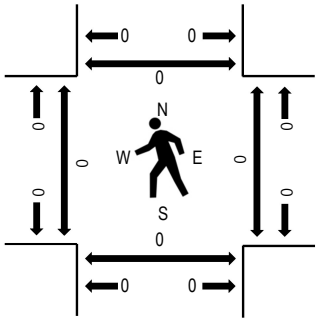
## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles




## Peak Hour - Pedestrians




Note: Total study counts contained in parentheses.

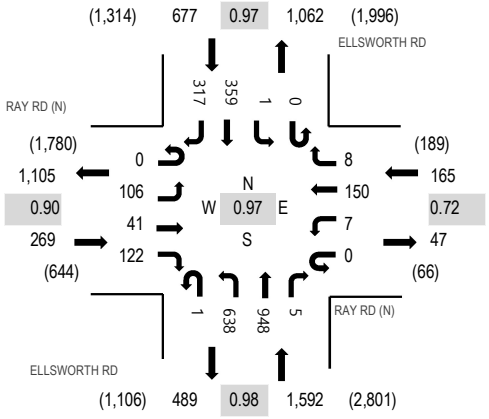
## Traffic Counts - Motorized Vehicles

| Interval Start Time | RAY RD Eastbound | | | | RAY RD Westbound | | | | HAWES RD Northbound | | | | HAWES RD Southbound | | | | | Rolling Hour | Pedestrian Crossings | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | Total | | West | East | South | North |
| 7:00 AM | 0 | 51 | 42 | 0 | 0 | 0 | 109 | 156 | 0 | 0 | 0 | 0 | 0 | 21 | 0 | 71 | 450 | 1,886 | 0 | 0 | 0 | 0 |
| 7:15 AM | 0 | 37 | 47 | 0 | 0 | 0 | 112 | 184 | 0 | 0 | 0 | 0 | 0 | 27 | 0 | 59 | 466 | 1,905 | 0 | 0 | 0 | 0 |
| 7:30 AM | 0 | 67 | 48 | 0 | 1 | 0 | 103 | 174 | 0 | 0 | 0 | 0 | 0 | 26 | 0 | 81 | 500 | 1,838 | 0 | 0 | 0 | 0 |
| 7:45 AM | 0 | 38 | 39 | 0 | 0 | 0 | 125 | 137 | 0 | 0 | 0 | 0 | 0 | 23 | 0 | 108 | 470 | 1,683 | 0 | 0 | 0 | 0 |
| 8:00 AM | 0 | 54 | 77 | 0 | 0 | 0 | 124 | 112 | 0 | 0 | 0 | 0 | 0 | 29 | 0 | 73 | 469 | 1,496 | 0 | 0 | 0 | 0 |
| 8:15 AM | 0 | 46 | 80 | 0 | 0 | 0 | 93 | 93 | 0 | 0 | 0 | 0 | 0 | 28 | 0 | 59 | 399 | | 0 | 0 | 0 | 0 |
| 8:30 AM | 0 | 36 | 74 | 0 | 0 | 0 | 75 | 89 | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 58 | 345 | | 0 | 0 | 0 | 0 |
| 8:45 AM | 0 | 24 | 57 | 0 | 0 | 0 | 69 | 58 | 0 | 0 | 0 | 0 | 0 | 30 | 0 | 45 | 283 | | 0 | 0 | 0 | 0 |
| Count Total | 0 | 353 | 464 | 0 | 1 | 0 | 810 | 1,003 | 0 | 0 | 0 | 0 | 0 | 197 | 0 | 554 | 3,382 | | 0 | 0 | 0 | 0 |
| Peak Hour | 0 | 196 | 211 | 0 | 1 | 0 | 464 | 607 | 0 | 0 | 0 | 0 | 0 | 105 | 0 | 321 | 1,905 | | 0 | 0 | 0 | 0 |

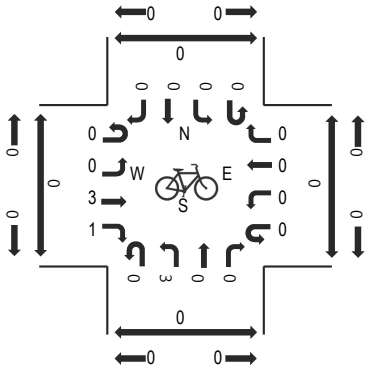
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

**Location:** 4 ELLSWORTH RD & RAY RD (N) AM
**Date:** Tuesday, April 2, 2024
**Peak Hour:** 07:00 AM - 08:00 AM
**Peak 15-Minutes:** 07:30 AM - 07:45 AM

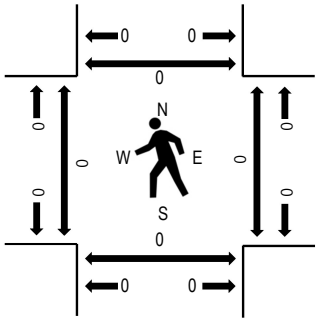
## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles




## Peak Hour - Pedestrians




Note: Total study counts contained in parentheses.

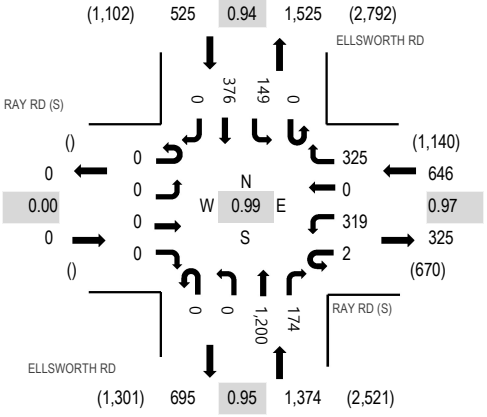
## Traffic Counts - Motorized Vehicles

| Interval Start Time | RAY RD (N) Eastbound | | | | RAY RD (N) Westbound | | | | ELLSWORTH RD Northbound | | | | ELLSWORTH RD Southbound | | | | | Rolling Hour | Pedestrian Crossings | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | Total | | West | East | South | North |
| 7:00 AM | 0 | 34 | 9 | 19 | 0 | 0 | 38 | 0 | 0 | 160 | 245 | 0 | 0 | 0 | 91 | 76 | 672 | 2,703 | 0 | 0 | 0 | 0 |
| 7:15 AM | 0 | 24 | 10 | 37 | 0 | 1 | 37 | 3 | 0 | 168 | 239 | 1 | 0 | 0 | 75 | 77 | 672 | 2,677 | 0 | 0 | 0 | 0 |
| 7:30 AM | 0 | 21 | 13 | 35 | 0 | 5 | 51 | 1 | 1 | 153 | 233 | 2 | 0 | 0 | 93 | 87 | 695 | 2,587 | 0 | 0 | 0 | 0 |
| 7:45 AM | 0 | 27 | 9 | 31 | 0 | 1 | 24 | 4 | 0 | 157 | 231 | 2 | 0 | 1 | 100 | 77 | 664 | 2,439 | 0 | 0 | 0 | 0 |
| 8:00 AM | 0 | 44 | 7 | 53 | 0 | 0 | 12 | 1 | 0 | 135 | 207 | 2 | 0 | 0 | 105 | 80 | 646 | 2,245 | 0 | 1 | 0 | 0 |
| 8:15 AM | 0 | 40 | 1 | 56 | 0 | 0 | 5 | 2 | 0 | 105 | 197 | 0 | 0 | 0 | 106 | 70 | 582 | | 0 | 0 | 0 | 0 |
| 8:30 AM | 0 | 43 | 5 | 53 | 0 | 0 | 2 | 0 | 1 | 98 | 200 | 2 | 0 | 0 | 104 | 39 | 547 | | 0 | 0 | 0 | 0 |
| 8:45 AM | 0 | 31 | 2 | 40 | 0 | 0 | 2 | 0 | 0 | 93 | 169 | 0 | 0 | 0 | 99 | 34 | 470 | | 0 | 0 | 0 | 0 |
| Count Total | 0 | 264 | 56 | 324 | 0 | 7 | 171 | 11 | 2 | 1,069 | 1,721 | 9 | 0 | 1 | 773 | 540 | 4,948 | | 0 | 1 | 0 | 0 |
| Peak Hour | 0 | 106 | 41 | 122 | 0 | 7 | 150 | 8 | 1 | 638 | 948 | 5 | 0 | 1 | 359 | 317 | 2,703 | | 0 | 0 | 0 | 0 |

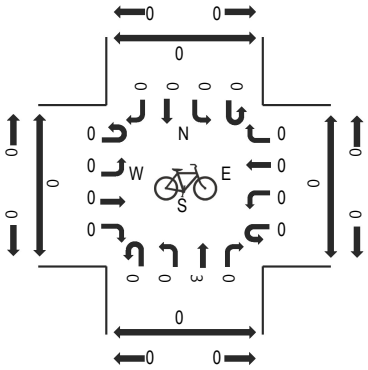
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

**Location:** 5 ELLSWORTH RD & RAY RD (S) AM
**Date:** Tuesday, April 2, 2024
**Peak Hour:** 07:15 AM - 08:15 AM
**Peak 15-Minutes:** 07:15 AM - 07:30 AM

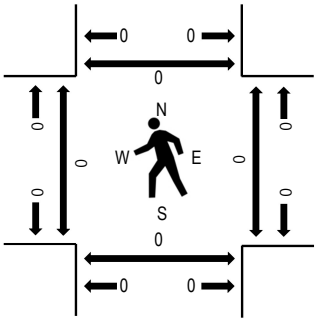
## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles



## Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

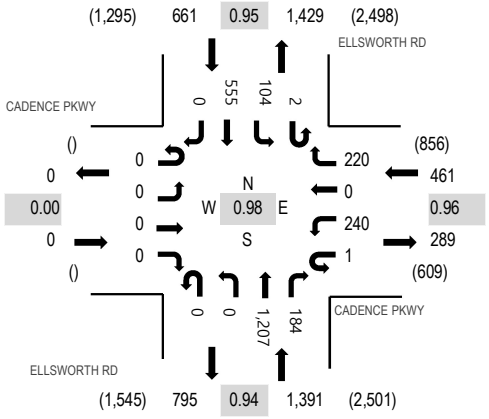
## Traffic Counts - Motorized Vehicles

| Interval Start Time | RAY RD (S) Eastbound | | | | RAY RD (S) Westbound | | | | ELLSWORTH RD Northbound | | | | ELLSWORTH RD Southbound | | | | | Rolling Hour | Pedestrian Crossings | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | Total | | West | East | South | North |
| 7:00 AM | 0 | 0 | 0 | 0 | 0 | 65 | 0 | 72 | 0 | 0 | 334 | 42 | 0 | 26 | 84 | 0 | 623 | 2,543 | 0 | 0 | 0 | 0 |
| 7:15 AM | 0 | 0 | 0 | 0 | 1 | 82 | 0 | 70 | 0 | 0 | 340 | 38 | 0 | 38 | 75 | 0 | 644 | 2,545 | 0 | 0 | 0 | 0 |
| 7:30 AM | 0 | 0 | 0 | 0 | 0 | 78 | 0 | 85 | 0 | 0 | 299 | 56 | 0 | 25 | 94 | 0 | 637 | 2,465 | 0 | 0 | 0 | 0 |
| 7:45 AM | 0 | 0 | 0 | 0 | 0 | 75 | 0 | 91 | 0 | 0 | 294 | 34 | 0 | 37 | 108 | 0 | 639 | 2,371 | 0 | 0 | 0 | 0 |
| 8:00 AM | 0 | 0 | 0 | 0 | 1 | 84 | 0 | 79 | 0 | 0 | 267 | 46 | 0 | 49 | 99 | 0 | 625 | 2,220 | 0 | 0 | 0 | 0 |
| 8:15 AM | 0 | 0 | 0 | 0 | 1 | 56 | 0 | 75 | 0 | 0 | 226 | 42 | 0 | 65 | 99 | 0 | 564 | | 0 | 0 | 0 | 0 |
| 8:30 AM | 0 | 0 | 0 | 0 | 1 | 44 | 0 | 59 | 0 | 0 | 243 | 39 | 0 | 47 | 110 | 0 | 543 | | 0 | 0 | 0 | 0 |
| 8:45 AM | 0 | 0 | 0 | 0 | 0 | 53 | 0 | 68 | 0 | 0 | 190 | 31 | 0 | 51 | 95 | 0 | 488 | | 0 | 0 | 0 | 0 |
| Count Total | 0 | 0 | 0 | 0 | 4 | 537 | 0 | 599 | 0 | 0 | 2,193 | 328 | 0 | 338 | 764 | 0 | 4,763 | | 0 | 0 | 0 | 0 |
| Peak Hour | 0 | 0 | 0 | 0 | 2 | 319 | 0 | 325 | 0 | 0 | 1,200 | 174 | 0 | 149 | 376 | 0 | 2,545 | | 0 | 0 | 0 | 0 |

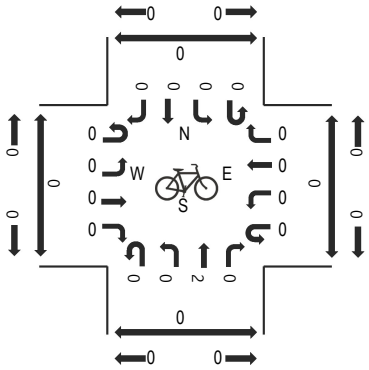
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

**Location:** 6 ELLSWORTH RD & CADENCE PKWY AM
**Date:** Tuesday, April 2, 2024
**Peak Hour:** 07:00 AM - 08:00 AM
**Peak 15-Minutes:** 07:30 AM - 07:45 AM

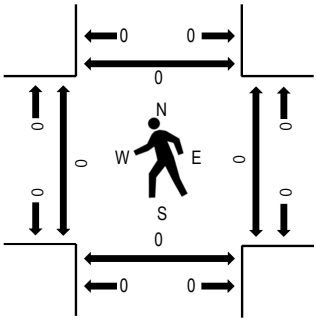
## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles




## Peak Hour - Pedestrians




Note: Total study counts contained in parentheses.

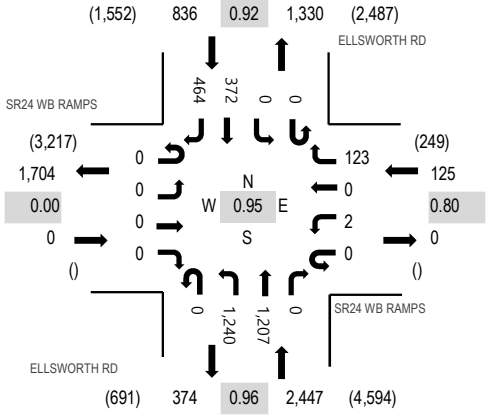
## Traffic Counts - Motorized Vehicles

| Interval Start Time | CADENCE PKWY Eastbound | | | | CADENCE PKWY Westbound | | | | ELLSWORTH RD Northbound | | | | ELLSWORTH RD Southbound | | | | | Rolling Hour | Pedestrian Crossings | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | Total | | West | East | South | North |
| 7:00 AM | 0 | 0 | 0 | 0 | 1 | 58 | 0 | 51 | 0 | 0 | 325 | 44 | 0 | 17 | 132 | 0 | 628 | 2,513 | 0 | 0 | 0 | 0 |
| 7:15 AM | 0 | 0 | 0 | 0 | 0 | 62 | 0 | 58 | 0 | 0 | 307 | 35 | 1 | 31 | 125 | 0 | 619 | 2,500 | 0 | 0 | 0 | 0 |
| 7:30 AM | 0 | 0 | 0 | 0 | 0 | 65 | 0 | 48 | 0 | 0 | 306 | 47 | 0 | 28 | 144 | 0 | 638 | 2,425 | 0 | 0 | 0 | 0 |
| 7:45 AM | 0 | 0 | 0 | 0 | 0 | 55 | 0 | 63 | 0 | 0 | 269 | 58 | 1 | 28 | 154 | 0 | 628 | 2,315 | 0 | 0 | 0 | 0 |
| 8:00 AM | 0 | 0 | 0 | 0 | 0 | 62 | 0 | 61 | 0 | 0 | 251 | 59 | 1 | 23 | 158 | 0 | 615 | 2,139 | 0 | 0 | 0 | 0 |
| 8:15 AM | 0 | 0 | 0 | 0 | 2 | 63 | 0 | 38 | 0 | 0 | 230 | 57 | 0 | 32 | 122 | 0 | 544 | | 0 | 0 | 0 | 0 |
| 8:30 AM | 0 | 0 | 0 | 0 | 2 | 54 | 0 | 45 | 0 | 0 | 229 | 41 | 3 | 27 | 127 | 0 | 528 | | 0 | 0 | 0 | 0 |
| 8:45 AM | 0 | 0 | 0 | 0 | 0 | 49 | 0 | 19 | 0 | 0 | 192 | 51 | 0 | 26 | 115 | 0 | 452 | | 0 | 0 | 0 | 0 |
| Count Total | 0 | 0 | 0 | 0 | 5 | 468 | 0 | 383 | 0 | 0 | 2,109 | 392 | 6 | 212 | 1,077 | 0 | 4,652 | | 0 | 0 | 0 | 0 |
| Peak Hour | 0 | 0 | 0 | 0 | 1 | 240 | 0 | 220 | 0 | 0 | 1,207 | 184 | 2 | 104 | 555 | 0 | 2,513 | | 0 | 0 | 0 | 0 |

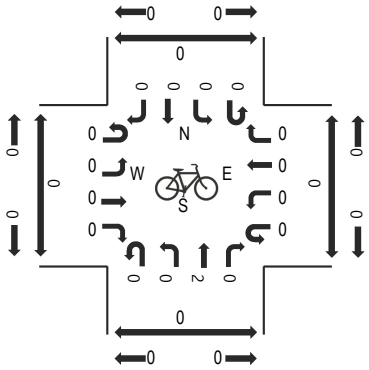
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

**Location:** 7 ELLSWORTH RD & SR24 WB RAMPS AM
**Date:** Tuesday, April 2, 2024
**Peak Hour:** 07:15 AM - 08:15 AM
**Peak 15-Minutes:** 08:00 AM - 08:15 AM

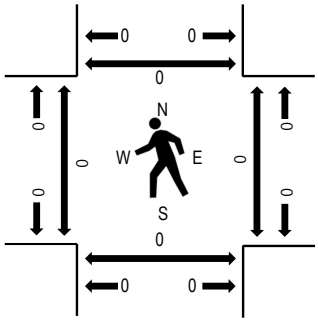
## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles




## Peak Hour - Pedestrians




Note: Total study counts contained in parentheses.

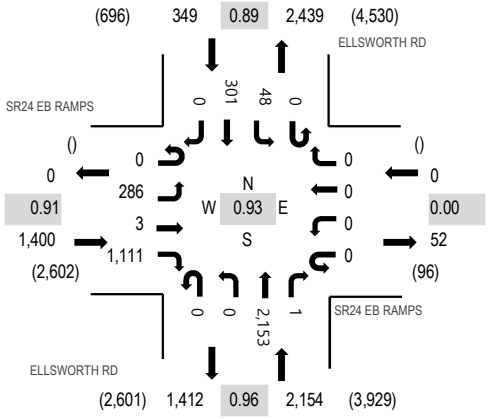
## Traffic Counts - Motorized Vehicles

| Interval Start Time | SR24 WB RAMPS Eastbound | | | | SR24 WB RAMPS Westbound | | | | ELLSWORTH RD Northbound | | | | ELLSWORTH RD Southbound | | | | | Rolling Hour | Pedestrian Crossings | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | Total | | West | East | South | North |
| 7:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 36 | 0 | 308 | 332 | 0 | 0 | 0 | 74 | 110 | 860 | 3,373 | 0 | 0 | 0 | 0 |
| 7:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 29 | 0 | 280 | 323 | 0 | 0 | 0 | 63 | 126 | 821 | 3,408 | 0 | 0 | 0 | 0 |
| 7:30 AM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 17 | 0 | 299 | 325 | 0 | 0 | 0 | 109 | 103 | 854 | 3,363 | 0 | 0 | 0 | 0 |
| 7:45 AM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 42 | 0 | 305 | 282 | 0 | 0 | 0 | 101 | 107 | 838 | 3,218 | 0 | 0 | 0 | 0 |
| 8:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 35 | 0 | 356 | 277 | 0 | 0 | 0 | 99 | 128 | 895 | 3,022 | 0 | 0 | 0 | 0 |
| 8:15 AM | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 33 | 1 | 302 | 253 | 0 | 0 | 0 | 81 | 102 | 776 | | 0 | 0 | 0 | 0 |
| 8:30 AM | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 20 | 0 | 262 | 241 | 0 | 0 | 0 | 85 | 99 | 709 | | 0 | 0 | 0 | 0 |
| 8:45 AM | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 27 | 0 | 233 | 215 | 0 | 0 | 0 | 70 | 95 | 642 | | 0 | 0 | 0 | 0 |
| Count Total | 0 | 0 | 0 | 0 | 0 | 8 | 2 | 239 | 1 | 2,345 | 2,248 | 0 | 0 | 0 | 682 | 870 | 6,395 | | 0 | 0 | 0 | 0 |
| Peak Hour | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 123 | 0 | 1,240 | 1,207 | 0 | 0 | 0 | 372 | 464 | 3,408 | | 0 | 0 | 0 | 0 |

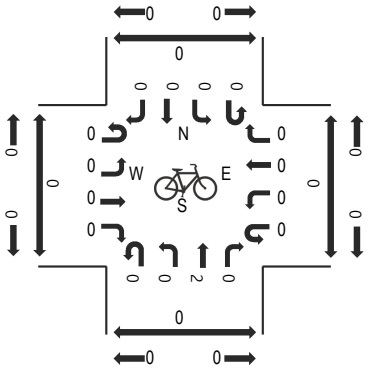
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

**Location:** 8 ELLSWORTH RD & SR24 EB RAMPS AM
**Date:** Tuesday, April 2, 2024
**Peak Hour:** 07:00 AM - 08:00 AM
**Peak 15-Minutes:** 07:30 AM - 07:45 AM

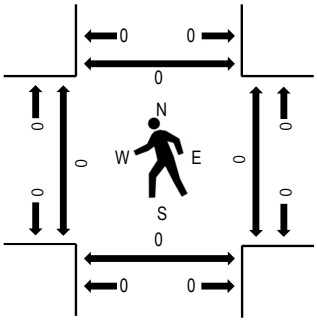
## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles




## Peak Hour - Pedestrians




Note: Total study counts contained in parentheses.

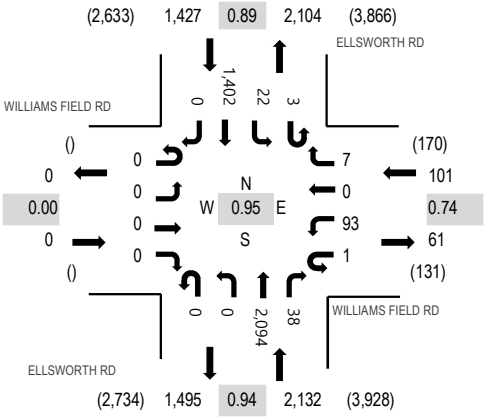
## Traffic Counts - Motorized Vehicles

| Interval Start Time | SR24 EB RAMPS Eastbound | | | | SR24 EB RAMPS Westbound | | | | ELLSWORTH RD Northbound | | | | ELLSWORTH RD Southbound | | | | | Rolling Hour | Pedestrian Crossings | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | Total | | West | East | South | North |
| 7:00 AM | 0 | 74 | 0 | 275 | 0 | 0 | 0 | 0 | 0 | 0 | 558 | 1 | 0 | 7 | 64 | 0 | 979 | 3,903 | 0 | 0 | 0 | 0 |
| 7:15 AM | 0 | 62 | 1 | 268 | 0 | 0 | 0 | 0 | 0 | 0 | 532 | 0 | 0 | 13 | 52 | 0 | 928 | 3,871 | 0 | 0 | 0 | 0 |
| 7:30 AM | 0 | 74 | 0 | 309 | 0 | 0 | 0 | 0 | 0 | 0 | 550 | 0 | 0 | 12 | 99 | 0 | 1,044 | 3,790 | 0 | 0 | 0 | 0 |
| 7:45 AM | 0 | 76 | 2 | 259 | 0 | 0 | 0 | 0 | 0 | 0 | 513 | 0 | 0 | 16 | 86 | 0 | 952 | 3,563 | 0 | 0 | 0 | 0 |
| 8:00 AM | 0 | 80 | 1 | 220 | 0 | 0 | 0 | 0 | 0 | 0 | 548 | 0 | 0 | 11 | 87 | 0 | 947 | 3,324 | 0 | 0 | 0 | 0 |
| 8:15 AM | 0 | 76 | 0 | 230 | 0 | 0 | 0 | 0 | 0 | 0 | 454 | 1 | 1 | 16 | 69 | 0 | 847 | | 0 | 0 | 0 | 0 |
| 8:30 AM | 0 | 81 | 0 | 231 | 0 | 0 | 0 | 0 | 0 | 0 | 416 | 0 | 0 | 5 | 84 | 0 | 817 | | 0 | 0 | 0 | 0 |
| 8:45 AM | 0 | 79 | 2 | 202 | 0 | 0 | 0 | 0 | 0 | 0 | 356 | 0 | 0 | 8 | 66 | 0 | 713 | | 0 | 0 | 0 | 0 |
| Count Total | 0 | 602 | 6 | 1,994 | 0 | 0 | 0 | 0 | 0 | 0 | 3,927 | 2 | 1 | 88 | 607 | 0 | 7,227 | | 0 | 0 | 0 | 0 |
| Peak Hour | 0 | 286 | 3 | 1,111 | 0 | 0 | 0 | 0 | 0 | 0 | 2,153 | 1 | 0 | 48 | 301 | 0 | 3,903 | | 0 | 0 | 0 | 0 |

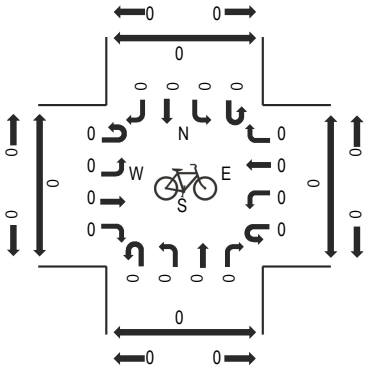
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

**Location:** 9 ELLSWORTH RD & WILLIAMS FIELD RD AM
**Date:** Tuesday, April 2, 2024
**Peak Hour:** 07:00 AM - 08:00 AM
**Peak 15-Minutes:** 07:30 AM - 07:45 AM

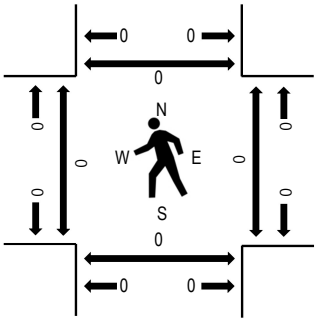
## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles




## Peak Hour - Pedestrians




Note: Total study counts contained in parentheses.

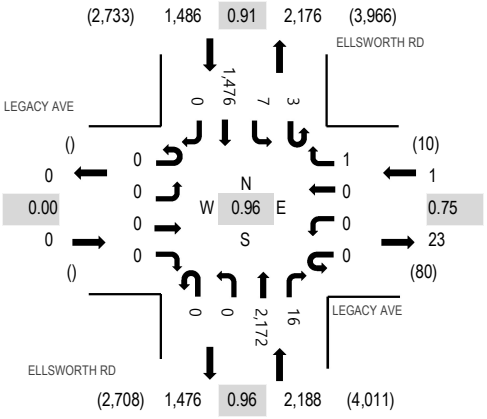
## Traffic Counts - Motorized Vehicles

| Interval Start Time | WILLIAMS FIELD RD Eastbound | | | | WILLIAMS FIELD RD Westbound | | | | ELLSWORTH RD Northbound | | | | ELLSWORTH RD Southbound | | | | | Rolling Hour | Pedestrian Crossings | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | Total | | West | East | South | North |
| 7:00 AM | 0 | 0 | 0 | 0 | 1 | 17 | 0 | 2 | 0 | 0 | 559 | 7 | 0 | 1 | 347 | 0 | 934 | 3,660 | 0 | 0 | 0 | 0 |
| 7:15 AM | 0 | 0 | 0 | 0 | 0 | 32 | 0 | 3 | 0 | 0 | 507 | 13 | 0 | 4 | 316 | 0 | 875 | 3,614 | 0 | 0 | 0 | 0 |
| 7:30 AM | 0 | 0 | 0 | 0 | 0 | 21 | 0 | 2 | 0 | 0 | 536 | 9 | 2 | 9 | 389 | 0 | 968 | 3,535 | 0 | 0 | 0 | 0 |
| 7:45 AM | 0 | 0 | 0 | 0 | 0 | 23 | 0 | 0 | 0 | 0 | 492 | 9 | 1 | 8 | 350 | 0 | 883 | 3,322 | 0 | 0 | 0 | 0 |
| 8:00 AM | 0 | 0 | 0 | 0 | 0 | 22 | 0 | 1 | 0 | 0 | 539 | 13 | 1 | 4 | 308 | 0 | 888 | 3,071 | 0 | 0 | 0 | 0 |
| 8:15 AM | 0 | 0 | 0 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 476 | 8 | 0 | 4 | 293 | 0 | 796 | | 0 | 0 | 0 | 0 |
| 8:30 AM | 0 | 0 | 0 | 0 | 0 | 17 | 0 | 0 | 0 | 0 | 393 | 11 | 0 | 14 | 320 | 0 | 755 | | 0 | 0 | 0 | 0 |
| 8:45 AM | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 2 | 0 | 0 | 349 | 7 | 1 | 9 | 252 | 0 | 632 | | 0 | 0 | 0 | 0 |
| Count Total | 0 | 0 | 0 | 0 | 1 | 159 | 0 | 10 | 0 | 0 | 3,851 | 77 | 5 | 53 | 2,575 | 0 | 6,731 | | 0 | 0 | 0 | 0 |
| Peak Hour | 0 | 0 | 0 | 0 | 1 | 93 | 0 | 7 | 0 | 0 | 2,094 | 38 | 3 | 22 | 1,402 | 0 | 3,660 | | 0 | 0 | 0 | 0 |

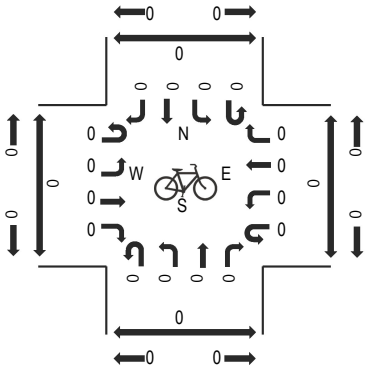
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

**Location:** 10 ELLSWORTH RD & LEGACY AVE AM
**Date:** Tuesday, April 2, 2024
**Peak Hour:** 07:00 AM - 08:00 AM
**Peak 15-Minutes:** 07:30 AM - 07:45 AM

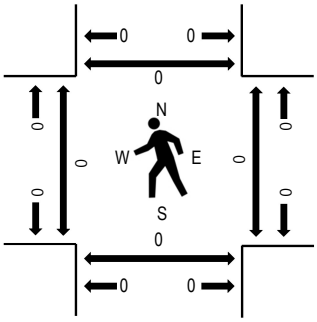
## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles



## Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

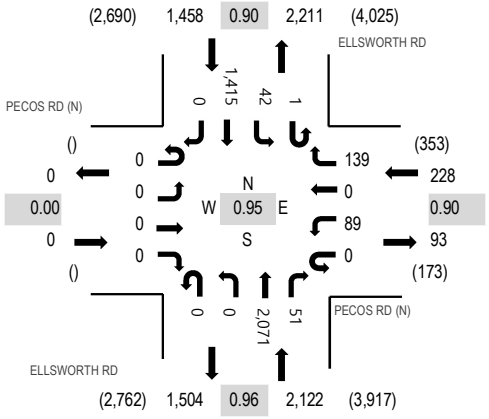
## Traffic Counts - Motorized Vehicles

| Interval Start Time | LEGACY AVE Eastbound | | | | LEGACY AVE Westbound | | | | ELLSWORTH RD Northbound | | | | ELLSWORTH RD Southbound | | | | | Rolling Hour | Pedestrian Crossings | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | Total | | West | East | South | North |
| 7:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 568 | 2 | 2 | 2 | 354 | 0 | 928 | 3,675 | 0 | 0 | 0 | 0 |
| 7:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 532 | 2 | 0 | 1 | 360 | 0 | 896 | 3,639 | 0 | 0 | 0 | 0 |
| 7:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 551 | 2 | 0 | 0 | 408 | 0 | 961 | 3,508 | 0 | 0 | 0 | 0 |
| 7:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 521 | 10 | 1 | 4 | 354 | 0 | 890 | 3,308 | 0 | 0 | 0 | 0 |
| 8:00 AM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 521 | 21 | 1 | 6 | 340 | 0 | 892 | 3,079 | 0 | 0 | 0 | 0 |
| 8:15 AM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 472 | 4 | 1 | 4 | 282 | 0 | 765 | | 0 | 0 | 0 | 0 |
| 8:30 AM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 421 | 6 | 0 | 3 | 330 | 0 | 761 | | 0 | 0 | 0 | 0 |
| 8:45 AM | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 0 | 0 | 370 | 8 | 0 | 5 | 275 | 0 | 661 | | 0 | 0 | 0 | 0 |
| Count Total | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 5 | 0 | 0 | 3,956 | 55 | 5 | 25 | 2,703 | 0 | 6,754 | | 0 | 0 | 0 | 0 |
| Peak Hour | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2,172 | 16 | 3 | 7 | 1,476 | 0 | 3,675 | | 0 | 0 | 0 | 0 |

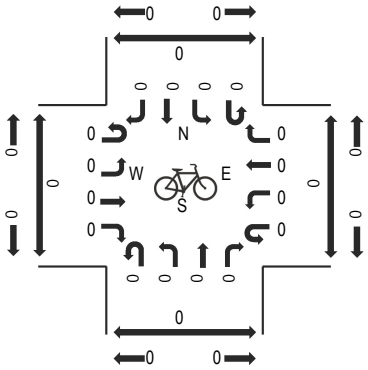
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

**Location:** 11 ELLSWORTH RD & PECOS RD (N) AM
**Date:** Tuesday, April 2, 2024
**Peak Hour:** 07:00 AM - 08:00 AM
**Peak 15-Minutes:** 07:30 AM - 07:45 AM

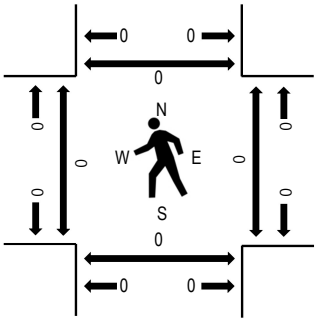
## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles



## Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

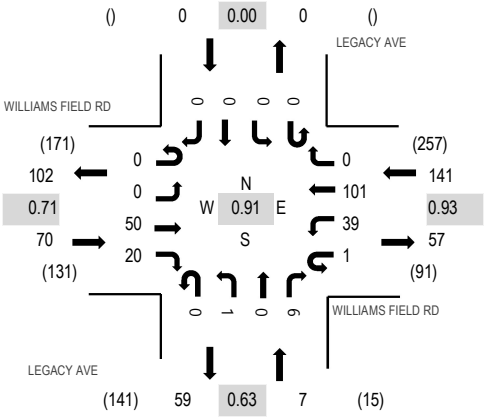
## Traffic Counts - Motorized Vehicles

| Interval Start Time | PECOS RD (N) Eastbound | | | | PECOS RD (N) Westbound | | | | ELLSWORTH RD Northbound | | | | ELLSWORTH RD Southbound | | | | | Rolling Hour | Pedestrian Crossings | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | Total | | West | East | South | North |
| 7:00 AM | 0 | 0 | 0 | 0 | 0 | 14 | 0 | 36 | 0 | 0 | 538 | 13 | 0 | 7 | 347 | 0 | 955 | 3,808 | 0 | 0 | 0 | 0 |
| 7:15 AM | 0 | 0 | 0 | 0 | 0 | 28 | 0 | 31 | 0 | 0 | 511 | 11 | 0 | 9 | 335 | 0 | 925 | 3,762 | 0 | 0 | 0 | 0 |
| 7:30 AM | 0 | 0 | 0 | 0 | 0 | 24 | 0 | 39 | 0 | 0 | 513 | 16 | 0 | 10 | 395 | 0 | 997 | 3,624 | 0 | 0 | 0 | 0 |
| 7:45 AM | 0 | 0 | 0 | 0 | 0 | 23 | 0 | 33 | 0 | 0 | 509 | 11 | 1 | 16 | 338 | 0 | 931 | 3,399 | 0 | 0 | 0 | 0 |
| 8:00 AM | 0 | 0 | 0 | 0 | 0 | 17 | 0 | 27 | 0 | 0 | 509 | 14 | 0 | 12 | 330 | 0 | 909 | 3,152 | 0 | 0 | 0 | 0 |
| 8:15 AM | 0 | 0 | 0 | 0 | 0 | 14 | 0 | 15 | 0 | 0 | 463 | 9 | 0 | 6 | 280 | 0 | 787 | | 0 | 0 | 0 | 0 |
| 8:30 AM | 0 | 0 | 0 | 0 | 0 | 16 | 0 | 13 | 0 | 0 | 411 | 14 | 0 | 8 | 310 | 0 | 772 | | 0 | 0 | 0 | 0 |
| 8:45 AM | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 12 | 0 | 0 | 364 | 11 | 0 | 6 | 280 | 0 | 684 | | 0 | 0 | 0 | 0 |
| Count Total | 0 | 0 | 0 | 0 | 0 | 147 | 0 | 206 | 0 | 0 | 3,818 | 99 | 1 | 74 | 2,615 | 0 | 6,960 | | 0 | 0 | 0 | 0 |
| Peak Hour | 0 | 0 | 0 | 0 | 0 | 89 | 0 | 139 | 0 | 0 | 2,071 | 51 | 1 | 42 | 1,415 | 0 | 3,808 | | 0 | 0 | 0 | 0 |

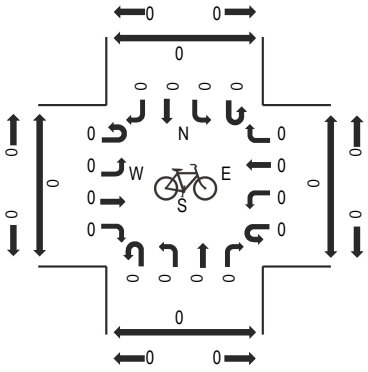
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

**Location:** 12 LEGACY AVE & WILLIAMS FIELD RD AM
**Date:** Tuesday, April 2, 2024
**Peak Hour:** 07:15 AM - 08:15 AM
**Peak 15-Minutes:** 08:00 AM - 08:15 AM

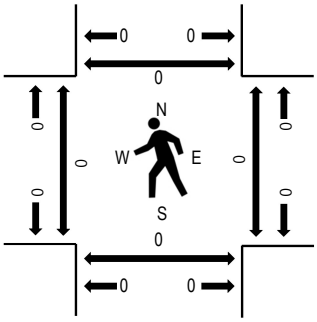
## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles



## Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

## Traffic Counts - Motorized Vehicles

| Interval Start Time | WILLIAMS FIELD RD Eastbound | | | | WILLIAMS FIELD RD Westbound | | | | LEGACY AVE Northbound | | | | LEGACY AVE Southbound | | | | | Rolling Hour | Pedestrian Crossings | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | Total | | West | East | South | North |
| 7:00 AM | 1 | 0 | 7 | 0 | 0 | 1 | 20 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 31 | 189 | 0 | 0 | 0 | 0 |
| 7:15 AM | 0 | 0 | 16 | 2 | 1 | 5 | 31 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 57 | 218 | 0 | 0 | 0 | 0 |
| 7:30 AM | 0 | 0 | 10 | 8 | 0 | 8 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 49 | 198 | 0 | 0 | 0 | 0 |
| 7:45 AM | 0 | 0 | 8 | 8 | 0 | 11 | 24 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 52 | 210 | 0 | 0 | 0 | 0 |
| 8:00 AM | 0 | 0 | 16 | 2 | 0 | 15 | 23 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 60 | 214 | 0 | 0 | 0 | 0 |
| 8:15 AM | 0 | 0 | 9 | 3 | 0 | 10 | 13 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 37 | | 0 | 0 | 0 | 0 |
| 8:30 AM | 0 | 0 | 11 | 14 | 0 | 20 | 15 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 61 | | 0 | 0 | 0 | 0 |
| 8:45 AM | 0 | 0 | 7 | 9 | 0 | 25 | 12 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 56 | | 0 | 0 | 0 | 0 |
| Count Total | 1 | 0 | 84 | 46 | 1 | 95 | 161 | 0 | 0 | 9 | 0 | 6 | 0 | 0 | 0 | 0 | 403 | | 0 | 0 | 0 | 0 |
| Peak Hour | 0 | 0 | 50 | 20 | 1 | 39 | 101 | 0 | 0 | 1 | 0 | 6 | 0 | 0 | 0 | 0 | 218 | | 0 | 0 | 0 | 0 |

ALL TRAFFIC DATA SERVICES
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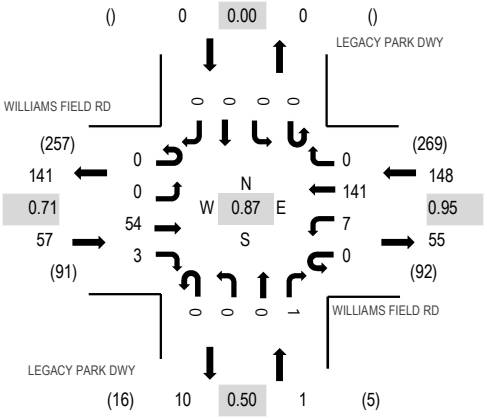
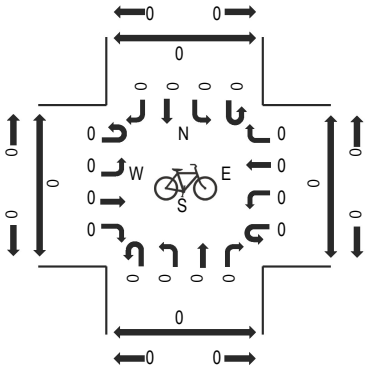
**Location:** 13 LEGACY PARK DWY & WILLIAMS FIELD RD AM
**Date:** Tuesday, April 2, 2024
**Peak Hour:** 07:15 AM - 08:15 AM
**Peak 15-Minutes:** 08:00 AM - 08:15 AM

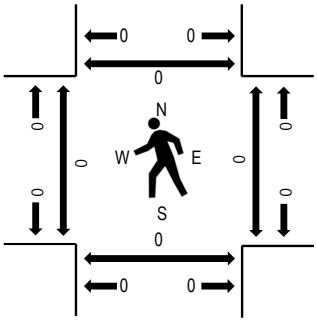
## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles



## Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

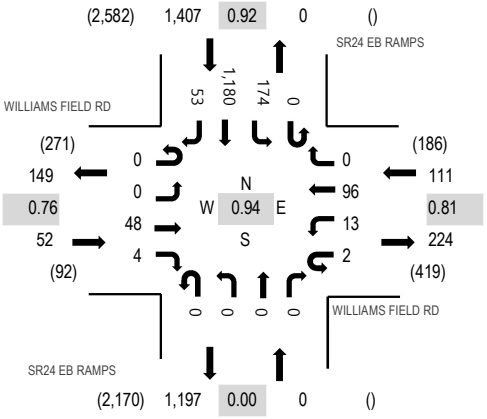
## Traffic Counts - Motorized Vehicles

| Interval Start Time | WILLIAMS FIELD RD Eastbound | | | | WILLIAMS FIELD RD Westbound | | | | LEGACY PARK DWY Northbound | | | | LEGACY PARK DWY Southbound | | | | | Rolling Hour | Pedestrian Crossings | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | Total | | West | East | South | North |
| 7:00 AM | 0 | 0 | 7 | 0 | 0 | 0 | 21 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 29 | 176 | 0 | 0 | 0 | 0 |
| 7:15 AM | 0 | 0 | 17 | 1 | 0 | 2 | 37 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 57 | 206 | 0 | 0 | 0 | 0 |
| 7:30 AM | 0 | 0 | 10 | 0 | 0 | 1 | 31 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 42 | 186 | 0 | 0 | 0 | 0 |
| 7:45 AM | 0 | 0 | 8 | 1 | 0 | 4 | 35 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 48 | 191 | 0 | 0 | 0 | 0 |
| 8:00 AM | 0 | 0 | 19 | 1 | 0 | 0 | 38 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 59 | 189 | 0 | 0 | 0 | 0 |
| 8:15 AM | 0 | 0 | 8 | 1 | 1 | 2 | 23 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 37 | | 0 | 0 | 0 | 0 |
| 8:30 AM | 0 | 0 | 10 | 1 | 0 | 1 | 35 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 47 | | 0 | 0 | 0 | 0 |
| 8:45 AM | 0 | 0 | 7 | 0 | 0 | 1 | 37 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 46 | | 0 | 0 | 0 | 0 |
| Count Total | 0 | 0 | 86 | 5 | 1 | 11 | 257 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 365 | | 0 | 0 | 0 | 0 |
| Peak Hour | 0 | 0 | 54 | 3 | 0 | 7 | 141 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 206 | | 0 | 0 | 0 | 0 |

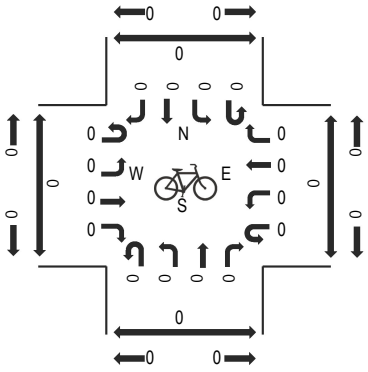
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

**Location:** 14 SR24 EB RAMPS & WILLIAMS FIELD RD AM
**Date:** Tuesday, April 2, 2024
**Peak Hour:** 07:15 AM - 08:15 AM
**Peak 15-Minutes:** 07:45 AM - 08:00 AM

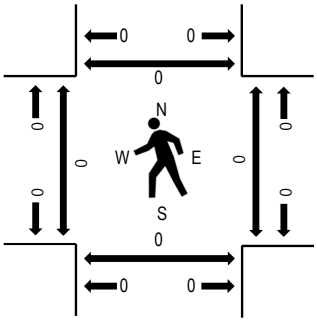
## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles




## Peak Hour - Pedestrians




Note: Total study counts contained in parentheses.

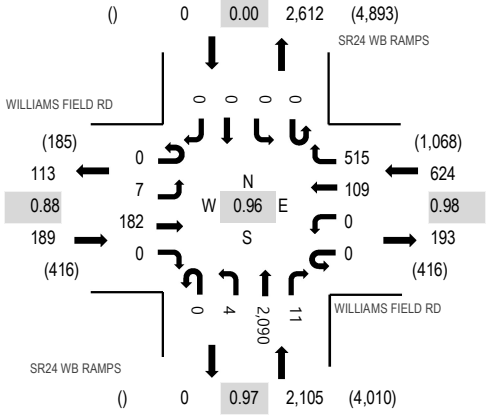
## Traffic Counts - Motorized Vehicles

| Interval Start Time | WILLIAMS FIELD RD Eastbound | | | | WILLIAMS FIELD RD Westbound | | | | SR24 EB RAMPS Northbound | | | | SR24 EB RAMPS Southbound | | | | | Rolling Hour | Pedestrian Crossings | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | Total | | West | East | South | North |
| 7:00 AM | 0 | 0 | 7 | 1 | 0 | 7 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 266 | 2 | 324 | 1,531 | 0 | 0 | 0 | 0 |
| 7:15 AM | 0 | 0 | 16 | 1 | 0 | 3 | 32 | 0 | 0 | 0 | 0 | 0 | 0 | 32 | 301 | 7 | 392 | 1,570 | 0 | 0 | 0 | 0 |
| 7:30 AM | 0 | 0 | 9 | 1 | 2 | 3 | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 52 | 298 | 11 | 397 | 1,544 | 0 | 0 | 0 | 0 |
| 7:45 AM | 0 | 0 | 7 | 1 | 0 | 3 | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 41 | 324 | 18 | 418 | 1,461 | 0 | 0 | 0 | 0 |
| 8:00 AM | 0 | 0 | 16 | 1 | 0 | 4 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 49 | 257 | 17 | 363 | 1,329 | 0 | 0 | 0 | 0 |
| 8:15 AM | 0 | 0 | 12 | 1 | 0 | 3 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 46 | 278 | 11 | 366 | | 0 | 0 | 0 | 0 |
| 8:30 AM | 0 | 0 | 10 | 0 | 0 | 1 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 43 | 221 | 23 | 314 | | 0 | 0 | 0 | 0 |
| 8:45 AM | 0 | 0 | 8 | 1 | 0 | 3 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 47 | 191 | 25 | 286 | | 0 | 0 | 0 | 0 |
| Count Total | 0 | 0 | 85 | 7 | 2 | 27 | 157 | 0 | 0 | 0 | 0 | 0 | 0 | 332 | 2,136 | 114 | 2,860 | | 0 | 0 | 0 | 0 |
| Peak Hour | 0 | 0 | 48 | 4 | 2 | 13 | 96 | 0 | 0 | 0 | 0 | 0 | 0 | 174 | 1,180 | 53 | 1,570 | | 0 | 0 | 0 | 0 |

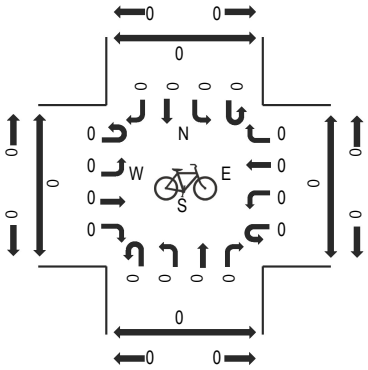
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

**Location:** 15 SR24 WB RAMPS & WILLIAMS FIELD RD AM
**Date:** Tuesday, April 2, 2024
**Peak Hour:** 07:00 AM - 08:00 AM
**Peak 15-Minutes:** 07:30 AM - 07:45 AM

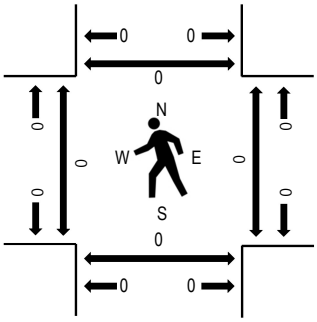
## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles



## Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

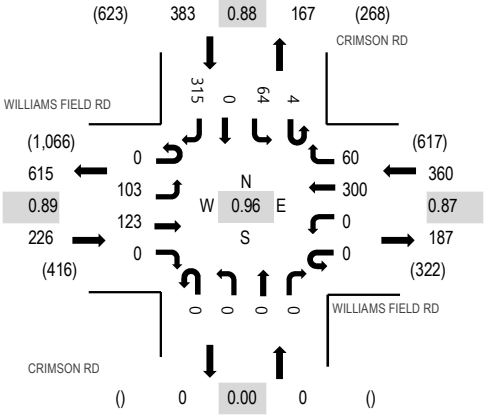
## Traffic Counts - Motorized Vehicles

| Interval Start Time | WILLIAMS FIELD RD Eastbound | | | | WILLIAMS FIELD RD Westbound | | | | SR24 WB RAMPS Northbound | | | | SR24 WB RAMPS Southbound | | | | | Rolling Hour | Pedestrian Crossings | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | Total | | West | East | South | North |
| 7:00 AM | 0 | 1 | 28 | 0 | 0 | 0 | 28 | 129 | 0 | 1 | 530 | 1 | 0 | 0 | 0 | 0 | 718 | 2,918 | 0 | 0 | 0 | 0 |
| 7:15 AM | 0 | 1 | 42 | 0 | 0 | 0 | 31 | 129 | 0 | 0 | 542 | 0 | 0 | 0 | 0 | 0 | 745 | 2,900 | 0 | 0 | 0 | 0 |
| 7:30 AM | 0 | 4 | 55 | 0 | 0 | 0 | 23 | 134 | 0 | 3 | 538 | 4 | 0 | 0 | 0 | 0 | 761 | 2,872 | 0 | 0 | 0 | 0 |
| 7:45 AM | 0 | 1 | 57 | 0 | 0 | 0 | 27 | 123 | 0 | 0 | 480 | 6 | 0 | 0 | 0 | 0 | 694 | 2,732 | 0 | 0 | 0 | 0 |
| 8:00 AM | 0 | 4 | 62 | 0 | 0 | 0 | 22 | 128 | 0 | 1 | 482 | 1 | 0 | 0 | 0 | 0 | 700 | 2,576 | 0 | 0 | 0 | 0 |
| 8:15 AM | 0 | 2 | 47 | 0 | 0 | 0 | 18 | 105 | 0 | 0 | 545 | 0 | 0 | 0 | 0 | 0 | 717 | | 0 | 0 | 0 | 0 |
| 8:30 AM | 0 | 2 | 57 | 0 | 0 | 0 | 17 | 72 | 0 | 1 | 469 | 3 | 0 | 0 | 0 | 0 | 621 | | 0 | 0 | 0 | 0 |
| 8:45 AM | 0 | 0 | 53 | 0 | 0 | 0 | 12 | 70 | 0 | 1 | 402 | 0 | 0 | 0 | 0 | 0 | 538 | | 0 | 0 | 0 | 0 |
| Count Total | 0 | 15 | 401 | 0 | 0 | 0 | 178 | 890 | 0 | 7 | 3,988 | 15 | 0 | 0 | 0 | 0 | 5,494 | | 0 | 0 | 0 | 0 |
| Peak Hour | 0 | 7 | 182 | 0 | 0 | 0 | 109 | 515 | 0 | 4 | 2,090 | 11 | 0 | 0 | 0 | 0 | 2,918 | | 0 | 0 | 0 | 0 |

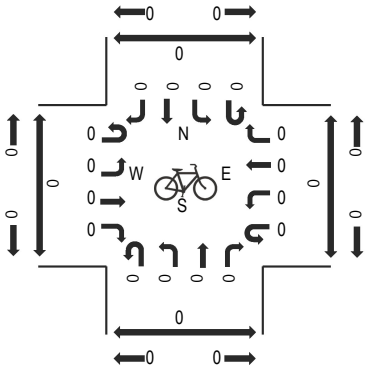
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

**Location:** 16 CRIMSON RD & WILLIAMS FIELD RD AM
**Date:** Tuesday, April 2, 2024
**Peak Hour:** 07:15 AM - 08:15 AM
**Peak 15-Minutes:** 08:00 AM - 08:15 AM

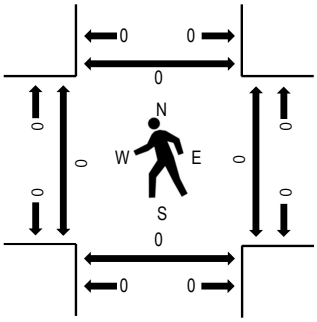
## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles




## Peak Hour - Pedestrians




Note: Total study counts contained in parentheses.

## Traffic Counts - Motorized Vehicles

| Interval Start Time | WILLIAMS FIELD RD Eastbound | | | | WILLIAMS FIELD RD Westbound | | | | CRIMSON RD Northbound | | | | CRIMSON RD Southbound | | | | | Rolling Hour | Pedestrian Crossings | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | Total | | West | East | South | North |
| 7:00 AM | 0 | 12 | 17 | 0 | 0 | 0 | 74 | 11 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 83 | 199 | 916 | 0 | 0 | 0 | 1 |
| 7:15 AM | 0 | 19 | 23 | 0 | 0 | 0 | 99 | 7 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 79 | 239 | 969 | 0 | 0 | 0 | 0 |
| 7:30 AM | 0 | 22 | 36 | 0 | 0 | 0 | 67 | 17 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 75 | 229 | 921 | 0 | 0 | 0 | 0 |
| 7:45 AM | 0 | 29 | 31 | 0 | 0 | 0 | 71 | 22 | 0 | 0 | 0 | 0 | 1 | 22 | 0 | 73 | 249 | 848 | 0 | 0 | 0 | 0 |
| 8:00 AM | 0 | 33 | 33 | 0 | 0 | 0 | 63 | 14 | 0 | 0 | 0 | 0 | 3 | 18 | 0 | 88 | 252 | 740 | 0 | 0 | 0 | 0 |
| 8:15 AM | 0 | 15 | 33 | 0 | 0 | 0 | 59 | 11 | 0 | 0 | 0 | 0 | 2 | 5 | 0 | 66 | 191 | | 0 | 0 | 0 | 0 |
| 8:30 AM | 0 | 30 | 30 | 0 | 0 | 0 | 52 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 36 | 156 | | 0 | 0 | 0 | 0 |
| 8:45 AM | 0 | 17 | 36 | 0 | 0 | 0 | 47 | 3 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 34 | 141 | | 0 | 0 | 0 | 0 |
| Count Total | 0 | 177 | 239 | 0 | 0 | 0 | 532 | 85 | 0 | 0 | 0 | 0 | 6 | 83 | 0 | 534 | 1,656 | | 0 | 0 | 0 | 1 |
| Peak Hour | 0 | 103 | 123 | 0 | 0 | 0 | 300 | 60 | 0 | 0 | 0 | 0 | 4 | 64 | 0 | 315 | 969 | | 0 | 0 | 0 | 0 |

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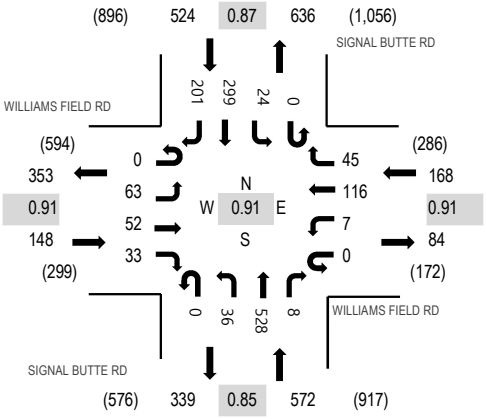
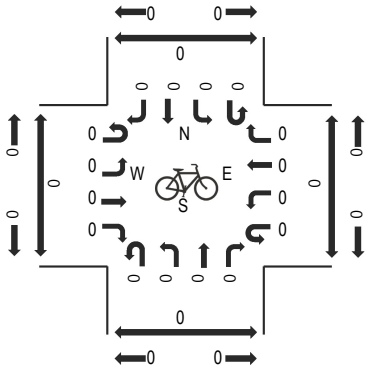
**Location:** 17 SIGNAL BUTTE RD & WILLIAMS FIELD RD AM
**Date:** Tuesday, April 2, 2024
**Peak Hour:** 07:00 AM - 08:00 AM
**Peak 15-Minutes:** 07:15 AM - 07:30 AM

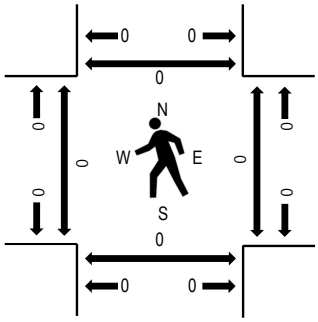
## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles




## Peak Hour - Pedestrians




Note: Total study counts contained in parentheses.

## Traffic Counts - Motorized Vehicles

| Interval Start Time | WILLIAMS FIELD RD Eastbound | | | | WILLIAMS FIELD RD Westbound | | | | SIGNAL BUTTE RD Northbound | | | | SIGNAL BUTTE RD Southbound | | | | | Rolling Hour | Pedestrian Crossings | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | Total | | West | East | South | North |
| 7:00 AM | 0 | 10 | 12 | 0 | 0 | 0 | 28 | 14 | 0 | 7 | 129 | 1 | 0 | 4 | 63 | 54 | 322 | 1,412 | 0 | 0 | 0 | 0 |
| 7:15 AM | 0 | 12 | 11 | 8 | 0 | 3 | 29 | 8 | 0 | 8 | 158 | 2 | 0 | 7 | 81 | 62 | 389 | 1,389 | 0 | 0 | 0 | 0 |
| 7:30 AM | 0 | 22 | 15 | 11 | 0 | 2 | 27 | 11 | 0 | 10 | 138 | 3 | 0 | 5 | 95 | 45 | 384 | 1,253 | 0 | 0 | 0 | 0 |
| 7:45 AM | 0 | 19 | 14 | 14 | 0 | 2 | 32 | 12 | 0 | 11 | 103 | 2 | 0 | 8 | 60 | 40 | 317 | 1,096 | 0 | 0 | 0 | 0 |
| 8:00 AM | 0 | 16 | 19 | 9 | 0 | 1 | 29 | 5 | 0 | 8 | 96 | 1 | 0 | 7 | 60 | 48 | 299 | 986 | 0 | 0 | 0 | 0 |
| 8:15 AM | 0 | 20 | 14 | 2 | 0 | 5 | 23 | 5 | 0 | 4 | 91 | 3 | 0 | 1 | 47 | 38 | 253 | | 0 | 0 | 0 | 0 |
| 8:30 AM | 0 | 21 | 10 | 4 | 0 | 1 | 17 | 3 | 0 | 0 | 77 | 1 | 0 | 4 | 61 | 28 | 227 | | 0 | 0 | 0 | 0 |
| 8:45 AM | 0 | 17 | 19 | 0 | 0 | 1 | 18 | 10 | 0 | 1 | 59 | 4 | 0 | 5 | 46 | 27 | 207 | | 0 | 0 | 0 | 0 |
| Count Total | 0 | 137 | 114 | 48 | 0 | 15 | 203 | 68 | 0 | 49 | 851 | 17 | 0 | 41 | 513 | 342 | 2,398 | | 0 | 0 | 0 | 0 |
| Peak Hour | 0 | 63 | 52 | 33 | 0 | 7 | 116 | 45 | 0 | 36 | 528 | 8 | 0 | 24 | 299 | 201 | 1,412 | | 0 | 0 | 0 | 0 |

ALL TRAFFIC DATA SERVICES
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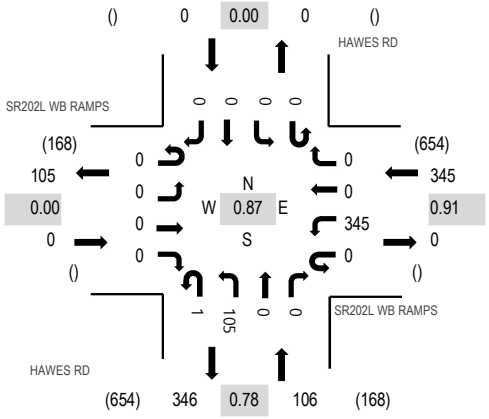
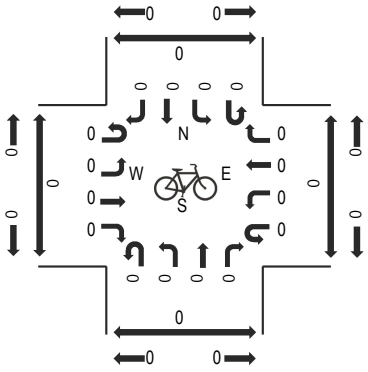
**Location:** 1 HAWES RD & SR202L WB RAMPS PM
**Date:** Tuesday, April 2, 2024
**Peak Hour:** 04:00 PM - 05:00 PM
**Peak 15-Minutes:** 04:30 PM - 04:45 PM

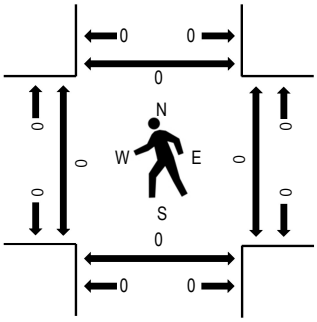
## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles




## Peak Hour - Pedestrians




Note: Total study counts contained in parentheses.

## Traffic Counts - Motorized Vehicles

| Interval Start Time | SR202L WB RAMPS Eastbound | | | | SR202L WB RAMPS Westbound | | | | HAWES RD Northbound | | | | HAWES RD Southbound | | | | | Rolling Hour | Pedestrian Crossings | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | Total | | West | East | South | North |
| 4:00 PM | 0 | 0 | 0 | 0 | 0 | 84 | 0 | 0 | 0 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 106 | 451 | 0 | 0 | 0 | 0 |
| 4:15 PM | 0 | 0 | 0 | 0 | 0 | 83 | 0 | 0 | 0 | 27 | 0 | 0 | 0 | 0 | 0 | 0 | 110 | 442 | 0 | 0 | 0 | 0 |
| 4:30 PM | 0 | 0 | 0 | 0 | 0 | 95 | 0 | 0 | 0 | 34 | 0 | 0 | 0 | 0 | 0 | 0 | 129 | 431 | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 0 | 0 | 0 | 0 | 83 | 0 | 0 | 1 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 106 | 410 | 0 | 0 | 0 | 0 |
| 5:00 PM | 0 | 0 | 0 | 0 | 0 | 75 | 0 | 0 | 0 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 97 | 371 | 0 | 0 | 0 | 0 |
| 5:15 PM | 0 | 0 | 0 | 0 | 0 | 86 | 0 | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 99 | | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 0 | 0 | 0 | 0 | 91 | 1 | 0 | 0 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 108 | | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 0 | 0 | 0 | 56 | 0 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 67 | | 0 | 0 | 0 | 0 |
| Count Total | 0 | 0 | 0 | 0 | 0 | 653 | 1 | 0 | 1 | 167 | 0 | 0 | 0 | 0 | 0 | 0 | 822 | | 0 | 0 | 0 | 0 |
| Peak Hour | 0 | 0 | 0 | 0 | 0 | 345 | 0 | 0 | 1 | 105 | 0 | 0 | 0 | 0 | 0 | 0 | 451 | | 0 | 0 | 0 | 0 |

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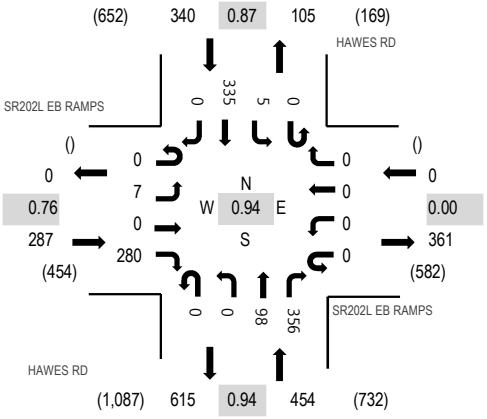
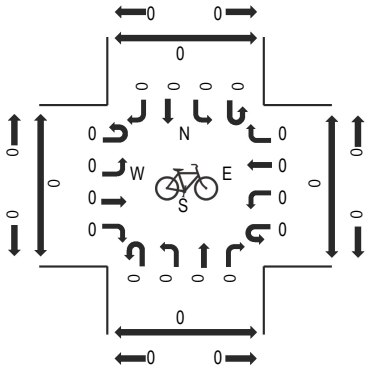
**Location:** 2 HAWES RD & SR202L EB RAMPS PM
**Date:** Tuesday, April 2, 2024
**Peak Hour:** 04:15 PM - 05:15 PM
**Peak 15-Minutes:** 04:45 PM - 05:00 PM

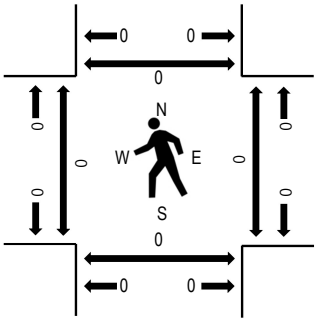
## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles




## Peak Hour - Pedestrians




Note: Total study counts contained in parentheses.

## Traffic Counts - Motorized Vehicles

| Interval Start Time | SR202L EB RAMPS Eastbound | | | | SR202L EB RAMPS Westbound | | | | HAWES RD Northbound | | | | HAWES RD Southbound | | | | | Rolling Hour | Pedestrian Crossings | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | Total | | West | East | South | North |
| 4:00 PM | 0 | 0 | 0 | 39 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 96 | 0 | 0 | 81 | 0 | 240 | 1,067 | 0 | 0 | 0 | 0 |
| 4:15 PM | 0 | 2 | 0 | 56 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 91 | 0 | 0 | 82 | 0 | 256 | 1,081 | 0 | 0 | 0 | 0 |
| 4:30 PM | 0 | 1 | 0 | 59 | 0 | 0 | 0 | 0 | 0 | 0 | 34 | 91 | 0 | 2 | 97 | 0 | 284 | 1,013 | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 2 | 0 | 93 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 90 | 0 | 1 | 82 | 0 | 287 | 918 | 0 | 0 | 0 | 0 |
| 5:00 PM | 0 | 2 | 0 | 72 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 84 | 0 | 2 | 74 | 0 | 254 | 771 | 0 | 0 | 0 | 0 |
| 5:15 PM | 0 | 1 | 1 | 44 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 44 | 0 | 0 | 86 | 0 | 188 | | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 2 | 1 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 44 | 0 | 1 | 87 | 0 | 189 | | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 0 | 39 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 33 | 0 | 1 | 56 | 0 | 140 | | 0 | 0 | 0 | 0 |
| Count Total | 0 | 10 | 2 | 442 | 0 | 0 | 0 | 0 | 0 | 0 | 159 | 573 | 0 | 7 | 645 | 0 | 1,838 | | 0 | 0 | 0 | 0 |
| Peak Hour | 0 | 7 | 0 | 280 | 0 | 0 | 0 | 0 | 0 | 0 | 98 | 356 | 0 | 5 | 335 | 0 | 1,081 | | 0 | 0 | 0 | 0 |

ALL TRAFFIC DATA SERVICES
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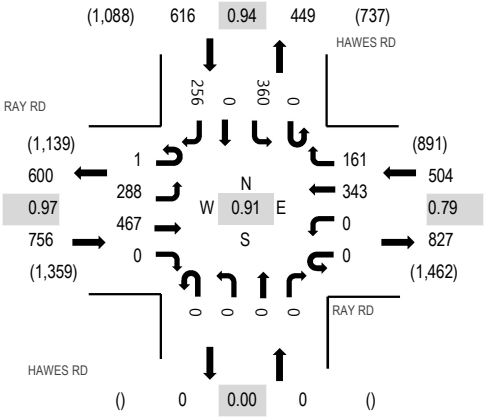
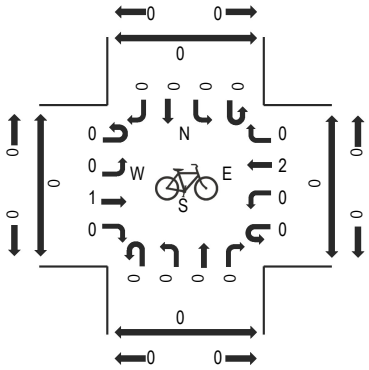
**Location:** 3 HAWES RD & RAY RD PM
**Date:** Tuesday, April 2, 2024
**Peak Hour:** 04:15 PM - 05:15 PM
**Peak 15-Minutes:** 04:30 PM - 04:45 PM

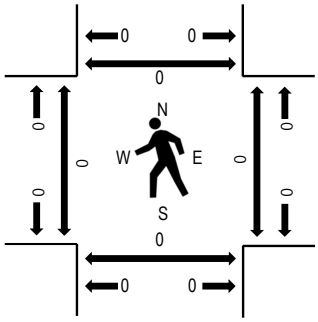
## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles




## Peak Hour - Pedestrians




Note: Total study counts contained in parentheses.

## Traffic Counts - Motorized Vehicles

| Interval Start Time | RAY RD Eastbound | | | | RAY RD Westbound | | | | HAWES RD Northbound | | | | HAWES RD Southbound | | | | | Rolling Hour | Pedestrian Crossings | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | Total | | West | East | South | North |
| 4:00 PM | 1 | 89 | 110 | 0 | 0 | 0 | 84 | 28 | 0 | 0 | 0 | 0 | 0 | 56 | 0 | 62 | 430 | 1,863 | 0 | 0 | 0 | 0 |
| 4:15 PM | 1 | 76 | 117 | 0 | 0 | 0 | 70 | 36 | 0 | 0 | 0 | 0 | 0 | 75 | 0 | 58 | 433 | 1,876 | 0 | 0 | 0 | 0 |
| 4:30 PM | 0 | 73 | 123 | 0 | 0 | 0 | 102 | 60 | 0 | 0 | 0 | 0 | 0 | 85 | 0 | 72 | 515 | 1,825 | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 63 | 124 | 0 | 0 | 0 | 96 | 38 | 0 | 0 | 0 | 0 | 0 | 94 | 0 | 70 | 485 | 1,671 | 0 | 0 | 0 | 0 |
| 5:00 PM | 0 | 76 | 103 | 0 | 0 | 0 | 75 | 27 | 0 | 0 | 0 | 0 | 0 | 106 | 0 | 56 | 443 | 1,475 | 0 | 0 | 0 | 0 |
| 5:15 PM | 0 | 40 | 111 | 0 | 0 | 0 | 78 | 21 | 0 | 0 | 0 | 0 | 0 | 66 | 0 | 66 | 382 | | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 32 | 111 | 0 | 0 | 0 | 64 | 27 | 0 | 0 | 0 | 0 | 0 | 57 | 0 | 70 | 361 | | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 34 | 75 | 0 | 0 | 0 | 68 | 17 | 0 | 0 | 0 | 0 | 0 | 49 | 0 | 46 | 289 | | 0 | 0 | 0 | 0 |
| Count Total | 2 | 483 | 874 | 0 | 0 | 0 | 637 | 254 | 0 | 0 | 0 | 0 | 0 | 588 | 0 | 500 | 3,338 | | 0 | 0 | 0 | 0 |
| Peak Hour | 1 | 288 | 467 | 0 | 0 | 0 | 343 | 161 | 0 | 0 | 0 | 0 | 0 | 360 | 0 | 256 | 1,876 | | 0 | 0 | 0 | 0 |

ALL TRAFFIC DATA SERVICES
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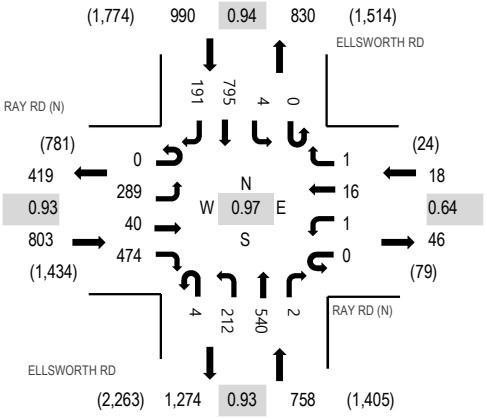
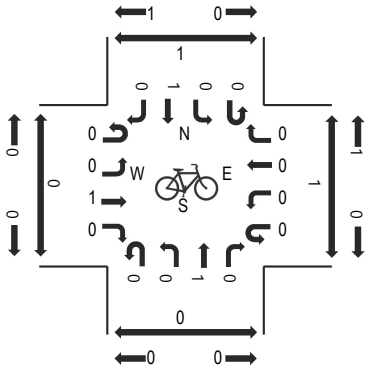
**Location:** 4 ELLSWORTH RD & RAY RD (N) PM
**Date:** Tuesday, April 2, 2024
**Peak Hour:** 04:30 PM - 05:30 PM
**Peak 15-Minutes:** 04:30 PM - 04:45 PM

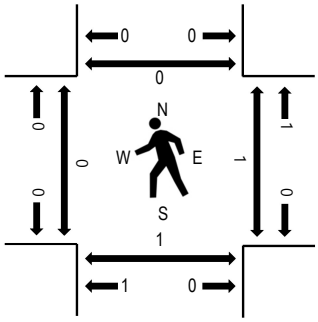
## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles




## Peak Hour - Pedestrians




Note: Total study counts contained in parentheses.

## Traffic Counts - Motorized Vehicles

| Interval Start Time | RAY RD (N) Eastbound | | | | RAY RD (N) Westbound | | | | ELLSWORTH RD Northbound | | | | ELLSWORTH RD Southbound | | | | | Rolling Hour | Pedestrian Crossings | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | Total | | West | East | South | North |
| 4:00 PM | 0 | 59 | 9 | 84 | 0 | 0 | 0 | 0 | 0 | 62 | 136 | 2 | 0 | 1 | 151 | 37 | 541 | 2,407 | 0 | 0 | 0 | 0 |
| 4:15 PM | 0 | 66 | 7 | 97 | 0 | 0 | 1 | 0 | 2 | 56 | 131 | 0 | 0 | 1 | 155 | 39 | 555 | 2,504 | 0 | 1 | 0 | 0 |
| 4:30 PM | 0 | 73 | 8 | 125 | 0 | 0 | 7 | 0 | 2 | 62 | 123 | 0 | 0 | 0 | 215 | 49 | 664 | 2,569 | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 80 | 8 | 129 | 0 | 1 | 3 | 0 | 2 | 57 | 113 | 0 | 0 | 1 | 205 | 48 | 647 | 2,426 | 0 | 0 | 1 | 0 |
| 5:00 PM | 0 | 67 | 8 | 126 | 0 | 0 | 3 | 0 | 0 | 50 | 151 | 2 | 0 | 2 | 182 | 47 | 638 | 2,230 | 0 | 1 | 0 | 0 |
| 5:15 PM | 0 | 69 | 16 | 94 | 0 | 0 | 3 | 1 | 0 | 43 | 153 | 0 | 0 | 1 | 193 | 47 | 620 | | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 61 | 6 | 110 | 0 | 0 | 2 | 0 | 0 | 36 | 93 | 1 | 0 | 1 | 164 | 47 | 521 | | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 48 | 3 | 81 | 0 | 0 | 2 | 1 | 0 | 38 | 89 | 1 | 0 | 1 | 145 | 42 | 451 | | 0 | 0 | 0 | 0 |
| Count Total | 0 | 523 | 65 | 846 | 0 | 1 | 21 | 2 | 6 | 404 | 989 | 6 | 0 | 8 | 1,410 | 356 | 4,637 | | 0 | 2 | 1 | 0 |
| Peak Hour | 0 | 289 | 40 | 474 | 0 | 1 | 16 | 1 | 4 | 212 | 540 | 2 | 0 | 4 | 795 | 191 | 2,569 | | 0 | 1 | 1 | 0 |

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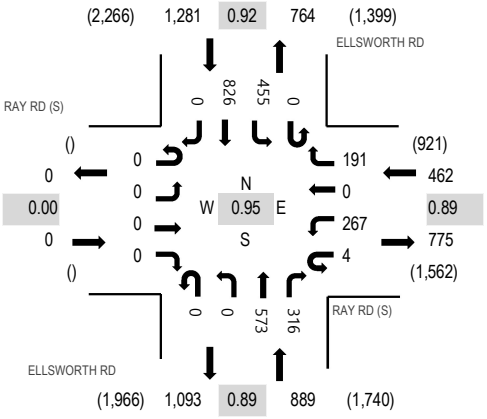
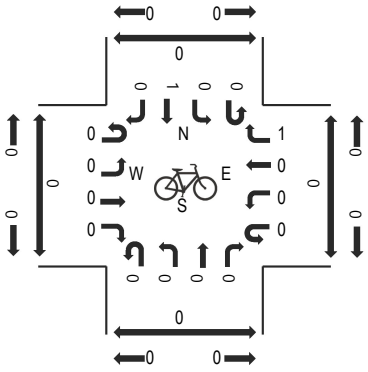
**Location:** 5 ELLSWORTH RD & RAY RD (S) PM
**Date:** Tuesday, April 2, 2024
**Peak Hour:** 04:30 PM - 05:30 PM
**Peak 15-Minutes:** 04:30 PM - 04:45 PM

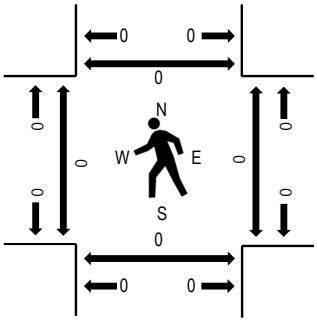
## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles



## Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

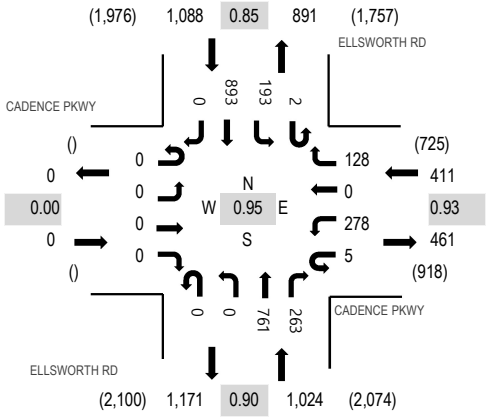
## Traffic Counts - Motorized Vehicles

| Interval Start Time | RAY RD (S) Eastbound | | | | RAY RD (S) Westbound | | | | ELLSWORTH RD Northbound | | | | ELLSWORTH RD Southbound | | | | | Rolling Hour | Pedestrian Crossings | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | Total | | West | East | South | North |
| 4:00 PM | 0 | 0 | 0 | 0 | 1 | 67 | 0 | 42 | 0 | 0 | 150 | 97 | 0 | 82 | 153 | 0 | 592 | 2,531 | 0 | 0 | 0 | 0 |
| 4:15 PM | 0 | 0 | 0 | 0 | 2 | 77 | 0 | 54 | 1 | 0 | 136 | 91 | 0 | 91 | 151 | 0 | 603 | 2,594 | 0 | 0 | 0 | 0 |
| 4:30 PM | 0 | 0 | 0 | 0 | 2 | 82 | 0 | 52 | 0 | 0 | 142 | 73 | 0 | 106 | 238 | 0 | 695 | 2,632 | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 0 | 0 | 0 | 0 | 54 | 0 | 42 | 0 | 0 | 124 | 74 | 0 | 126 | 221 | 0 | 641 | 2,512 | 0 | 0 | 0 | 0 |
| 5:00 PM | 0 | 0 | 0 | 0 | 1 | 67 | 0 | 53 | 0 | 0 | 151 | 75 | 0 | 119 | 189 | 0 | 655 | 2,396 | 0 | 0 | 0 | 0 |
| 5:15 PM | 0 | 0 | 0 | 0 | 1 | 64 | 0 | 44 | 0 | 0 | 156 | 94 | 0 | 104 | 178 | 0 | 641 | | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 0 | 0 | 0 | 1 | 72 | 0 | 36 | 0 | 0 | 96 | 98 | 0 | 122 | 150 | 0 | 575 | | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 0 | 0 | 2 | 70 | 0 | 35 | 0 | 0 | 85 | 97 | 1 | 103 | 132 | 0 | 525 | | 0 | 0 | 0 | 0 |
| Count Total | 0 | 0 | 0 | 0 | 10 | 553 | 0 | 358 | 1 | 0 | 1,040 | 699 | 1 | 853 | 1,412 | 0 | 4,927 | | 0 | 0 | 0 | 0 |
| Peak Hour | 0 | 0 | 0 | 0 | 4 | 267 | 0 | 191 | 0 | 0 | 573 | 316 | 0 | 455 | 826 | 0 | 2,632 | | 0 | 0 | 0 | 0 |

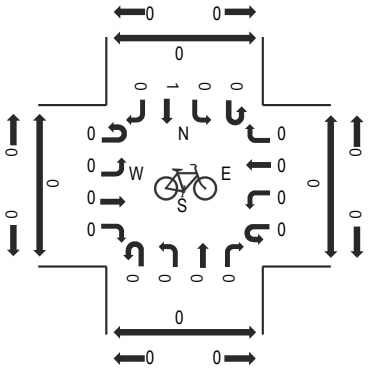
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

**Location:** 6 ELLSWORTH RD & CADENCE PKWY PM
**Date:** Tuesday, April 2, 2024
**Peak Hour:** 04:30 PM - 05:30 PM
**Peak 15-Minutes:** 04:30 PM - 04:45 PM

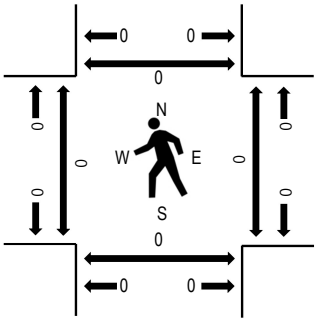
## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles




## Peak Hour - Pedestrians




Note: Total study counts contained in parentheses.

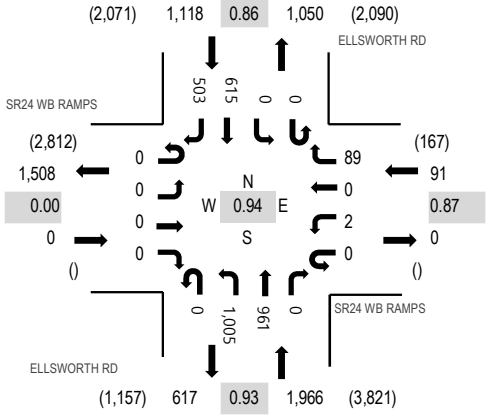
## Traffic Counts - Motorized Vehicles

| Interval Start Time | CADENCE PKWY Eastbound | | | | CADENCE PKWY Westbound | | | | ELLSWORTH RD Northbound | | | | ELLSWORTH RD Southbound | | | | | Rolling Hour | Pedestrian Crossings | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | Total | | West | East | South | North |
| 4:00 PM | 0 | 0 | 0 | 0 | 1 | 52 | 0 | 34 | 0 | 0 | 213 | 75 | 0 | 36 | 184 | 0 | 595 | 2,466 | 0 | 0 | 0 | 0 |
| 4:15 PM | 0 | 0 | 0 | 0 | 0 | 60 | 0 | 37 | 0 | 0 | 198 | 84 | 0 | 31 | 197 | 0 | 607 | 2,491 | 0 | 0 | 0 | 0 |
| 4:30 PM | 0 | 0 | 0 | 0 | 0 | 63 | 0 | 32 | 0 | 0 | 177 | 70 | 2 | 42 | 276 | 0 | 662 | 2,523 | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 0 | 0 | 0 | 1 | 73 | 0 | 31 | 0 | 0 | 173 | 49 | 0 | 47 | 228 | 0 | 602 | 2,405 | 0 | 0 | 0 | 0 |
| 5:00 PM | 0 | 0 | 0 | 0 | 1 | 68 | 0 | 32 | 0 | 0 | 185 | 71 | 0 | 51 | 212 | 0 | 620 | 2,309 | 0 | 0 | 0 | 0 |
| 5:15 PM | 0 | 0 | 0 | 0 | 3 | 74 | 0 | 33 | 0 | 0 | 226 | 73 | 0 | 53 | 177 | 0 | 639 | | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 0 | 0 | 0 | 0 | 45 | 0 | 17 | 0 | 0 | 179 | 69 | 1 | 43 | 190 | 0 | 544 | | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 0 | 0 | 0 | 41 | 0 | 27 | 0 | 0 | 160 | 72 | 0 | 46 | 160 | 0 | 506 | | 0 | 0 | 0 | 0 |
| Count Total | 0 | 0 | 0 | 0 | 6 | 476 | 0 | 243 | 0 | 0 | 1,511 | 563 | 3 | 349 | 1,624 | 0 | 4,775 | | 0 | 0 | 0 | 0 |
| Peak Hour | 0 | 0 | 0 | 0 | 5 | 278 | 0 | 128 | 0 | 0 | 761 | 263 | 2 | 193 | 893 | 0 | 2,523 | | 0 | 0 | 0 | 0 |

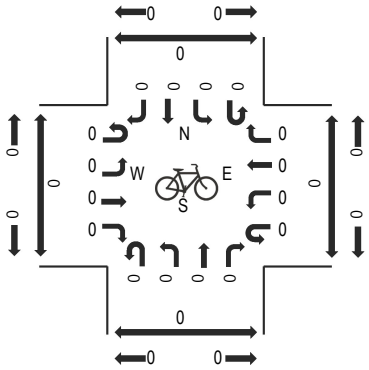
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

**Location:** 7 ELLSWORTH RD & SR24 WB RAMPS PM
**Date:** Tuesday, April 2, 2024
**Peak Hour:** 04:00 PM - 05:00 PM
**Peak 15-Minutes:** 04:30 PM - 04:45 PM

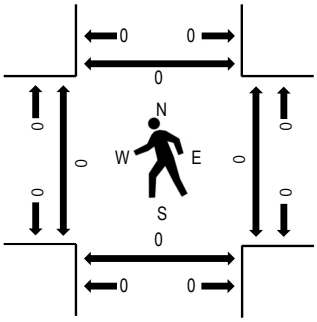
## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles




## Peak Hour - Pedestrians




Note: Total study counts contained in parentheses.

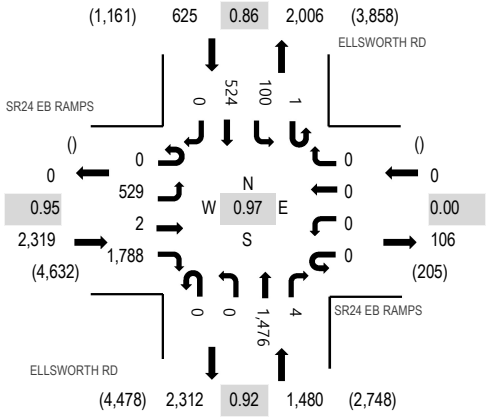
## Traffic Counts - Motorized Vehicles

| Interval Start Time | SR24 WB RAMPS Eastbound | | | | SR24 WB RAMPS Westbound | | | | ELLSWORTH RD Northbound | | | | ELLSWORTH RD Southbound | | | | | Rolling Hour | Pedestrian Crossings | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | Total | | West | East | South | North |
| 4:00 PM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 26 | 0 | 267 | 261 | 0 | 0 | 0 | 127 | 109 | 791 | 3,175 | 0 | 0 | 0 | 0 |
| 4:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 0 | 247 | 274 | 0 | 0 | 0 | 128 | 123 | 789 | 3,167 | 0 | 0 | 0 | 0 |
| 4:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 0 | 258 | 223 | 0 | 0 | 0 | 191 | 148 | 842 | 3,140 | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 24 | 0 | 233 | 203 | 0 | 0 | 0 | 169 | 123 | 753 | 3,006 | 0 | 0 | 0 | 0 |
| 5:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 29 | 0 | 240 | 234 | 0 | 0 | 0 | 148 | 132 | 783 | 2,884 | 0 | 0 | 0 | 0 |
| 5:15 PM | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 23 | 0 | 224 | 278 | 0 | 0 | 0 | 140 | 95 | 762 | | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 10 | 0 | 233 | 232 | 0 | 0 | 0 | 122 | 110 | 708 | | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 10 | 0 | 190 | 224 | 0 | 0 | 0 | 126 | 80 | 631 | | 0 | 0 | 0 | 0 |
| Count Total | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 161 | 0 | 1,892 | 1,929 | 0 | 0 | 0 | 1,151 | 920 | 6,059 | | 0 | 0 | 0 | 0 |
| Peak Hour | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 89 | 0 | 1,005 | 961 | 0 | 0 | 0 | 615 | 503 | 3,175 | | 0 | 0 | 0 | 0 |

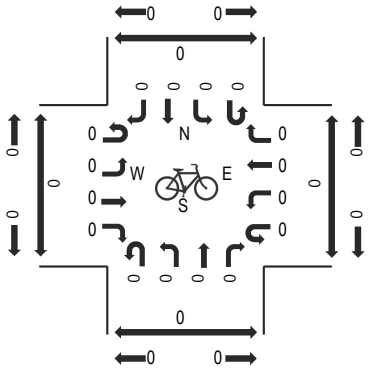
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

**Location:** 8 ELLSWORTH RD & SR24 EB RAMPS PM
**Date:** Tuesday, April 2, 2024
**Peak Hour:** 04:00 PM - 05:00 PM
**Peak 15-Minutes:** 04:15 PM - 04:30 PM

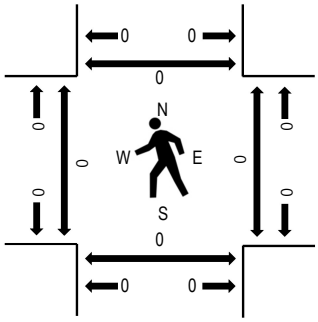
## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles




## Peak Hour - Pedestrians




Note: Total study counts contained in parentheses.

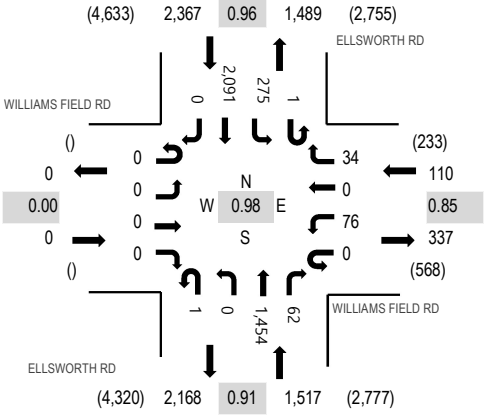
## Traffic Counts - Motorized Vehicles

| Interval Start Time | SR24 EB RAMPS Eastbound | | | | SR24 EB RAMPS Westbound | | | | ELLSWORTH RD Northbound | | | | ELLSWORTH RD Southbound | | | | | Rolling Hour | Pedestrian Crossings | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | Total | | West | East | South | North |
| 4:00 PM | 0 | 157 | 0 | 453 | 0 | 0 | 0 | 0 | 0 | 0 | 378 | 2 | 0 | 26 | 98 | 0 | 1,114 | 4,424 | 0 | 0 | 0 | 0 |
| 4:15 PM | 0 | 147 | 0 | 453 | 0 | 0 | 0 | 0 | 0 | 0 | 401 | 0 | 0 | 16 | 119 | 0 | 1,136 | 4,352 | 0 | 0 | 0 | 0 |
| 4:30 PM | 0 | 122 | 1 | 449 | 0 | 0 | 0 | 0 | 0 | 0 | 368 | 1 | 1 | 29 | 159 | 0 | 1,130 | 4,320 | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 103 | 1 | 433 | 0 | 0 | 0 | 0 | 0 | 0 | 329 | 1 | 0 | 29 | 148 | 0 | 1,044 | 4,201 | 0 | 0 | 0 | 0 |
| 5:00 PM | 0 | 131 | 1 | 424 | 0 | 0 | 0 | 0 | 0 | 0 | 337 | 1 | 1 | 33 | 114 | 0 | 1,042 | 4,117 | 0 | 0 | 0 | 0 |
| 5:15 PM | 0 | 162 | 1 | 462 | 0 | 0 | 0 | 0 | 0 | 0 | 346 | 0 | 0 | 16 | 117 | 0 | 1,104 | | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 153 | 0 | 420 | 0 | 0 | 0 | 0 | 0 | 0 | 305 | 0 | 0 | 29 | 104 | 0 | 1,011 | | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 139 | 0 | 420 | 0 | 0 | 0 | 0 | 0 | 0 | 278 | 1 | 0 | 17 | 105 | 0 | 960 | | 0 | 0 | 0 | 0 |
| Count Total | 0 | 1,114 | 4 | 3,514 | 0 | 0 | 0 | 0 | 0 | 0 | 2,742 | 6 | 2 | 195 | 964 | 0 | 8,541 | | 0 | 0 | 0 | 0 |
| Peak Hour | 0 | 529 | 2 | 1,788 | 0 | 0 | 0 | 0 | 0 | 0 | 1,476 | 4 | 1 | 100 | 524 | 0 | 4,424 | | 0 | 0 | 0 | 0 |

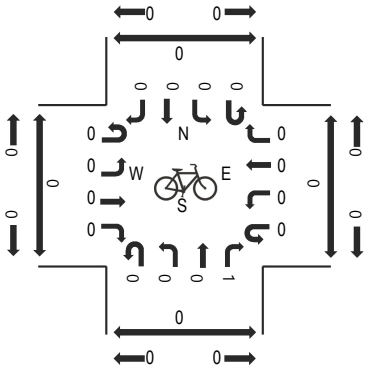
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

**Location:** 9 ELLSWORTH RD & WILLIAMS FIELD RD PM
**Date:** Tuesday, April 2, 2024
**Peak Hour:** 04:00 PM - 05:00 PM
**Peak 15-Minutes:** 04:15 PM - 04:30 PM

## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles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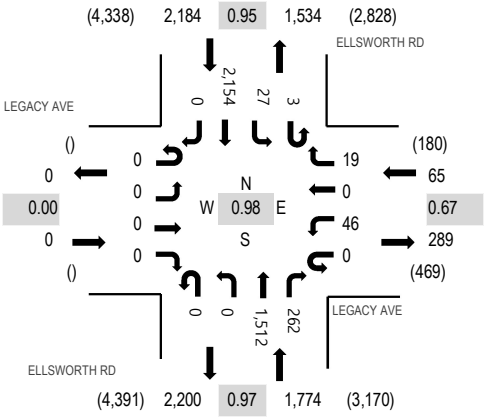
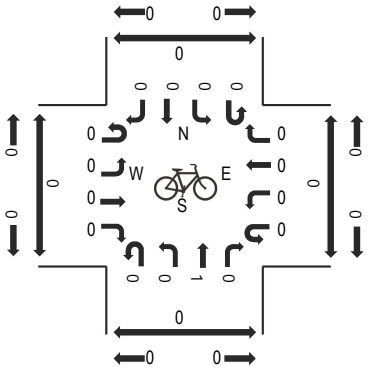
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

**Location:** 10 ELLSWORTH RD & LEGACY AVE PM
**Date:** Tuesday, April 2, 2024
**Peak Hour:** 04:00 PM - 05:00 PM
**Peak 15-Minutes:** 04:15 PM - 04:30 PM

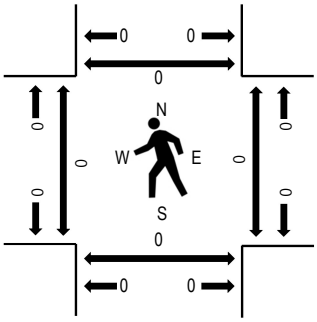
## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles



## Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

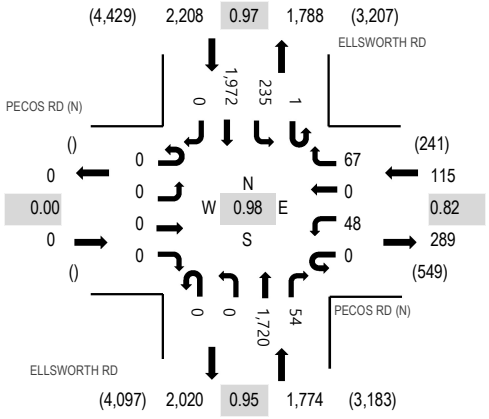
## Traffic Counts - Motorized Vehicles

| Interval Start Time | LEGACY AVE Eastbound | | | | LEGACY AVE Westbound | | | | ELLSWORTH RD Northbound | | | | ELLSWORTH RD Southbound | | | | | Rolling Hour | Pedestrian Crossings | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | Total | | West | East | South | North |
| 4:00 PM | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 5 | 0 | 0 | 412 | 16 | 2 | 3 | 549 | 0 | 993 | 4,023 | 0 | 0 | 0 | 0 |
| 4:15 PM | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 6 | 0 | 0 | 417 | 39 | 1 | 13 | 544 | 0 | 1,024 | 3,977 | 0 | 0 | 0 | 0 |
| 4:30 PM | 0 | 0 | 0 | 0 | 0 | 17 | 0 | 2 | 0 | 0 | 359 | 82 | 0 | 9 | 545 | 0 | 1,014 | 3,901 | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 0 | 0 | 0 | 0 | 19 | 0 | 6 | 0 | 0 | 324 | 125 | 0 | 2 | 516 | 0 | 992 | 3,775 | 0 | 0 | 0 | 0 |
| 5:00 PM | 0 | 0 | 0 | 0 | 0 | 37 | 0 | 6 | 0 | 0 | 327 | 40 | 0 | 13 | 524 | 0 | 947 | 3,665 | 0 | 0 | 0 | 0 |
| 5:15 PM | 0 | 0 | 0 | 0 | 0 | 14 | 0 | 6 | 0 | 0 | 330 | 22 | 0 | 10 | 566 | 0 | 948 | | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 0 | 0 | 0 | 0 | 17 | 0 | 10 | 0 | 0 | 316 | 24 | 0 | 8 | 513 | 0 | 888 | | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 0 | 0 | 0 | 16 | 0 | 9 | 0 | 0 | 290 | 47 | 0 | 16 | 504 | 0 | 882 | | 0 | 0 | 0 | 0 |
| Count Total | 0 | 0 | 0 | 0 | 0 | 130 | 0 | 50 | 0 | 0 | 2,775 | 395 | 3 | 74 | 4,261 | 0 | 7,688 | | 0 | 0 | 0 | 0 |
| Peak Hour | 0 | 0 | 0 | 0 | 0 | 46 | 0 | 19 | 0 | 0 | 1,512 | 262 | 3 | 27 | 2,154 | 0 | 4,023 | | 0 | 0 | 0 | 0 |

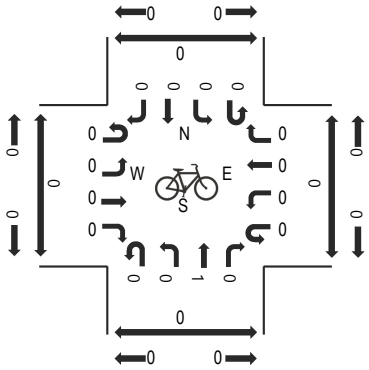
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

**Location:** 11 ELLSWORTH RD & PECOS RD (N) PM
**Date:** Tuesday, April 2, 2024
**Peak Hour:** 04:00 PM - 05:00 PM
**Peak 15-Minutes:** 04:15 PM - 04:30 PM

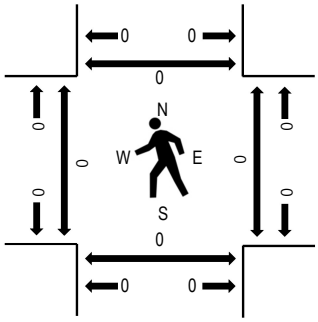
## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles



## Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

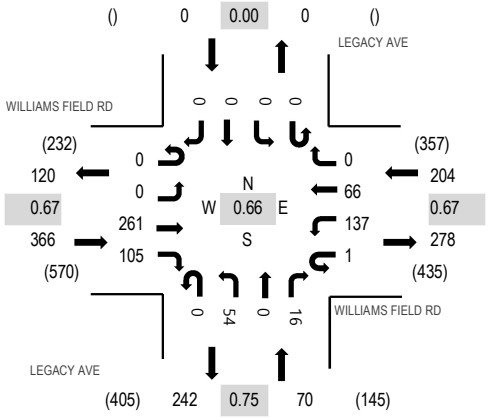
## Traffic Counts - Motorized Vehicles

| Interval Start Time | PECOS RD (N) Eastbound | | | | PECOS RD (N) Westbound | | | | ELLSWORTH RD Northbound | | | | ELLSWORTH RD Southbound | | | | | Rolling Hour | Pedestrian Crossings | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | Total | | West | East | South | North |
| 4:00 PM | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 8 | 0 | 0 | 415 | 15 | 1 | 68 | 486 | 0 | 999 | 4,097 | 0 | 0 | 0 | 0 |
| 4:15 PM | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 17 | 0 | 0 | 449 | 19 | 0 | 58 | 492 | 0 | 1,041 | 4,061 | 0 | 0 | 0 | 0 |
| 4:30 PM | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 26 | 0 | 0 | 417 | 8 | 0 | 59 | 503 | 0 | 1,024 | 3,984 | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 0 | 0 | 0 | 0 | 25 | 0 | 16 | 0 | 0 | 439 | 12 | 0 | 50 | 491 | 0 | 1,033 | 3,890 | 0 | 0 | 0 | 0 |
| 5:00 PM | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 18 | 0 | 0 | 358 | 12 | 0 | 60 | 504 | 0 | 963 | 3,756 | 0 | 0 | 0 | 0 |
| 5:15 PM | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 12 | 0 | 0 | 348 | 14 | 0 | 57 | 520 | 0 | 964 | | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 0 | 0 | 0 | 0 | 16 | 0 | 23 | 0 | 0 | 335 | 17 | 0 | 49 | 490 | 0 | 930 | | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 0 | 0 | 0 | 21 | 0 | 12 | 0 | 0 | 312 | 13 | 1 | 38 | 502 | 0 | 899 | | 0 | 0 | 0 | 0 |
| Count Total | 0 | 0 | 0 | 0 | 0 | 109 | 0 | 132 | 0 | 0 | 3,073 | 110 | 2 | 439 | 3,988 | 0 | 7,853 | | 0 | 0 | 0 | 0 |
| Peak Hour | 0 | 0 | 0 | 0 | 0 | 48 | 0 | 67 | 0 | 0 | 1,720 | 54 | 1 | 235 | 1,972 | 0 | 4,097 | | 0 | 0 | 0 | 0 |

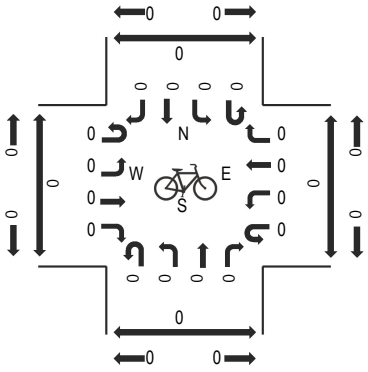
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

**Location:** 12 LEGACY AVE & WILLIAMS FIELD RD PM
**Date:** Tuesday, April 2, 2024
**Peak Hour:** 04:15 PM - 05:15 PM
**Peak 15-Minutes:** 04:45 PM - 05:00 PM

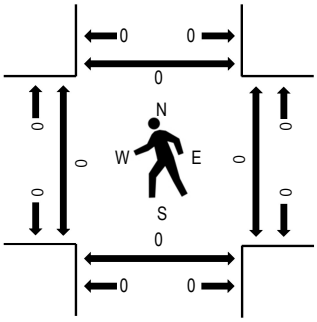
## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles




## Peak Hour - Pedestrians




Note: Total study counts contained in parentheses.

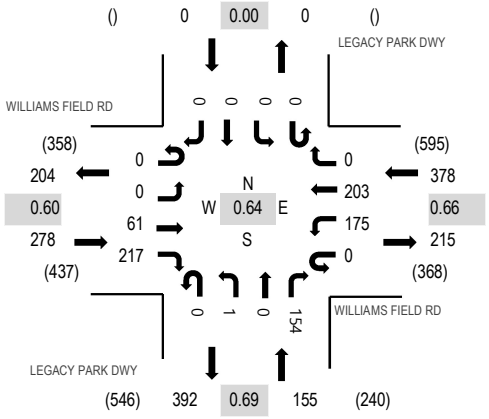
## Traffic Counts - Motorized Vehicles

| Interval Start Time | WILLIAMS FIELD RD Eastbound | | | | WILLIAMS FIELD RD Westbound | | | | LEGACY AVE Northbound | | | | LEGACY AVE Southbound | | | | | Rolling Hour | Pedestrian Crossings | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | Total | | West | East | South | North |
| 4:00 PM | 0 | 0 | 17 | 13 | 0 | 11 | 16 | 0 | 0 | 6 | 0 | 1 | 0 | 0 | 0 | 0 | 64 | 587 | 0 | 0 | 0 | 0 |
| 4:15 PM | 0 | 0 | 31 | 27 | 0 | 33 | 18 | 0 | 0 | 10 | 0 | 3 | 0 | 0 | 0 | 0 | 122 | 640 | 0 | 0 | 0 | 0 |
| 4:30 PM | 0 | 0 | 73 | 28 | 0 | 30 | 15 | 0 | 0 | 9 | 0 | 3 | 0 | 0 | 0 | 0 | 158 | 624 | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 0 | 109 | 28 | 0 | 61 | 15 | 0 | 0 | 23 | 0 | 7 | 0 | 0 | 0 | 0 | 243 | 595 | 0 | 0 | 0 | 0 |
| 5:00 PM | 0 | 0 | 48 | 22 | 1 | 13 | 18 | 0 | 0 | 12 | 0 | 3 | 0 | 0 | 0 | 0 | 117 | 485 | 0 | 0 | 0 | 0 |
| 5:15 PM | 0 | 0 | 21 | 17 | 0 | 38 | 13 | 0 | 0 | 14 | 0 | 3 | 0 | 0 | 0 | 0 | 106 | | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 0 | 54 | 14 | 0 | 20 | 10 | 0 | 0 | 21 | 0 | 10 | 0 | 0 | 0 | 0 | 129 | | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 45 | 23 | 0 | 27 | 18 | 0 | 0 | 14 | 0 | 6 | 0 | 0 | 0 | 0 | 133 | | 0 | 0 | 0 | 0 |
| Count Total | 0 | 0 | 398 | 172 | 1 | 233 | 123 | 0 | 0 | 109 | 0 | 36 | 0 | 0 | 0 | 0 | 1,072 | | 0 | 0 | 0 | 0 |
| Peak Hour | 0 | 0 | 261 | 105 | 1 | 137 | 66 | 0 | 0 | 54 | 0 | 16 | 0 | 0 | 0 | 0 | 640 | | 0 | 0 | 0 | 0 |

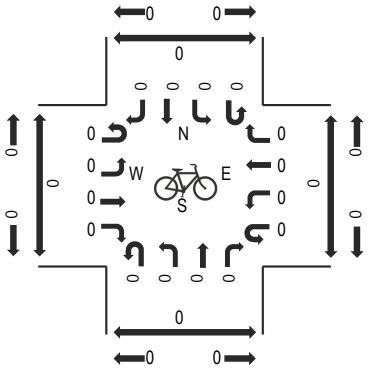
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

**Location:** 13 LEGACY PARK DWY & WILLIAMS FIELD RD PM
**Date:** Tuesday, April 2, 2024
**Peak Hour:** 04:15 PM - 05:15 PM
**Peak 15-Minutes:** 04:45 PM - 05:00 PM

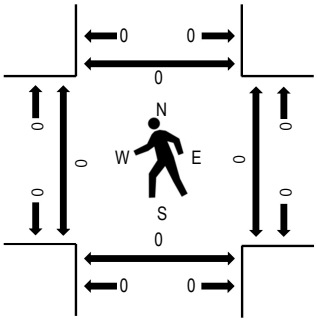
## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles



## Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

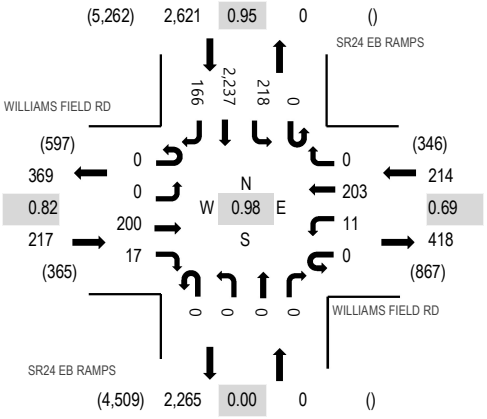
## Traffic Counts - Motorized Vehicles

| Interval Start Time | WILLIAMS FIELD RD Eastbound | | | | WILLIAMS FIELD RD Westbound | | | | LEGACY PARK DWY Northbound | | | | LEGACY PARK DWY Southbound | | | | | Rolling Hour | Pedestrian Crossings | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | Total | | West | East | South | North |
| 4:00 PM | 0 | 0 | 14 | 4 | 0 | 2 | 27 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 54 | 712 | 0 | 0 | 1 | 0 |
| 4:15 PM | 0 | 0 | 16 | 18 | 0 | 23 | 51 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 118 | 811 | 0 | 0 | 0 | 0 |
| 4:30 PM | 0 | 0 | 13 | 63 | 0 | 58 | 45 | 0 | 0 | 0 | 0 | 45 | 0 | 0 | 0 | 0 | 224 | 795 | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 0 | 21 | 95 | 0 | 67 | 76 | 0 | 0 | 0 | 0 | 57 | 0 | 0 | 0 | 0 | 316 | 708 | 0 | 0 | 0 | 0 |
| 5:00 PM | 0 | 0 | 11 | 41 | 0 | 27 | 31 | 0 | 0 | 1 | 0 | 42 | 0 | 0 | 0 | 0 | 153 | 560 | 0 | 0 | 0 | 0 |
| 5:15 PM | 0 | 0 | 13 | 11 | 0 | 14 | 51 | 0 | 0 | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 102 | | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 0 | 22 | 37 | 0 | 13 | 30 | 0 | 0 | 0 | 0 | 35 | 0 | 0 | 0 | 0 | 137 | | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 22 | 36 | 0 | 37 | 43 | 0 | 0 | 3 | 0 | 27 | 0 | 0 | 0 | 0 | 168 | | 0 | 0 | 0 | 0 |
| Count Total | 0 | 0 | 132 | 305 | 0 | 241 | 354 | 0 | 0 | 4 | 0 | 236 | 0 | 0 | 0 | 0 | 1,272 | | 0 | 0 | 1 | 0 |
| Peak Hour | 0 | 0 | 61 | 217 | 0 | 175 | 203 | 0 | 0 | 1 | 0 | 154 | 0 | 0 | 0 | 0 | 811 | | 0 | 0 | 0 | 0 |

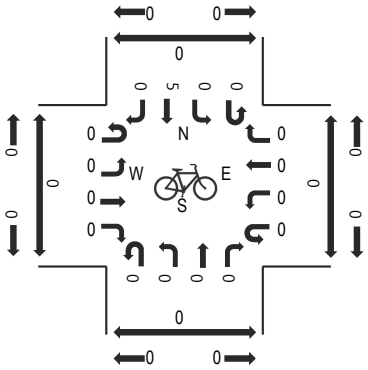
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

**Location:** 14 SR24 EB RAMPS & WILLIAMS FIELD RD PM
**Date:** Tuesday, April 2, 2024
**Peak Hour:** 04:30 PM - 05:30 PM
**Peak 15-Minutes:** 04:45 PM - 05:00 PM

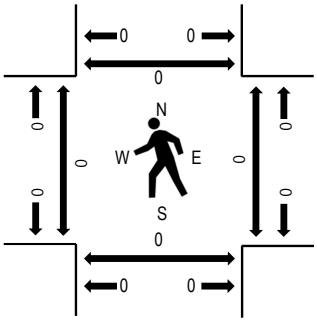
## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles




## Peak Hour - Pedestrians




Note: Total study counts contained in parentheses.

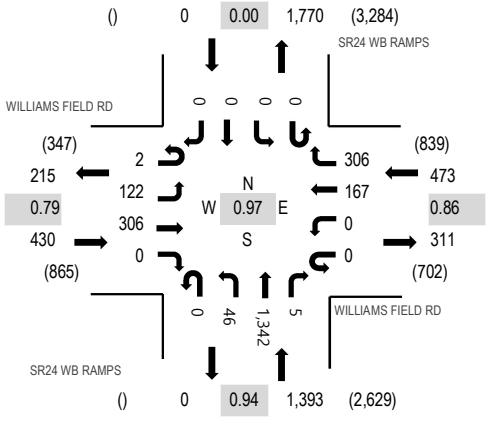
## Traffic Counts - Motorized Vehicles

| Interval Start Time | WILLIAMS FIELD RD Eastbound | | | | WILLIAMS FIELD RD Westbound | | | | SR24 EB RAMPS Northbound | | | | SR24 EB RAMPS Southbound | | | | | Rolling Hour | Pedestrian Crossings | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | Total | | West | East | South | North |
| 4:00 PM | 0 | 0 | 20 | 1 | 0 | 3 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 73 | 618 | 11 | 744 | 3,020 | 0 | 0 | 0 | 0 |
| 4:15 PM | 0 | 0 | 18 | 4 | 0 | 1 | 45 | 0 | 0 | 0 | 0 | 0 | 0 | 82 | 568 | 30 | 748 | 3,026 | 0 | 0 | 0 | 0 |
| 4:30 PM | 0 | 0 | 53 | 7 | 0 | 5 | 51 | 0 | 0 | 0 | 0 | 0 | 0 | 56 | 526 | 52 | 750 | 3,052 | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 0 | 61 | 5 | 0 | 4 | 73 | 0 | 0 | 0 | 0 | 0 | 0 | 42 | 523 | 70 | 778 | 3,046 | 0 | 0 | 0 | 0 |
| 5:00 PM | 0 | 0 | 60 | 2 | 0 | 2 | 32 | 0 | 0 | 0 | 0 | 0 | 0 | 57 | 571 | 26 | 750 | 2,953 | 0 | 0 | 0 | 0 |
| 5:15 PM | 0 | 0 | 26 | 3 | 0 | 0 | 47 | 0 | 0 | 0 | 0 | 0 | 0 | 63 | 617 | 18 | 774 | | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 0 | 46 | 4 | 0 | 1 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 70 | 579 | 19 | 744 | | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 51 | 4 | 0 | 0 | 39 | 0 | 0 | 0 | 0 | 0 | 0 | 89 | 461 | 41 | 685 | | 0 | 0 | 0 | 0 |
| Count Total | 0 | 0 | 335 | 30 | 0 | 16 | 330 | 0 | 0 | 0 | 0 | 0 | 0 | 532 | 4,463 | 267 | 5,973 | | 0 | 0 | 0 | 0 |
| Peak Hour | 0 | 0 | 200 | 17 | 0 | 11 | 203 | 0 | 0 | 0 | 0 | 0 | 0 | 218 | 2,237 | 166 | 3,052 | | 0 | 0 | 0 | 0 |

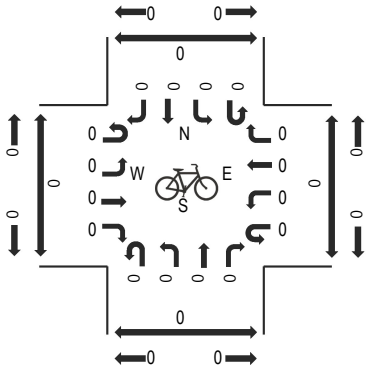
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

**Location:** 15 SR24 WB RAMPS & WILLIAMS FIELD RD PM
**Date:** Tuesday, April 2, 2024
**Peak Hour:** 04:30 PM - 05:30 PM
**Peak 15-Minutes:** 04:45 PM - 05:00 PM

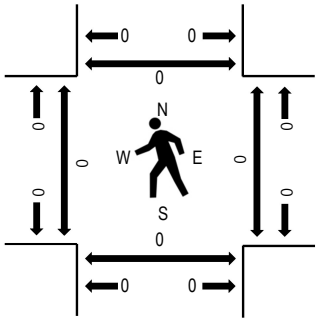
## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles




## Peak Hour - Pedestrians




Note: Total study counts contained in parentheses.

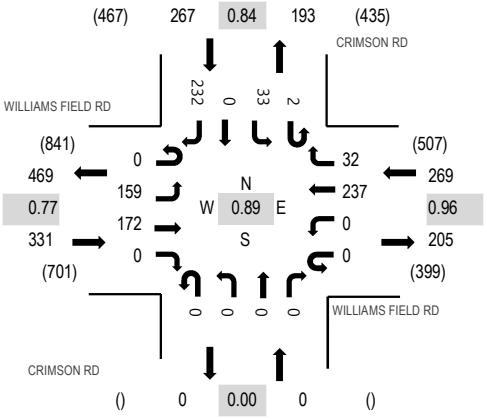
## Traffic Counts - Motorized Vehicles

| Interval Start Time | WILLIAMS FIELD RD Eastbound | | | | WILLIAMS FIELD RD Westbound | | | | SR24 WB RAMPS Northbound | | | | SR24 WB RAMPS Southbound | | | | | Rolling Hour | Pedestrian Crossings | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | Total | | West | East | South | North |
| 4:00 PM | 0 | 2 | 91 | 0 | 0 | 0 | 19 | 94 | 0 | 2 | 355 | 0 | 0 | 0 | 0 | 0 | 563 | 2,243 | 0 | 0 | 1 | 0 |
| 4:15 PM | 1 | 6 | 82 | 0 | 0 | 0 | 34 | 56 | 0 | 11 | 315 | 3 | 0 | 0 | 0 | 0 | 508 | 2,234 | 0 | 0 | 0 | 0 |
| 4:30 PM | 1 | 30 | 90 | 0 | 0 | 0 | 45 | 82 | 0 | 10 | 318 | 2 | 0 | 0 | 0 | 0 | 578 | 2,296 | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 42 | 61 | 0 | 0 | 0 | 62 | 76 | 0 | 15 | 337 | 1 | 0 | 0 | 0 | 0 | 594 | 2,205 | 0 | 0 | 0 | 0 |
| 5:00 PM | 1 | 37 | 78 | 0 | 0 | 0 | 27 | 73 | 0 | 11 | 325 | 2 | 0 | 0 | 0 | 0 | 554 | 2,090 | 0 | 0 | 0 | 0 |
| 5:15 PM | 0 | 13 | 77 | 0 | 0 | 0 | 33 | 75 | 0 | 10 | 362 | 0 | 0 | 0 | 0 | 0 | 570 | | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 17 | 91 | 0 | 0 | 0 | 17 | 64 | 0 | 10 | 287 | 1 | 0 | 0 | 0 | 0 | 487 | | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 27 | 118 | 0 | 0 | 0 | 31 | 51 | 0 | 7 | 240 | 5 | 0 | 0 | 0 | 0 | 479 | | 0 | 0 | 0 | 0 |
| Count Total | 3 | 174 | 688 | 0 | 0 | 0 | 268 | 571 | 0 | 76 | 2,539 | 14 | 0 | 0 | 0 | 0 | 4,333 | | 0 | 0 | 1 | 0 |
| Peak Hour | 2 | 122 | 306 | 0 | 0 | 0 | 167 | 306 | 0 | 46 | 1,342 | 5 | 0 | 0 | 0 | 0 | 2,296 | | 0 | 0 | 0 | 0 |

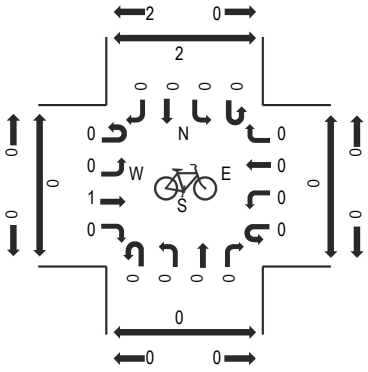
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

**Location:** 16 CRIMSON RD & WILLIAMS FIELD RD PM
**Date:** Tuesday, April 2, 2024
**Peak Hour:** 04:00 PM - 05:00 PM
**Peak 15-Minutes:** 04:30 PM - 04:45 PM

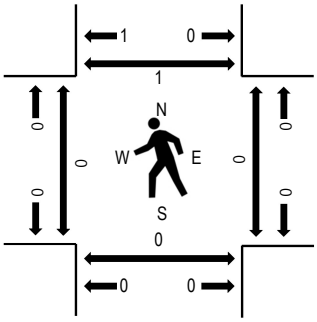
## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles




## Peak Hour - Pedestrians




Note: Total study counts contained in parentheses.

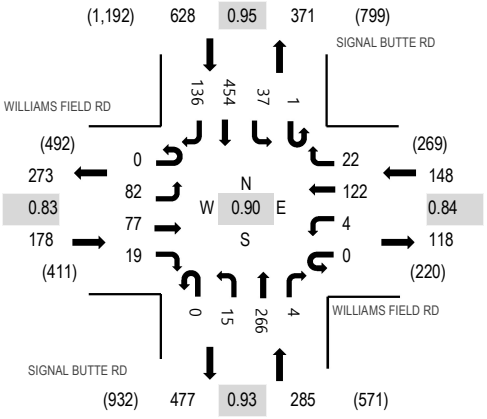
## Traffic Counts - Motorized Vehicles

| Interval Start Time | WILLIAMS FIELD RD Eastbound | | | | WILLIAMS FIELD RD Westbound | | | | CRIMSON RD Northbound | | | | CRIMSON RD Southbound | | | | | Rolling Hour | Pedestrian Crossings | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | Total | | West | East | South | North |
| 4:00 PM | 0 | 53 | 38 | 0 | 0 | 0 | 62 | 10 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 51 | 224 | 867 | 0 | 0 | 0 | 1 |
| 4:15 PM | 0 | 38 | 44 | 0 | 0 | 0 | 45 | 5 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 45 | 183 | 848 | 0 | 0 | 0 | 0 |
| 4:30 PM | 0 | 36 | 57 | 0 | 0 | 0 | 64 | 11 | 0 | 0 | 0 | 0 | 2 | 7 | 0 | 67 | 244 | 857 | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 32 | 33 | 0 | 0 | 0 | 66 | 6 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 69 | 216 | 809 | 0 | 0 | 0 | 0 |
| 5:00 PM | 0 | 49 | 31 | 0 | 0 | 0 | 59 | 13 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 48 | 205 | 808 | 0 | 0 | 0 | 0 |
| 5:15 PM | 0 | 43 | 33 | 0 | 0 | 0 | 60 | 8 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 41 | 192 | | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 53 | 41 | 0 | 0 | 0 | 47 | 8 | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 36 | 196 | | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 64 | 56 | 0 | 0 | 0 | 40 | 3 | 0 | 0 | 0 | 0 | 1 | 10 | 0 | 41 | 215 | | 0 | 0 | 0 | 0 |
| Count Total | 0 | 368 | 333 | 0 | 0 | 0 | 443 | 64 | 0 | 0 | 0 | 0 | 3 | 66 | 0 | 398 | 1,675 | | 0 | 0 | 0 | 1 |
| Peak Hour | 0 | 159 | 172 | 0 | 0 | 0 | 237 | 32 | 0 | 0 | 0 | 0 | 2 | 33 | 0 | 232 | 867 | | 0 | 0 | 0 | 1 |

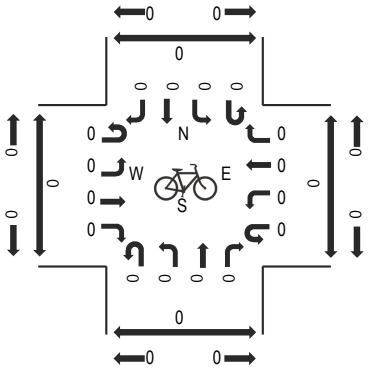
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

**Location:** 17 SIGNAL BUTTE RD & WILLIAMS FIELD RD PM
**Date:** Tuesday, April 2, 2024
**Peak Hour:** 04:30 PM - 05:30 PM
**Peak 15-Minutes:** 04:30 PM - 04:45 PM

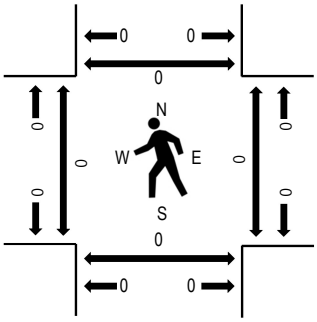
## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles




## Peak Hour - Pedestrians




Note: Total study counts contained in parentheses.

## Traffic Counts - Motorized Vehicles

| Interval Start Time | WILLIAMS FIELD RD Eastbound | | | | WILLIAMS FIELD RD Westbound | | | | SIGNAL BUTTE RD Northbound | | | | SIGNAL BUTTE RD Southbound | | | | | Rolling Hour | Pedestrian Crossings | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | Total | | West | East | South | North |
| 4:00 PM | 0 | 32 | 17 | 6 | 0 | 2 | 34 | 3 | 0 | 3 | 76 | 1 | 1 | 8 | 112 | 22 | 317 | 1,234 | 0 | 0 | 0 | 0 |
| 4:15 PM | 0 | 31 | 20 | 4 | 0 | 1 | 13 | 7 | 0 | 4 | 66 | 1 | 0 | 2 | 93 | 35 | 277 | 1,221 | 0 | 0 | 0 | 0 |
| 4:30 PM | 0 | 29 | 30 | 4 | 0 | 0 | 29 | 7 | 0 | 4 | 75 | 2 | 0 | 8 | 112 | 45 | 345 | 1,239 | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 18 | 11 | 8 | 0 | 1 | 25 | 8 | 0 | 5 | 63 | 0 | 0 | 8 | 111 | 37 | 295 | 1,209 | 0 | 0 | 0 | 0 |
| 5:00 PM | 0 | 16 | 18 | 3 | 0 | 0 | 30 | 4 | 0 | 4 | 67 | 2 | 1 | 11 | 115 | 33 | 304 | 1,209 | 0 | 0 | 0 | 0 |
| 5:15 PM | 0 | 19 | 18 | 4 | 0 | 3 | 38 | 3 | 0 | 2 | 61 | 0 | 0 | 10 | 116 | 21 | 295 | | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 33 | 15 | 6 | 0 | 2 | 28 | 3 | 0 | 0 | 73 | 2 | 0 | 10 | 107 | 36 | 315 | | 0 | 0 | 0 | 1 |
| 5:45 PM | 0 | 41 | 22 | 6 | 0 | 1 | 22 | 5 | 0 | 3 | 57 | 0 | 0 | 4 | 115 | 19 | 295 | | 0 | 0 | 0 | 0 |
| Count Total | 0 | 219 | 151 | 41 | 0 | 10 | 219 | 40 | 0 | 25 | 538 | 8 | 2 | 61 | 881 | 248 | 2,443 | | 0 | 0 | 0 | 1 |
| Peak Hour | 0 | 82 | 77 | 19 | 0 | 4 | 122 | 22 | 0 | 15 | 266 | 4 | 1 | 37 | 454 | 136 | 1,239 | | 0 | 0 | 0 | 0 |

# All Traffic Data Services



SITE 8_S - ELLSWORTH RD SOUTH OF SR24 EB RAMPS

| Time | NB | SB | Total |
|---|---|---|---|
| 4/2/2024 | 17 | 24 | 41 |
| 4/2/2024 12:15:00 AM | 24 | 31 | 55 |
| 4/2/2024 12:30:00 AM | 15 | 32 | 47 |
| 4/2/2024 12:45:00 AM | 17 | 34 | 51 |
| 4/2/2024 1:00:00 AM | 18 | 26 | 44 |
| 4/2/2024 1:15:00 AM | 13 | 28 | 41 |
| 4/2/2024 1:30:00 AM | 15 | 24 | 39 |
| 4/2/2024 1:45:00 AM | 20 | 28 | 48 |
| 4/2/2024 2:00:00 AM | 17 | 15 | 32 |
| 4/2/2024 2:15:00 AM | 23 | 25 | 48 |
| 4/2/2024 2:30:00 AM | 30 | 17 | 47 |
| 4/2/2024 2:45:00 AM | 31 | 20 | 51 |
| 4/2/2024 3:00:00 AM | 41 | 20 | 61 |
| 4/2/2024 3:15:00 AM | 65 | 14 | 79 |
| 4/2/2024 3:30:00 AM | 77 | 22 | 99 |
| 4/2/2024 3:45:00 AM | 99 | 28 | 127 |
| 4/2/2024 4:00:00 AM | 130 | 29 | 159 |
| 4/2/2024 4:15:00 AM | 206 | 41 | 247 |
| 4/2/2024 4:30:00 AM | 235 | 75 | 310 |
| 4/2/2024 4:45:00 AM | 220 | 132 | 352 |
| 4/2/2024 5:00:00 AM | 321 | 116 | 437 |
| 4/2/2024 5:15:00 AM | 381 | 153 | 534 |
| 4/2/2024 5:30:00 AM | 374 | 262 | 636 |
| 4/2/2024 5:45:00 AM | 383 | 291 | 674 |
| 4/2/2024 6:00:00 AM | 428 | 207 | 635 |
| 4/2/2024 6:15:00 AM | 443 | 287 | 730 |
| 4/2/2024 6:30:00 AM | 470 | 337 | 807 |
| 4/2/2024 6:45:00 AM | 517 | 334 | 851 |
| 4/2/2024 7:00:00 AM | 559 | 339 | 898 |
| 4/2/2024 7:15:00 AM | 532 | 320 | 852 |
| 4/2/2024 7:30:00 AM | 550 | 408 | 958 |
| 4/2/2024 7:45:00 AM | 513 | 345 | 858 |
| 4/2/2024 8:00:00 AM | 548 | 307 | 855 |
| 4/2/2024 8:15:00 AM | 455 | 299 | 754 |
| 4/2/2024 8:30:00 AM | 416 | 315 | 731 |
| 4/2/2024 8:45:00 AM | 356 | 268 | 624 |
| 4/2/2024 9:00:00 AM | 334 | 297 | 631 |
| 4/2/2024 9:15:00 AM | 363 | 254 | 617 |
| 4/2/2024 9:30:00 AM | 380 | 263 | 643 |
| 4/2/2024 9:45:00 AM | 312 | 298 | 610 |
| 4/2/2024 10:00:00 AM | 289 | 284 | 573 |
| 4/2/2024 10:15:00 AM | 345 | 260 | 605 |
| 4/2/2024 10:30:00 AM | 320 | 272 | 592 |
| 4/2/2024 10:45:00 AM | 293 | 314 | 607 |
| 4/2/2024 11:00:00 AM | 320 | 350 | 670 |
| 4/2/2024 11:15:00 AM | 329 | 288 | 617 |
| 4/2/2024 11:30:00 AM | 335 | 284 | 619 |
| 4/2/2024 11:45:00 AM | 307 | 312 | 619 |
| Total | 12,486 | 8,729 | 21,215 |
| Percentage | 58.9% | 41.1% | |
| Peak Hour | 6:45 AM | 7:00 AM | 7:00 AM |
| Volume | 2,159 | 1,412 | 3,568 |
| PHF | 0.966 | 0.865 | 0.931 |

# All Traffic Data Services

SITE 8_S - ELLSWORTH RD SOUTH OF SR24 EB RAMPS

| Time | NB | SB | Total |
|---|---|---|---|
| 4/2/2024 12:00:00 PM | 313 | 312 | 625 |
| 4/2/2024 12:15:00 PM | 320 | 301 | 621 |
| 4/2/2024 12:30:00 PM | 315 | 293 | 608 |
| 4/2/2024 12:45:00 PM | 304 | 335 | 639 |
| 4/2/2024 1:00:00 PM | 303 | 288 | 591 |
| 4/2/2024 1:15:00 PM | 321 | 330 | 651 |
| 4/2/2024 1:30:00 PM | 344 | 365 | 709 |
| 4/2/2024 1:45:00 PM | 361 | 368 | 729 |
| 4/2/2024 2:00:00 PM | 304 | 390 | 694 |
| 4/2/2024 2:15:00 PM | 357 | 441 | 798 |
| 4/2/2024 2:30:00 PM | 344 | 457 | 801 |
| 4/2/2024 2:45:00 PM | 391 | 453 | 844 |
| 4/2/2024 3:00:00 PM | 404 | 521 | 925 |
| 4/2/2024 3:15:00 PM | 350 | 512 | 862 |
| 4/2/2024 3:30:00 PM | 418 | 536 | 954 |
| 4/2/2024 3:45:00 PM | 428 | 546 | 974 |
| 4/2/2024 4:00:00 PM | 380 | 551 | 931 |
| 4/2/2024 4:15:00 PM | 401 | 572 | 973 |
| 4/2/2024 4:30:00 PM | 369 | 608 | 977 |
| 4/2/2024 4:45:00 PM | 330 | 581 | 911 |
| 4/2/2024 5:00:00 PM | 338 | 538 | 876 |
| 4/2/2024 5:15:00 PM | 346 | 579 | 925 |
| 4/2/2024 5:30:00 PM | 305 | 524 | 829 |
| 4/2/2024 5:45:00 PM | 279 | 525 | 804 |
| 4/2/2024 6:00:00 PM | 311 | 427 | 738 |
| 4/2/2024 6:15:00 PM | 324 | 449 | 773 |
| 4/2/2024 6:30:00 PM | 250 | 379 | 629 |
| 4/2/2024 6:45:00 PM | 248 | 377 | 625 |
| 4/2/2024 7:00:00 PM | 265 | 338 | 603 |
| 4/2/2024 7:15:00 PM | 210 | 342 | 552 |
| 4/2/2024 7:30:00 PM | 192 | 303 | 495 |
| 4/2/2024 7:45:00 PM | 201 | 244 | 445 |
| 4/2/2024 8:00:00 PM | 170 | 218 | 388 |
| 4/2/2024 8:15:00 PM | 196 | 234 | 430 |
| 4/2/2024 8:30:00 PM | 148 | 215 | 363 |
| 4/2/2024 8:45:00 PM | 139 | 234 | 373 |
| 4/2/2024 9:00:00 PM | 168 | 199 | 367 |
| 4/2/2024 9:15:00 PM | 162 | 197 | 359 |
| 4/2/2024 9:30:00 PM | 128 | 152 | 280 |
| 4/2/2024 9:45:00 PM | 105 | 128 | 233 |
| 4/2/2024 10:00:00 PM | 80 | 146 | 226 |
| 4/2/2024 10:15:00 PM | 73 | 140 | 213 |
| 4/2/2024 10:30:00 PM | 84 | 100 | 184 |
| 4/2/2024 10:45:00 PM | 48 | 78 | 126 |
| 4/2/2024 11:00:00 PM | 44 | 81 | 125 |
| 4/2/2024 11:15:00 PM | 38 | 59 | 97 |
| 4/2/2024 11:30:00 PM | 38 | 49 | 87 |
| 4/2/2024 11:45:00 PM | 27 | 44 | 71 |
| Total | 11,974 | 16,059 | 28,033 |
| Percentage | 42.7% | 57.3% | |
| Peak Hour | 3:30 PM | 4:00 PM | 3:45 PM |
| Volume | 1,627 | 2,312 | 3,855 |
| PHF | 0.950 | 0.951 | 0.986 |
| Grand Total | 24,460 | 24,788 | 49,248 |
| Percentage | 49.7% | 50.3% | |

# All Traffic Data Services

SITE 9_E - WILLIAMS FIELD RD  EAST OF ELLSWORTH RD

| Time | EB | WB | Total |
|---|---|---|---|
| 4/2/2024 | 0 | 0 | 0 |
| 4/2/2024 12:15:00 AM | 0 | 0 | 0 |
| 4/2/2024 12:30:00 AM | 0 | 0 | 0 |
| 4/2/2024 12:45:00 AM | 0 | 1 | 1 |
| 4/2/2024 1:00:00 AM | 1 | 2 | 3 |
| 4/2/2024 1:15:00 AM | 0 | 0 | 0 |
| 4/2/2024 1:30:00 AM | 0 | 0 | 0 |
| 4/2/2024 1:45:00 AM | 0 | 0 | 0 |
| 4/2/2024 2:00:00 AM | 0 | 0 | 0 |
| 4/2/2024 2:15:00 AM | 2 | 0 | 2 |
| 4/2/2024 2:30:00 AM | 0 | 2 | 2 |
| 4/2/2024 2:45:00 AM | 0 | 1 | 1 |
| 4/2/2024 3:00:00 AM | 1 | 0 | 1 |
| 4/2/2024 3:15:00 AM | 0 | 0 | 0 |
| 4/2/2024 3:30:00 AM | 0 | 0 | 0 |
| 4/2/2024 3:45:00 AM | 1 | 3 | 4 |
| 4/2/2024 4:00:00 AM | 0 | 0 | 0 |
| 4/2/2024 4:15:00 AM | 0 | 0 | 0 |
| 4/2/2024 4:30:00 AM | 1 | 3 | 4 |
| 4/2/2024 4:45:00 AM | 0 | 1 | 1 |
| 4/2/2024 5:00:00 AM | 1 | 1 | 2 |
| 4/2/2024 5:15:00 AM | 2 | 3 | 5 |
| 4/2/2024 5:30:00 AM | 1 | 1 | 2 |
| 4/2/2024 5:45:00 AM | 5 | 3 | 8 |
| 4/2/2024 6:00:00 AM | 3 | 6 | 9 |
| 4/2/2024 6:15:00 AM | 4 | 5 | 9 |
| 4/2/2024 6:30:00 AM | 6 | 6 | 12 |
| 4/2/2024 6:45:00 AM | 5 | 24 | 29 |
| 4/2/2024 7:00:00 AM | 9 | 20 | 29 |
| 4/2/2024 7:15:00 AM | 17 | 35 | 52 |
| 4/2/2024 7:30:00 AM | 18 | 23 | 41 |
| 4/2/2024 7:45:00 AM | 17 | 23 | 40 |
| 4/2/2024 8:00:00 AM | 17 | 23 | 40 |
| 4/2/2024 8:15:00 AM | 12 | 15 | 27 |
| 4/2/2024 8:30:00 AM | 25 | 17 | 42 |
| 4/2/2024 8:45:00 AM | 16 | 14 | 30 |
| 4/2/2024 9:00:00 AM | 13 | 12 | 25 |
| 4/2/2024 9:15:00 AM | 8 | 17 | 25 |
| 4/2/2024 9:30:00 AM | 8 | 11 | 19 |
| 4/2/2024 9:45:00 AM | 14 | 20 | 34 |
| 4/2/2024 10:00:00 AM | 6 | 15 | 21 |
| 4/2/2024 10:15:00 AM | 10 | 15 | 25 |
| 4/2/2024 10:30:00 AM | 12 | 14 | 26 |
| 4/2/2024 10:45:00 AM | 9 | 10 | 19 |
| 4/2/2024 11:00:00 AM | 17 | 16 | 33 |
| 4/2/2024 11:15:00 AM | 12 | 22 | 34 |
| 4/2/2024 11:30:00 AM | 11 | 27 | 38 |
| 4/2/2024 11:45:00 AM | 14 | 23 | 37 |
| Total | 298 | 434 | 732 |
| Percentage | 40.7% | 59.3% | |
| Peak Hour | 7:45 AM | 7:15 AM | 7:15 AM |
| Volume | 71 | 104 | 173 |
| PHF | 0.710 | 0.743 | 0.832 |

# All Traffic Data Services

SITE 9_E - WILLIAMS FIELD RD  EAST OF ELLSWORTH RD

| Time | EB | WB | Total |
|---|---|---|---|
| 4/2/2024 12:00:00 PM | 15 | 21 | 36 |
| 4/2/2024 12:15:00 PM | 15 | 19 | 34 |
| 4/2/2024 12:30:00 PM | 11 | 11 | 22 |
| 4/2/2024 12:45:00 PM | 8 | 15 | 23 |
| 4/2/2024 1:00:00 PM | 18 | 14 | 32 |
| 4/2/2024 1:15:00 PM | 10 | 25 | 35 |
| 4/2/2024 1:30:00 PM | 14 | 12 | 26 |
| 4/2/2024 1:45:00 PM | 17 | 14 | 31 |
| 4/2/2024 2:00:00 PM | 14 | 19 | 33 |
| 4/2/2024 2:15:00 PM | 11 | 2 | 13 |
| 4/2/2024 2:30:00 PM | 13 | 20 | 33 |
| 4/2/2024 2:45:00 PM | 15 | 21 | 36 |
| 4/2/2024 3:00:00 PM | 12 | 25 | 37 |
| 4/2/2024 3:15:00 PM | 25 | 24 | 49 |
| 4/2/2024 3:30:00 PM | 17 | 23 | 40 |
| 4/2/2024 3:45:00 PM | 39 | 8 | 47 |
| 4/2/2024 4:00:00 PM | 31 | 21 | 52 |
| 4/2/2024 4:15:00 PM | 57 | 29 | 86 |
| 4/2/2024 4:30:00 PM | 101 | 24 | 125 |
| 4/2/2024 4:45:00 PM | 148 | 36 | 184 |
| 4/2/2024 5:00:00 PM | 59 | 32 | 91 |
| 4/2/2024 5:15:00 PM | 49 | 26 | 75 |
| 4/2/2024 5:30:00 PM | 56 | 29 | 85 |
| 4/2/2024 5:45:00 PM | 67 | 36 | 103 |
| 4/2/2024 6:00:00 PM | 67 | 37 | 104 |
| 4/2/2024 6:15:00 PM | 45 | 26 | 71 |
| 4/2/2024 6:30:00 PM | 56 | 42 | 98 |
| 4/2/2024 6:45:00 PM | 62 | 40 | 102 |
| 4/2/2024 7:00:00 PM | 54 | 37 | 91 |
| 4/2/2024 7:15:00 PM | 54 | 26 | 80 |
| 4/2/2024 7:30:00 PM | 42 | 30 | 72 |
| 4/2/2024 7:45:00 PM | 20 | 33 | 53 |
| 4/2/2024 8:00:00 PM | 21 | 21 | 42 |
| 4/2/2024 8:15:00 PM | 24 | 16 | 40 |
| 4/2/2024 8:30:00 PM | 17 | 18 | 35 |
| 4/2/2024 8:45:00 PM | 20 | 23 | 43 |
| 4/2/2024 9:00:00 PM | 16 | 31 | 47 |
| 4/2/2024 9:15:00 PM | 10 | 34 | 44 |
| 4/2/2024 9:30:00 PM | 9 | 11 | 20 |
| 4/2/2024 9:45:00 PM | 3 | 10 | 13 |
| 4/2/2024 10:00:00 PM | 3 | 1 | 4 |
| 4/2/2024 10:15:00 PM | 1 | 7 | 8 |
| 4/2/2024 10:30:00 PM | 0 | 5 | 5 |
| 4/2/2024 10:45:00 PM | 1 | 1 | 2 |
| 4/2/2024 11:00:00 PM | 4 | 1 | 5 |
| 4/2/2024 11:15:00 PM | 0 | 0 | 0 |
| 4/2/2024 11:30:00 PM | 0 | 0 | 0 |
| 4/2/2024 11:45:00 PM | 2 | 0 | 2 |
| Total | 1,353 | 956 | 2,309 |
| Percentage | 58.6% | 41.4% | |
| Peak Hour | 4:15 PM | 6:00 PM | 4:15 PM |
| Volume | 365 | 145 | 486 |
| PHF | 0.617 | 0.863 | 0.660 |
| Grand Total | 1,651 | 1,390 | 3,041 |
| Percentage | 54.3% | 45.7% | |

# All Traffic Data Services



SITE 9_S - ELLSWORTH RD SOUTH OF WILLIAMS FIELD RD

| Time | NB | SB | Total |
|---|---|---|---|
| 4/2/2024 | 20 | 25 | 45 |
| 4/2/2024 12:15:00 AM | 22 | 28 | 50 |
| 4/2/2024 12:30:00 AM | 16 | 32 | 48 |
| 4/2/2024 12:45:00 AM | 17 | 37 | 54 |
| 4/2/2024 1:00:00 AM | 18 | 30 | 48 |
| 4/2/2024 1:15:00 AM | 13 | 26 | 39 |
| 4/2/2024 1:30:00 AM | 13 | 23 | 36 |
| 4/2/2024 1:45:00 AM | 21 | 29 | 50 |
| 4/2/2024 2:00:00 AM | 19 | 16 | 35 |
| 4/2/2024 2:15:00 AM | 22 | 24 | 46 |
| 4/2/2024 2:30:00 AM | 31 | 19 | 50 |
| 4/2/2024 2:45:00 AM | 32 | 20 | 52 |
| 4/2/2024 3:00:00 AM | 40 | 19 | 59 |
| 4/2/2024 3:15:00 AM | 72 | 13 | 85 |
| 4/2/2024 3:30:00 AM | 74 | 21 | 95 |
| 4/2/2024 3:45:00 AM | 97 | 31 | 128 |
| 4/2/2024 4:00:00 AM | 134 | 28 | 162 |
| 4/2/2024 4:15:00 AM | 218 | 44 | 262 |
| 4/2/2024 4:30:00 AM | 252 | 77 | 329 |
| 4/2/2024 4:45:00 AM | 225 | 131 | 356 |
| 4/2/2024 5:00:00 AM | 308 | 121 | 429 |
| 4/2/2024 5:15:00 AM | 409 | 153 | 562 |
| 4/2/2024 5:30:00 AM | 384 | 232 | 616 |
| 4/2/2024 5:45:00 AM | 395 | 322 | 717 |
| 4/2/2024 6:00:00 AM | 444 | 221 | 665 |
| 4/2/2024 6:15:00 AM | 443 | 286 | 729 |
| 4/2/2024 6:30:00 AM | 469 | 337 | 806 |
| 4/2/2024 6:45:00 AM | 512 | 350 | 862 |
| 4/2/2024 7:00:00 AM | 566 | 364 | 930 |
| 4/2/2024 7:15:00 AM | 520 | 348 | 868 |
| 4/2/2024 7:30:00 AM | 545 | 410 | 955 |
| 4/2/2024 7:45:00 AM | 501 | 373 | 874 |
| 4/2/2024 8:00:00 AM | 552 | 330 | 882 |
| 4/2/2024 8:15:00 AM | 484 | 308 | 792 |
| 4/2/2024 8:30:00 AM | 404 | 337 | 741 |
| 4/2/2024 8:45:00 AM | 356 | 264 | 620 |
| 4/2/2024 9:00:00 AM | 353 | 306 | 659 |
| 4/2/2024 9:15:00 AM | 362 | 250 | 612 |
| 4/2/2024 9:30:00 AM | 393 | 274 | 667 |
| 4/2/2024 9:45:00 AM | 310 | 305 | 615 |
| 4/2/2024 10:00:00 AM | 305 | 270 | 575 |
| 4/2/2024 10:15:00 AM | 334 | 268 | 602 |
| 4/2/2024 10:30:00 AM | 340 | 293 | 633 |
| 4/2/2024 10:45:00 AM | 324 | 307 | 631 |
| 4/2/2024 11:00:00 AM | 340 | 351 | 691 |
| 4/2/2024 11:15:00 AM | 362 | 297 | 659 |
| 4/2/2024 11:30:00 AM | 325 | 292 | 617 |
| 4/2/2024 11:45:00 AM | 334 | 336 | 670 |
| Total | 12,730 | 8,978 | 21,708 |
| Percentage | 58.6% | 41.4% | |
| Peak Hour | 6:45 AM | 7:00 AM | 7:00 AM |
| Volume | 2,143 | 1,495 | 3,627 |
| PHF | 0.947 | 0.912 | 0.949 |

# All Traffic Data Services

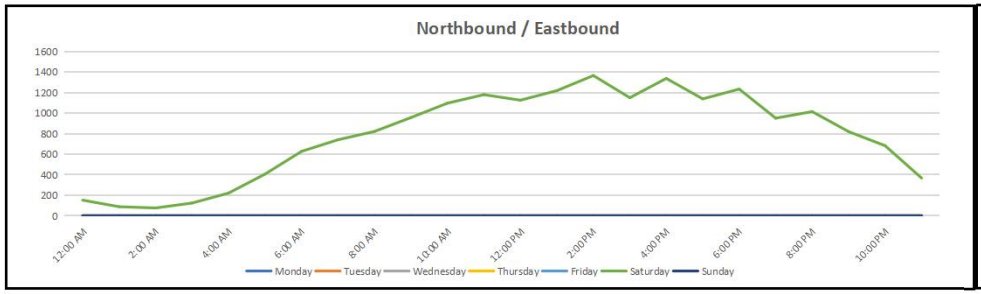
SITE 9_S - ELLSWORTH RD SOUTH OF WILLIAMS FIELD RD

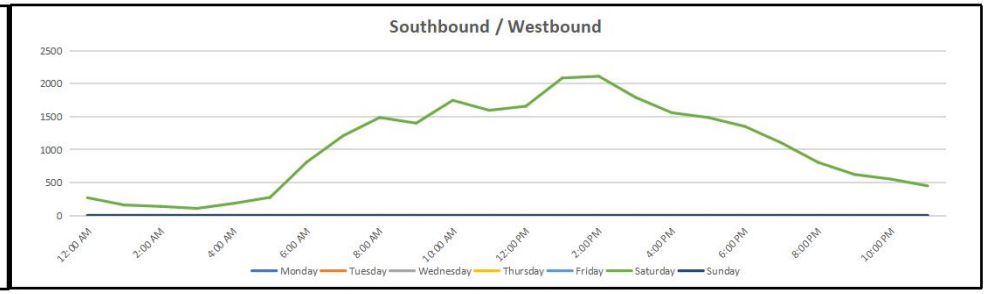
| Time | NB | SB | Total |
|---|---|---|---|
| 4/2/2024 12:00:00 PM | 320 | 311 | 631 |
| 4/2/2024 12:15:00 PM | 350 | 308 | 658 |
| 4/2/2024 12:30:00 PM | 350 | 305 | 655 |
| 4/2/2024 12:45:00 PM | 266 | 333 | 599 |
| 4/2/2024 1:00:00 PM | 314 | 297 | 611 |
| 4/2/2024 1:15:00 PM | 343 | 345 | 688 |
| 4/2/2024 1:30:00 PM | 361 | 362 | 723 |
| 4/2/2024 1:45:00 PM | 373 | 383 | 756 |
| 4/2/2024 2:00:00 PM | 350 | 376 | 726 |
| 4/2/2024 2:15:00 PM | 374 | 436 | 810 |
| 4/2/2024 2:30:00 PM | 391 | 475 | 866 |
| 4/2/2024 2:45:00 PM | 416 | 487 | 903 |
| 4/2/2024 3:00:00 PM | 385 | 512 | 897 |
| 4/2/2024 3:15:00 PM | 400 | 546 | 946 |
| 4/2/2024 3:30:00 PM | 451 | 543 | 994 |
| 4/2/2024 3:45:00 PM | 424 | 542 | 966 |
| 4/2/2024 4:00:00 PM | 404 | 547 | 951 |
| 4/2/2024 4:15:00 PM | 415 | 557 | 972 |
| 4/2/2024 4:30:00 PM | 374 | 560 | 934 |
| 4/2/2024 4:45:00 PM | 324 | 504 | 828 |
| 4/2/2024 5:00:00 PM | 324 | 534 | 858 |
| 4/2/2024 5:15:00 PM | 329 | 573 | 902 |
| 4/2/2024 5:30:00 PM | 319 | 531 | 850 |
| 4/2/2024 5:45:00 PM | 288 | 514 | 802 |
| 4/2/2024 6:00:00 PM | 337 | 395 | 732 |
| 4/2/2024 6:15:00 PM | 300 | 426 | 726 |
| 4/2/2024 6:30:00 PM | 267 | 393 | 660 |
| 4/2/2024 6:45:00 PM | 254 | 359 | 613 |
| 4/2/2024 7:00:00 PM | 256 | 315 | 571 |
| 4/2/2024 7:15:00 PM | 234 | 318 | 552 |
| 4/2/2024 7:30:00 PM | 179 | 288 | 467 |
| 4/2/2024 7:45:00 PM | 211 | 257 | 468 |
| 4/2/2024 8:00:00 PM | 169 | 220 | 389 |
| 4/2/2024 8:15:00 PM | 222 | 227 | 449 |
| 4/2/2024 8:30:00 PM | 170 | 206 | 376 |
| 4/2/2024 8:45:00 PM | 163 | 241 | 404 |
| 4/2/2024 9:00:00 PM | 153 | 204 | 357 |
| 4/2/2024 9:15:00 PM | 165 | 212 | 377 |
| 4/2/2024 9:30:00 PM | 127 | 162 | 289 |
| 4/2/2024 9:45:00 PM | 100 | 136 | 236 |
| 4/2/2024 10:00:00 PM | 83 | 140 | 223 |
| 4/2/2024 10:15:00 PM | 75 | 146 | 221 |
| 4/2/2024 10:30:00 PM | 77 | 104 | 181 |
| 4/2/2024 10:45:00 PM | 49 | 83 | 132 |
| 4/2/2024 11:00:00 PM | 45 | 79 | 124 |
| 4/2/2024 11:15:00 PM | 41 | 63 | 104 |
| 4/2/2024 11:30:00 PM | 37 | 49 | 86 |
| 4/2/2024 11:45:00 PM | 26 | 45 | 71 |
| Total | 12,385 | 15,949 | 28,334 |
| Percentage | 43.7% | 56.3% | |
| Peak Hour | 3:30 PM | 3:45 PM | 3:30 PM |
| Volume | 1,695 | 2,206 | 3,884 |
| PHF | 0.940 | 0.985 | 0.977 |
| Grand Total | 25,115 | 24,927 | 50,042 |
| Percentage | 50.2% | 49.8% | |

# Vehicle Volume Report - Hourly

**Site Description:** Ellsworth Rd N/O Williams Fld Rd
**Site Number:** 9
**Start Date:** 01/24/2026
**End Date:** 01/24/2026

| Time | Monday 1/26/26 | | | Tuesday 1/27/26 | | | Wednesday 1/28/26 | | | Thursday 1/29/26 | | | Friday 1/30/26 | | | Saturday 1/24/26 | | | Sunday 1/25/26 | | | 3 Day Avg Tue-Thu | | 5 Day Avg Mon-Fri | | 7 Day Avg Mon-Sun | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NB | SB | Total | NB | SB | Total | NB | SB | Total | NB | SB | Total | NB | SB | Total | NB | SB | Total | NB | SB | Total | NB | SB | NB | SB | NB | SB |
| 12:00 AM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 152 | 269 | 421 | - | - | - | - | - | - | - | - | - |
| 1:00 AM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 88 | 159 | 247 | - | - | - | - | - | - | - | - | - |
| 2:00 AM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 76 | 137 | 213 | - | - | - | - | - | - | - | - | - |
| 3:00 AM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 124 | 107 | 231 | - | - | - | - | - | - | - | - | - |
| 4:00 AM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 221 | 183 | 404 | - | - | - | - | - | - | - | - | - |
| 5:00 AM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 406 | 274 | 680 | - | - | - | - | - | - | - | - | - |
| 6:00 AM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 627 | 809 | 1436 | - | - | - | - | - | - | - | - | - |
| 7:00 AM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 740 | 1210 | 1950 | - | - | - | - | - | - | - | - | - |
| 8:00 AM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 821 | 1487 | 2308 | - | - | - | - | - | - | - | - | - |
| 9:00 AM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 956 | 1401 | 2357 | - | - | - | - | - | - | - | - | - |
| 10:00 AM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1096 | 1748 | 2844 | - | - | - | - | - | - | - | - | - |
| 11:00 AM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1179 | 1596 | 2775 | - | - | - | - | - | - | - | - | - |
| 12:00 PM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1125 | 1658 | 2783 | - | - | - | - | - | - | - | - | - |
| 1:00 PM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1218 | 2087 | 3305 | - | - | - | - | - | - | - | - | - |
| 2:00 PM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1365 | 2113 | 3478 | - | - | - | - | - | - | - | - | - |
| 3:00 PM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1149 | 1794 | 2943 | - | - | - | - | - | - | - | - | - |
| 4:00 PM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1337 | 1559 | 2896 | - | - | - | - | - | - | - | - | - |
| 5:00 PM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1138 | 1486 | 2624 | - | - | - | - | - | - | - | - | - |
| 6:00 PM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1233 | 1351 | 2584 | - | - | - | - | - | - | - | - | - |
| 7:00 PM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 950 | 1101 | 2051 | - | - | - | - | - | - | - | - | - |
| 8:00 PM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1014 | 806 | 1820 | - | - | - | - | - | - | - | - | - |
| 9:00 PM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 819 | 622 | 1441 | - | - | - | - | - | - | - | - | - |
| 10:00 PM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 682 | 551 | 1233 | - | - | - | - | - | - | - | - | - |
| 11:00 PM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 367 | 449 | 816 | - | - | - | - | - | - | - | - | - |
| **6:00 AM - 9:00 AM** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | **2188** | **3506** | **5694** | - | - | - | - | - | - | - | - | - |
| **3:00 PM - 6:00 PM** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | **3624** | **4839** | **8463** | - | - | - | - | - | - | - | - | - |
| **6:00 AM - 7:00 PM** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | **13984** | **20299** | **34283** | - | - | - | - | - | - | - | - | - |
| **12:00 AM - 12:00 AM** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | **18883** | **24957** | **43840** | - | - | - | - | - | - | - | - | - |
| ***Percent*** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | ***43.1%*** | ***56.9%*** | ***100.0%*** | - | - | - | - | - | - | - | - | - |
| **AM Peak** | - | - | | - | - | | - | - | | - | - | | - | - | | **10:00 AM** | **11:00 AM** | | - | - | | | | | | | |
| **PM Peak** | - | - | | - | - | | - | - | | - | - | | - | - | | **2:00 PM** | **3:00 PM** | | - | - | | | | | | | |

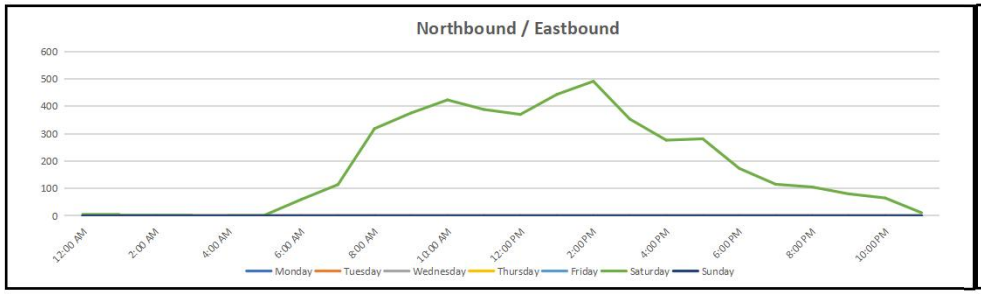


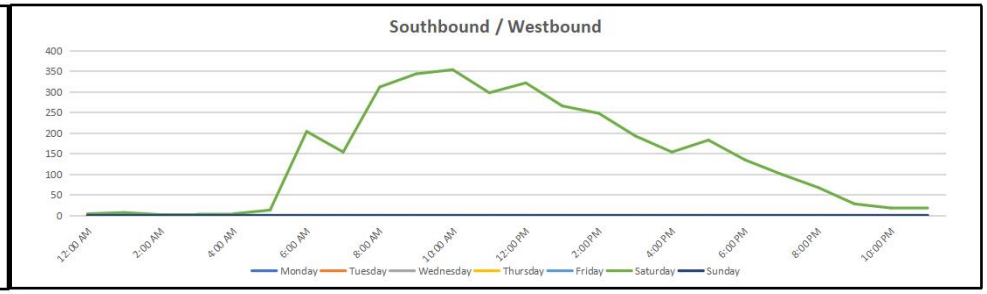



# Vehicle Volume Report - Hourly

**Site Description:** Williams Fld Rd E/O Legacy Ave
**Site Number:** 10
**Start Date:** 01/24/2026
**End Date:** 01/24/2026

| Time | Monday 1/26/26 | | | Tuesday 1/27/26 | | | Wednesday 1/28/26 | | | Thursday 1/29/26 | | | Friday 1/30/26 | | | Saturday 1/24/26 | | | Sunday 1/25/26 | | | 3 Day Avg Tue-Thu | | 5 Day Avg Mon-Fri | | 7 Day Avg Mon-Sun | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | EB | WB | Total | EB | WB | Total | EB | WB | Total | EB | WB | Total | EB | WB | Total | EB | WB | Total | EB | WB | Total | EB | WB | EB | WB | EB | WB |
| 12:00 AM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 5 | 4 | 9 | - | - | - | - | - | - | - | - | - |
| 1:00 AM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2 | 7 | 9 | - | - | - | - | - | - | - | - | - |
| 2:00 AM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2 | 2 | 4 | - | - | - | - | - | - | - | - | - |
| 3:00 AM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 0 | 3 | 3 | - | - | - | - | - | - | - | - | - |
| 4:00 AM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1 | 4 | 5 | - | - | - | - | - | - | - | - | - |
| 5:00 AM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 3 | 13 | 16 | - | - | - | - | - | - | - | - | - |
| 6:00 AM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 60 | 204 | 264 | - | - | - | - | - | - | - | - | - |
| 7:00 AM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 114 | 154 | 268 | - | - | - | - | - | - | - | - | - |
| 8:00 AM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 318 | 312 | 630 | - | - | - | - | - | - | - | - | - |
| 9:00 AM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 375 | 344 | 719 | - | - | - | - | - | - | - | - | - |
| 10:00 AM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 423 | 354 | 777 | - | - | - | - | - | - | - | - | - |
| 11:00 AM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 388 | 298 | 686 | - | - | - | - | - | - | - | - | - |
| 12:00 PM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 370 | 322 | 692 | - | - | - | - | - | - | - | - | - |
| 1:00 PM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 443 | 266 | 709 | - | - | - | - | - | - | - | - | - |
| 2:00 PM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 491 | 248 | 739 | - | - | - | - | - | - | - | - | - |
| 3:00 PM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 353 | 193 | 546 | - | - | - | - | - | - | - | - | - |
| 4:00 PM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 276 | 154 | 430 | - | - | - | - | - | - | - | - | - |
| 5:00 PM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 281 | 183 | 464 | - | - | - | - | - | - | - | - | - |
| 6:00 PM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 173 | 135 | 308 | - | - | - | - | - | - | - | - | - |
| 7:00 PM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 115 | 100 | 215 | - | - | - | - | - | - | - | - | - |
| 8:00 PM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 105 | 68 | 173 | - | - | - | - | - | - | - | - | - |
| 9:00 PM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 80 | 28 | 108 | - | - | - | - | - | - | - | - | - |
| 10:00 PM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 65 | 18 | 83 | - | - | - | - | - | - | - | - | - |
| 11:00 PM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 11 | 16 | 27 | - | - | - | - | - | - | - | - | - |
| **6:00 AM - 9:00 AM** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | **492** | **670** | **1162** | - | - | - | - | - | - | - | - | - |
| **3:00 PM - 6:00 PM** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | **910** | **530** | **1440** | - | - | - | - | - | - | - | - | - |
| **6:00 AM - 7:00 PM** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | **4065** | **3167** | **7232** | - | - | - | - | - | - | - | - | - |
| **12:00 AM - 12:00 AM** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | **4454** | **3430** | **7884** | - | - | - | - | - | - | - | - | - |
| ***Percent*** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | ***56.5%*** | ***43.5%*** | ***100.0%*** | - | - | - | - | - | - | - | - | - |
| **AM Peak** | - | - | | - | - | | - | - | | - | - | | - | - | | **10:00 AM** | **11:00 AM** | | - | - | | | | | | | |
| **PM Peak** | - | - | | - | - | | - | - | | - | - | | - | - | | **2:00 PM** | **3:00 PM** | | - | - | | | | | | | |

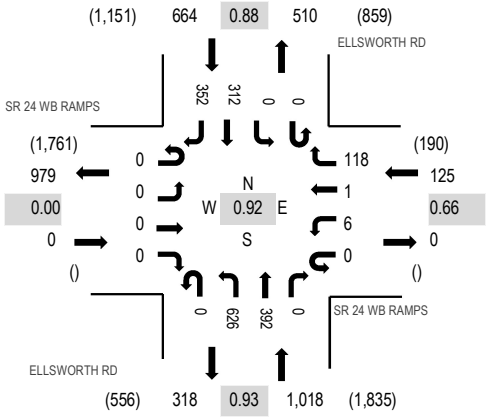


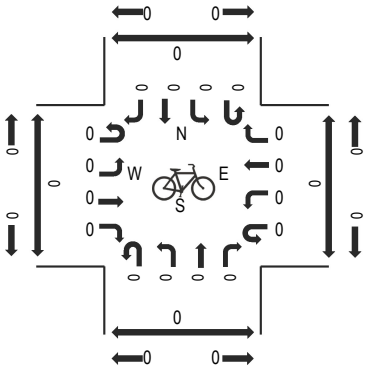
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

**Location:** 1 ELLSWORTH RD & SR 24 WB RAMPS AM
**Date:** Saturday, January 24, 2026
**Peak Hour:** 07:30 AM - 08:30 AM
**Peak 15-Minutes:** 08:15 AM - 08:30 AM

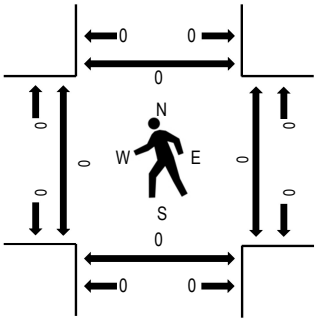
## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles




## Peak Hour - Pedestrians




Note: Total study counts contained in parentheses.

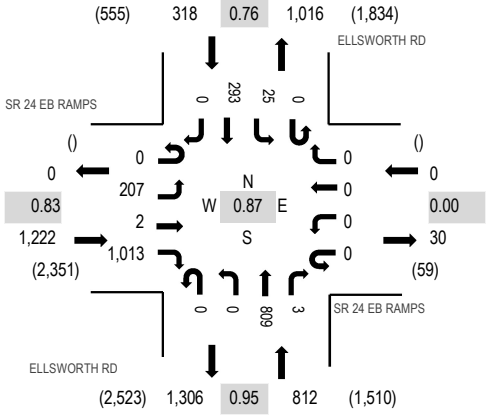
## Traffic Counts - Motorized Vehicles

| Interval Start Time | SR 24 WB RAMPS Eastbound | | | | SR 24 WB RAMPS Westbound | | | | ELLSWORTH RD Northbound | | | | ELLSWORTH RD Southbound | | | | | Rolling Hour | Pedestrian Crossings | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | Total | | West | East | South | North |
| 6:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 132 | 74 | 0 | 0 | 0 | 40 | 54 | 310 | 1,369 | 0 | 0 | 0 | 0 |
| 6:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 0 | 148 | 82 | 0 | 0 | 0 | 50 | 55 | 350 | 1,496 | 0 | 0 | 0 | 0 |
| 7:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 0 | 107 | 76 | 0 | 0 | 0 | 74 | 65 | 345 | 1,600 | 0 | 0 | 0 | 0 |
| 7:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 0 | 146 | 52 | 0 | 0 | 0 | 74 | 75 | 364 | 1,678 | 0 | 0 | 0 | 0 |
| 7:30 AM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 25 | 0 | 159 | 94 | 0 | 0 | 0 | 72 | 86 | 437 | 1,807 | 0 | 0 | 0 | 0 |
| 7:45 AM | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 43 | 0 | 161 | 95 | 0 | 0 | 0 | 68 | 83 | 454 | | 0 | 0 | 0 | 0 |
| 8:00 AM | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 20 | 0 | 146 | 88 | 0 | 0 | 0 | 69 | 98 | 423 | | 0 | 0 | 0 | 0 |
| 8:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 0 | 160 | 115 | 0 | 0 | 0 | 103 | 85 | 493 | | 0 | 0 | 0 | 0 |
| Count Total | 0 | 0 | 0 | 0 | 0 | 6 | 1 | 183 | 0 | 1,159 | 676 | 0 | 0 | 0 | 550 | 601 | 3,176 | | 0 | 0 | 0 | 0 |
| Peak Hour | 0 | 0 | 0 | 0 | 0 | 6 | 1 | 118 | 0 | 626 | 392 | 0 | 0 | 0 | 312 | 352 | 1,807 | | 0 | 0 | 0 | 0 |

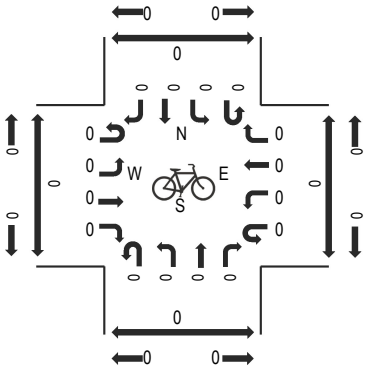
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

**Location:** 2 ELLSWORTH RD & SR 24 EB RAMPS AM
**Date:** Saturday, January 24, 2026
**Peak Hour:** 07:30 AM - 08:30 AM
**Peak 15-Minutes:** 08:15 AM - 08:30 AM

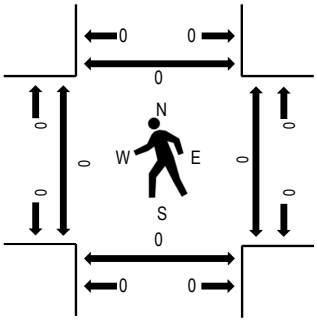
## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles



## Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

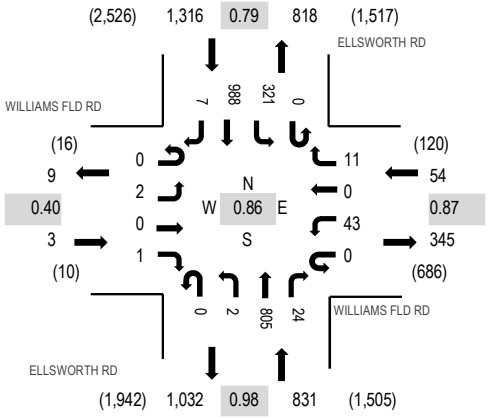
## Traffic Counts - Motorized Vehicles

| Interval Start Time | SR 24 EB RAMPS Eastbound | | | | SR 24 EB RAMPS Westbound | | | | ELLSWORTH RD Northbound | | | | ELLSWORTH RD Southbound | | | | | Rolling Hour | Pedestrian Crossings | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | Total | | West | East | South | North |
| 6:30 AM | 0 | 36 | 0 | 267 | 0 | 0 | 0 | 0 | 0 | 0 | 168 | 0 | 1 | 4 | 32 | 0 | 508 | 2,064 | 0 | 0 | 0 | 0 |
| 6:45 AM | 0 | 33 | 0 | 266 | 0 | 0 | 0 | 0 | 0 | 0 | 197 | 1 | 0 | 7 | 44 | 0 | 548 | 2,110 | 0 | 0 | 0 | 0 |
| 7:00 AM | 0 | 34 | 0 | 254 | 0 | 0 | 0 | 0 | 0 | 0 | 148 | 1 | 1 | 7 | 64 | 0 | 509 | 2,128 | 0 | 0 | 0 | 0 |
| 7:15 AM | 0 | 17 | 0 | 222 | 0 | 0 | 0 | 0 | 0 | 0 | 183 | 0 | 0 | 9 | 68 | 0 | 499 | 2,174 | 0 | 0 | 0 | 0 |
| 7:30 AM | 0 | 54 | 0 | 234 | 0 | 0 | 0 | 0 | 0 | 0 | 197 | 0 | 0 | 5 | 64 | 0 | 554 | 2,352 | 0 | 0 | 0 | 0 |
| 7:45 AM | 0 | 45 | 1 | 235 | 0 | 0 | 0 | 0 | 0 | 0 | 212 | 2 | 0 | 6 | 65 | 0 | 566 | | 0 | 0 | 0 | 0 |
| 8:00 AM | 0 | 38 | 1 | 246 | 0 | 0 | 0 | 0 | 0 | 0 | 195 | 1 | 0 | 6 | 68 | 0 | 555 | | 0 | 0 | 0 | 0 |
| 8:15 AM | 0 | 70 | 0 | 298 | 0 | 0 | 0 | 0 | 0 | 0 | 205 | 0 | 0 | 8 | 96 | 0 | 677 | | 0 | 0 | 0 | 0 |
| Count Total | 0 | 327 | 2 | 2,022 | 0 | 0 | 0 | 0 | 0 | 0 | 1,505 | 5 | 2 | 52 | 501 | 0 | 4,416 | | 0 | 0 | 0 | 0 |
| Peak Hour | 0 | 207 | 2 | 1,013 | 0 | 0 | 0 | 0 | 0 | 0 | 809 | 3 | 0 | 25 | 293 | 0 | 2,352 | | 0 | 0 | 0 | 0 |

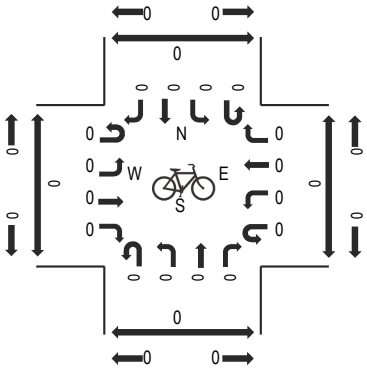
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

**Location:** 3 ELLSWORTH RD & WILLIAMS FLD RD AM
**Date:** Saturday, January 24, 2026
**Peak Hour:** 07:30 AM - 08:30 AM
**Peak 15-Minutes:** 08:15 AM - 08:30 AM

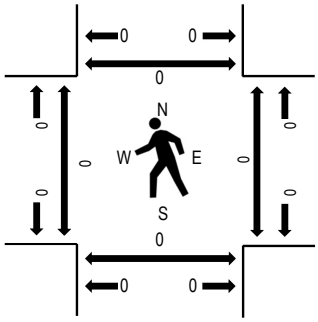
## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles




## Peak Hour - Pedestrians




Note: Total study counts contained in parentheses.

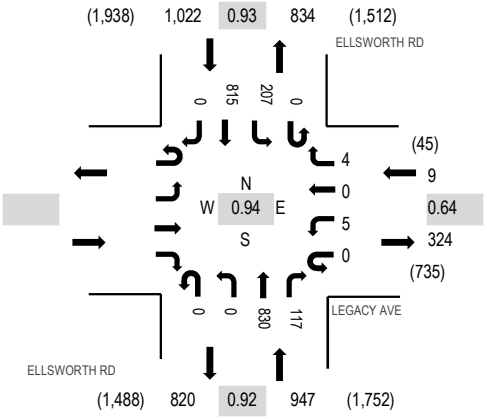
## Traffic Counts - Motorized Vehicles

| Interval Start Time | WILLIAMS FLD RD Eastbound | | | | WILLIAMS FLD RD Westbound | | | | ELLSWORTH RD Northbound | | | | ELLSWORTH RD Southbound | | | | | Rolling Hour | Pedestrian Crossings | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | Total | | West | East | South | North |
| 6:30 AM | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 9 | 0 | 0 | 167 | 3 | 0 | 72 | 223 | 1 | 483 | 1,957 | 0 | 0 | 0 | 0 |
| 6:45 AM | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 9 | 0 | 0 | 174 | 2 | 0 | 84 | 218 | 3 | 500 | 1,999 | 0 | 0 | 0 | 0 |
| 7:00 AM | 0 | 2 | 0 | 0 | 0 | 4 | 0 | 13 | 0 | 1 | 126 | 5 | 0 | 109 | 225 | 1 | 486 | 2,028 | 0 | 0 | 0 | 0 |
| 7:15 AM | 0 | 4 | 0 | 1 | 0 | 8 | 0 | 5 | 0 | 1 | 190 | 5 | 0 | 61 | 213 | 0 | 488 | 2,048 | 0 | 0 | 0 | 0 |
| 7:30 AM | 0 | 1 | 0 | 0 | 0 | 5 | 0 | 5 | 0 | 0 | 207 | 6 | 0 | 26 | 272 | 3 | 525 | 2,204 | 0 | 0 | 0 | 0 |
| 7:45 AM | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 1 | 205 | 6 | 0 | 51 | 254 | 2 | 529 | | 0 | 0 | 0 | 0 |
| 8:00 AM | 0 | 1 | 0 | 1 | 0 | 13 | 0 | 3 | 0 | 0 | 190 | 4 | 0 | 89 | 204 | 1 | 506 | | 0 | 0 | 0 | 0 |
| 8:15 AM | 0 | 0 | 0 | 0 | 0 | 15 | 0 | 3 | 0 | 1 | 203 | 8 | 0 | 155 | 258 | 1 | 644 | | 0 | 0 | 0 | 0 |
| Count Total | 0 | 8 | 0 | 2 | 0 | 73 | 0 | 47 | 0 | 4 | 1,462 | 39 | 0 | 647 | 1,867 | 12 | 4,161 | | 0 | 0 | 0 | 0 |
| Peak Hour | 0 | 2 | 0 | 1 | 0 | 43 | 0 | 11 | 0 | 2 | 805 | 24 | 0 | 321 | 988 | 7 | 2,204 | | 0 | 0 | 0 | 0 |

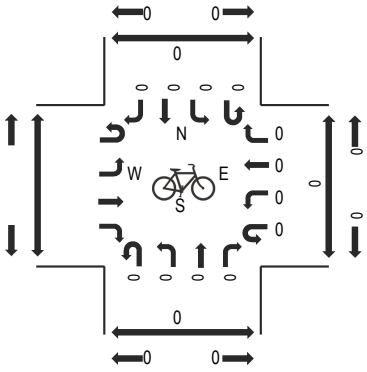
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

**Location:** 4 ELLSWORTH RD & LEGACY AVE AM
**Date:** Saturday, January 24, 2026
**Peak Hour:** 07:30 AM - 08:30 AM
**Peak 15-Minutes:** 08:15 AM - 08:30 AM

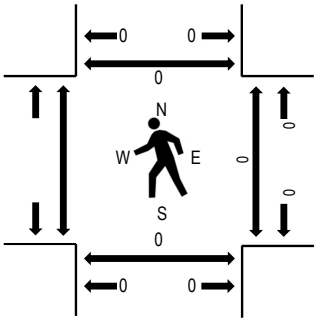
## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles




## Peak Hour - Pedestrians




Note: Total study counts contained in parentheses.

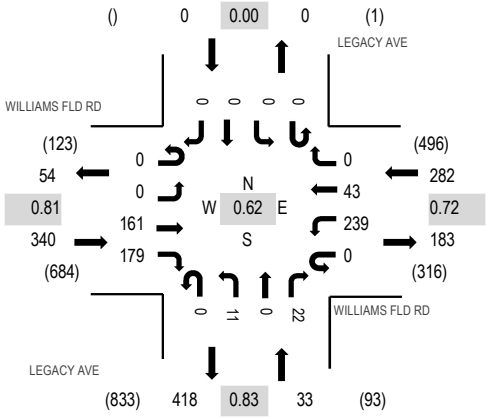
## Traffic Counts - Motorized Vehicles

| Interval Start Time | Eastbound | | | | LEGACY AVE Westbound | | | | ELLSWORTH RD Northbound | | | | ELLSWORTH RD Southbound | | | | | Rolling Hour | Pedestrian Crossings | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | Total | | West | East | South | North |
| 6:30 AM | | | | | 0 | 4 | 0 | 3 | 0 | 0 | 171 | 31 | 0 | 61 | 168 | 0 | 438 | 1,757 | | 0 | 0 | 0 |
| 6:45 AM | | | | | 0 | 3 | 0 | 11 | 0 | 0 | 166 | 45 | 0 | 72 | 147 | 0 | 444 | 1,818 | | 0 | 0 | 0 |
| 7:00 AM | | | | | 0 | 6 | 0 | 4 | 0 | 0 | 130 | 37 | 0 | 96 | 142 | 0 | 415 | 1,883 | | 0 | 0 | 0 |
| 7:15 AM | | | | | 0 | 1 | 0 | 4 | 0 | 0 | 189 | 36 | 0 | 33 | 197 | 0 | 460 | 1,910 | | 0 | 0 | 0 |
| 7:30 AM | | | | | 0 | 1 | 0 | 1 | 0 | 0 | 217 | 16 | 0 | 53 | 211 | 0 | 499 | 1,978 | | 0 | 0 | 0 |
| 7:45 AM | | | | | 0 | 0 | 0 | 2 | 0 | 0 | 202 | 30 | 0 | 59 | 216 | 0 | 509 | | | 0 | 0 | 0 |
| 8:00 AM | | | | | 0 | 2 | 0 | 0 | 0 | 0 | 195 | 29 | 0 | 33 | 183 | 0 | 442 | | | 0 | 0 | 0 |
| 8:15 AM | | | | | 0 | 2 | 0 | 1 | 0 | 0 | 216 | 42 | 0 | 62 | 205 | 0 | 528 | | | 0 | 0 | 0 |
| Count Total | | | | | 0 | 19 | 0 | 26 | 0 | 0 | 1,486 | 266 | 0 | 469 | 1,469 | 0 | 3,735 | | | 0 | 0 | 0 |
| Peak Hour | | | | | 0 | 5 | 0 | 4 | 0 | 0 | 830 | 117 | 0 | 207 | 815 | 0 | 1,978 | | | 0 | 0 | 0 |

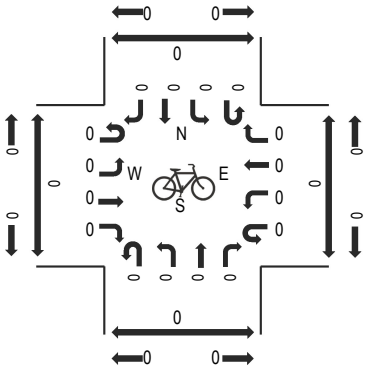
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

**Location:** 5 LEGACY AVE & WILLIAMS FLD RD AM
**Date:** Saturday, January 24, 2026
**Peak Hour:** 07:30 AM - 08:30 AM
**Peak 15-Minutes:** 08:15 AM - 08:30 AM

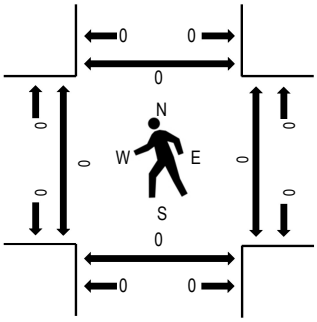
## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles




## Peak Hour - Pedestrians




Note: Total study counts contained in parentheses.

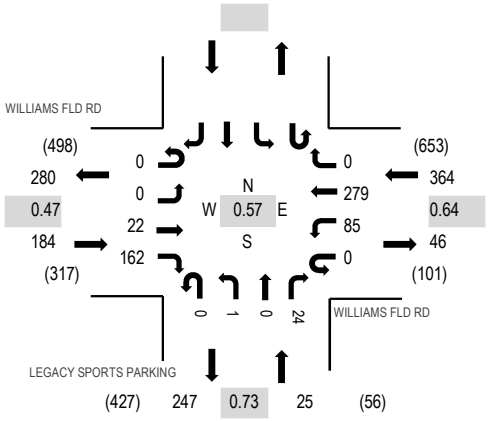
## Traffic Counts - Motorized Vehicles

| Interval Start Time | WILLIAMS FLD RD Eastbound | | | | WILLIAMS FLD RD Westbound | | | | LEGACY AVE Northbound | | | | LEGACY AVE Southbound | | | | | Rolling Hour | Pedestrian Crossings | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | Total | | West | East | South | North |
| 6:30 AM | 0 | 0 | 13 | 61 | 0 | 67 | 11 | 0 | 0 | 9 | 0 | 8 | 0 | 0 | 0 | 0 | 169 | 618 | 0 | 0 | 0 | 0 |
| 6:45 AM | 0 | 0 | 25 | 65 | 0 | 69 | 6 | 0 | 0 | 10 | 1 | 7 | 0 | 0 | 0 | 0 | 183 | 524 | 0 | 0 | 0 | 0 |
| 7:00 AM | 0 | 0 | 42 | 64 | 0 | 19 | 2 | 0 | 0 | 14 | 0 | 4 | 0 | 0 | 0 | 0 | 145 | 469 | 0 | 0 | 0 | 0 |
| 7:15 AM | 0 | 0 | 32 | 42 | 0 | 28 | 12 | 0 | 0 | 5 | 0 | 2 | 0 | 0 | 0 | 0 | 121 | 510 | 0 | 0 | 0 | 0 |
| 7:30 AM | 0 | 0 | 8 | 31 | 0 | 23 | 7 | 0 | 0 | 4 | 0 | 2 | 0 | 0 | 0 | 0 | 75 | 655 | 0 | 0 | 0 | 0 |
| 7:45 AM | 0 | 0 | 23 | 35 | 0 | 57 | 8 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 128 | | 0 | 0 | 0 | 0 |
| 8:00 AM | 0 | 0 | 47 | 44 | 0 | 75 | 14 | 0 | 0 | 4 | 0 | 2 | 0 | 0 | 0 | 0 | 186 | | 0 | 0 | 0 | 0 |
| 8:15 AM | 0 | 0 | 83 | 69 | 0 | 84 | 14 | 0 | 0 | 3 | 0 | 13 | 0 | 0 | 0 | 0 | 266 | | 0 | 0 | 0 | 0 |
| Count Total | 0 | 0 | 273 | 411 | 0 | 422 | 74 | 0 | 0 | 49 | 1 | 43 | 0 | 0 | 0 | 0 | 1,273 | | 0 | 0 | 0 | 0 |
| Peak Hour | 0 | 0 | 161 | 179 | 0 | 239 | 43 | 0 | 0 | 11 | 0 | 22 | 0 | 0 | 0 | 0 | 655 | | 0 | 0 | 0 | 0 |

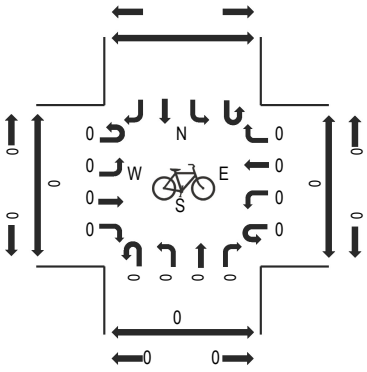
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

**Location:** 6 LEGACY SPORTS PARKING & WILLIAMS FLD RD AM
**Date:** Saturday, January 24, 2026
**Peak Hour:** 07:30 AM - 08:30 AM
**Peak 15-Minutes:** 08:15 AM - 08:30 AM

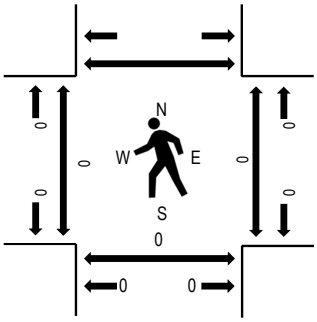
## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles




## Peak Hour - Pedestrians




Note: Total study counts contained in parentheses.

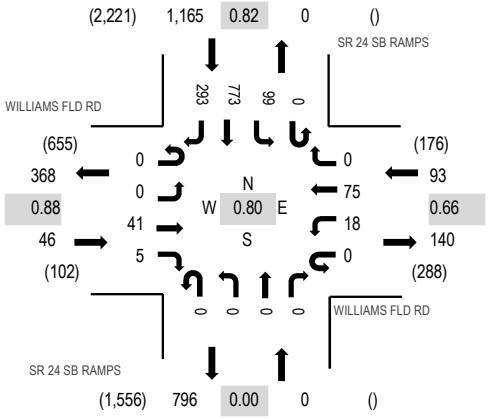
## Traffic Counts - Motorized Vehicles

| Interval Start Time | WILLIAMS FLD RD Eastbound | | | | WILLIAMS FLD RD Westbound | | | | LEGACY SPORTS PARKING Northbound | | | | Southbound | | | | Total | Rolling Hour | Pedestrian Crossings | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | | | West | East | South | North |
| 6:30 AM | 0 | 0 | 7 | 13 | 0 | 5 | 80 | 0 | 0 | 0 | 0 | 2 | | | | | 107 | 453 | 0 | 0 | 0 | |
| 6:45 AM | 0 | 0 | 6 | 27 | 1 | 29 | 76 | 0 | 0 | 0 | 0 | 7 | | | | | 146 | 409 | 0 | 0 | 0 | |
| 7:00 AM | 0 | 0 | 6 | 40 | 1 | 22 | 20 | 0 | 0 | 0 | 0 | 9 | | | | | 98 | 372 | 0 | 0 | 0 | |
| 7:15 AM | 0 | 0 | 5 | 29 | 0 | 15 | 40 | 0 | 0 | 2 | 0 | 11 | | | | | 102 | 424 | 0 | 0 | 1 | |
| 7:30 AM | 0 | 0 | 4 | 6 | 0 | 15 | 29 | 0 | 0 | 0 | 0 | 9 | | | | | 63 | 573 | 0 | 0 | 0 | |
| 7:45 AM | 0 | 0 | 6 | 22 | 0 | 13 | 66 | 0 | 0 | 0 | 0 | 2 | | | | | 109 | | 0 | 0 | 0 | |
| 8:00 AM | 0 | 0 | 3 | 46 | 0 | 10 | 89 | 0 | 0 | 0 | 0 | 2 | | | | | 150 | | 0 | 0 | 0 | |
| 8:15 AM | 0 | 0 | 9 | 88 | 0 | 47 | 95 | 0 | 0 | 1 | 0 | 11 | | | | | 251 | | 0 | 0 | 0 | |
| Count Total | 0 | 0 | 46 | 271 | 2 | 156 | 495 | 0 | 0 | 3 | 0 | 53 | | | | | 1,026 | | 0 | 0 | 1 | |
| Peak Hour | 0 | 0 | 22 | 162 | 0 | 85 | 279 | 0 | 0 | 1 | 0 | 24 | | | | | 573 | | 0 | 0 | 0 | |

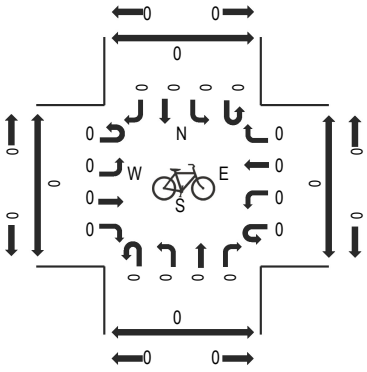
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

**Location:** 7 SR 24 SB RAMPS & WILLIAMS FLD RD AM
**Date:** Saturday, January 24, 2026
**Peak Hour:** 07:30 AM - 08:30 AM
**Peak 15-Minutes:** 08:15 AM - 08:30 AM

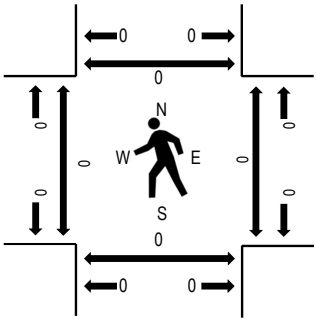
## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles




## Peak Hour - Pedestrians




Note: Total study counts contained in parentheses.

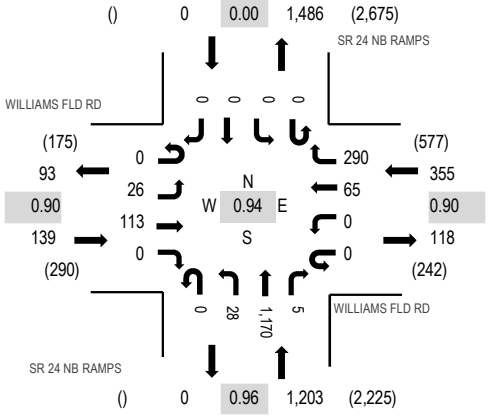
## Traffic Counts - Motorized Vehicles

| Interval Start Time | WILLIAMS FLD RD Eastbound | | | | WILLIAMS FLD RD Westbound | | | | SR 24 SB RAMPS Northbound | | | | SR 24 SB RAMPS Southbound | | | | | Rolling Hour | Pedestrian Crossings | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | Total | | West | East | South | North |
| 6:30 AM | 0 | 0 | 6 | 3 | 0 | 2 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 32 | 237 | 61 | 366 | 1,195 | 0 | 0 | 0 | 0 |
| 6:45 AM | 0 | 0 | 12 | 2 | 0 | 1 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 171 | 82 | 316 | 1,076 | 0 | 0 | 0 | 0 |
| 7:00 AM | 0 | 0 | 12 | 4 | 0 | 1 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 151 | 32 | 232 | 1,069 | 0 | 0 | 0 | 0 |
| 7:15 AM | 0 | 0 | 13 | 4 | 0 | 2 | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 182 | 35 | 281 | 1,177 | 0 | 0 | 0 | 0 |
| 7:30 AM | 0 | 0 | 10 | 3 | 0 | 3 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 169 | 29 | 247 | 1,304 | 0 | 0 | 0 | 0 |
| 7:45 AM | 0 | 0 | 7 | 0 | 0 | 2 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 35 | 185 | 69 | 309 | | 0 | 0 | 0 | 0 |
| 8:00 AM | 0 | 0 | 6 | 1 | 0 | 4 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 210 | 77 | 340 | | 0 | 0 | 0 | 0 |
| 8:15 AM | 0 | 0 | 18 | 1 | 0 | 9 | 26 | 0 | 0 | 0 | 0 | 0 | 0 | 27 | 209 | 118 | 408 | | 0 | 0 | 0 | 0 |
| Count Total | 0 | 0 | 84 | 18 | 0 | 24 | 152 | 0 | 0 | 0 | 0 | 0 | 0 | 204 | 1,514 | 503 | 2,499 | | 0 | 0 | 0 | 0 |
| Peak Hour | 0 | 0 | 41 | 5 | 0 | 18 | 75 | 0 | 0 | 0 | 0 | 0 | 0 | 99 | 773 | 293 | 1,304 | | 0 | 0 | 0 | 0 |

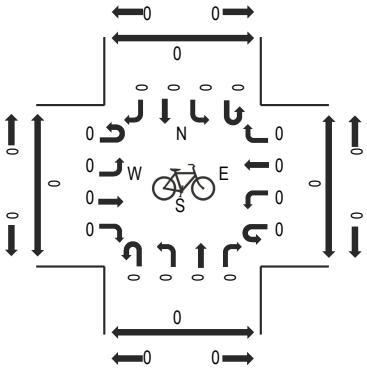
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

**Location:** 8 SR 24 NB RAMPS & WILLIAMS FLD RD AM
**Date:** Saturday, January 24, 2026
**Peak Hour:** 07:30 AM - 08:30 AM
**Peak 15-Minutes:** 08:15 AM - 08:30 AM

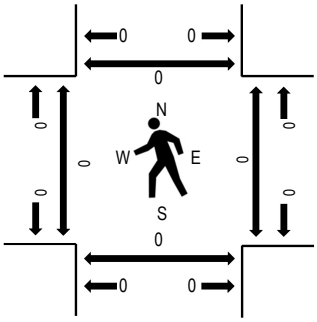
## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles




## Peak Hour - Pedestrians




Note: Total study counts contained in parentheses.

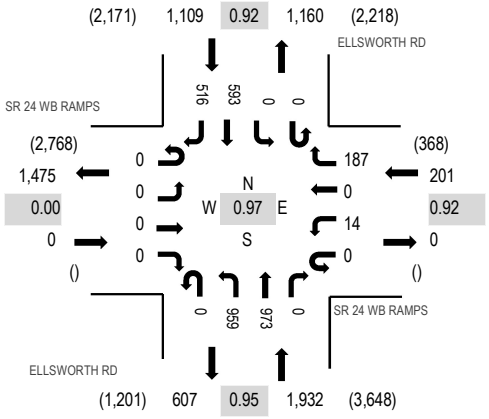
## Traffic Counts - Motorized Vehicles

| Interval Start Time | WILLIAMS FLD RD Eastbound | | | | WILLIAMS FLD RD Westbound | | | | SR 24 NB RAMPS Northbound | | | | SR 24 NB RAMPS Southbound | | | | | Rolling Hour | Pedestrian Crossings | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | Total | | West | East | South | North |
| 6:30 AM | 0 | 4 | 38 | 0 | 0 | 0 | 18 | 41 | 0 | 8 | 256 | 1 | 0 | 0 | 0 | 0 | 366 | 1,395 | 0 | 0 | 0 | 0 |
| 6:45 AM | 0 | 8 | 34 | 0 | 0 | 0 | 15 | 39 | 0 | 4 | 228 | 0 | 0 | 0 | 0 | 0 | 328 | 1,472 | 0 | 0 | 0 | 0 |
| 7:00 AM | 1 | 10 | 22 | 0 | 0 | 0 | 10 | 30 | 0 | 5 | 230 | 1 | 0 | 0 | 0 | 0 | 309 | 1,549 | 0 | 1 | 1 | 0 |
| 7:15 AM | 0 | 7 | 27 | 0 | 0 | 0 | 17 | 52 | 0 | 4 | 284 | 1 | 0 | 0 | 0 | 0 | 392 | 1,638 | 0 | 0 | 0 | 0 |
| 7:30 AM | 0 | 6 | 24 | 0 | 0 | 0 | 16 | 83 | 0 | 4 | 308 | 2 | 0 | 0 | 0 | 0 | 443 | 1,697 | 0 | 0 | 0 | 0 |
| 7:45 AM | 0 | 9 | 32 | 0 | 0 | 0 | 10 | 61 | 0 | 3 | 290 | 0 | 0 | 0 | 0 | 0 | 405 | | 0 | 0 | 0 | 0 |
| 8:00 AM | 0 | 1 | 24 | 0 | 0 | 0 | 20 | 67 | 0 | 8 | 276 | 2 | 0 | 0 | 0 | 0 | 398 | | 0 | 0 | 0 | 0 |
| 8:15 AM | 0 | 10 | 33 | 0 | 0 | 0 | 19 | 79 | 0 | 13 | 296 | 1 | 0 | 0 | 0 | 0 | 451 | | 0 | 0 | 0 | 0 |
| Count Total | 1 | 55 | 234 | 0 | 0 | 0 | 125 | 452 | 0 | 49 | 2,168 | 8 | 0 | 0 | 0 | 0 | 3,092 | | 0 | 1 | 1 | 0 |
| Peak Hour | 0 | 26 | 113 | 0 | 0 | 0 | 65 | 290 | 0 | 28 | 1,170 | 5 | 0 | 0 | 0 | 0 | 1,697 | | 0 | 0 | 0 | 0 |

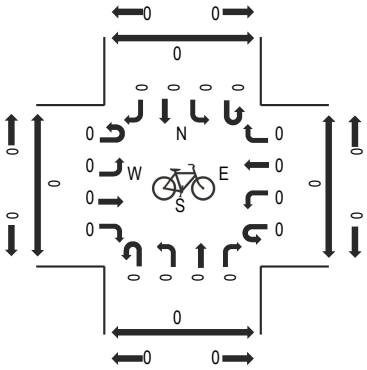
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

**Location:** 1 ELLSWORTH RD & SR 24 WB RAMPS Noon
**Date:** Saturday, January 24, 2026
**Peak Hour:** 01:30 PM - 02:30 PM
**Peak 15-Minutes:** 02:15 PM - 02:30 PM

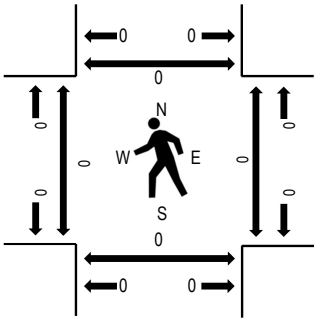
## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles




## Peak Hour - Pedestrians




Note: Total study counts contained in parentheses.

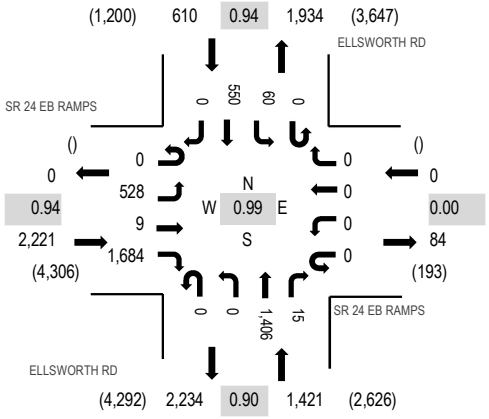
## Traffic Counts - Motorized Vehicles

| Interval Start Time | SR 24 WB RAMPS Eastbound | | | | SR 24 WB RAMPS Westbound | | | | ELLSWORTH RD Northbound | | | | ELLSWORTH RD Southbound | | | | | Rolling Hour | Pedestrian Crossings | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | Total | | West | East | South | North |
| 1:30 PM | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 43 | 0 | 227 | 255 | 0 | 0 | 0 | 152 | 150 | 831 | 3,242 | 0 | 0 | 0 | 0 |
| 1:45 PM | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 50 | 0 | 205 | 241 | 0 | 0 | 0 | 148 | 130 | 777 | 3,199 | 0 | 0 | 0 | 0 |
| 2:00 PM | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 42 | 0 | 259 | 239 | 0 | 0 | 0 | 150 | 103 | 797 | 3,129 | 0 | 0 | 0 | 0 |
| 2:15 PM | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 52 | 0 | 268 | 238 | 0 | 0 | 0 | 143 | 133 | 837 | 3,068 | 0 | 0 | 0 | 0 |
| 2:30 PM | 0 | 0 | 0 | 0 | 0 | 8 | 1 | 39 | 0 | 211 | 235 | 0 | 0 | 0 | 163 | 131 | 788 | 2,945 | 0 | 0 | 0 | 0 |
| 2:45 PM | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 40 | 0 | 187 | 229 | 0 | 0 | 0 | 133 | 114 | 707 | | 0 | 0 | 0 | 0 |
| 3:00 PM | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 34 | 0 | 205 | 220 | 0 | 0 | 0 | 148 | 126 | 736 | | 0 | 0 | 0 | 0 |
| 3:15 PM | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 36 | 0 | 204 | 225 | 0 | 0 | 0 | 135 | 112 | 714 | | 0 | 0 | 0 | 0 |
| Count Total | 0 | 0 | 0 | 0 | 0 | 29 | 3 | 336 | 0 | 1,766 | 1,882 | 0 | 0 | 0 | 1,172 | 999 | 6,187 | | 0 | 0 | 0 | 0 |
| Peak Hour | 0 | 0 | 0 | 0 | 0 | 14 | 0 | 187 | 0 | 959 | 973 | 0 | 0 | 0 | 593 | 516 | 3,242 | | 0 | 0 | 0 | 0 |

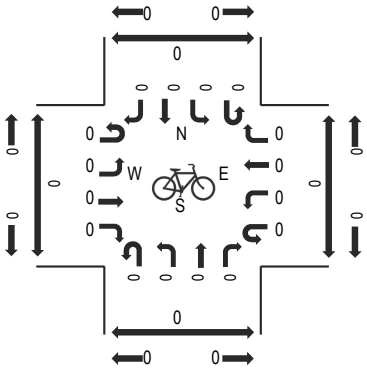
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

**Location:** 2 ELLSWORTH RD & SR 24 EB RAMPS Noon
**Date:** Saturday, January 24, 2026
**Peak Hour:** 01:30 PM - 02:30 PM
**Peak 15-Minutes:** 02:15 PM - 02:30 PM

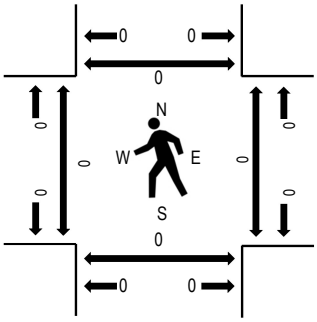
## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles



## Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

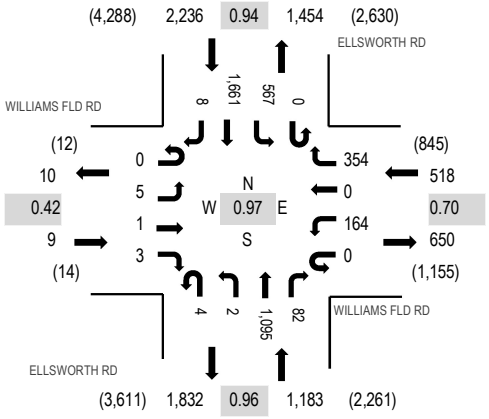
## Traffic Counts - Motorized Vehicles

| Interval Start Time | SR 24 EB RAMPS Eastbound | | | | SR 24 EB RAMPS Westbound | | | | ELLSWORTH RD Northbound | | | | ELLSWORTH RD Southbound | | | | | Rolling Hour | Pedestrian Crossings | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | Total | | West | East | South | North |
| 1:30 PM | 0 | 152 | 3 | 435 | 0 | 0 | 0 | 0 | 0 | 0 | 310 | 2 | 0 | 10 | 142 | 0 | 1,054 | 4,252 | 0 | 0 | 0 | 0 |
| 1:45 PM | 0 | 122 | 1 | 458 | 0 | 0 | 0 | 0 | 0 | 0 | 336 | 2 | 0 | 12 | 136 | 0 | 1,067 | 4,180 | 0 | 0 | 0 | 0 |
| 2:00 PM | 0 | 118 | 4 | 403 | 0 | 0 | 0 | 0 | 0 | 0 | 370 | 6 | 0 | 18 | 137 | 0 | 1,056 | 4,079 | 0 | 0 | 0 | 0 |
| 2:15 PM | 0 | 136 | 1 | 388 | 0 | 0 | 0 | 0 | 0 | 0 | 390 | 5 | 0 | 20 | 135 | 0 | 1,075 | 4,010 | 0 | 0 | 0 | 0 |
| 2:30 PM | 0 | 132 | 1 | 385 | 0 | 0 | 0 | 0 | 0 | 0 | 291 | 6 | 0 | 24 | 143 | 0 | 982 | 3,880 | 0 | 0 | 0 | 0 |
| 2:45 PM | 0 | 120 | 3 | 390 | 0 | 0 | 0 | 0 | 0 | 0 | 312 | 4 | 0 | 17 | 120 | 0 | 966 | | 0 | 0 | 0 | 0 |
| 3:00 PM | 0 | 132 | 4 | 414 | 0 | 0 | 0 | 0 | 0 | 0 | 297 | 0 | 1 | 23 | 116 | 0 | 987 | | 0 | 0 | 0 | 0 |
| 3:15 PM | 0 | 133 | 0 | 371 | 0 | 0 | 0 | 0 | 0 | 0 | 295 | 0 | 0 | 27 | 119 | 0 | 945 | | 0 | 0 | 0 | 0 |
| Count Total | 0 | 1,045 | 17 | 3,244 | 0 | 0 | 0 | 0 | 0 | 0 | 2,601 | 25 | 1 | 151 | 1,048 | 0 | 8,132 | | 0 | 0 | 0 | 0 |
| Peak Hour | 0 | 528 | 9 | 1,684 | 0 | 0 | 0 | 0 | 0 | 0 | 1,406 | 15 | 0 | 60 | 550 | 0 | 4,252 | | 0 | 0 | 0 | 0 |

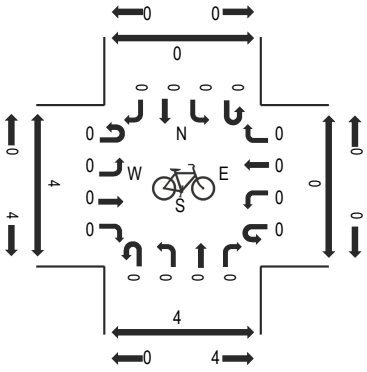
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

**Location:** 3 ELLSWORTH RD & WILLIAMS FLD RD Noon
**Date:** Saturday, January 24, 2026
**Peak Hour:** 01:30 PM - 02:30 PM
**Peak 15-Minutes:** 02:00 PM - 02:15 PM

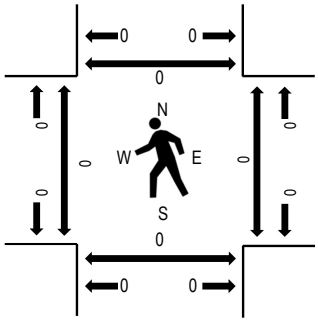
## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles




## Peak Hour - Pedestrians




Note: Total study counts contained in parentheses.

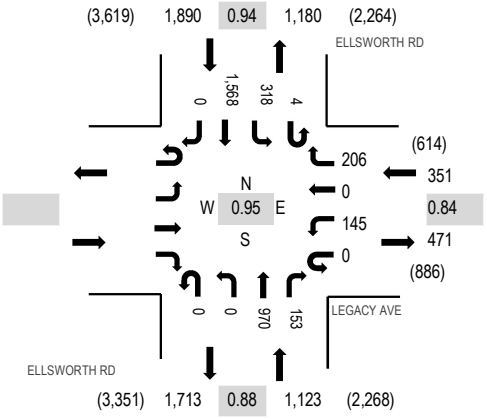
## Traffic Counts - Motorized Vehicles

| Interval Start Time | WILLIAMS FLD RD Eastbound | | | | WILLIAMS FLD RD Westbound | | | | ELLSWORTH RD Northbound | | | | ELLSWORTH RD Southbound | | | | | Rolling Hour | Pedestrian Crossings | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | Total | | West | East | South | North |
| 1:30 PM | 0 | 0 | 0 | 0 | 0 | 19 | 0 | 62 | 0 | 0 | 265 | 19 | 0 | 138 | 420 | 1 | 924 | 3,946 | 0 | 0 | 0 | 0 |
| 1:45 PM | 0 | 1 | 0 | 1 | 0 | 39 | 0 | 73 | 1 | 2 | 279 | 26 | 0 | 152 | 439 | 2 | 1,015 | 3,901 | 0 | 0 | 0 | 0 |
| 2:00 PM | 0 | 4 | 1 | 1 | 0 | 66 | 0 | 120 | 2 | 0 | 273 | 23 | 0 | 141 | 384 | 2 | 1,017 | 3,755 | 0 | 0 | 0 | 0 |
| 2:15 PM | 0 | 0 | 0 | 1 | 0 | 40 | 0 | 99 | 1 | 0 | 278 | 14 | 0 | 136 | 418 | 3 | 990 | 3,623 | 0 | 0 | 0 | 0 |
| 2:30 PM | 0 | 1 | 0 | 0 | 0 | 40 | 0 | 30 | 0 | 0 | 251 | 26 | 0 | 92 | 439 | 0 | 879 | 3,462 | 0 | 0 | 0 | 0 |
| 2:45 PM | 0 | 0 | 0 | 0 | 0 | 38 | 0 | 52 | 0 | 0 | 239 | 23 | 0 | 115 | 401 | 1 | 869 | | 0 | 0 | 0 | 0 |
| 3:00 PM | 0 | 1 | 0 | 1 | 0 | 30 | 0 | 59 | 0 | 0 | 247 | 27 | 0 | 92 | 428 | 0 | 885 | | 0 | 0 | 0 | 0 |
| 3:15 PM | 0 | 1 | 1 | 0 | 0 | 22 | 0 | 56 | 0 | 0 | 239 | 26 | 0 | 103 | 380 | 1 | 829 | | 0 | 0 | 0 | 0 |
| Count Total | 0 | 8 | 2 | 4 | 0 | 294 | 0 | 551 | 4 | 2 | 2,071 | 184 | 0 | 969 | 3,309 | 10 | 7,408 | | 0 | 0 | 0 | 0 |
| Peak Hour | 0 | 5 | 1 | 3 | 0 | 164 | 0 | 354 | 4 | 2 | 1,095 | 82 | 0 | 567 | 1,661 | 8 | 3,946 | | 0 | 0 | 0 | 0 |

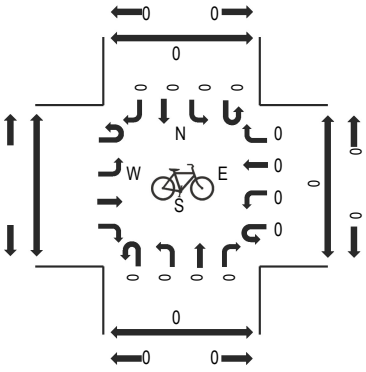
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

**Location:** 4 ELLSWORTH RD & LEGACY AVE Noon
**Date:** Saturday, January 24, 2026
**Peak Hour:** 01:45 PM - 02:45 PM
**Peak 15-Minutes:** 02:00 PM - 02:15 PM

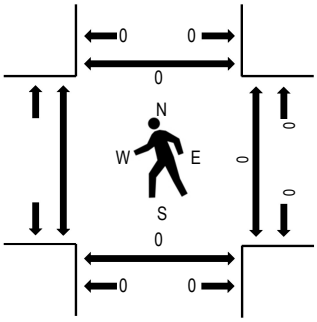
## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles




## Peak Hour - Pedestrians




Note: Total study counts contained in parentheses.

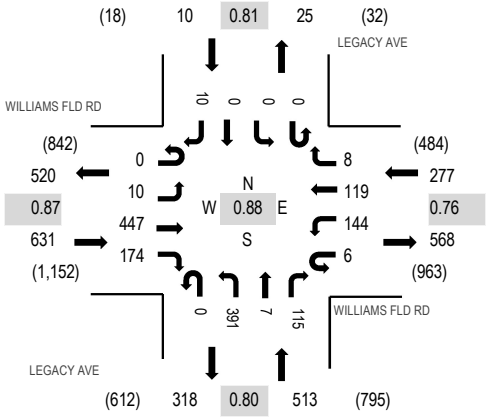
## Traffic Counts - Motorized Vehicles

| Interval Start Time | Eastbound | | | | LEGACY AVE Westbound | | | | ELLSWORTH RD Northbound | | | | ELLSWORTH RD Southbound | | | | | Rolling Hour | Pedestrian Crossings | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | Total | | West | East | South | North |
| 1:30 PM | | | | | 0 | 32 | 0 | 32 | 0 | 0 | 252 | 70 | 0 | 76 | 355 | 0 | 817 | 3,343 | | 0 | 0 | 0 |
| 1:45 PM | | | | | 0 | 44 | 0 | 71 | 0 | 0 | 223 | 51 | 0 | 97 | 361 | 0 | 847 | 3,364 | | 0 | 0 | 0 |
| 2:00 PM | | | | | 0 | 48 | 0 | 65 | 0 | 0 | 240 | 35 | 3 | 103 | 391 | 0 | 885 | 3,289 | | 0 | 0 | 0 |
| 2:15 PM | | | | | 0 | 37 | 0 | 59 | 0 | 0 | 229 | 38 | 0 | 60 | 371 | 0 | 794 | 3,199 | | 0 | 0 | 0 |
| 2:30 PM | | | | | 0 | 16 | 0 | 11 | 0 | 0 | 278 | 29 | 1 | 58 | 445 | 0 | 838 | 3,158 | | 0 | 0 | 0 |
| 2:45 PM | | | | | 0 | 31 | 0 | 25 | 0 | 0 | 235 | 40 | 2 | 65 | 374 | 0 | 772 | | | 0 | 0 | 0 |
| 3:00 PM | | | | | 0 | 38 | 0 | 37 | 0 | 0 | 237 | 45 | 0 | 51 | 387 | 0 | 795 | | | 0 | 0 | 0 |
| 3:15 PM | | | | | 0 | 28 | 0 | 40 | 0 | 0 | 223 | 43 | 1 | 25 | 393 | 0 | 753 | | | 0 | 0 | 0 |
| Count Total | | | | | 0 | 274 | 0 | 340 | 0 | 0 | 1,917 | 351 | 7 | 535 | 3,077 | 0 | 6,501 | | | 0 | 0 | 0 |
| Peak Hour | | | | | 0 | 145 | 0 | 206 | 0 | 0 | 970 | 153 | 4 | 318 | 1,568 | 0 | 3,364 | | | 0 | 0 | 0 |

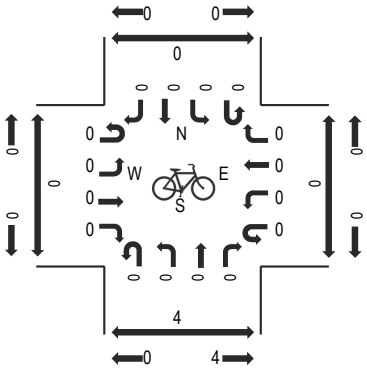
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

**Location:** 5 LEGACY AVE & WILLIAMS FLD RD Noon
**Date:** Saturday, January 24, 2026
**Peak Hour:** 01:30 PM - 02:30 PM
**Peak 15-Minutes:** 02:00 PM - 02:15 PM

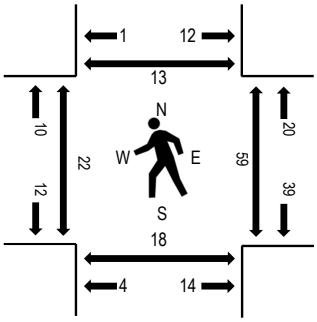
## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles




## Peak Hour - Pedestrians




Note: Total study counts contained in parentheses.

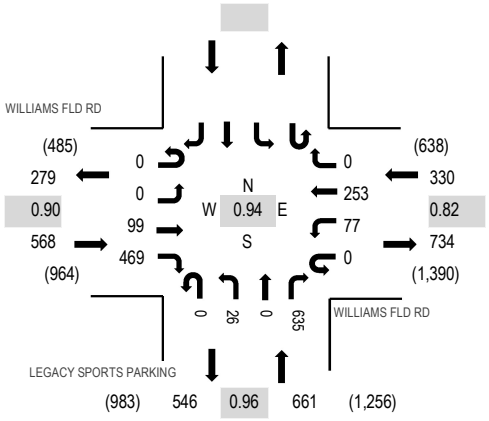
## Traffic Counts - Motorized Vehicles

| Interval Start Time | WILLIAMS FLD RD Eastbound | | | | WILLIAMS FLD RD Westbound | | | | LEGACY AVE Northbound | | | | LEGACY AVE Southbound | | | | | Rolling Hour | Pedestrian Crossings | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | Total | | West | East | South | North |
| 1:30 PM | 0 | 0 | 85 | 56 | 1 | 45 | 21 | 2 | 0 | 66 | 1 | 14 | 0 | 0 | 0 | 1 | 292 | 1,431 | 0 | 1 | 0 | 0 |
| 1:45 PM | 0 | 0 | 125 | 56 | 1 | 36 | 29 | 0 | 0 | 94 | 0 | 26 | 0 | 0 | 0 | 3 | 370 | 1,368 | 2 | 13 | 1 | 1 |
| 2:00 PM | 0 | 4 | 115 | 31 | 1 | 43 | 45 | 2 | 0 | 118 | 3 | 40 | 0 | 0 | 0 | 3 | 405 | 1,278 | 4 | 23 | 7 | 4 |
| 2:15 PM | 0 | 6 | 122 | 31 | 3 | 20 | 24 | 4 | 0 | 113 | 3 | 35 | 0 | 0 | 0 | 3 | 364 | 1,138 | 16 | 22 | 10 | 8 |
| 2:30 PM | 0 | 0 | 81 | 49 | 0 | 26 | 25 | 1 | 0 | 38 | 1 | 4 | 0 | 1 | 1 | 2 | 229 | 1,018 | 0 | 9 | 3 | 1 |
| 2:45 PM | 0 | 0 | 81 | 60 | 0 | 34 | 24 | 0 | 0 | 69 | 0 | 12 | 0 | 0 | 0 | 0 | 280 | | 0 | 1 | 0 | 0 |
| 3:00 PM | 0 | 2 | 88 | 33 | 0 | 29 | 22 | 1 | 0 | 66 | 1 | 21 | 0 | 1 | 1 | 0 | 265 | | 0 | 2 | 0 | 0 |
| 3:15 PM | 0 | 0 | 97 | 30 | 0 | 31 | 14 | 0 | 0 | 61 | 1 | 8 | 0 | 1 | 0 | 1 | 244 | | 0 | 3 | 0 | 0 |
| Count Total | 0 | 12 | 794 | 346 | 6 | 264 | 204 | 10 | 0 | 625 | 10 | 160 | 0 | 3 | 2 | 13 | 2,449 | | 22 | 74 | 21 | 14 |
| Peak Hour | 0 | 10 | 447 | 174 | 6 | 144 | 119 | 8 | 0 | 391 | 7 | 115 | 0 | 0 | 0 | 10 | 1,431 | | 22 | 59 | 18 | 13 |

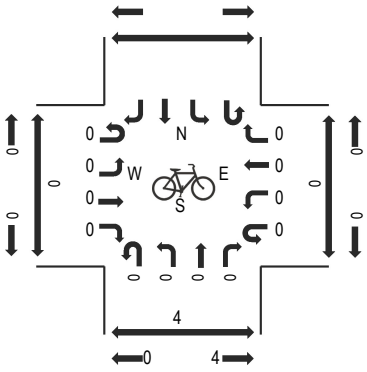
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

**Location:** 6 LEGACY SPORTS PARKING & WILLIAMS FLD RD Noon
**Date:** Saturday, January 24, 2026
**Peak Hour:** 01:30 PM - 02:30 PM
**Peak 15-Minutes:** 02:00 PM - 02:15 PM

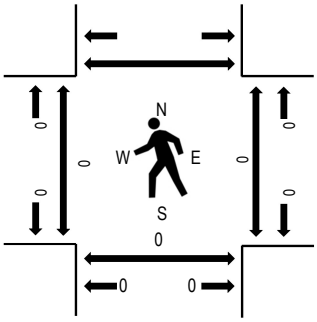
## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles




## Peak Hour - Pedestrians




Note: Total study counts contained in parentheses.

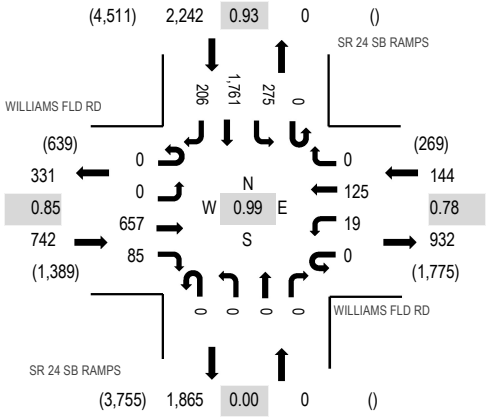
## Traffic Counts - Motorized Vehicles

| Interval Start Time | WILLIAMS FLD RD Eastbound | | | | WILLIAMS FLD RD Westbound | | | | LEGACY SPORTS PARKING Northbound | | | | Southbound | | | | Total | Rolling Hour | Pedestrian Crossings | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | | | West | East | South North |
| 1:30 PM | 0 | 0 | 16 | 84 | 0 | 32 | 67 | 0 | 0 | 3 | 0 | 168 | | | | | 370 | 1,559 | 0 | 0 | 0 |
| 1:45 PM | 0 | 0 | 29 | 123 | 0 | 12 | 57 | 0 | 0 | 10 | 0 | 162 | | | | | 393 | 1,434 | 0 | 0 | 0 |
| 2:00 PM | 0 | 0 | 30 | 128 | 0 | 20 | 81 | 0 | 0 | 9 | 0 | 145 | | | | | 413 | 1,380 | 0 | 0 | 0 |
| 2:15 PM | 0 | 0 | 24 | 134 | 0 | 13 | 48 | 0 | 0 | 4 | 0 | 160 | | | | | 383 | 1,306 | 0 | 0 | 0 |
| 2:30 PM | 0 | 0 | 20 | 66 | 0 | 19 | 51 | 0 | 0 | 1 | 0 | 88 | | | | | 245 | 1,299 | 0 | 0 | 0 |
| 2:45 PM | 0 | 0 | 14 | 79 | 0 | 20 | 52 | 0 | 0 | 6 | 0 | 168 | | | | | 339 | | 0 | 0 | 0 |
| 3:00 PM | 0 | 0 | 25 | 85 | 0 | 33 | 45 | 0 | 0 | 7 | 0 | 144 | | | | | 339 | | 0 | 0 | 1 |
| 3:15 PM | 0 | 0 | 17 | 90 | 0 | 45 | 43 | 0 | 0 | 1 | 0 | 180 | | | | | 376 | | 0 | 0 | 0 |
| Count Total | 0 | 0 | 175 | 789 | 0 | 194 | 444 | 0 | 0 | 41 | 0 | 1,215 | | | | | 2,858 | | 0 | 0 | 1 |
| Peak Hour | 0 | 0 | 99 | 469 | 0 | 77 | 253 | 0 | 0 | 26 | 0 | 635 | | | | | 1,559 | | 0 | 0 | 0 |

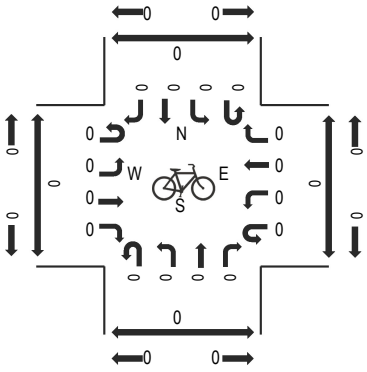
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

**Location:** 7 SR 24 SB RAMPS & WILLIAMS FLD RD Noon
**Date:** Saturday, January 24, 2026
**Peak Hour:** 01:30 PM - 02:30 PM
**Peak 15-Minutes:** 02:15 PM - 02:30 PM

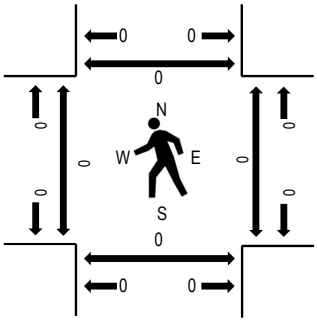
## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles




## Peak Hour - Pedestrians




Note: Total study counts contained in parentheses.

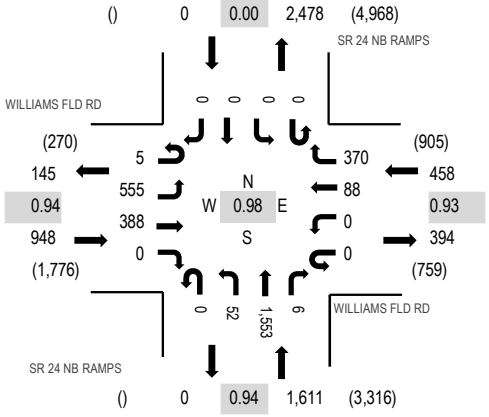
## Traffic Counts - Motorized Vehicles

| Interval Start Time | WILLIAMS FLD RD Eastbound | | | | WILLIAMS FLD RD Westbound | | | | SR 24 SB RAMPS Northbound | | | | SR 24 SB RAMPS Southbound | | | | | Rolling Hour | Pedestrian Crossings | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | Total | | West | East | South | North |
| 1:30 PM | 0 | 0 | 148 | 10 | 0 | 11 | 35 | 0 | 0 | 0 | 0 | 0 | 0 | 72 | 435 | 65 | 776 | 3,128 | 0 | 0 | 0 | 0 |
| 1:45 PM | 0 | 0 | 168 | 18 | 0 | 4 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 76 | 445 | 42 | 783 | 3,074 | 0 | 0 | 0 | 0 |
| 2:00 PM | 0 | 0 | 146 | 33 | 0 | 2 | 39 | 0 | 0 | 0 | 0 | 0 | 0 | 59 | 443 | 54 | 776 | 3,109 | 0 | 0 | 0 | 0 |
| 2:15 PM | 0 | 0 | 195 | 24 | 0 | 2 | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 68 | 438 | 45 | 793 | 3,088 | 0 | 0 | 0 | 0 |
| 2:30 PM | 0 | 0 | 118 | 23 | 0 | 3 | 29 | 0 | 0 | 0 | 0 | 0 | 0 | 64 | 445 | 40 | 722 | 3,041 | 0 | 0 | 1 | 0 |
| 2:45 PM | 1 | 0 | 154 | 16 | 0 | 3 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 73 | 499 | 49 | 818 | | 0 | 0 | 0 | 0 |
| 3:00 PM | 0 | 0 | 130 | 12 | 0 | 2 | 34 | 0 | 0 | 0 | 0 | 0 | 0 | 69 | 466 | 42 | 755 | | 0 | 0 | 1 | 0 |
| 3:15 PM | 0 | 0 | 173 | 20 | 0 | 3 | 28 | 0 | 0 | 0 | 0 | 0 | 0 | 62 | 398 | 62 | 746 | | 0 | 0 | 0 | 0 |
| Count Total | 1 | 0 | 1,232 | 156 | 0 | 30 | 239 | 0 | 0 | 0 | 0 | 0 | 0 | 543 | 3,569 | 399 | 6,169 | | 0 | 0 | 2 | 0 |
| Peak Hour | 0 | 0 | 657 | 85 | 0 | 19 | 125 | 0 | 0 | 0 | 0 | 0 | 0 | 275 | 1,761 | 206 | 3,128 | | 0 | 0 | 0 | 0 |

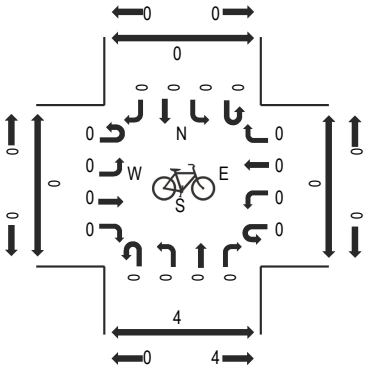
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

**Location:** 8 SR 24 NB RAMPS & WILLIAMS FLD RD Noon
**Date:** Saturday, January 24, 2026
**Peak Hour:** 01:30 PM - 02:30 PM
**Peak 15-Minutes:** 01:45 PM - 02:00 PM

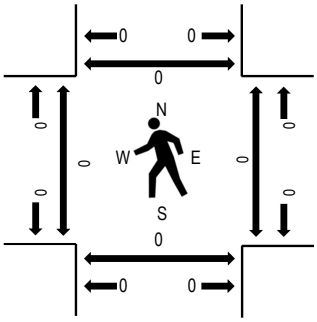
## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles




## Peak Hour - Pedestrians




Note: Total study counts contained in parentheses.

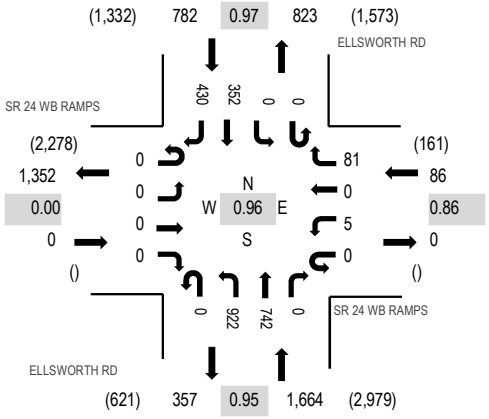
## Traffic Counts - Motorized Vehicles

| Interval Start Time | WILLIAMS FLD RD Eastbound | | | | WILLIAMS FLD RD Westbound | | | | SR 24 NB RAMPS Northbound | | | | SR 24 NB RAMPS Southbound | | | | | Rolling Hour | Pedestrian Crossings | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | Total | | West | East | South | North |
| 1:30 PM | 1 | 144 | 88 | 0 | 0 | 0 | 24 | 83 | 0 | 22 | 393 | 1 | 0 | 0 | 0 | 0 | 756 | 3,017 | 0 | 0 | 0 | 0 |
| 1:45 PM | 1 | 140 | 112 | 0 | 0 | 0 | 20 | 96 | 0 | 13 | 385 | 0 | 0 | 0 | 0 | 0 | 767 | 3,016 | 0 | 0 | 0 | 0 |
| 2:00 PM | 2 | 115 | 95 | 0 | 0 | 0 | 26 | 89 | 0 | 12 | 393 | 4 | 0 | 0 | 0 | 0 | 736 | 2,979 | 0 | 0 | 0 | 0 |
| 2:15 PM | 1 | 156 | 93 | 0 | 0 | 0 | 18 | 102 | 0 | 5 | 382 | 1 | 0 | 0 | 0 | 0 | 758 | 2,945 | 0 | 0 | 0 | 0 |
| 2:30 PM | 0 | 99 | 80 | 0 | 0 | 0 | 25 | 105 | 0 | 8 | 437 | 1 | 0 | 0 | 0 | 0 | 755 | 2,980 | 0 | 0 | 0 | 0 |
| 2:45 PM | 0 | 131 | 85 | 0 | 0 | 0 | 21 | 76 | 0 | 4 | 411 | 2 | 0 | 0 | 0 | 0 | 730 | | 0 | 0 | 0 | 0 |
| 3:00 PM | 0 | 121 | 88 | 0 | 0 | 0 | 23 | 81 | 0 | 11 | 373 | 5 | 0 | 0 | 0 | 0 | 702 | | 0 | 1 | 1 | 0 |
| 3:15 PM | 1 | 124 | 99 | 0 | 0 | 0 | 20 | 96 | 0 | 12 | 436 | 5 | 0 | 0 | 0 | 0 | 793 | | 0 | 0 | 0 | 0 |
| Count Total | 6 | 1,030 | 740 | 0 | 0 | 0 | 177 | 728 | 0 | 87 | 3,210 | 19 | 0 | 0 | 0 | 0 | 5,997 | | 0 | 1 | 1 | 0 |
| Peak Hour | 5 | 555 | 388 | 0 | 0 | 0 | 88 | 370 | 0 | 52 | 1,553 | 6 | 0 | 0 | 0 | 0 | 3,017 | | 0 | 0 | 0 | 0 |

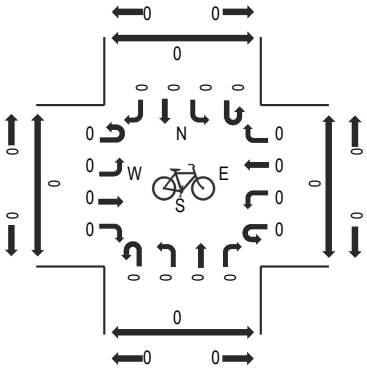
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

**Location:** 1 ELLSWORTH RD & SR 24 WB RAMPS PM
**Date:** Saturday, January 24, 2026
**Peak Hour:** 06:00 PM - 07:00 PM
**Peak 15-Minutes:** 06:30 PM - 06:45 PM

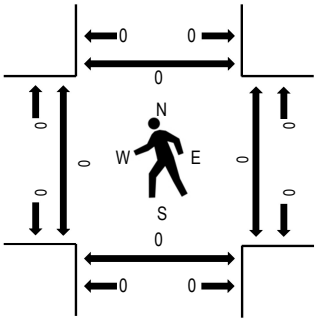
## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles




## Peak Hour - Pedestrians




Note: Total study counts contained in parentheses.

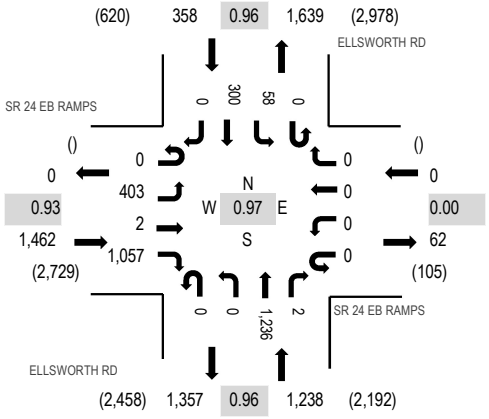
## Traffic Counts - Motorized Vehicles

| Interval Start Time | SR 24 WB RAMPS Eastbound | | | | SR 24 WB RAMPS Westbound | | | | ELLSWORTH RD Northbound | | | | ELLSWORTH RD Southbound | | | | | Rolling Hour | Pedestrian Crossings | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | Total | | West | East | South | North |
| 6:00 PM | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 23 | 0 | 200 | 197 | 0 | 0 | 0 | 88 | 114 | 624 | 2,532 | 0 | 0 | 0 | 0 |
| 6:15 PM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 17 | 0 | 238 | 194 | 0 | 0 | 0 | 89 | 111 | 650 | 2,453 | 0 | 0 | 0 | 0 |
| 6:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 0 | 256 | 180 | 0 | 0 | 0 | 88 | 111 | 656 | 2,317 | 0 | 0 | 0 | 0 |
| 6:45 PM | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 20 | 0 | 228 | 171 | 0 | 0 | 0 | 87 | 94 | 602 | 2,100 | 0 | 0 | 0 | 0 |
| 7:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 18 | 0 | 187 | 175 | 0 | 0 | 0 | 91 | 73 | 545 | 1,940 | 0 | 0 | 0 | 0 |
| 7:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 11 | 0 | 161 | 191 | 0 | 0 | 0 | 68 | 82 | 514 | | 0 | 0 | 0 | 0 |
| 7:30 PM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 19 | 0 | 146 | 155 | 0 | 0 | 0 | 43 | 75 | 439 | | 0 | 0 | 0 | 0 |
| 7:45 PM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 23 | 0 | 142 | 158 | 0 | 0 | 0 | 60 | 58 | 442 | | 0 | 0 | 0 | 0 |
| Count Total | 0 | 0 | 0 | 0 | 0 | 7 | 2 | 152 | 0 | 1,558 | 1,421 | 0 | 0 | 0 | 614 | 718 | 4,472 | | 0 | 0 | 0 | 0 |
| Peak Hour | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 81 | 0 | 922 | 742 | 0 | 0 | 0 | 352 | 430 | 2,532 | | 0 | 0 | 0 | 0 |

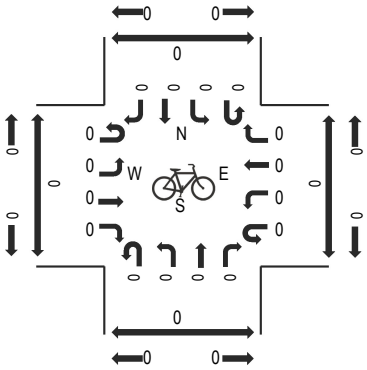
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

**Location:** 2 ELLSWORTH RD & SR 24 EB RAMPS PM
**Date:** Saturday, January 24, 2026
**Peak Hour:** 06:00 PM - 07:00 PM
**Peak 15-Minutes:** 06:15 PM - 06:30 PM

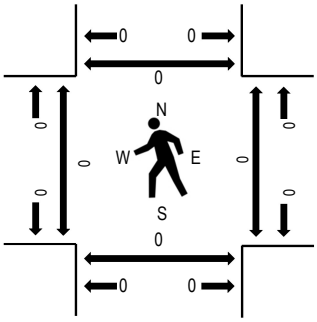
## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles




## Peak Hour - Pedestrians




Note: Total study counts contained in parentheses.

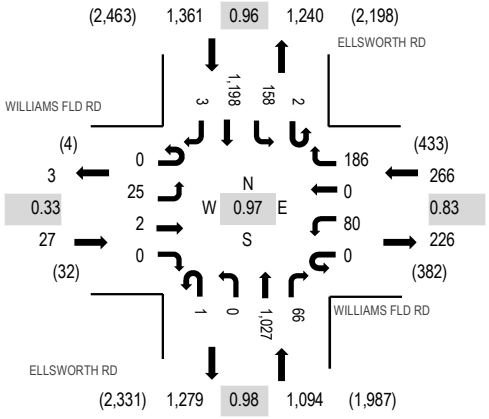
## Traffic Counts - Motorized Vehicles

| Interval Start Time | SR 24 EB RAMPS Eastbound | | | | SR 24 EB RAMPS Westbound | | | | ELLSWORTH RD Northbound | | | | ELLSWORTH RD Southbound | | | | | Rolling Hour | Pedestrian Crossings | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | Total | | West | East | South | North |
| 6:00 PM | 0 | 104 | 1 | 260 | 0 | 0 | 0 | 0 | 0 | 0 | 307 | 0 | 0 | 17 | 67 | 0 | 756 | 3,058 | 0 | 0 | 0 | 0 |
| 6:15 PM | 0 | 99 | 0 | 274 | 0 | 0 | 0 | 0 | 0 | 0 | 323 | 0 | 0 | 10 | 85 | 0 | 791 | 3,006 | 0 | 0 | 0 | 0 |
| 6:30 PM | 0 | 98 | 1 | 231 | 0 | 0 | 0 | 0 | 0 | 0 | 321 | 1 | 0 | 17 | 73 | 0 | 742 | 2,850 | 0 | 0 | 0 | 0 |
| 6:45 PM | 0 | 102 | 0 | 292 | 0 | 0 | 0 | 0 | 0 | 0 | 285 | 1 | 0 | 14 | 75 | 0 | 769 | 2,649 | 0 | 0 | 0 | 0 |
| 7:00 PM | 0 | 89 | 1 | 255 | 0 | 0 | 0 | 0 | 0 | 0 | 269 | 1 | 0 | 10 | 79 | 0 | 704 | 2,483 | 0 | 0 | 0 | 0 |
| 7:15 PM | 0 | 102 | 2 | 224 | 0 | 0 | 0 | 0 | 0 | 0 | 239 | 0 | 0 | 11 | 57 | 0 | 635 | | 0 | 0 | 0 | 0 |
| 7:30 PM | 0 | 98 | 1 | 196 | 0 | 0 | 0 | 0 | 0 | 0 | 200 | 2 | 0 | 8 | 36 | 0 | 541 | | 0 | 0 | 0 | 0 |
| 7:45 PM | 0 | 100 | 0 | 199 | 0 | 0 | 0 | 0 | 0 | 0 | 242 | 1 | 0 | 6 | 55 | 0 | 603 | | 0 | 0 | 0 | 0 |
| Count Total | 0 | 792 | 6 | 1,931 | 0 | 0 | 0 | 0 | 0 | 0 | 2,186 | 6 | 0 | 93 | 527 | 0 | 5,541 | | 0 | 0 | 0 | 0 |
| Peak Hour | 0 | 403 | 2 | 1,057 | 0 | 0 | 0 | 0 | 0 | 0 | 1,236 | 2 | 0 | 58 | 300 | 0 | 3,058 | | 0 | 0 | 0 | 0 |

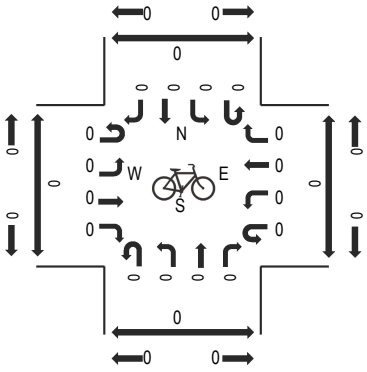
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

**Location:** 3 ELLSWORTH RD & WILLIAMS FLD RD PM
**Date:** Saturday, January 24, 2026
**Peak Hour:** 06:00 PM - 07:00 PM
**Peak 15-Minutes:** 06:15 PM - 06:30 PM

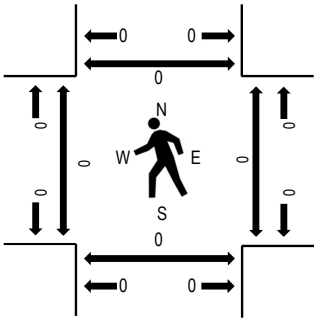
## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles




## Peak Hour - Pedestrians




Note: Total study counts contained in parentheses.

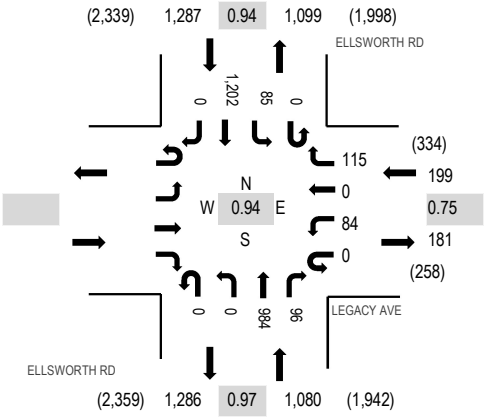
## Traffic Counts - Motorized Vehicles

| Interval Start Time | WILLIAMS FLD RD Eastbound | | | | WILLIAMS FLD RD Westbound | | | | ELLSWORTH RD Northbound | | | | ELLSWORTH RD Southbound | | | | | Rolling Hour | Pedestrian Crossings | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | Total | | West | East | South | North |
| 6:00 PM | 0 | 0 | 1 | 0 | 0 | 23 | 0 | 52 | 0 | 0 | 259 | 20 | 0 | 42 | 296 | 0 | 693 | 2,748 | 0 | 0 | 0 | 0 |
| 6:15 PM | 0 | 2 | 0 | 0 | 0 | 24 | 0 | 56 | 0 | 0 | 261 | 13 | 1 | 32 | 317 | 2 | 708 | 2,686 | 0 | 0 | 0 | 0 |
| 6:30 PM | 0 | 20 | 1 | 0 | 0 | 14 | 0 | 38 | 0 | 0 | 263 | 12 | 1 | 37 | 278 | 1 | 665 | 2,523 | 0 | 0 | 0 | 0 |
| 6:45 PM | 0 | 3 | 0 | 0 | 0 | 19 | 0 | 40 | 1 | 0 | 244 | 21 | 0 | 47 | 307 | 0 | 682 | 2,325 | 0 | 0 | 0 | 0 |
| 7:00 PM | 0 | 2 | 0 | 0 | 0 | 13 | 0 | 39 | 0 | 0 | 230 | 12 | 0 | 54 | 281 | 0 | 631 | 2,167 | 0 | 0 | 0 | 0 |
| 7:15 PM | 0 | 2 | 0 | 0 | 0 | 22 | 0 | 20 | 1 | 0 | 219 | 11 | 0 | 25 | 245 | 0 | 545 | | 0 | 0 | 0 | 0 |
| 7:30 PM | 0 | 0 | 0 | 0 | 0 | 9 | 1 | 14 | 0 | 0 | 187 | 13 | 1 | 18 | 224 | 0 | 467 | | 0 | 0 | 0 | 0 |
| 7:45 PM | 0 | 0 | 0 | 1 | 0 | 16 | 0 | 33 | 0 | 0 | 211 | 9 | 0 | 14 | 240 | 0 | 524 | | 0 | 0 | 0 | 0 |
| Count Total | 0 | 29 | 2 | 1 | 0 | 140 | 1 | 292 | 2 | 0 | 1,874 | 111 | 3 | 269 | 2,188 | 3 | 4,915 | | 0 | 0 | 0 | 0 |
| Peak Hour | 0 | 25 | 2 | 0 | 0 | 80 | 0 | 186 | 1 | 0 | 1,027 | 66 | 2 | 158 | 1,198 | 3 | 2,748 | | 0 | 0 | 0 | 0 |

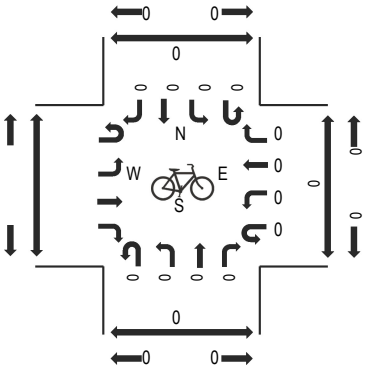
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

**Location:** 4 ELLSWORTH RD & LEGACY AVE PM
**Date:** Saturday, January 24, 2026
**Peak Hour:** 06:00 PM - 07:00 PM
**Peak 15-Minutes:** 06:00 PM - 06:15 PM

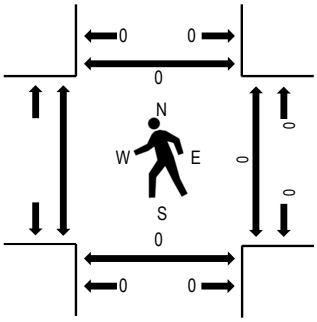
## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles




## Peak Hour - Pedestrians




Note: Total study counts contained in parentheses.

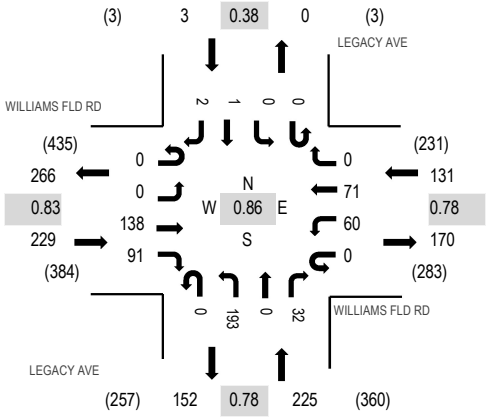
## Traffic Counts - Motorized Vehicles

| Interval Start Time | LEGACY AVE Eastbound | | | | LEGACY AVE Westbound | | | | ELLSWORTH RD Northbound | | | | ELLSWORTH RD Southbound | | | | | Rolling Hour | Pedestrian Crossings | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | Total | | West | East | South | North |
| 6:00 PM | | | | | 0 | 39 | 0 | 27 | 0 | 0 | 254 | 23 | 0 | 23 | 318 | 0 | 684 | 2,566 | | 0 | 0 | 0 |
| 6:15 PM | | | | | 0 | 14 | 0 | 23 | 0 | 0 | 252 | 17 | 0 | 25 | 306 | 0 | 637 | 2,465 | | 0 | 0 | 0 |
| 6:30 PM | | | | | 0 | 17 | 0 | 32 | 0 | 0 | 245 | 24 | 0 | 19 | 283 | 0 | 620 | 2,351 | | 0 | 0 | 0 |
| 6:45 PM | | | | | 0 | 14 | 0 | 33 | 0 | 0 | 233 | 32 | 0 | 18 | 295 | 0 | 625 | 2,167 | | 0 | 0 | 0 |
| 7:00 PM | | | | | 0 | 23 | 0 | 37 | 0 | 0 | 206 | 22 | 0 | 14 | 281 | 0 | 583 | 2,049 | | 0 | 0 | 0 |
| 7:15 PM | | | | | 0 | 7 | 0 | 11 | 0 | 0 | 223 | 9 | 0 | 8 | 265 | 0 | 523 | | | 0 | 0 | 0 |
| 7:30 PM | | | | | 0 | 7 | 0 | 7 | 0 | 0 | 192 | 7 | 0 | 6 | 217 | 0 | 436 | | | 0 | 0 | 0 |
| 7:45 PM | | | | | 0 | 13 | 0 | 30 | 0 | 0 | 193 | 10 | 0 | 1 | 260 | 0 | 507 | | | 0 | 0 | 0 |
| Count Total | | | | | 0 | 134 | 0 | 200 | 0 | 0 | 1,798 | 144 | 0 | 114 | 2,225 | 0 | 4,615 | | | 0 | 0 | 0 |
| Peak Hour | | | | | 0 | 84 | 0 | 115 | 0 | 0 | 984 | 96 | 0 | 85 | 1,202 | 0 | 2,566 | | | 0 | 0 | 0 |

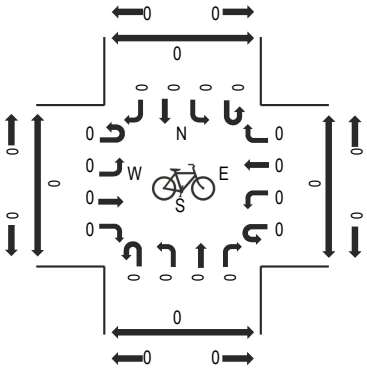
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

**Location:** 5 LEGACY AVE & WILLIAMS FLD RD PM
**Date:** Saturday, January 24, 2026
**Peak Hour:** 06:00 PM - 07:00 PM
**Peak 15-Minutes:** 06:00 PM - 06:15 PM

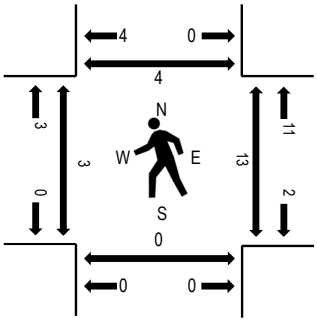
## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles




## Peak Hour - Pedestrians




Note: Total study counts contained in parentheses.

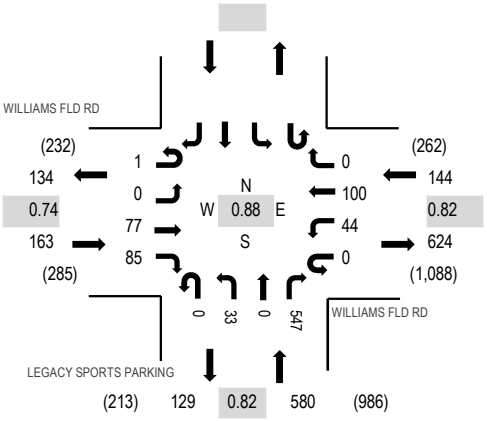
## Traffic Counts - Motorized Vehicles

| Interval Start Time | WILLIAMS FLD RD Eastbound | | | | WILLIAMS FLD RD Westbound | | | | LEGACY AVE Northbound | | | | LEGACY AVE Southbound | | | | | Rolling Hour | Pedestrian Crossings | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | Total | | West | East | South | North |
| 6:00 PM | 0 | 0 | 49 | 16 | 0 | 20 | 18 | 0 | 0 | 59 | 0 | 8 | 0 | 0 | 0 | 0 | 170 | 588 | 2 | 6 | 0 | 0 |
| 6:15 PM | 0 | 0 | 31 | 11 | 0 | 14 | 9 | 0 | 0 | 66 | 0 | 6 | 0 | 0 | 1 | 0 | 138 | 570 | 1 | 7 | 0 | 4 |
| 6:30 PM | 0 | 0 | 28 | 25 | 0 | 10 | 18 | 0 | 0 | 33 | 0 | 13 | 0 | 0 | 0 | 2 | 129 | 517 | 0 | 0 | 0 | 0 |
| 6:45 PM | 0 | 0 | 30 | 39 | 0 | 16 | 26 | 0 | 0 | 35 | 0 | 5 | 0 | 0 | 0 | 0 | 151 | 454 | 0 | 0 | 0 | 0 |
| 7:00 PM | 0 | 0 | 39 | 24 | 0 | 16 | 17 | 1 | 0 | 42 | 2 | 11 | 0 | 0 | 0 | 0 | 152 | 390 | 3 | 2 | 0 | 1 |
| 7:15 PM | 0 | 0 | 24 | 13 | 0 | 9 | 17 | 0 | 0 | 18 | 0 | 4 | 0 | 0 | 0 | 0 | 85 | | 0 | 0 | 0 | 0 |
| 7:30 PM | 0 | 0 | 17 | 13 | 0 | 8 | 11 | 0 | 0 | 13 | 0 | 4 | 0 | 0 | 0 | 0 | 66 | | 0 | 1 | 0 | 0 |
| 7:45 PM | 0 | 0 | 11 | 14 | 0 | 8 | 13 | 0 | 0 | 38 | 0 | 3 | 0 | 0 | 0 | 0 | 87 | | 0 | 0 | 0 | 0 |
| Count Total | 0 | 0 | 229 | 155 | 0 | 101 | 129 | 1 | 0 | 304 | 2 | 54 | 0 | 0 | 1 | 2 | 978 | | 6 | 16 | 0 | 5 |
| Peak Hour | 0 | 0 | 138 | 91 | 0 | 60 | 71 | 0 | 0 | 193 | 0 | 32 | 0 | 0 | 1 | 2 | 588 | | 3 | 13 | 0 | 4 |

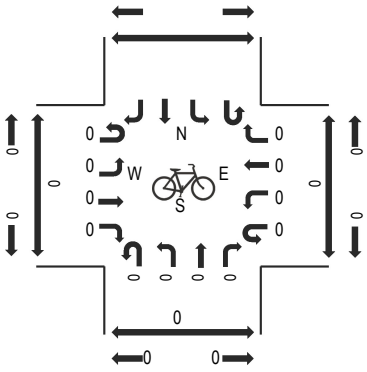
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

**Location:** 6 LEGACY SPORTS PARKING & WILLIAMS FLD RD PM
**Date:** Saturday, January 24, 2026
**Peak Hour:** 06:15 PM - 07:15 PM
**Peak 15-Minutes:** 06:45 PM - 07:00 PM

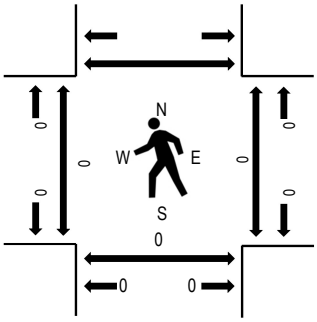
## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles




## Peak Hour - Pedestrians




Note: Total study counts contained in parentheses.

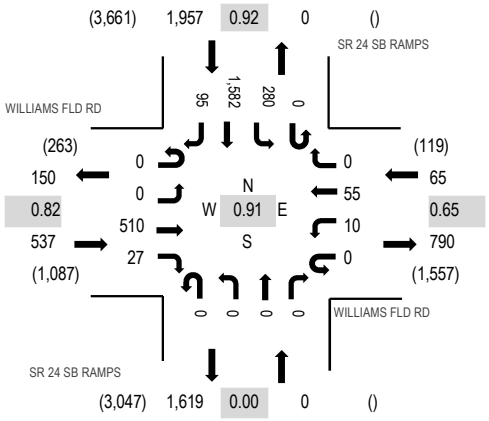
## Traffic Counts - Motorized Vehicles

| Interval Start Time | WILLIAMS FLD RD Eastbound | | | | WILLIAMS FLD RD Westbound | | | | LEGACY SPORTS PARKING Northbound | | | | Southbound | | | | Total | Rolling Hour | Pedestrian Crossings | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | | | West | East | South | North |
| 6:00 PM | 0 | 0 | 21 | 37 | 0 | 15 | 30 | 0 | 0 | 1 | 0 | 54 | | | | | 158 | 794 | 0 | 0 | 0 | |
| 6:15 PM | 0 | 0 | 19 | 18 | 0 | 6 | 21 | 0 | 0 | 2 | 0 | 72 | | | | | 138 | 887 | 0 | 0 | 0 | |
| 6:30 PM | 0 | 0 | 21 | 20 | 0 | 10 | 23 | 0 | 0 | 9 | 0 | 162 | | | | | 245 | 843 | 0 | 0 | 0 | |
| 6:45 PM | 1 | 0 | 21 | 13 | 0 | 12 | 30 | 0 | 0 | 10 | 0 | 166 | | | | | 253 | 766 | 0 | 0 | 0 | |
| 7:00 PM | 0 | 0 | 16 | 34 | 0 | 16 | 26 | 0 | 0 | 12 | 0 | 147 | | | | | 251 | 739 | 0 | 0 | 0 | |
| 7:15 PM | 0 | 0 | 18 | 10 | 0 | 4 | 21 | 0 | 0 | 2 | 0 | 39 | | | | | 94 | | 0 | 0 | 0 | |
| 7:30 PM | 0 | 0 | 14 | 7 | 2 | 4 | 20 | 0 | 0 | 2 | 0 | 119 | | | | | 168 | | 0 | 0 | 0 | |
| 7:45 PM | 0 | 0 | 11 | 4 | 0 | 3 | 19 | 0 | 0 | 3 | 0 | 186 | | | | | 226 | | 0 | 0 | 0 | |
| Count Total | 1 | 0 | 141 | 143 | 2 | 70 | 190 | 0 | 0 | 41 | 0 | 945 | | | | | 1,533 | | 0 | 0 | 0 | |
| Peak Hour | 1 | 0 | 77 | 85 | 0 | 44 | 100 | 0 | 0 | 33 | 0 | 547 | | | | | 887 | | 0 | 0 | 0 | |

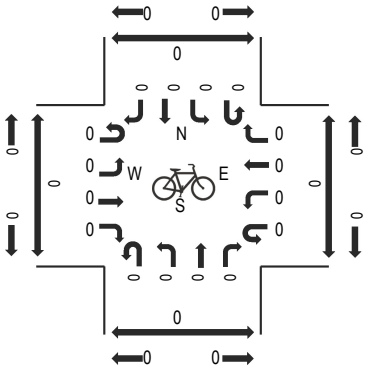
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

**Location:** 7 SR 24 SB RAMPS & WILLIAMS FLD RD PM
**Date:** Saturday, January 24, 2026
**Peak Hour:** 06:00 PM - 07:00 PM
**Peak 15-Minutes:** 06:30 PM - 06:45 PM

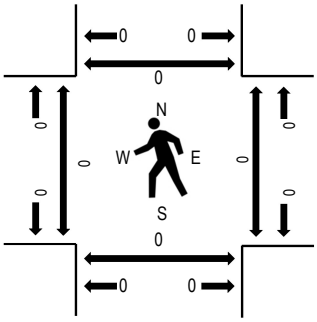
## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles




## Peak Hour - Pedestrians




Note: Total study counts contained in parentheses.

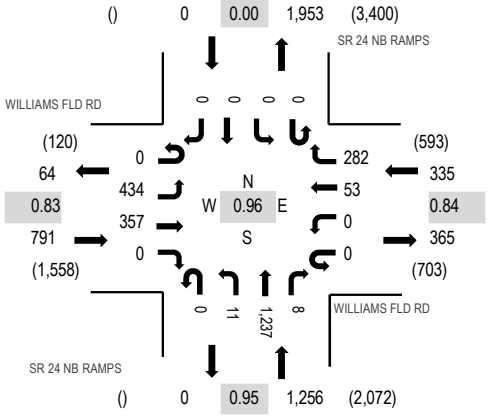
## Traffic Counts - Motorized Vehicles

| Interval Start Time | WILLIAMS FLD RD Eastbound | | | | WILLIAMS FLD RD Westbound | | | | SR 24 SB RAMPS Northbound | | | | SR 24 SB RAMPS Southbound | | | | | Rolling Hour | Pedestrian Crossings | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | Total | | West | East | South | North |
| 6:00 PM | 0 | 0 | 82 | 8 | 0 | 3 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 78 | 424 | 29 | 646 | 2,559 | 0 | 0 | 0 | 0 |
| 6:15 PM | 0 | 0 | 85 | 7 | 0 | 2 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 46 | 358 | 15 | 522 | 2,531 | 0 | 0 | 0 | 0 |
| 6:30 PM | 0 | 0 | 162 | 7 | 0 | 2 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 81 | 418 | 23 | 705 | 2,521 | 0 | 0 | 0 | 0 |
| 6:45 PM | 0 | 0 | 181 | 5 | 0 | 3 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 75 | 382 | 28 | 686 | 2,371 | 0 | 0 | 0 | 0 |
| 7:00 PM | 0 | 0 | 155 | 9 | 0 | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 56 | 355 | 25 | 618 | 2,308 | 0 | 0 | 0 | 0 |
| 7:15 PM | 0 | 0 | 52 | 5 | 0 | 1 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 57 | 374 | 9 | 512 | | 0 | 0 | 0 | 0 |
| 7:30 PM | 0 | 0 | 119 | 14 | 0 | 1 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 82 | 314 | 16 | 555 | | 0 | 0 | 0 | 0 |
| 7:45 PM | 0 | 0 | 180 | 16 | 0 | 2 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 66 | 337 | 13 | 623 | | 0 | 0 | 0 | 0 |
| Count Total | 0 | 0 | 1,016 | 71 | 0 | 14 | 105 | 0 | 0 | 0 | 0 | 0 | 0 | 541 | 2,962 | 158 | 4,867 | | 0 | 0 | 0 | 0 |
| Peak Hour | 0 | 0 | 510 | 27 | 0 | 10 | 55 | 0 | 0 | 0 | 0 | 0 | 0 | 280 | 1,582 | 95 | 2,559 | | 0 | 0 | 0 | 0 |

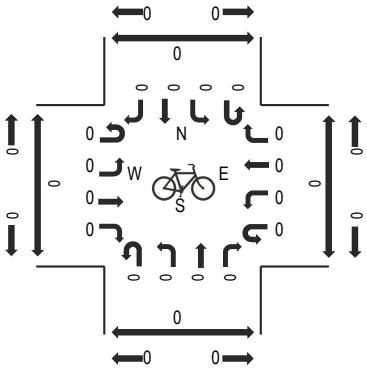
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

**Location:** 8 SR 24 NB RAMPS & WILLIAMS FLD RD PM
**Date:** Saturday, January 24, 2026
**Peak Hour:** 06:00 PM - 07:00 PM
**Peak 15-Minutes:** 06:45 PM - 07:00 PM

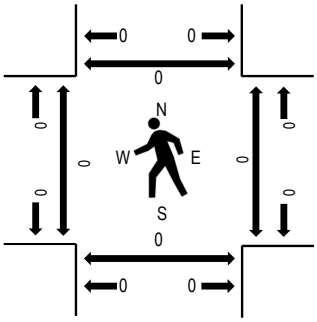
## Peak Hour - Motorized Vehicles




## Peak Hour - Bicycles



## Peak Hour - Pedestrians



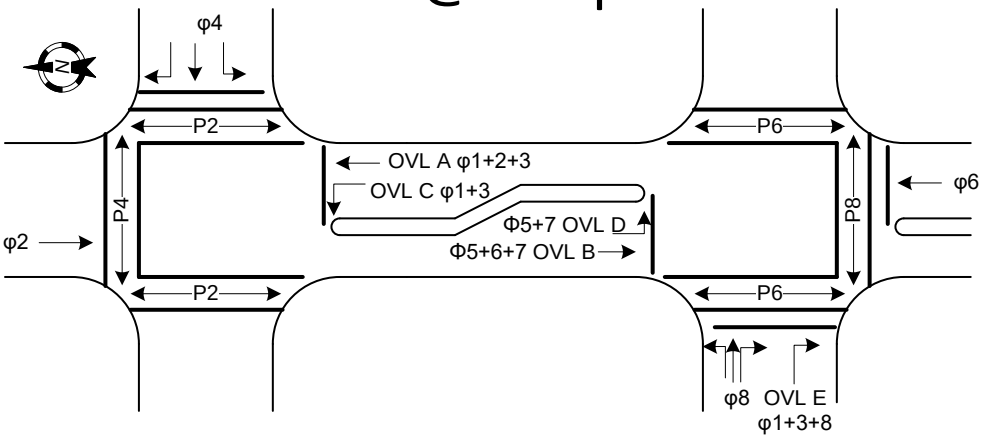
Note: Total study counts contained in parentheses.

## Traffic Counts - Motorized Vehicles

| Interval Start Time | WILLIAMS FLD RD Eastbound | | | | WILLIAMS FLD RD Westbound | | | | SR 24 NB RAMPS Northbound | | | | SR 24 NB RAMPS Southbound | | | | | Rolling Hour | Pedestrian Crossings | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | Total | | West | East | South | North |
| 6:00 PM | 0 | 77 | 95 | 0 | 0 | 0 | 21 | 79 | 0 | 4 | 323 | 1 | 0 | 0 | 0 | 0 | 600 | 2,382 | 0 | 0 | 0 | 0 |
| 6:15 PM | 0 | 67 | 64 | 0 | 0 | 0 | 6 | 82 | 0 | 4 | 324 | 1 | 0 | 0 | 0 | 0 | 548 | 2,356 | 0 | 0 | 0 | 0 |
| 6:30 PM | 0 | 128 | 103 | 0 | 0 | 0 | 12 | 58 | 0 | 1 | 309 | 4 | 0 | 0 | 0 | 0 | 615 | 2,176 | 0 | 0 | 0 | 0 |
| 6:45 PM | 0 | 162 | 95 | 0 | 0 | 0 | 14 | 63 | 0 | 2 | 281 | 2 | 0 | 0 | 0 | 0 | 619 | 1,983 | 0 | 0 | 0 | 0 |
| 7:00 PM | 1 | 158 | 73 | 0 | 0 | 0 | 11 | 66 | 0 | 7 | 254 | 4 | 0 | 0 | 0 | 0 | 574 | 1,841 | 0 | 0 | 0 | 0 |
| 7:15 PM | 1 | 39 | 70 | 0 | 0 | 0 | 8 | 55 | 0 | 6 | 189 | 0 | 0 | 0 | 0 | 0 | 368 | | 0 | 0 | 0 | 0 |
| 7:30 PM | 2 | 80 | 99 | 0 | 0 | 0 | 7 | 55 | 0 | 2 | 177 | 0 | 0 | 0 | 0 | 0 | 422 | | 0 | 0 | 0 | 0 |
| 7:45 PM | 0 | 156 | 88 | 0 | 0 | 0 | 10 | 46 | 0 | 1 | 172 | 4 | 0 | 0 | 0 | 0 | 477 | | 0 | 0 | 0 | 0 |
| Count Total | 4 | 867 | 687 | 0 | 0 | 0 | 89 | 504 | 0 | 27 | 2,029 | 16 | 0 | 0 | 0 | 0 | 4,223 | | 0 | 0 | 0 | 0 |
| Peak Hour | 0 | 434 | 357 | 0 | 0 | 0 | 53 | 282 | 0 | 11 | 1,237 | 8 | 0 | 0 | 0 | 0 | 2,382 | | 0 | 0 | 0 | 0 |

# Appendix D – Existing Signal Timing

# #9967 SR-24 & Ellsworth
# Effective: 9/14/2022 Flash@1:30pm
# Normal@1:35pm




**Phase Ring (MM-1-1**

| | | |
|---|---|---|
| R1 | 2 1 | 3 4 |
| R2 | 5 6 | 8 7 |
| R3 | | |
| R4 | | |

Seq - 10

**LD Switch Assign**
(MM-1-3)

| | Phase /Ovlp | Type |
|---|---|---|
| **1** | 3 | O |
| **2** | 2 | V |
| **3** | 2 | O |
| **4** | 4 | V |
| **5** | 4 | O |
| **6** | 6 | V |
| **7** | 1 | O |
| **8** | 8 | V |
| **9** | 2 | P |
| **10** | 4 | P |
| **11** | 6 | P |
| **12** | 8 | P |
| **13** | 5 | O |
| **14** | 0 | . |
| **15** | 0 | . |
| **16** | 0 | . |

**Notes:**

Power start sequence is 10.
OvL B – Not Ovlap enabled Ph 1 & 3
OvL E – Ped Protect Ph 6 & 8
Phase 5 omitted in Action Plans

| | φ1 | φ2 | φ3 | φ4 | φ5 | φ6 | φ7 | φ8 |
|---|---|---|---|---|---|---|---|---|
| Direction | NBL | SB | NBL | WB | SBL | NB | SBL | EB |
| Phases In Use(MM-1-2) | X | X | X | X | X | X | X | X |
| Min Grn (MM-2-1) | 5 | 15 | 5 | 10 | 5 | 15 | 5 | 10 |
| BK MGrn (MM-2-1) | | | | | | | | |
| Walk (MM-2-1) | | 4 | | 4 | | 4 | | 4 |
| Ped Clr (MM-2-1) | | 13 | | 38 | | 15 | | 36 |
| Yellow (MM-2-1) | 4.0 | 5.5 | 4.0 | 4.5 | 4.0 | 5.5 | 4.0 | 4.5 |
| Red Clr (MM-2-1) | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| Veh OL A - Incl. (MM-2-2) | X | X | X | | | | | |
| Veh OL B - Incl. (MM-2-2) | | | | | X | X | X | |
| Veh OL C - Incl. (MM-2-2) | X | | X | | | | | |
| Veh OL D - Incl. (MM-2-2) | | | | | X | | X | |
| Veh OL E - Incl. (MM-2-2) | X | | X | | | | | X |
| Veh OL F - Incl. (MM-2-2) | | | | | | | | |
| VE Recall (MM-2-8) | | X | | | | X | | |
| PD Recall (MM-2-8) | | | | | | | | |
| MX Recall (MM-2-8) | | | | | | | | |
| SF Recall (MM-2-8) | | | | | | | | |
| Left Turn Type | PT | | PT | | PT | | PT | |
| 3rd Car | | | | | | | | |

Revision History:

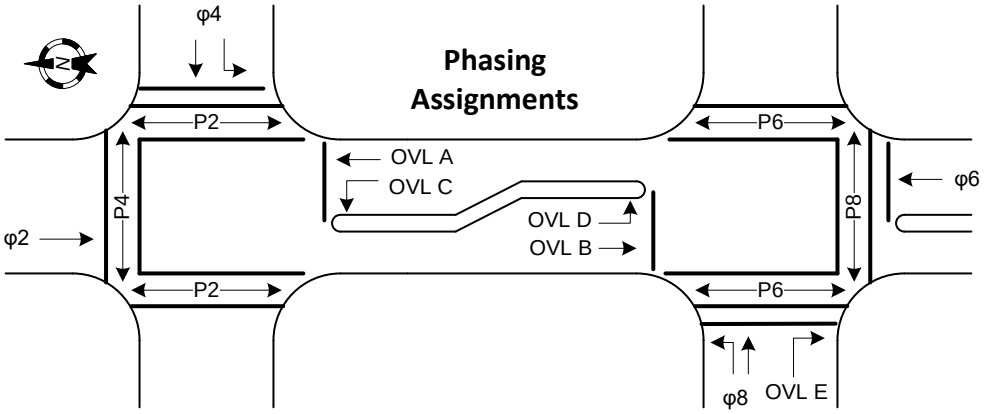
| Date | Description |
|---|---|
| 9/14/2022 | Updated traffic signal phasing configuration and upgraded to cobalt controller…BG,FL |
| | |
| | |
| | |

# #9967 SR24 & Ellsworth

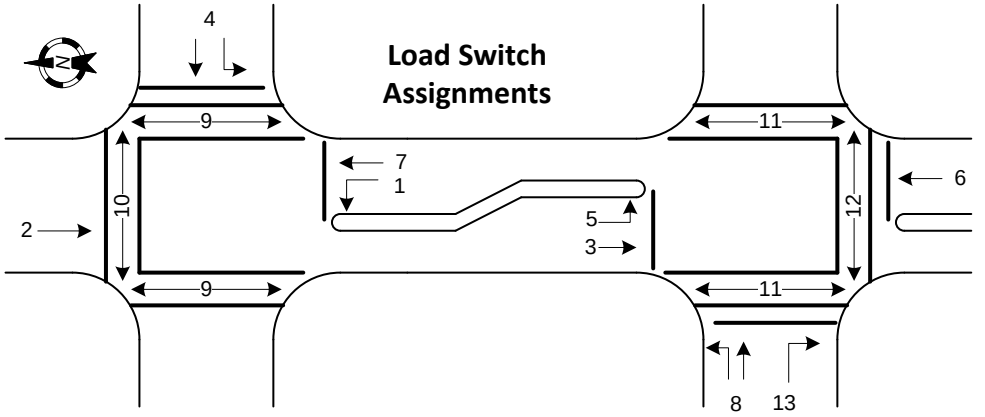
**Phase Ring (MM-1-1**
Compatibility Mode

| | | |
|---|---|---|
| R1 | 2 1 | 3 4 |
| R2 | 5 6 | 8 7 |
| R3 | | |
| R4 | | |

Seq-10




| Overlap | Incld. Phases |
|---|---|
| A | 1,2,3 |
| B | 5,6,7 |
| C | 1,3 |
| D | 5,7 |
| E | 1,3,8 |




**LD Switch Assign**
(MM-1-3)

| | Phase/ Ovlp | Type |
|---|---|---|
| **1** | 3 | O |
| **2** | 2 | V |
| **3** | 2 | O |
| **4** | 4 | V |
| **5** | 4 | O |
| **6** | 6 | V |
| **7** | 1 | O |
| **8** | 8 | V |
| **9** | 2 | P |
| **10** | 4 | P |
| **11** | 6 | P |
| **12** | 8 | P |
| **13** | 5 | O |
| **14** | | |
| **15** | | |
| **16** | | |

**MMU Card Programming**

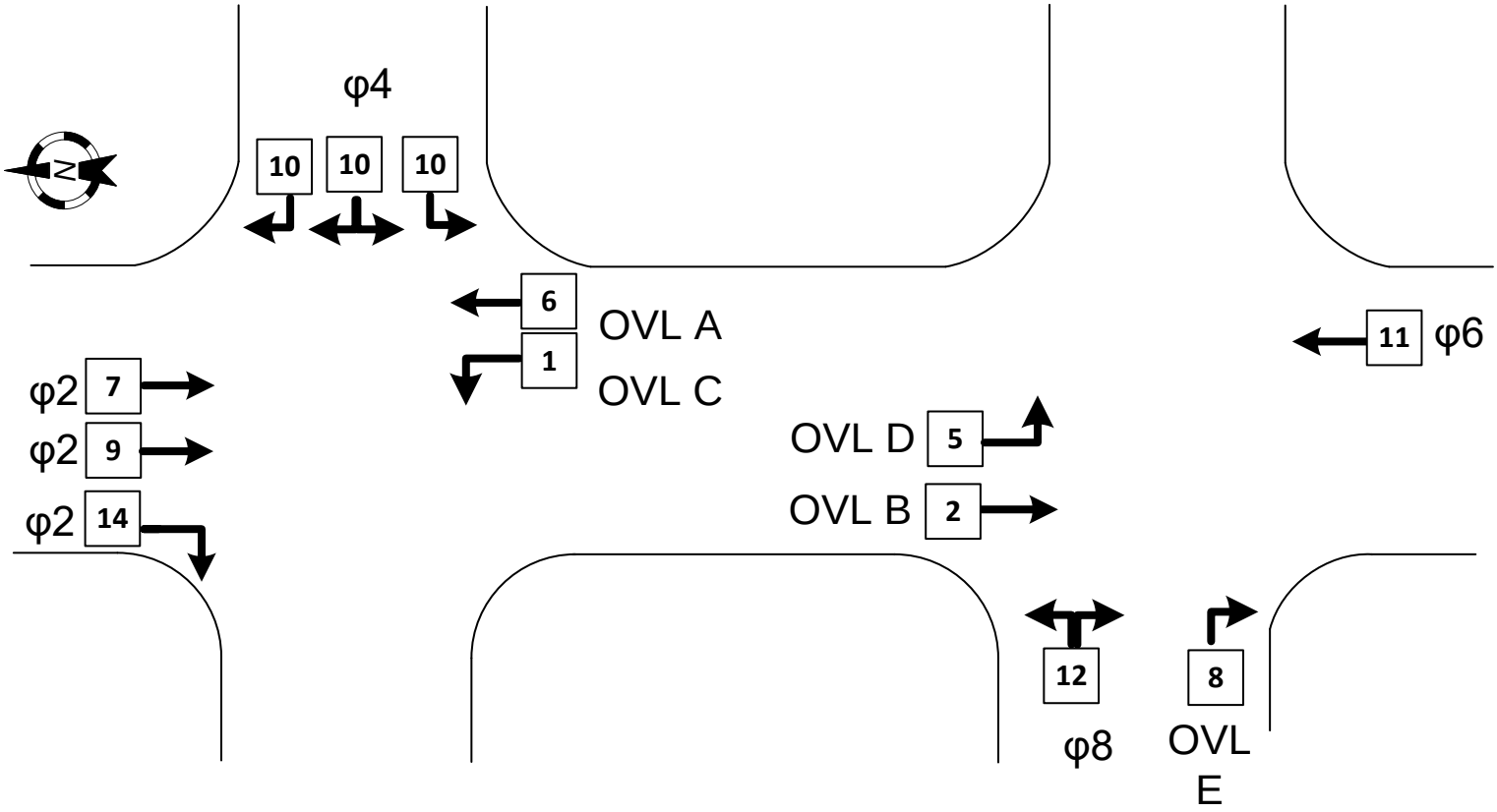
| | 16 | 15 | 14 | 13 | 12 | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | X | X | X | | | X | X | X | X | | X | |
| 2 | | | | X | X | X | | X | X | X | X | X | | X | |
| 3 | | | | | | X | X | X | | X | X | X | X | | |
| 4 | | | | X | X | X | X | | X | | X | X | | | |
| 5 | | | | X | | | X | X | | X | | | | | |
| 6 | | | | X | | X | X | X | | X | | | | | |
| 7 | | | | X | X | X | | X | X | | | | | | |
| 8 | | | | X | X | | X | X | | | | | | | |
| 9 | | | | X | X | X | | | | | | | | | |
| 10 | | | | X | X | X | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | |

# #9967 SR-24 & Ellsworth

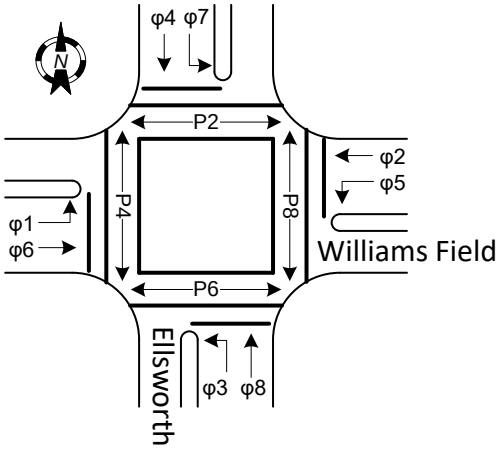
Detectors (MM-6)

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phase | 1,3 | 2,6,7 | | | 5,7 | 2 | 2,7 | 8 | 2 | 4 | 6 | 8 | | 2 | | |
| Call | X | X | | | X | X | X | X | X | X | X | X | | X | | |
| Passage | X | X | | | X | X | X | X | X | X | X | X | | X | | |
| Bike | | | | | | | | | | | | | | | | |
| Delay | | | | | | | | 10 | | | | | | 10 | | |

| | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phase | | | | | | | | | | | | | | | | |
| Call | | | | | | | | | | | | | | | | |
| Passage | | | | | | | | | | | | | | | | |
| Bike | | | | | | | | | | | | | | | | |
| Delay | | | | | | | | | | | | | | | | |



# #9990 Williams Field & Ellsworth
# Effective: 2/9/2022 Flash@10:02AM
# Normal@12:39PM




LD Switch Assign (MM-1-3)

| | Phase/ Ovlp | Type |
|---|---|---|
| 1 | 1 | V |
| 2 | 2 | V |
| 3 | 3 | V |
| 4 | 4 | V |
| 5 | 5 | V |
| 6 | 6 | V |
| 7 | 7 | V |
| 8 | 8 | V |
| 9 | 2 | P |
| 10 | 4 | P |
| 11 | 6 | P |
| 12 | 8 | P |
| 13 | 13 | V |
| 14 | 14 | V |
| 15 | 15 | V |
| 16 | 16 | V |

**Notes:**

Disabled Ped Protect (MM-2-6-1)

Phase Diagram (MM-1-1-1)

| | | | |
|---|---|---|---|
| R1 | 1 2 | 3 4 | |
| R2 | 5 6 | 7 8 | |
| R3 | | | |
| R4 | | | |

| | φ1 | φ2 | φ3 | φ4 | φ5 | φ6 | φ7 | φ8 |
|---|---|---|---|---|---|---|---|---|
| Phases In Use(MM-1-2) | EBLT | WB | NBLT | SB | WBLT | EB | SBLT | NB |
| Min Grn (MM-2-1) | 5 | 15 | 5 | 15 | 5 | 15 | 5 | 15 |
| BK MGrn (MM-2-1) | | | | | | | | |
| Walk (MM-2-1) | | 4 | | 7 | | 4 | | 7 |
| Ped Clr (MM-2-1) | | 26 | | 21 | | 27 | | 23 |
| Yellow (MM-2-1) | 3.0 | 4.5 | 3.0 | 5.5 | 4.0 | 4.5 | 4.0 | 5.5 |
| Red Clr (MM-2-1) | 1.0 | 2.0 | 1.0 | 2.0 | 1.0 | 2.0 | 1.0 | 2.0 |
| Veh Ovlp A - Included (MM-2-2) | | | | | | | | |
| Veh Ovlp B - Included (MM-2-2) | | | | | | | | |
| Veh Ovlp C - Included (MM-2-2) | | | | | | | | |
| Veh Ovlp D - Included (MM-2-2) | | | | | | | | |
| Lock Det (MM-2-8) | | | | | | | | |
| VE Recall (MM-2-8) | | | | | | | | |
| PD Recall (MM-2-8) | | | | | | | | |
| MX Recall (MM-2-8) | | | | | | | | |
| SF Recall (MM-2-8) | | | | | | | | |
| Left Turn Type | P | | P | | P | | P | |
| 3rd Car | No | | No | | No | | No | |

**Detectors (MM-6)**

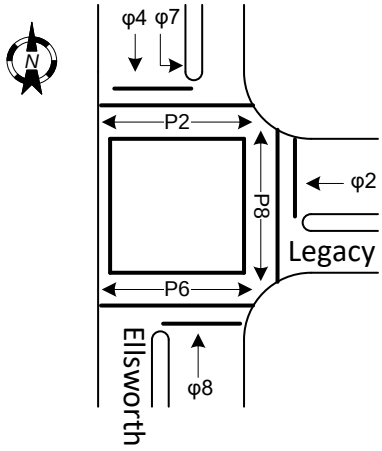
| Ch. | Assigned Phase (MM-6-1) | |
|---|---|---|
| **1/17** | | |
| **2/18** | | |
| **3/19** | 3 C,P | |
| **4/20** | | |
| **5/21** | | 5 C,P |
| **6/22** | | |
| **7/23** | 7 C,P | |
| **8/24** | | |
| **9/25** | | 2 C,P |
| **10/26** | | 4 C,P |
| **11/27** | | |
| **12/28** | | 8 C,P |
| **13/29** | | |
| **14/30** | | |
| **15/31** | | |
| **16/32** | | |

"C" =Call,"B"=Bike
"P"=Passage,"D"=Delay

Revision History:

| Date | Description |
|---|---|
| 12/22/2021 | Signal Turn-on...BG |
| 2/8/2022 | Enabled phases 1&6 vehicle and phases 2,4,6,8 peds...BG, JF, TK |
| | |
| | |
| | |

# #9993 Legacy & Ellsworth
# Effective: 12/15/2021 Flash@1009 Normal@1213




Phase Diagram (MM-1-1-1)

| | | | | |
|---|---|---|---|---|
| R1 | 1 2 | 3 4 | | |
| R2 | 5 6 | 7 8 | | |
| R3 | | | | |
| R4 | | | | |

**Notes:**

Disabled Ped Protect (MM-2-6-1)

LD Switch Assign (MM-1-3)

| | Phase/ Ovlp | Type |
|---|---|---|
| 1 | 1 | V |
| 2 | 2 | V |
| 3 | 3 | V |
| 4 | 4 | V |
| 5 | 5 | V |
| 6 | 0 | . |
| 7 | 7 | V |
| 8 | 8 | V |
| 9 | 2 | P |
| 10 | 0 | . |
| 11 | 6 | P |
| 12 | 8 | P |
| 13 | 13 | V |
| 14 | 14 | V |
| 15 | 15 | V |
| 16 | 16 | V |

| | φ1 | φ2 | φ3 | φ4 | φ5 | φ6 | φ7 | φ8 |
|---|---|---|---|---|---|---|---|---|
| Phases In Use(MM-1-2) | | WB | | SB | | EB | SBLT | NB |
| Min Grn (MM-2-1) | | 10 | | 15 | | | 5 | 15 |
| BK MGrn (MM-2-1) | | | | | | | | |
| Walk (MM-2-1) | | 4 | | | | 4 | | 7 |
| Ped Clr (MM-2-1) | | 25 | | | | 28 | | 12 |
| Yellow (MM-2-1) | | 4.0 | | 5.5 | | 3.0 | 4.0 | 5.5 |
| Red Clr (MM-2-1) | | 2.0 | | 2.0 | | 0.0 | 1.0 | 2.0 |
| Veh Ovlp A - Included (MM-2-2) | | | | | | | | |
| Veh Ovlp B - Included (MM-2-2) | | | | | | | | |
| Veh Ovlp C - Included (MM-2-2) | | | | | | | | |
| Veh Ovlp D - Included (MM-2-2) | | | | | | | | |
| Lock Det (MM-2-8) | | | | | | | | |
| VE Recall (MM-2-8) | | | | | | | | |
| PD Recall (MM-2-8) | | | | | | | | |
| MX Recall (MM-2-8) | | | | | | | | |
| SF Recall (MM-2-8) | | | | | | | | |
| Left Turn Type | | | | | | | P | |
| 3rd Car | | | | | | | No | |

Detectors (MM 6)

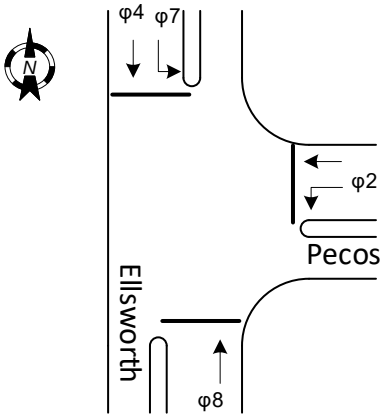
| | Call Phase and Set up (MM 6-1, 6-2) |
|---|---|
| 1 | |
| 2 | |
| 3 | |
| 4 | |
| 5 | |
| 6 | |
| 7 | 7 C,P |
| 8 | |
| 9 | 2 C,P |
| 10 | 4 C,P |
| 11 | |
| 12 | 8 C,P |
| 13 | |
| 14 | |
| 15 | |
| 16 | |

C = Call
P = Passage
B=Bike
D = Delay (X sec)

Revision History:

| Date | Description |
|---|---|
| 12/15/2021 | Signal Turn-on...BG,SG |
| | |
| | |
| | |
| | |

# #9970 Pecos N. & Ellsworth
# Effective: 1/26/2016




**Phase Diagram (MM-1-1-1)** Seq- 1

| | | | | | |
|---|---|---|---|---|---|
| R1 | 1 2 | 3 4 | | | |
| R2 | 5 6 | 7 8 | | | |
| R3 | | | | | |
| R4 | | | | | |

**Notes:**

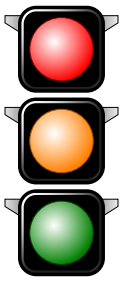
Logic Statements 50-52 for FYA for phase 7.

MM-1-1-3
Backup Prevent enabled for phases 7/8 with B & C selected to place call on phase 2

| | φ1 | φ2 | φ3 | φ4 | φ5 | φ6 | φ7 | φ8 |
|---|---|---|---|---|---|---|---|---|
| Phases In Use(MM-1-2) | | WB | | SB | | | SBL | NB |
| Min Grn (MM-2-1) | | 5 | | 15 | | | 8 | 15 |
| BK MGrn (MM-2-1) | | 12 | | | | | | |
| Walk (MM-2-1) | | | | | | | | |
| Ped Clr (MM-2-1) | | | | | | | | |
| Yellow (MM-2-1) | | 4.5 | | 5.5 | | | 3.0 | 5.5 |
| Red Clr (MM-2-1) | | 2.0 | | 2.0 | | | 1.0 | 2.0 |
| Veh Ovlp A - Included (MM-2-2) | | | | | | | | |
| Veh Ovlp B - Included (MM-2-2) | | | | | | | | |
| Veh Ovlp C - Included (MM-2-2) | | | | | | | | |
| Veh Ovlp D - Included (MM-2-2) | | | | | | | | |
| Lock Det (MM-2-8) | | | | | | | | |
| VE Recall (MM-2-8) | | | | | | | | |
| PD Recall (MM-2-8) | | | | | | | | |
| MX Recall (MM-2-8) | | | | X | | | | X |
| SF Recall (MM-2-8) | | | | | | | | |
| Left Turn Type | | | | | | | FYA | |
| 3rd Car | | | | | | | | |

Revision History:

| Date | Description |
|---|---|
| 1/26/2016 | Changed Bike Min Green to 12 sec, due to 139' measurement. SMH |
| 2/27/2020 | Backup protection enabled for ph 7/8 with B&C call to ph 2...BG |
| | |
| | |
| | |



**LD Switch Assign**
(MM-1-3)

| | Phase/ Ovlp | Type |
|---|---|---|
| **1** | 1 | V |
| **2** | 2 | V |
| **3** | 3 | V |
| **4** | 4 | V |
| **5** | 5 | V |
| **6** | 6 | V |
| **7** | 7 | V |
| **8** | 8 | V |
| **9** | 2 | P |
| **10** | 4 | P |
| **11** | 6 | P |
| **12** | 8 | P |
| **13** | 5 | O |
| **14** | 6 | O |
| **15** | 7 | O |
| **16** | 8 | O |

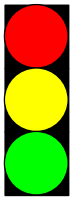
**Detectors (MM-6)**

| Ch. | Assigned Phase (MM-6-1) |
|---|---|
| **1/17** | |
| **2/18** | 2,C,P |
| **3/19** | |
| **4/20** | |
| **5/21** | |
| **6/22** | |
| **7/23** | 7,C,P |
| **8/24** | |
| **9/25** | 2,C,P |
| **10/26** | |
| **11/27** | |
| **12/28** | |
| **13/29** | 2,B |
| **14/30** | |
| **15/31** | |
| **16/32** | |

"C"= Call,"B"= Bike
"P"= Passage

# Left-Turn Operation in the City of Mesa

## Permissive Left-Turn Operation (PM)

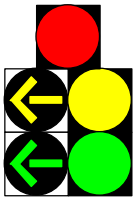


Permissive operation does not have an exclusive left-turn phase. Motorists may make a left on a circular green indication if there are acceptable gaps in the opposing through traffic.

## Protected-Only Left-Turn Operation (PT)

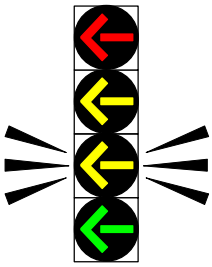
Protected-Only operation allows left turns only while the green arrow is on. It is terminated by a yellow arrow and then a red arrow indication.

## Protected-Permissive Left-Turn Operation (P/P)



Protected-Permissive operation allows left turns when the green arrow is on. It is terminated by a yellow arrow. It differs from Protected-Only mode because there is no red arrow and motorists may make a left on a circular green indication if there are acceptable gaps in the opposing through traffic.

## Flashing Yellow Arrow (FYA)



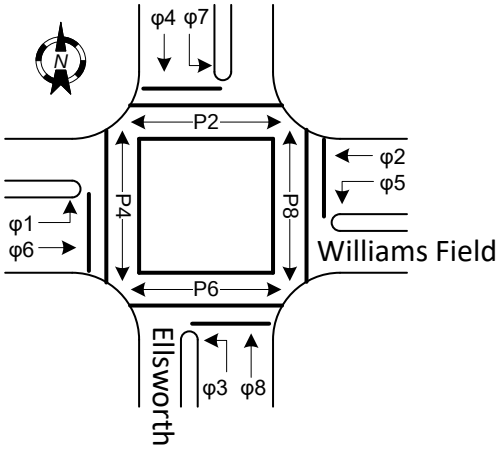
The flashing yellow arrow is an alternative display for a permissive left turn. The flashing yellow arrow essentially takes the place of the circular green indication and the motorist may make a left-turn on the flashing yellow arrow if there are acceptable gaps in the opposing through traffic.

## Third Car Detection

Third car detection is used at some protected-permissive and flashing yellow arrow left-turns. The green arrow is displayed when approximately three or more vehicles are present in the left-turn lane. If approximately two or less vehicles are waiting to turn, the arrow will not come on and those vehicles will be able to make the left turn during the green ball or flashing yellow arrow interval if there are acceptable gaps in the opposing through traffic.

Third car detection is used because it is a more efficient way to distribute time at a signalized intersection. The minimum amount of time required to provide a left turn arrow for one left turning vehicle is 9 seconds; this includes the green arrow plus yellow and red clearance intervals. This time could be more productively used by allotting it to opposing through vehicles. On a two-lane approach, 8 to 10 through vehicles could be processed in the same 9 seconds.

# #9990 Williams Field & Ellsworth
# Effective: 2/9/2022 Flash@10:02AM
# Normal@12:39PM




LD Switch Assign (MM-1-3)

| | Phase/ Ovlp | Type |
|---|---|---|
| 1 | 1 | V |
| 2 | 2 | V |
| 3 | 3 | V |
| 4 | 4 | V |
| 5 | 5 | V |
| 6 | 6 | V |
| 7 | 7 | V |
| 8 | 8 | V |
| 9 | 2 | P |
| 10 | 4 | P |
| 11 | 6 | P |
| 12 | 8 | P |
| 13 | 13 | V |
| 14 | 14 | V |
| 15 | 15 | V |
| 16 | 16 | V |

**Notes:**

Disabled Ped Protect (MM-2-6-1)

Phase Diagram (MM-1-1-1)

| | | | |
|---|---|---|---|
| R1 | 1 2 | 3 4 | |
| R2 | 5 6 | 7 8 | |
| R3 | | | |
| R4 | | | |

| | φ1 | φ2 | φ3 | φ4 | φ5 | φ6 | φ7 | φ8 |
|---|---|---|---|---|---|---|---|---|
| Phases In Use(MM-1-2) | EBLT | WB | NBLT | SB | WBLT | EB | SBLT | NB |
| Min Grn (MM-2-1) | 5 | 15 | 5 | 15 | 5 | 15 | 5 | 15 |
| BK MGrn (MM-2-1) | | | | | | | | |
| Walk (MM-2-1) | | 4 | | 7 | | 4 | | 7 |
| Ped Clr (MM-2-1) | | 26 | | 21 | | 27 | | 23 |
| Yellow (MM-2-1) | 3.0 | 4.5 | 3.0 | 5.5 | 4.0 | 4.5 | 4.0 | 5.5 |
| Red Clr (MM-2-1) | 1.0 | 2.0 | 1.0 | 2.0 | 1.0 | 2.0 | 1.0 | 2.0 |
| Veh Ovlp A - Included (MM-2-2) | | | | | | | | |
| Veh Ovlp B - Included (MM-2-2) | | | | | | | | |
| Veh Ovlp C - Included (MM-2-2) | | | | | | | | |
| Veh Ovlp D - Included (MM-2-2) | | | | | | | | |
| Lock Det (MM-2-8) | | | | | | | | |
| VE Recall (MM-2-8) | | | | | | | | |
| PD Recall (MM-2-8) | | | | | | | | |
| MX Recall (MM-2-8) | | | | | | | | |
| SF Recall (MM-2-8) | | | | | | | | |
| Left Turn Type | P | | P | | P | | P | |
| 3rd Car | No | | No | | No | | No | |

**Detectors (MM-6)**

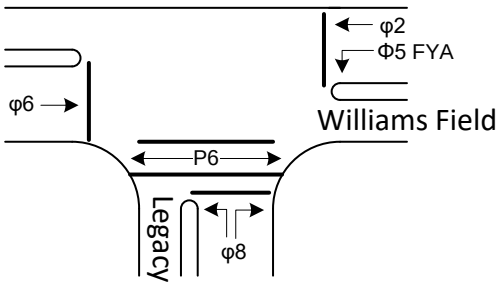
| Ch. | Assigned Phase (MM-6-1) | |
|---|---|---|
| **1/17** | | |
| **2/18** | | |
| **3/19** | 3 C,P | |
| **4/20** | | |
| **5/21** | | 5 C,P |
| **6/22** | | |
| **7/23** | 7 C,P | |
| **8/24** | | |
| **9/25** | | 2 C,P |
| **10/26** | | 4 C,P |
| **11/27** | | |
| **12/28** | | 8 C,P |
| **13/29** | | |
| **14/30** | | |
| **15/31** | | |
| **16/32** | | |

"C" =Call,"B"=Bike
"P"=Passage,"D"=Delay

Revision History:

| Date | Description |
|---|---|
| 12/22/2021 | Signal Turn-on...BG |
| 2/8/2022 | Enabled phases 1&6 vehicle and phases 2,4,6,8 peds...BG, JF, TK |
| | |
| | |
| | |

# #9992 Williams Field & Legacy
# Effective: 3/10/2022, Flash 8:10am, Normal 9:00am




**Notes:**

Logic Statements 47-49 enabled for FYA

Phase Diagram (MM-1-1-1)

| | | | | |
|---|---|---|---|---|
| R1 | 1 2 | 3 4 | | |
| R2 | 5 6 | 7 8 | | |
| R3 | | | | |
| R4 | | | | |

LD Switch Assign (MM-1-3)

| | Phase/ Ovlp | Type |
|---|---|---|
| 1 | 1 | V |
| 2 | 2 | V |
| 3 | 3 | V |
| 4 | 0 | . |
| 5 | 5 | V |
| 6 | 6 | V |
| 7 | 7 | V |
| 8 | 8 | V |
| 9 | 0 | . |
| 10 | 0 | . |
| 11 | 6 | P |
| 12 | 0 | . |
| 13 | 13 | V |
| 14 | 14 | V |
| 15 | 7 | O |
| 16 | 16 | V |

| | φ1 | φ2 | φ3 | φ4 | φ5 | φ6 | φ7 | φ8 |
|---|---|---|---|---|---|---|---|---|
| Phases In Use(MM-1-2) | | WB | | | WBLT | EB | | NB |
| Min Grn (MM-2-1) | | 15 | | | 8 | 15 | | 10 |
| BK MGrn (MM-2-1) | | | | | | | | |
| Walk (MM-2-1) | | | | | | 7 | | |
| Ped Clr (MM-2-1) | | | | | | 15 | | |
| Yellow (MM-2-1) | | 4.5 | | | 3.0 | 4.5 | | 4.0 |
| Red Clr (MM-2-1) | | 2.0 | | | 1.0 | 2.0 | | 2.0 |
| Veh Ovlp A - Included (MM-2-2) | | | | | | | | |
| Veh Ovlp B - Included (MM-2-2) | | | | | | | | |
| Veh Ovlp C - Included (MM-2-2) | | | | | | | | |
| Veh Ovlp D - Included (MM-2-2) | | | | | | | | |
| Lock Det (MM-2-8) | | | | | | | | |
| VE Recall (MM-2-8) | | | | | | | | |
| PD Recall (MM-2-8) | | | | | | | | |
| MX Recall (MM-2-8) | | | | | | | | |
| SF Recall (MM-2-8) | | | | | | | | |
| Left Turn Type | | | | | FYA | | | |
| 3rd Car | | | | | Yes | | | |

Detectors (MM 6)

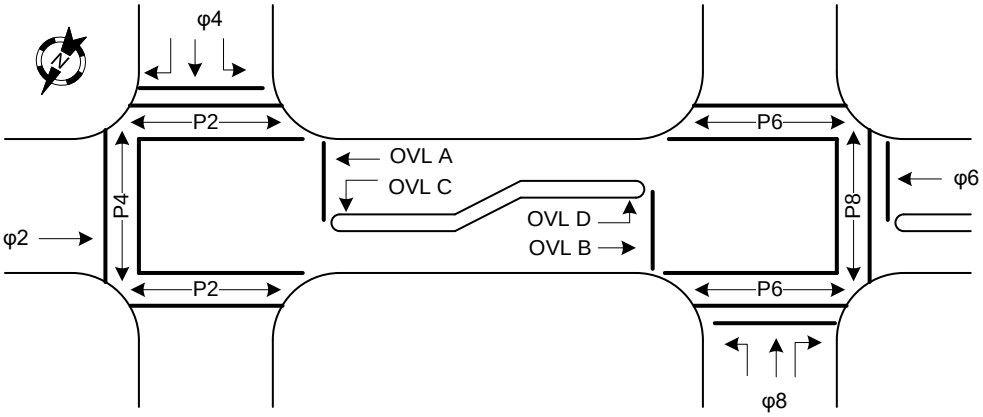
| | Call Phase and Set up (MM 6-1, 6-2) |
|---|---|
| 1 | |
| 2 | |
| 3 | |
| 4 | |
| 5 | 2 C,P |
| 6 | 5 P |
| 7 | |
| 8 | 8 C,P,D |
| 9 | 2 C,P |
| 10 | |
| 11 | 6 C,P |
| 12 | 8 C,P |
| 13 | |
| 14 | |
| 15 | |
| 16 | |

C = Call
P = Passage
B=Bike
D = Delay (X sec)

Revision History:

| Date | Description |
|---|---|
| | |
| | |
| | |
| | |
| | |

# #9982 SR-24 & Williams Field
# Effective: 8/11/2022 @11:30AM




**Phase Ring (MM-1-1**

| | | |
|---|---|---|
| R1 | 2 1 | 3 4 |
| R2 | 5 6 | 8 7 |
| R3 | | |
| R4 | | |

Seq - 10

**LD Switch Assign**
(MM-1-3)

| | Phase /Ovlp | Type |
|---|---|---|
| **1** | 3 | O |
| **2** | 2 | V |
| **3** | 2 | O |
| **4** | 4 | V |
| **5** | 4 | O |
| **6** | 6 | V |
| **7** | 1 | O |
| **8** | 8 | V |
| **9** | 2 | P |
| **10** | 4 | P |
| **11** | 6 | P |
| **12** | 8 | P |
| **13** | 0 | . |
| **14** | 0 | . |
| **15** | 0 | . |
| **16** | 0 | . |

**Notes:**

Power start sequence is 10.

| | φ1 | φ2 | φ3 | φ4 | φ5 | φ6 | φ7 | φ8 |
|---|---|---|---|---|---|---|---|---|
| Direction | NBL | SB | NBL | WB | SBL | NB | SBL | EB |
| Phases In Use(MM-1-2) | X | X | X | X | X | X | X | X |
| Min Grn (MM-2-1) | 5 | 15 | 5 | 10 | 5 | 15 | 5 | 10 |
| BK MGrn (MM-2-1) | | | | | | | | |
| Walk (MM-2-1) | | 4 | | 4 | | 4 | | 4 |
| Ped Clr (MM-2-1) | | 15 | | 35 | | 16 | | 34 |
| Yellow (MM-2-1) | 4.0 | 4.5 | 4.0 | 5.5 | 4.0 | 4.5 | 4.0 | 5.5 |
| Red Clr (MM-2-1) | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| Veh OL A - Incl. (MM-2-2) | X | X | X | | | | | |
| Veh OL B - Incl. (MM-2-2) | | | | | X | X | X | |
| Veh OL C - Incl. (MM-2-2) | X | | X | | | | | |
| Veh OL D - Incl. (MM-2-2) | | | | | X | | X | |
| Veh OL E - Incl. (MM-2-2) | | | | | | | | |
| Veh OL F - Incl. (MM-2-2) | | | | | | | | |
| VE Recall (MM-2-8) | | | | X | | | | X |
| PD Recall (MM-2-8) | | | | | | | | |
| MX Recall (MM-2-8) | | | | | | | | |
| SF Recall (MM-2-8) | | | | | | | | |
| Left Turn Type | PT | | PT | | PT | | PT | |
| 3rd Car | | | | | | | | |

Revision History:

| Date | Description |
|---|---|
| 4/1/2022 | Signal turn on...BG,MF |
| 8/11/2022 | SR24 opened up on east side, enable SBLT detection and ph 4/8 min recall...BG |
| | |
| | |

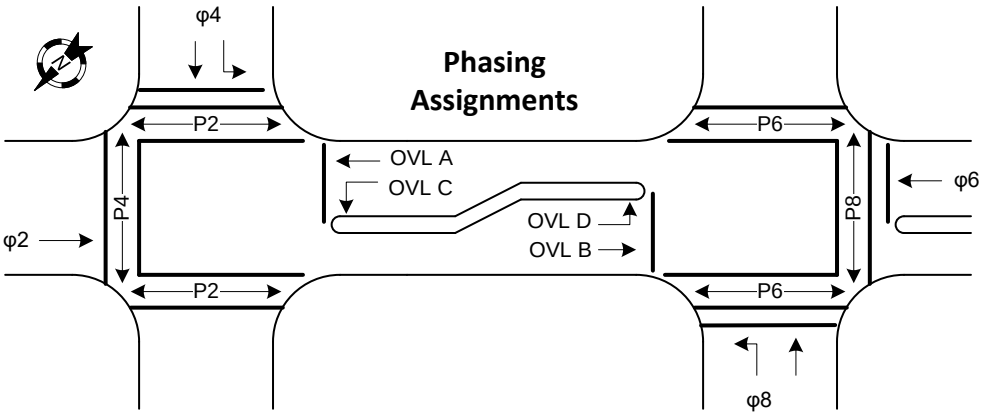
# #9982 SR24 & Williams Field

**Phase Ring (MM-1-1·**

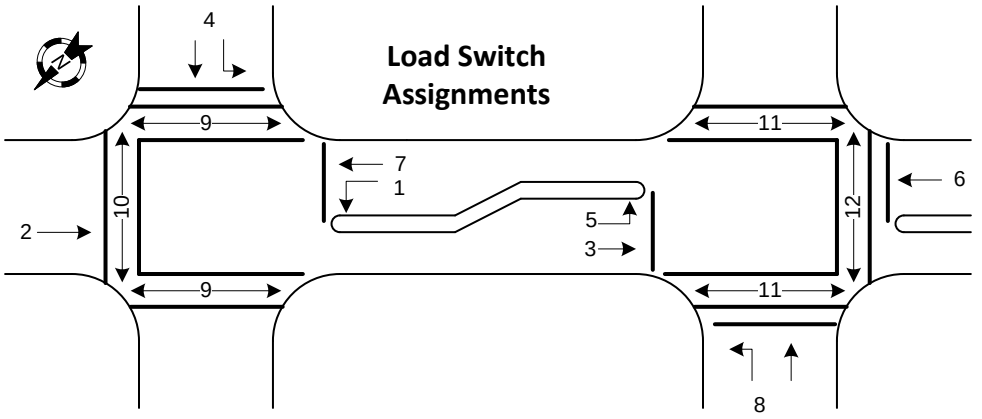
Compatibility Mode

| | | |
|---|---|---|
| R1 | 2 1 | 3 4 |
| R2 | 5 6 | 8 7 |
| R3 | | |
| R4 | | |

Seq-10




| Overlap | Incld. Phases |
|---|---|
| A | 1,2,3 |
| B | 5,6,7 |
| C | 1,3 |
| D | 5,7 |




**LD Switch Assign**

(MM-1-3)

| | Phase/ Ovlp | Type |
|---|---|---|
| **1** | 3 | O |
| **2** | 2 | V |
| **3** | 2 | O |
| **4** | 4 | V |
| **5** | 4 | O |
| **6** | 6 | V |
| **7** | 1 | O |
| **8** | 8 | V |
| **9** | 2 | P |
| **10** | 4 | P |
| **11** | 6 | P |
| **12** | 8 | P |
| **13** | 0 | . |
| **14** | 0 | . |
| **15** | 0 | . |
| **16** | 0 | . |

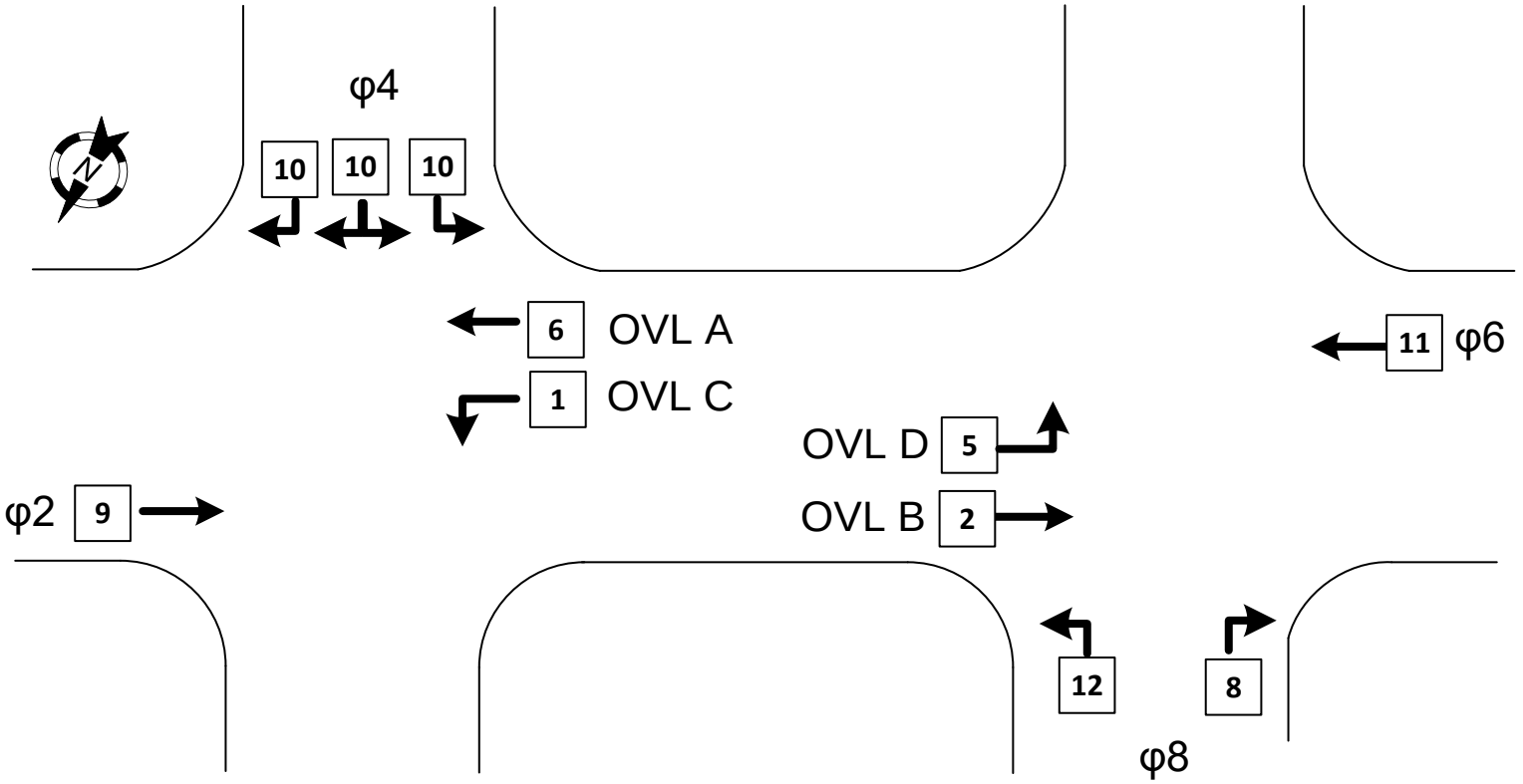
**MMU Card Programming**

| | 16 | 15 | 14 | 13 | 12 | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | X | X | | | X | X | X | X | | X | |
| 2 | | | | | X | X | | X | X | X | X | X | | X | |
| 3 | | | | | | X | X | X | | X | X | X | X | | |
| 4 | | | | | X | X | X | | X | | X | X | | | |
| 5 | | | | | | | X | X | | X | | | | | |
| 6 | | | | | | X | X | X | | X | | | | | |
| 7 | | | | | X | X | | X | X | | | | | | |
| 8 | | | | | X | | X | X | | | | | | | |
| 9 | | | | | X | X | | | | | | | | | |
| 10 | | | | | X | X | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | |

# #9982 SR-24 & Williams Field

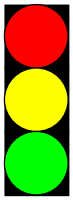
Detectors (MM-6)

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phase | 1,3 | 6 | | | 5,7 | 2 | | 8 | 2 | 4 | 6 | 8 | | | | |
| Call | X | X | | | X | X | | X | X | X | X | X | | | | |
| Passage | X | X | | | X | X | | X | X | X | X | X | | | | |
| Bike | | | | | | | | | | | | | | | | |
| Delay | | | | | | | | | | | | | | | | |
| | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 |
| Phase | | | | | | | | | | | | | | | | |
| Call | | | | | | | | | | | | | | | | |
| Passage | | | | | | | | | | | | | | | | |
| Bike | | | | | | | | | | | | | | | | |
| Delay | | | | | | | | | | | | | | | | |



# Left-Turn Operation in the City of Mesa

## Permissive Left-Turn Operation (PM)

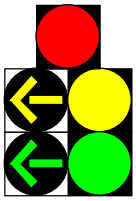


Permissive operation does not have an exclusive left-turn phase. Motorists may make a left on a circular green indication if there are acceptable gaps in the opposing through traffic.

## Protected-Only Left-Turn Operation (PT)

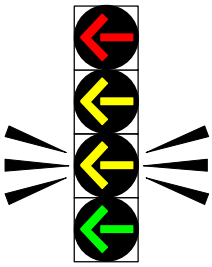
Protected-Only operation allows left turns only while the green arrow is on. It is terminated by a yellow arrow and then a red arrow indication.

## Protected-Permissive Left-Turn Operation (P/P)



Protected-Permissive operation allows left turns when the green arrow is on. It is terminated by a yellow arrow. It differs from Protected-Only mode because there is no red arrow and motorists may make a left on a circular green indication if there are acceptable gaps in the opposing through traffic.

## Flashing Yellow Arrow (FYA)



The flashing yellow arrow is an alternative display for a permissive left turn. The flashing yellow arrow essentially takes the place of the circular green indication and the motorist may make a left-turn on the flashing yellow arrow if there are acceptable gaps in the opposing through traffic.

## Third Car Detection

Third car detection is used at some protected-permissive and flashing yellow arrow left-turns. The green arrow is displayed when approximately three or more vehicles are present in the left-turn lane. If approximately two or less vehicles are waiting to turn, the arrow will not come on and those vehicles will be able to make the left turn during the green ball or flashing yellow arrow interval if there are acceptable gaps in the opposing through traffic.

Third car detection is used because it is a more efficient way to distribute time at a signalized intersection. The minimum amount of time required to provide a left turn arrow for one left turning vehicle is 9 seconds; this includes the green arrow plus yellow and red clearance intervals. This time could be more productively used by allotting it to opposing through vehicles. On a two-lane approach, 8 to 10 through vehicles could be processed in the same 9 seconds.

# Appendix E – Existing Capacity Analysis

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 106 | 41 | 122 | 7 | 150 | 8 | 639 | 948 | 5 | 1 | 359 | 317 |
| Future Volume (veh/h) | 106 | 41 | 122 | 7 | 150 | 8 | 639 | 948 | 5 | 1 | 359 | 317 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 109 | 42 | 126 | 7 | 155 | 8 | 659 | 977 | 5 | 1 | 370 | 327 |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 269 | 101 | 302 | 253 | 430 | 22 | 875 | 1589 | 709 | 450 | 666 | 297 |
| Arrive On Green | 0.24 | 0.24 | 0.24 | 0.24 | 0.24 | 0.24 | 0.42 | 0.45 | 0.45 | 0.16 | 0.19 | 0.19 |
| Sat Flow, veh/h | 1223 | 412 | 1236 | 1217 | 1763 | 91 | 1781 | 3554 | 1585 | 1781 | 3554 | 1585 |
| Grp Volume(v), veh/h | 109 | 0 | 168 | 7 | 0 | 163 | 659 | 977 | 5 | 1 | 370 | 327 |
| Grp Sat Flow(s),veh/h/ln | 1223 | 0 | 1648 | 1217 | 0 | 1854 | 1781 | 1777 | 1585 | 1781 | 1777 | 1585 |
| Q Serve(g_s), s | 9.7 | 0.0 | 10.3 | 0.6 | 0.0 | 8.7 | 27.1 | 25.1 | 0.2 | 0.0 | 11.3 | 22.5 |
| Cycle Q Clear(g_c), s | 18.5 | 0.0 | 10.3 | 10.9 | 0.0 | 8.7 | 27.1 | 25.1 | 0.2 | 0.0 | 11.3 | 22.5 |
| Prop In Lane | 1.00 | | 0.75 | 1.00 | | 0.05 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 269 | 0 | 402 | 253 | 0 | 453 | 875 | 1589 | 709 | 450 | 666 | 297 |
| V/C Ratio(X) | 0.40 | 0.00 | 0.42 | 0.03 | 0.00 | 0.36 | 0.75 | 0.61 | 0.01 | 0.00 | 0.56 | 1.10 |
| Avail Cap(c_a), veh/h | 269 | 0 | 402 | 253 | 0 | 453 | 875 | 1845 | 823 | 450 | 666 | 297 |
| 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 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 0.74 | 0.74 | 0.74 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 45.2 | 0.0 | 38.2 | 42.7 | 0.0 | 37.6 | 16.0 | 25.3 | 18.4 | 25.7 | 44.2 | 48.7 |
| Incr Delay (d2), s/veh | 1.0 | 0.0 | 0.7 | 0.2 | 0.0 | 2.2 | 2.8 | 0.4 | 0.0 | 0.0 | 1.0 | 81.8 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 5.5 | 0.0 | 7.6 | 0.3 | 0.0 | 7.7 | 15.8 | 15.1 | 0.1 | 0.0 | 8.8 | 23.2 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 46.2 | 0.0 | 38.9 | 42.9 | 0.0 | 39.8 | 18.8 | 25.6 | 18.4 | 25.7 | 45.2 | 130.5 |
| LnGrp LOS | D | | D | D | | D | B | C | B | C | D | F |
| Approach Vol, veh/h | | 277 | | | 170 | | | 1641 | | | 698 | |
| Approach Delay, s/veh | | 41.8 | | | 39.9 | | | 22.9 | | | 85.2 | |
| Approach LOS | | D | | | D | | | C | | | F | |

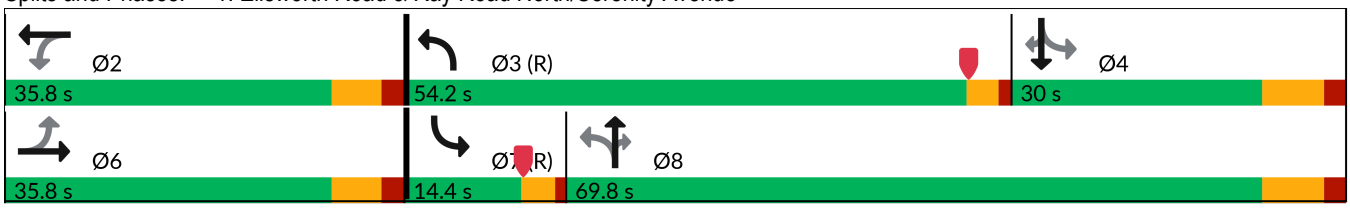
| Timer - Assigned Phs | 2 | 3 | 4 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 35.8 | 54.2 | 30.0 | 35.8 | 23.0 | 61.2 |
| Change Period (Y+Rc), s | 6.5 | 4.0 | 7.5 | 6.5 | 4.0 | 7.5 |
| Max Green Setting (Gmax), s | 29.3 | 50.2 | 22.5 | 29.3 | 10.4 | 62.3 |
| Max Q Clear Time (g_c+I1), s | 12.9 | 29.1 | 24.5 | 20.5 | 2.0 | 27.1 |
| Green Ext Time (p_c), s | 0.8 | 2.3 | 0.0 | 0.9 | 0.0 | 8.6 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 41.4 |
| HCM 7th LOS | D |

| Phase Number | 2 | 3 | 4 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|
| Movement | WBTL | NBL | SBTL | EBTL | SBL | NBTL |
| Lead/Lag | | Lead | Lag | | Lead | Lag |
| Lead-Lag Optimize | | Yes | Yes | | Yes | Yes |
| Recall Mode | Max | C-Max | None | None | C-Max | None |
| Maximum Split (s) | 35.8 | 54.2 | 30 | 35.8 | 14.4 | 69.8 |
| Maximum Split (%) | 29.8% | 45.2% | 25.0% | 29.8% | 12.0% | 58.2% |
| Minimum Split (s) | 34.5 | 12.5 | 24.5 | 35.5 | 12.5 | 24.5 |
| Yellow Time (s) | 4.5 | 3 | 5.5 | 4.5 | 3 | 5.5 |
| All-Red Time (s) | 2 | 1 | 2 | 2 | 1 | 2 |
| Minimum Initial (s) | 10 | 8 | 15 | 10 | 8 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | 4 | | 7 | 4 | | 7 |
| Flash Don't Walk (s) | 24 | | 10 | 25 | | 10 |
| Dual Entry | Yes | No | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 73.8 | 109.6 | 43.8 | 73.8 | 109.6 | 4 |
| End Time (s) | 109.6 | 43.8 | 73.8 | 109.6 | 4 | 73.8 |
| Yield/Force Off (s) | 103.1 | 39.8 | 66.3 | 103.1 | 0 | 66.3 |
| Yield/Force Off 170(s) | 79.1 | 39.8 | 56.3 | 78.1 | 0 | 56.3 |
| Local Start Time (s) | 73.8 | 109.6 | 43.8 | 73.8 | 109.6 | 4 |
| Local Yield (s) | 103.1 | 39.8 | 66.3 | 103.1 | 0 | 66.3 |
| Local Yield 170(s) | 79.1 | 39.8 | 56.3 | 78.1 | 0 | 56.3 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 90 |
| Offset: 0 (0%), Referenced to phase 3:NBL and 7:SBL, Start of Yellow | |

Splits and Phases: 1: Ellsworth Road & Ray Road North/Serenity Avenue



| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 301 | 318 | 1267 | 170 | 126 | 361 |
| Future Volume (veh/h) | 301 | 318 | 1267 | 170 | 126 | 361 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 304 | 321 | 1280 | 172 | 127 | 365 |
| Peak Hour Factor | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 772 | 438 | 2145 | 957 | 282 | 2428 |
| Arrive On Green | 0.22 | 0.22 | 0.60 | 0.60 | 0.05 | 0.68 |
| Sat Flow, veh/h | 3456 | 1585 | 3647 | 1585 | 1781 | 3647 |
| Grp Volume(v), veh/h | 304 | 321 | 1280 | 172 | 127 | 365 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1585 | 1777 | 1585 | 1781 | 1777 |
| Q Serve(g_s), s | 11.2 | 27.6 | 33.5 | 7.2 | 3.8 | 5.4 |
| Cycle Q Clear(g_c), s | 11.2 | 27.6 | 33.5 | 7.2 | 3.8 | 5.4 |
| Prop In Lane | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Lane Grp Cap(c), veh/h | 772 | 438 | 2145 | 957 | 282 | 2428 |
| V/C Ratio(X) | 0.39 | 0.73 | 0.60 | 0.18 | 0.45 | 0.15 |
| Avail Cap(c_a), veh/h | 772 | 438 | 2145 | 957 | 377 | 2428 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 0.73 | 0.73 | 0.72 | 0.72 |
| Uniform Delay (d), s/veh | 49.6 | 49.2 | 18.4 | 13.2 | 15.2 | 8.4 |
| Incr Delay (d2), s/veh | 1.5 | 10.4 | 0.2 | 0.0 | 0.3 | 0.1 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 8.8 | 32.4 | 18.9 | 4.7 | 2.7 | 3.8 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 51.1 | 59.6 | 18.7 | 13.2 | 15.5 | 8.5 |
| LnGrp LOS | D | E | B | B | B | A |
| Approach Vol, veh/h | 625 | | 1452 | | | 492 |
| Approach Delay, s/veh | 55.5 | | 18.0 | | | 10.3 |
| Approach LOS | E | | B | | | B |

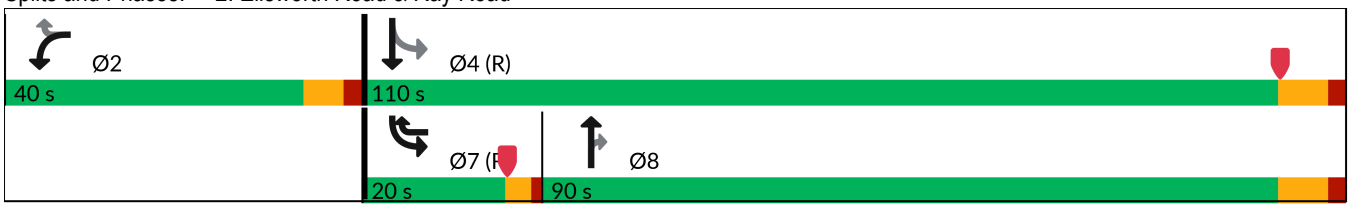
| Timer - Assigned Phs | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 40.0 | 110.0 | 12.0 | 98.0 |
| Change Period (Y+Rc), s | 6.5 | 7.5 | 4.0 | 7.5 |
| Max Green Setting (Gmax), s | 33.5 | 102.5 | 16.0 | 82.5 |
| Max Q Clear Time (g_c+I1), s | 29.6 | 7.4 | 5.8 | 35.5 |
| Green Ext Time (p_c), s | 0.6 | 0.5 | 0.1 | 2.1 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 25.6 |
| HCM 7th LOS | C |

| Phase Number | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Movement | WBL | SBTL | SBL | NBT |
| Lead/Lag | | | Lead | Lag |
| Lead-Lag Optimize | | | Yes | Yes |
| Recall Mode | Max | C-Max | C-Max | None |
| Maximum Split (s) | 40 | 110 | 20 | 90 |
| Maximum Split (%) | 26.7% | 73.3% | 13.3% | 60.0% |
| Minimum Split (s) | 32.5 | 34.5 | 12 | 37.5 |
| Yellow Time (s) | 4.5 | 5.5 | 3 | 5.5 |
| All-Red Time (s) | 2 | 2 | 1 | 2 |
| Minimum Initial (s) | 10 | 15 | 8 | 15 |
| Vehicle Extension (s) | 2 | 0.2 | 2 | 0.2 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | 4 | 4 | | 4 |
| Flash Don't Walk (s) | 22 | 23 | | 26 |
| Dual Entry | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 61 | 101 | 101 | 121 |
| End Time (s) | 101 | 61 | 121 | 61 |
| Yield/Force Off (s) | 94.5 | 53.5 | 117 | 53.5 |
| Yield/Force Off 170(s) | 72.5 | 30.5 | 117 | 27.5 |
| Local Start Time (s) | 94 | 134 | 134 | 4 |
| Local Yield (s) | 127.5 | 86.5 | 0 | 86.5 |
| Local Yield 170(s) | 105.5 | 63.5 | 0 | 60.5 |

| Intersection Summary | |
|---|---|
| Cycle Length | 150 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 85 |
| Offset: 117 (78%), Referenced to phase 4:SBTL and 7:SBL, Start of Yellow | |

Splits and Phases: 2: Ellsworth Road & Ray Road



| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 241 | 220 | 1207 | 184 | 106 | 555 |
| Future Volume (veh/h) | 241 | 220 | 1207 | 184 | 106 | 555 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 246 | 224 | 1232 | 188 | 108 | 566 |
| Peak Hour Factor | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 538 | 247 | 2086 | 931 | 179 | 2468 |
| Arrive On Green | 0.16 | 0.16 | 0.59 | 0.59 | 0.05 | 0.69 |
| Sat Flow, veh/h | 3456 | 1585 | 3647 | 1585 | 3456 | 3647 |
| Grp Volume(v), veh/h | 246 | 224 | 1232 | 188 | 108 | 566 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1585 | 1777 | 1585 | 1728 | 1777 |
| Q Serve(g_s), s | 5.8 | 12.5 | 19.7 | 5.0 | 2.8 | 5.2 |
| Cycle Q Clear(g_c), s | 5.8 | 12.5 | 19.7 | 5.0 | 2.8 | 5.2 |
| Prop In Lane | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Lane Grp Cap(c), veh/h | 538 | 247 | 2086 | 931 | 179 | 2468 |
| V/C Ratio(X) | 0.46 | 0.91 | 0.59 | 0.20 | 0.60 | 0.23 |
| Avail Cap(c_a), veh/h | 538 | 247 | 2086 | 931 | 384 | 2468 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 0.91 | 0.91 | 0.97 | 0.97 |
| Uniform Delay (d), s/veh | 34.5 | 37.4 | 11.7 | 8.7 | 41.8 | 5.0 |
| Incr Delay (d2), s/veh | 2.8 | 37.8 | 0.3 | 0.0 | 1.2 | 0.2 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 4.7 | 11.8 | 11.3 | 2.9 | 2.1 | 2.5 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 37.3 | 75.2 | 12.0 | 8.7 | 42.9 | 5.2 |
| LnGrp LOS | D | E | B | A | D | A |
| Approach Vol, veh/h | 470 | | 1420 | | | 674 |
| Approach Delay, s/veh | 55.4 | | 11.6 | | | 11.3 |
| Approach LOS | E | | B | | | B |

| Timer - Assigned Phs | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 20.0 | 70.0 | 9.7 | 60.3 |
| Change Period (Y+Rc), s | 6.0 | 7.5 | 5.0 | 7.5 |
| Max Green Setting (Gmax), s | 14.0 | 62.5 | 10.0 | 47.5 |
| Max Q Clear Time (g_c+I1), s | 14.5 | 7.2 | 4.8 | 21.7 |
| Green Ext Time (p_c), s | 0.0 | 0.5 | 0.1 | 2.0 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 19.5 |
| HCM 7th LOS | B |

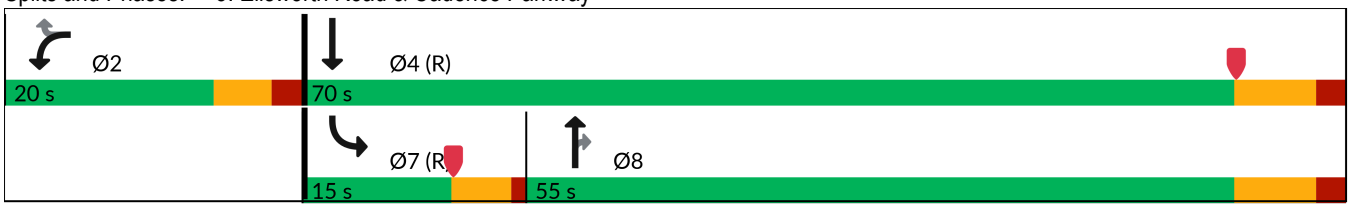
**Notes**

User approved pedestrian interval to be less than phase max green.

| Phase Number | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Movement | WBL | SBT | SBL | NBT |
| Lead/Lag | | | Lead | Lag |
| Lead-Lag Optimize | | | Yes | Yes |
| Recall Mode | Max | C-Max | C-Max | None |
| Maximum Split (s) | 20 | 70 | 15 | 55 |
| Maximum Split (%) | 22.2% | 77.8% | 16.7% | 61.1% |
| Minimum Split (s) | 19 | 56 | 12 | 44 |
| Yellow Time (s) | 4 | 5.5 | 4 | 5.5 |
| All-Red Time (s) | 2 | 2 | 1 | 2 |
| Minimum Initial (s) | 10 | 15 | 5 | 15 |
| Vehicle Extension (s) | 2 | 0.2 | 2 | 0.2 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | 4 | | | 7 |
| Flash Don't Walk (s) | 25 | | | 18 |
| Dual Entry | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 10 | 30 | 30 | 45 |
| End Time (s) | 30 | 10 | 45 | 10 |
| Yield/Force Off (s) | 24 | 2.5 | 40 | 2.5 |
| Yield/Force Off 170(s) | 89 | 2.5 | 40 | 74.5 |
| Local Start Time (s) | 60 | 80 | 80 | 5 |
| Local Yield (s) | 74 | 52.5 | 0 | 52.5 |
| Local Yield 170(s) | 49 | 52.5 | 0 | 34.5 |

| Intersection Summary | |
|---|---|
| Cycle Length | 90 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 75 |
| Offset: 40 (44%), Referenced to phase 4:SBT and 7:SBL, Start of Yellow | |

Splits and Phases: 3: Ellsworth Road & Cadence Parkway



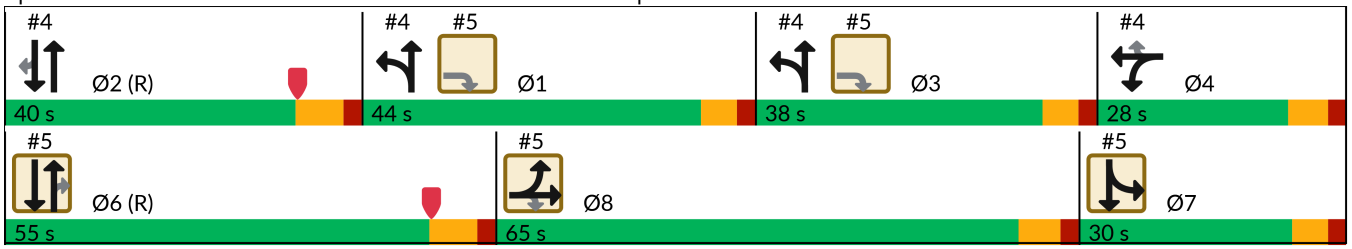
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 0 | 0 | 0 | 2 | 0 | 124 | 1192 | 1262 | 0 | 0 | 347 | 446 |
| Future Volume (vph) | 0 | 0 | 0 | 2 | 0 | 124 | 1192 | 1262 | 0 | 0 | 347 | 446 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | | 0 | 350 | | 350 | 525 | | 0 | 290 | | 285 |
| Storage Lanes | 0 | | 0 | 1 | | 1 | 0 | | 0 | 0 | | 2 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 0.91 | 0.86 | 0.91 | 0.97 | 0.95 | 1.00 | 1.00 | 0.86 | 0.88 |
| Frt | | | | | 0.850 | 0.850 | | | | | | 0.850 |
| Flt Protected | | | | 0.950 | | | 0.950 | | | | | |
| Satd. Flow (prot) | 0 | 0 | 0 | 1610 | 2723 | 1441 | 3433 | 3539 | 0 | 0 | 6408 | 2787 |
| Flt Permitted | | | | 0.950 | | | 0.950 | | | | | |
| Satd. Flow (perm) | 0 | 0 | 0 | 1610 | 2723 | 1441 | 3433 | 3539 | 0 | 0 | 6408 | 2787 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | | | 178 | 178 | | | | | | 455 |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 841 | | | 605 | | | 688 | | | 624 | |
| Travel Time (s) | | 19.1 | | | 13.8 | | | 15.6 | | | 14.2 | |
| Peak Hour Factor | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 |
| Adj. Flow (vph) | 0 | 0 | 0 | 2 | 0 | 127 | 1216 | 1288 | 0 | 0 | 354 | 455 |
| Shared Lane Traffic (%) | | | | 10% | | 50% | | | | | | |
| Lane Group Flow (vph) | 0 | 0 | 0 | 2 | 64 | 63 | 1216 | 1288 | 0 | 0 | 354 | 455 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 24 | | | 24 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | | | | 1 | 2 | 1 | 1 | 2 | | | 2 | 1 |
| Detector Template | | | | Left | Thru | Right | Left | Thru | | | Thru | Right |
| Leading Detector (ft) | | | | 20 | 100 | 20 | 20 | 100 | | | 100 | 20 |
| Trailing Detector (ft) | | | | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 |
| Detector 1 Position(ft) | | | | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 |
| Detector 1 Size(ft) | | | | 20 | 6 | 20 | 20 | 6 | | | 6 | 20 |
| Detector 1 Type | | | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | | Cl+Ex | Cl+Ex |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Detector 1 Queue (s) | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Detector 1 Delay (s) | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Detector 2 Position(ft) | | | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | | | | Split | NA | Perm | Prot | NA | | | NA | Perm |
| Protected Phases | | | | 4 | 4 | | 1 3 | 1 2 3 | | | 2 | |
| Permitted Phases | | | | | | 4 | | | | | | 2 |

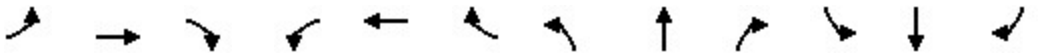
| Lane Group | Ø1 | Ø3 | Ø6 | Ø7 | Ø8 |
|---|---|---|---|---|---|
| Lane Configurations | | | | | |
| Traffic Volume (vph) | | | | | |
| Future Volume (vph) | | | | | |
| Ideal Flow (vphpl) | | | | | |
| Storage Length (ft) | | | | | |
| Storage Lanes | | | | | |
| Taper Length (ft) | | | | | |
| Lane Util. Factor | | | | | |
| Frt | | | | | |
| Flt Protected | | | | | |
| Satd. Flow (prot) | | | | | |
| Flt Permitted | | | | | |
| Satd. Flow (perm) | | | | | |
| Right Turn on Red | | | | | |
| Satd. Flow (RTOR) | | | | | |
| Link Speed (mph) | | | | | |
| Link Distance (ft) | | | | | |
| Travel Time (s) | | | | | |
| Peak Hour Factor | | | | | |
| Adj. Flow (vph) | | | | | |
| Shared Lane Traffic (%) | | | | | |
| Lane Group Flow (vph) | | | | | |
| Enter Blocked Intersection | | | | | |
| Lane Alignment | | | | | |
| Median Width(ft) | | | | | |
| Link Offset(ft) | | | | | |
| Crosswalk Width(ft) | | | | | |
| Two way Left Turn Lane | | | | | |
| Headway Factor | | | | | |
| Turning Speed (mph) | | | | | |
| Number of Detectors | | | | | |
| Detector Template | | | | | |
| Leading Detector (ft) | | | | | |
| Trailing Detector (ft) | | | | | |
| Detector 1 Position(ft) | | | | | |
| Detector 1 Size(ft) | | | | | |
| Detector 1 Type | | | | | |
| Detector 1 Channel | | | | | |
| Detector 1 Extend (s) | | | | | |
| Detector 1 Queue (s) | | | | | |
| Detector 1 Delay (s) | | | | | |
| Detector 2 Position(ft) | | | | | |
| Detector 2 Size(ft) | | | | | |
| Detector 2 Type | | | | | |
| Detector 2 Channel | | | | | |
| Detector 2 Extend (s) | | | | | |
| Turn Type | | | | | |
| Protected Phases | 1 | 3 | 6 | 7 | 8 |
| Permitted Phases | | | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | | | | 4 | 4 | 4 | 1 3 | 1 2 3 | | | 2 | 2 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | | | | 10.0 | 10.0 | 10.0 | | | | | 15.0 | 15.0 |
| Minimum Split (s) | | | | 48.5 | 48.5 | 48.5 | | | | | 25.5 | 25.5 |
| Total Split (s) | | | | 28.0 | 28.0 | 28.0 | | | | | 40.0 | 40.0 |
| Total Split (%) | | | | 18.7% | 18.7% | 18.7% | | | | | 26.7% | 26.7% |
| Maximum Green (s) | | | | 21.5 | 21.5 | 21.5 | | | | | 32.5 | 32.5 |
| Yellow Time (s) | | | | 4.5 | 4.5 | 4.5 | | | | | 5.5 | 5.5 |
| All-Red Time (s) | | | | 2.0 | 2.0 | 2.0 | | | | | 2.0 | 2.0 |
| Lost Time Adjust (s) | | | | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 |
| Total Lost Time (s) | | | | 6.5 | 6.5 | 6.5 | | | | | 7.5 | 7.5 |
| Lead/Lag | | | | Lag | Lag | Lag | | | | | Lead | Lead |
| Lead-Lag Optimize? | | | | Yes | Yes | Yes | | | | | Yes | Yes |
| Vehicle Extension (s) | | | | 4.0 | 4.0 | 4.0 | | | | | 2.0 | 2.0 |
| Recall Mode | | | | None | None | None | | | | | C-Max | C-Max |
| Walk Time (s) | | | | 4.0 | 4.0 | 4.0 | | | | | 4.0 | 4.0 |
| Flash Don't Walk (s) | | | | 38.0 | 38.0 | 38.0 | | | | | 13.0 | 13.0 |
| Pedestrian Calls (#/hr) | | | | 0 | 0 | 0 | | | | | 0 | 0 |
| Act Effct Green (s) | | | | 10.0 | 10.0 | 10.0 | 76.0 | 127.5 | | | 44.0 | 44.0 |
| Actuated g/C Ratio | | | | 0.07 | 0.07 | 0.07 | 0.51 | 0.85 | | | 0.29 | 0.29 |
| v/c Ratio | | | | 0.02 | 0.18 | 0.24 | 0.70 | 0.43 | | | 0.19 | 0.40 |
| Control Delay (s/veh) | | | | 66.0 | 1.2 | 2.2 | 31.5 | 0.3 | | | 40.0 | 4.3 |
| Queue Delay | | | | 0.0 | 0.0 | 0.0 | 5.8 | 0.4 | | | 0.0 | 0.0 |
| Total Delay (s/veh) | | | | 66.0 | 1.2 | 2.2 | 37.3 | 0.7 | | | 40.0 | 4.3 |
| LOS | | | | E | A | A | D | A | | | D | A |
| Approach Delay (s/veh) | | | | | 2.7 | | | 18.4 | | | 19.9 | |
| Approach LOS | | | | | A | | | B | | | B | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 150 | | | |
| Actuated Cycle Length: 150 | | | |
| Offset: 132 (88%), Referenced to phase 2:NBSB and 6:, Start of Yellow | | | |
| Natural Cycle: 120 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.92 | | | |
| Intersection Signal Delay (s/veh): 18.2 | | Intersection LOS: B | |
| Intersection Capacity Utilization 74.6% | | ICU Level of Service D | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 4: Ellsworth Road & SR24 Westbound Ramps





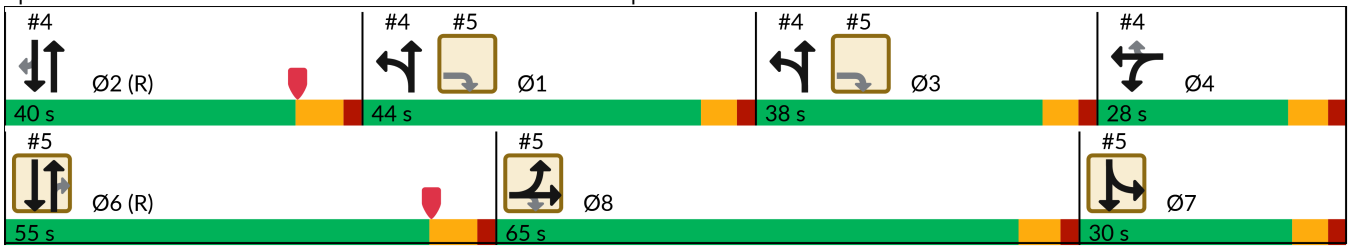
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 286 | 3 | 1111 | 0 | 0 | 0 | 0 | 2153 | 1 | 48 | 301 | 0 |
| Future Volume (vph) | 286 | 3 | 1111 | 0 | 0 | 0 | 0 | 2153 | 1 | 48 | 301 | 0 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 350 | | 350 | 0 | | 0 | 300 | | 300 | 550 | | 0 |
| Storage Lanes | 1 | | 2 | 0 | | 0 | 0 | | 1 | 0 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 0.95 | 0.95 | 0.88 | 1.00 | 1.00 | 1.00 | 1.00 | 0.86 | 1.00 | 0.97 | 0.91 | 1.00 |
| Frt | | | 0.850 | | | | | | 0.850 | | | |
| Flt Protected | 0.950 | 0.953 | | | | | | | | 0.950 | | |
| Satd. Flow (prot) | 1681 | 1686 | 2787 | 0 | 0 | 0 | 0 | 6408 | 1583 | 3433 | 5085 | 0 |
| Flt Permitted | 0.950 | 0.953 | | | | | | | | 0.950 | | |
| Satd. Flow (perm) | 1681 | 1686 | 2787 | 0 | 0 | 0 | 0 | 6408 | 1583 | 3433 | 5085 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 857 | | | | | | 116 | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 651 | | | 550 | | | 3939 | | | 688 | |
| Travel Time (s) | | 14.8 | | | 12.5 | | | 89.5 | | | 15.6 | |
| Peak Hour Factor | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Adj. Flow (vph) | 308 | 3 | 1195 | 0 | 0 | 0 | 0 | 2315 | 1 | 52 | 324 | 0 |
| Shared Lane Traffic (%) | 50% | | | | | | | | | | | |
| Lane Group Flow (vph) | 154 | 157 | 1195 | 0 | 0 | 0 | 0 | 2315 | 1 | 52 | 324 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 24 | | | 24 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | 1 | | | | | 2 | 1 | 1 | 2 | |
| Detector Template | Left | Thru | Right | | | | | Thru | Right | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | 20 | | | | | 100 | 20 | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | 0 | | | | | 0 | 0 | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | 0 | | | | | 0 | 0 | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | 20 | | | | | 6 | 20 | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | | | | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | | | | 0.0 | | | 0.0 | |
| Turn Type | Split | NA | custom | | | | | NA | Perm | Prot | NA | |
| Protected Phases | 8 | 8 | | | | | | 6 | | 7 | 6 7 | |
| Permitted Phases | | | 1 3 8 | | | | | | 6 | | | |

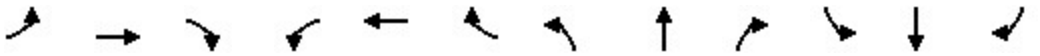
| Lane Group | Ø1 | Ø2 | Ø3 | Ø4 |
|---|---|---|---|---|
| Lane Configurations | | | | |
| Traffic Volume (vph) | | | | |
| Future Volume (vph) | | | | |
| Ideal Flow (vphpl) | | | | |
| Storage Length (ft) | | | | |
| Storage Lanes | | | | |
| Taper Length (ft) | | | | |
| Lane Util. Factor | | | | |
| Frt | | | | |
| Flt Protected | | | | |
| Satd. Flow (prot) | | | | |
| Flt Permitted | | | | |
| Satd. Flow (perm) | | | | |
| Right Turn on Red | | | | |
| Satd. Flow (RTOR) | | | | |
| Link Speed (mph) | | | | |
| Link Distance (ft) | | | | |
| Travel Time (s) | | | | |
| Peak Hour Factor | | | | |
| Adj. Flow (vph) | | | | |
| Shared Lane Traffic (%) | | | | |
| Lane Group Flow (vph) | | | | |
| Enter Blocked Intersection | | | | |
| Lane Alignment | | | | |
| Median Width(ft) | | | | |
| Link Offset(ft) | | | | |
| Crosswalk Width(ft) | | | | |
| Two way Left Turn Lane | | | | |
| Headway Factor | | | | |
| Turning Speed (mph) | | | | |
| Number of Detectors | | | | |
| Detector Template | | | | |
| Leading Detector (ft) | | | | |
| Trailing Detector (ft) | | | | |
| Detector 1 Position(ft) | | | | |
| Detector 1 Size(ft) | | | | |
| Detector 1 Type | | | | |
| Detector 1 Channel | | | | |
| Detector 1 Extend (s) | | | | |
| Detector 1 Queue (s) | | | | |
| Detector 1 Delay (s) | | | | |
| Detector 2 Position(ft) | | | | |
| Detector 2 Size(ft) | | | | |
| Detector 2 Type | | | | |
| Detector 2 Channel | | | | |
| Detector 2 Extend (s) | | | | |
| Turn Type | | | | |
| Protected Phases | 1 | 2 | 3 | 4 |
| Permitted Phases | | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | 8 | 8 | 1 3 8 | | | | | 6 | 6 | 7 | 6 7 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | | | | | 15.0 | 15.0 | 5.0 | | |
| Minimum Split (s) | 46.5 | 46.5 | | | | | | 26.5 | 26.5 | 11.0 | | |
| Total Split (s) | 65.0 | 65.0 | | | | | | 55.0 | 55.0 | 30.0 | | |
| Total Split (%) | 43.3% | 43.3% | | | | | | 36.7% | 36.7% | 20.0% | | |
| Maximum Green (s) | 58.5 | 58.5 | | | | | | 47.5 | 47.5 | 24.0 | | |
| Yellow Time (s) | 4.5 | 4.5 | | | | | | 5.5 | 5.5 | 4.0 | | |
| All-Red Time (s) | 2.0 | 2.0 | | | | | | 2.0 | 2.0 | 2.0 | | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | | | | | 0.0 | 0.0 | 0.0 | | |
| Total Lost Time (s) | 6.5 | 6.5 | | | | | | 7.5 | 7.5 | 6.0 | | |
| Lead/Lag | Lead | Lead | | | | | | | | Lag | | |
| Lead-Lag Optimize? | Yes | Yes | | | | | | | | Yes | | |
| Vehicle Extension (s) | 4.0 | 4.0 | | | | | | 2.0 | 2.0 | 2.0 | | |
| Recall Mode | None | None | | | | | | C-Max | C-Max | None | | |
| Walk Time (s) | 4.0 | 4.0 | | | | | | 4.0 | 4.0 | | | |
| Flash Don't Walk (s) | 36.0 | 36.0 | | | | | | 15.0 | 15.0 | | | |
| Pedestrian Calls (#/hr) | 0 | 0 | | | | | | 0 | 0 | | | |
| Act Effct Green (s) | 39.4 | 39.4 | 76.0 | | | | | 59.0 | 59.0 | 31.6 | 96.6 | |
| Actuated g/C Ratio | 0.26 | 0.26 | 0.51 | | | | | 0.39 | 0.39 | 0.21 | 0.64 | |
| v/c Ratio | 0.35 | 0.35 | 0.65 | | | | | 0.92 | 0.00 | 0.07 | 0.10 | |
| Control Delay (s/veh) | 44.3 | 44.5 | 8.4 | | | | | 50.2 | 0.0 | 95.5 | 1.2 | |
| Queue Delay | 0.1 | 0.1 | 0.0 | | | | | 0.6 | 0.0 | 0.0 | 0.0 | |
| Total Delay (s/veh) | 44.4 | 44.6 | 8.4 | | | | | 50.7 | 0.0 | 95.5 | 1.2 | |
| LOS | D | D | A | | | | | D | A | F | A | |
| Approach Delay (s/veh) | | 15.8 | | | | | | 50.7 | | | 14.2 | |
| Approach LOS | | B | | | | | | D | | | B | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 150 | | | |
| Actuated Cycle Length: 150 | | | |
| Offset: 132 (88%), Referenced to phase 2:NBSB and 6:, Start of Yellow | | | |
| Natural Cycle: 120 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.92 | | | |
| Intersection Signal Delay (s/veh): 34.9 | | Intersection LOS: C | |
| Intersection Capacity Utilization 74.6% | | ICU Level of Service D | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 5: Ellsworth Road & SR24 Eastbound Ramps





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 0 | 0 | 0 | 94 | 0 | 7 | 0 | 2094 | 38 | 25 | 1402 | 0 |
| Future Volume (veh/h) | 0 | 0 | 0 | 94 | 0 | 7 | 0 | 2094 | 38 | 25 | 1402 | 0 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 0 | 0 | 0 | 99 | 0 | 7 | 0 | 2204 | 40 | 26 | 1476 | 0 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.95 | 0.92 | 0.95 | 0.92 | 0.95 | 0.95 | 0.95 | 0.95 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 3 | 304 | 258 | 155 | 466 | 395 | 1 | 2020 | 901 | 83 | 3239 | 0 |
| Arrive On Green | 0.00 | 0.00 | 0.00 | 0.04 | 0.00 | 0.25 | 0.00 | 1.00 | 1.00 | 0.02 | 0.63 | 0.00 |
| Sat Flow, veh/h | 3456 | 1870 | 1585 | 3456 | 1870 | 1585 | 1781 | 3554 | 1585 | 3456 | 5274 | 0 |
| Grp Volume(v), veh/h | 0 | 0 | 0 | 99 | 0 | 7 | 0 | 2204 | 40 | 26 | 1476 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1870 | 1585 | 1728 | 1870 | 1585 | 1781 | 1777 | 1585 | 1728 | 1702 | 0 |
| Q Serve(g_s), s | 0.0 | 0.0 | 0.0 | 3.4 | 0.0 | 0.4 | 0.0 | 68.2 | 0.0 | 0.9 | 17.8 | 0.0 |
| Cycle Q Clear(g_c), s | 0.0 | 0.0 | 0.0 | 3.4 | 0.0 | 0.4 | 0.0 | 68.2 | 0.0 | 0.9 | 17.8 | 0.0 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.00 |
| Lane Grp Cap(c), veh/h | 3 | 304 | 258 | 155 | 466 | 395 | 1 | 2020 | 901 | 83 | 3239 | 0 |
| V/C Ratio(X) | 0.00 | 0.00 | 0.00 | 0.64 | 0.00 | 0.02 | 0.00 | 1.09 | 0.04 | 0.31 | 0.46 | 0.00 |
| Avail Cap(c_a), veh/h | 202 | 304 | 258 | 432 | 466 | 395 | 119 | 2020 | 901 | 202 | 3239 | 0 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 | 0.00 | 0.09 | 0.09 | 0.83 | 0.83 | 0.00 |
| Uniform Delay (d), s/veh | 0.0 | 0.0 | 0.0 | 56.4 | 0.0 | 34.0 | 0.0 | 0.0 | 0.0 | 57.6 | 11.3 | 0.0 |
| Incr Delay (d2), s/veh | 0.0 | 0.0 | 0.0 | 4.3 | 0.0 | 0.0 | 0.0 | 41.9 | 0.0 | 1.7 | 0.4 | 0.0 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 0.0 | 0.0 | 0.0 | 2.8 | 0.0 | 0.3 | 0.0 | 14.5 | 0.0 | 0.7 | 10.4 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 0.0 | 0.0 | 0.0 | 60.7 | 0.0 | 34.0 | 0.0 | 41.9 | 0.0 | 59.3 | 11.7 | 0.0 |
| LnGrp LOS | | | | E | | C | | F | A | E | B | |
| Approach Vol, veh/h | | 0 | | | 106 | | | 2244 | | | 1502 | |
| Approach Delay, s/veh | | 0.0 | | | 58.9 | | | 41.1 | | | 12.5 | |
| Approach LOS | | | | | E | | | D | | | B | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 10.4 | 26.0 | 0.0 | 83.6 | 0.0 | 36.4 | 7.9 | 75.7 |
| Change Period (Y+Rc), s | 5.0 | 6.5 | 4.0 | 7.5 | 5.0 | 6.5 | 5.0 | 7.5 |
| Max Green Setting (Gmax), s | 15.0 | 19.5 | 8.0 | 54.5 | 7.0 | 27.5 | 7.0 | 54.5 |
| Max Q Clear Time (g_c+I1), s | 5.4 | 0.0 | 0.0 | 19.8 | 0.0 | 2.4 | 2.9 | 70.2 |
| Green Ext Time (p_c), s | 0.2 | 0.0 | 0.0 | 14.6 | 0.0 | 0.0 | 0.0 | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 30.5 |
| HCM 7th LOS | C |

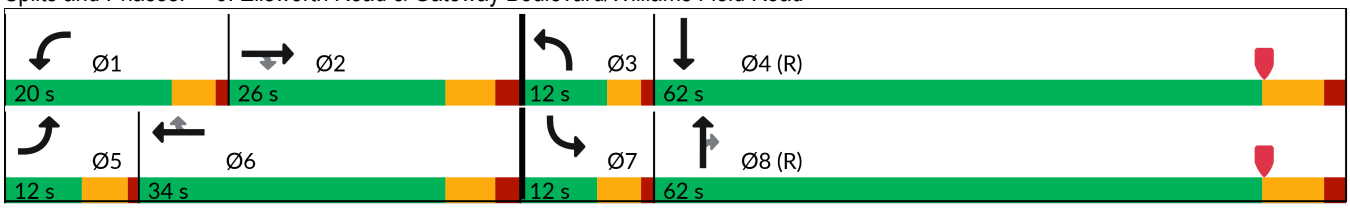
**Notes**

User approved pedestrian interval to be less than phase max green.

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | WBL | EBT | NBL | SBT | EBL | WBT | SBL | NBT |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | None | Max | None | C-Max | None | None | None | C-Max |
| Maximum Split (s) | 20 | 26 | 12 | 62 | 12 | 34 | 12 | 62 |
| Maximum Split (%) | 16.7% | 21.7% | 10.0% | 51.7% | 10.0% | 28.3% | 10.0% | 51.7% |
| Minimum Split (s) | 9 | 36.5 | 9.5 | 35.5 | 9 | 37.5 | 11 | 37.5 |
| Yellow Time (s) | 4 | 4.5 | 3 | 5.5 | 4 | 4.5 | 4 | 5.5 |
| All-Red Time (s) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| Minimum Initial (s) | 4 | 15 | 5 | 15 | 4 | 15 | 5 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 4 | | 7 | | 4 | | 7 |
| Flash Don't Walk (s) | | 26 | | 21 | | 27 | | 23 |
| Dual Entry | Yes | Yes | No | Yes | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 32.5 | 52.5 | 78.5 | 90.5 | 32.5 | 44.5 | 78.5 | 90.5 |
| End Time (s) | 52.5 | 78.5 | 90.5 | 32.5 | 44.5 | 78.5 | 90.5 | 32.5 |
| Yield/Force Off (s) | 47.5 | 72 | 86.5 | 25 | 39.5 | 72 | 85.5 | 25 |
| Yield/Force Off 170(s) | 47.5 | 46 | 86.5 | 4 | 39.5 | 45 | 85.5 | 2 |
| Local Start Time (s) | 7.5 | 27.5 | 53.5 | 65.5 | 7.5 | 19.5 | 53.5 | 65.5 |
| Local Yield (s) | 22.5 | 47 | 61.5 | 0 | 14.5 | 47 | 60.5 | 0 |
| Local Yield 170(s) | 22.5 | 21 | 61.5 | 99 | 14.5 | 20 | 60.5 | 97 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 145 |
| Offset: 25 (21%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow | |

Splits and Phases: 6: Ellsworth Road & Gateway Boulevard/Williams Field Road



| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 0 | 1 | 2172 | 16 | 10 | 1476 |
| Future Volume (veh/h) | 0 | 1 | 2172 | 16 | 10 | 1476 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 0 | 1 | 2262 | 17 | 10 | 1538 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 430 | 766 | 2105 | 939 | 41 | 2295 |
| Arrive On Green | 0.00 | 0.24 | 1.00 | 1.00 | 0.01 | 0.43 |
| Sat Flow, veh/h | 1781 | 3170 | 3647 | 1585 | 3456 | 3647 |
| Grp Volume(v), veh/h | 0 | 1 | 2262 | 17 | 10 | 1538 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1585 | 1777 | 1585 | 1728 | 1777 |
| Q Serve(g_s), s | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 41.5 |
| Cycle Q Clear(g_c), s | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 41.5 |
| Prop In Lane | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Lane Grp Cap(c), veh/h | 430 | 766 | 2105 | 939 | 41 | 2295 |
| V/C Ratio(X) | 0.00 | 0.00 | 1.07 | 0.02 | 0.25 | 0.67 |
| Avail Cap(c_a), veh/h | 430 | 766 | 2105 | 939 | 144 | 2295 |
| HCM Platoon Ratio | 1.00 | 1.00 | 2.00 | 2.00 | 0.67 | 0.67 |
| Upstream Filter(I) | 0.00 | 1.00 | 0.24 | 0.24 | 0.90 | 0.90 |
| Uniform Delay (d), s/veh | 0.0 | 34.5 | 0.0 | 0.0 | 59.0 | 23.8 |
| Incr Delay (d2), s/veh | 0.0 | 0.0 | 36.3 | 0.0 | 2.8 | 1.4 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 0.0 | 0.0 | 14.1 | 0.0 | 0.3 | 24.8 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 0.0 | 34.5 | 36.3 | 0.0 | 61.8 | 25.2 |
| LnGrp LOS | | C | F | A | E | C |
| Approach Vol, veh/h | 1 | | 2279 | | | 1548 |
| Approach Delay, s/veh | 34.5 | | 36.0 | | | 25.5 |
| Approach LOS | C | | D | | | C |

| Timer - Assigned Phs | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 35.0 | 85.0 | 6.4 | 78.6 |
| Change Period (Y+Rc), s | 6.0 | 7.5 | 5.0 | 7.5 |
| Max Green Setting (Gmax), s | 29.0 | 77.5 | 5.0 | 67.5 |
| Max Q Clear Time (g_c+I1), s | 2.0 | 43.5 | 2.3 | 2.0 |
| Green Ext Time (p_c), s | 0.0 | 13.8 | 0.0 | 36.4 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 31.8 |
| HCM 7th LOS | C |

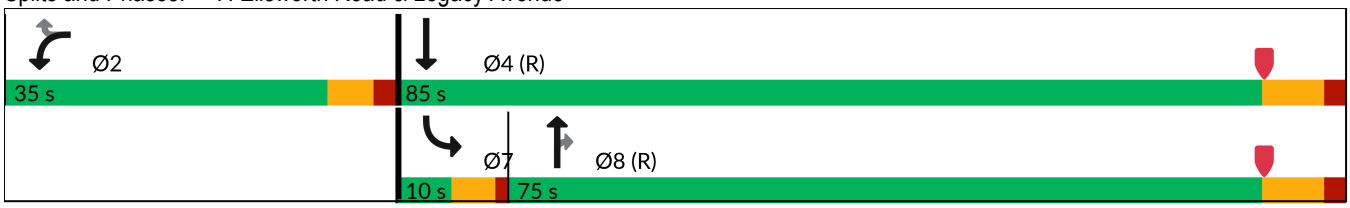
**Notes**

User approved volume balancing among the lanes for turning movement.

| Phase Number | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Movement | WBL | SBT | SBL | NBT |
| Lead/Lag | | | Lead | Lag |
| Lead-Lag Optimize | | | Yes | Yes |
| Recall Mode | Max | C-Max | None | C-Max |
| Maximum Split (s) | 35 | 85 | 10 | 75 |
| Maximum Split (%) | 29.2% | 70.8% | 8.3% | 62.5% |
| Minimum Split (s) | 35 | 39.5 | 10 | 26.5 |
| Yellow Time (s) | 4 | 5.5 | 4 | 5.5 |
| All-Red Time (s) | 2 | 2 | 1 | 2 |
| Minimum Initial (s) | 10 | 15 | 5 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | 4 | 4 | | 7 |
| Flash Don't Walk (s) | 25 | 28 | | 12 |
| Dual Entry | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 7.5 | 42.5 | 42.5 | 52.5 |
| End Time (s) | 42.5 | 7.5 | 52.5 | 7.5 |
| Yield/Force Off (s) | 36.5 | 0 | 47.5 | 0 |
| Yield/Force Off 170(s) | 11.5 | 92 | 47.5 | 108 |
| Local Start Time (s) | 7.5 | 42.5 | 42.5 | 52.5 |
| Local Yield (s) | 36.5 | 0 | 47.5 | 0 |
| Local Yield 170(s) | 11.5 | 92 | 47.5 | 108 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 140 |
| Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow | |

Splits and Phases: 7: Ellsworth Road & Legacy Avenue



| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 89 | 139 | 2071 | 51 | 43 | 1415 |
| Future Volume (veh/h) | 89 | 139 | 2071 | 51 | 43 | 1415 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 94 | 146 | 2180 | 54 | 45 | 1489 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 267 | 238 | 2245 | 55 | 186 | 2606 |
| Arrive On Green | 0.15 | 0.15 | 0.63 | 0.63 | 0.04 | 0.49 |
| Sat Flow, veh/h | 1781 | 1585 | 3638 | 87 | 1781 | 3647 |
| Grp Volume(v), veh/h | 94 | 146 | 1088 | 1146 | 45 | 1489 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1585 | 1777 | 1855 | 1781 | 1777 |
| Q Serve(g_s), s | 5.7 | 10.3 | 69.6 | 71.1 | 0.9 | 35.6 |
| Cycle Q Clear(g_c), s | 5.7 | 10.3 | 69.6 | 71.1 | 0.9 | 35.6 |
| Prop In Lane | 1.00 | 1.00 | | 0.05 | 1.00 | |
| Lane Grp Cap(c), veh/h | 267 | 238 | 1125 | 1175 | 186 | 2606 |
| V/C Ratio(X) | 0.35 | 0.61 | 0.97 | 0.98 | 0.24 | 0.57 |
| Avail Cap(c_a), veh/h | 267 | 238 | 1125 | 1175 | 342 | 2606 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 0.67 | 0.67 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 0.69 | 0.69 |
| Uniform Delay (d), s/veh | 45.8 | 47.7 | 20.8 | 21.1 | 30.6 | 17.2 |
| Incr Delay (d2), s/veh | 3.6 | 11.3 | 20.0 | 21.0 | 0.5 | 0.6 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 5.0 | 8.4 | 41.8 | 44.5 | 1.6 | 21.2 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 49.4 | 59.1 | 40.8 | 42.1 | 31.1 | 17.8 |
| LnGrp LOS | D | E | D | D | C | B |
| Approach Vol, veh/h | 240 | | 2234 | | | 1534 |
| Approach Delay, s/veh | 55.3 | | 41.5 | | | 18.2 |
| Approach LOS | E | | D | | | B |

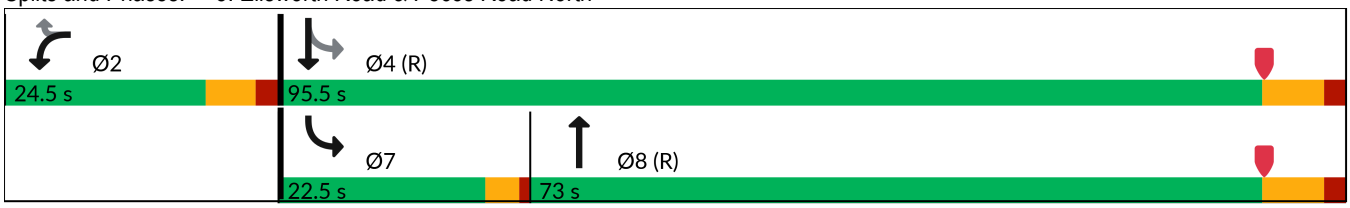
| Timer - Assigned Phs | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 24.5 | 95.5 | 12.0 | 83.5 |
| Change Period (Y+Rc), s | 6.5 | 7.5 | 4.0 | 7.5 |
| Max Green Setting (Gmax), s | 18.0 | 88.0 | 18.5 | 65.5 |
| Max Q Clear Time (g_c+I1), s | 12.3 | 37.6 | 2.9 | 73.1 |
| Green Ext Time (p_c), s | 0.4 | 17.9 | 0.1 | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 33.4 |
| HCM 7th LOS | C |

| Phase Number | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Movement | WBL | SBTL | SBL | NBT |
| Lead/Lag | | | Lead | Lag |
| Lead-Lag Optimize | | | Yes | Yes |
| Recall Mode | Max | C-Max | None | C-Max |
| Maximum Split (s) | 24.5 | 95.5 | 22.5 | 73 |
| Maximum Split (%) | 20.4% | 79.6% | 18.8% | 60.8% |
| Minimum Split (s) | 24.5 | 25.5 | 22.5 | 25.5 |
| Yellow Time (s) | 4.5 | 5.5 | 3 | 5.5 |
| All-Red Time (s) | 2 | 2 | 1 | 2 |
| Minimum Initial (s) | 5 | 15 | 8 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | 0 | 0 | 0 | 0 |
| Flash Don't Walk (s) | 0 | 0 | 0 | 0 |
| Dual Entry | Yes | Yes | Yes | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 7.5 | 32 | 32 | 54.5 |
| End Time (s) | 32 | 7.5 | 54.5 | 7.5 |
| Yield/Force Off (s) | 25.5 | 0 | 50.5 | 0 |
| Yield/Force Off 170(s) | 25.5 | 0 | 50.5 | 0 |
| Local Start Time (s) | 7.5 | 32 | 32 | 54.5 |
| Local Yield (s) | 25.5 | 0 | 50.5 | 0 |
| Local Yield 170(s) | 25.5 | 0 | 50.5 | 0 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 150 |
| Offset: 0 (0%), Referenced to phase 4:SBTL and 8:NBT, Start of Yellow | |

Splits and Phases: 8: Ellsworth Road & Pecos Road North



| Movement | EBT | EBR | WBL | WBT | NEL | NER |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 41 | 18 | 26 | 98 | 3 | 2 |
| Future Volume (veh/h) | 41 | 18 | 26 | 98 | 3 | 2 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 49 | 22 | 31 | 118 | 4 | 2 |
| Peak Hour Factor | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 1226 | 1039 | 1075 | 1451 | 28 | 25 |
| Arrive On Green | 0.66 | 0.66 | 0.11 | 1.00 | 0.02 | 0.02 |
| Sat Flow, veh/h | 1870 | 1585 | 1781 | 1870 | 1781 | 1585 |
| Grp Volume(v), veh/h | 49 | 22 | 31 | 118 | 4 | 2 |
| Grp Sat Flow(s),veh/h/ln | 1870 | 1585 | 1781 | 1870 | 1781 | 1585 |
| Q Serve(g_s), s | 0.6 | 0.3 | 0.3 | 0.0 | 0.1 | 0.1 |
| Cycle Q Clear(g_c), s | 0.6 | 0.3 | 0.3 | 0.0 | 0.1 | 0.1 |
| Prop In Lane | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Lane Grp Cap(c), veh/h | 1226 | 1039 | 1075 | 1451 | 28 | 25 |
| V/C Ratio(X) | 0.04 | 0.02 | 0.03 | 0.08 | 0.14 | 0.08 |
| Avail Cap(c_a), veh/h | 1226 | 1039 | 1216 | 1451 | 475 | 423 |
| HCM Platoon Ratio | 1.00 | 1.00 | 2.00 | 2.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 3.7 | 3.6 | 2.0 | 0.0 | 29.1 | 29.1 |
| Incr Delay (d2), s/veh | 0.1 | 0.0 | 0.0 | 0.1 | 2.3 | 1.3 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 0.2 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 3.7 | 3.7 | 2.0 | 0.1 | 31.4 | 30.4 |
| LnGrp LOS | A | A | A | A | C | C |
| Approach Vol, veh/h | 71 | | | 149 | 6 | |
| Approach Delay, s/veh | 3.7 | | | 0.5 | 31.1 | |
| Approach LOS | A | | | A | C | |

| Timer - Assigned Phs | 2 | | | 5 | 6 | 8 |
|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 53.0 | | | 7.2 | 45.8 | 7.0 |
| Change Period (Y+Rc), s | 6.5 | | | 4.0 | 6.5 | 6.0 |
| Max Green Setting (Gmax), s | 31.5 | | | 8.0 | 19.5 | 16.0 |
| Max Q Clear Time (g_c+I1), s | 2.0 | | | 2.3 | 2.6 | 2.1 |
| Green Ext Time (p_c), s | 0.5 | | | 0.0 | 0.2 | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 2.3 |
| HCM 7th LOS | A |

**Notes**

User approved pedestrian interval to be less than phase max green.

| Phase Number | 2 | 5 | 6 | 8 |
|---|---|---|---|---|
| Movement | WBTL | WBL | EBT | NEL |
| Lead/Lag | | Lead | Lag | |
| Lead-Lag Optimize | | Yes | Yes | |
| Recall Mode | C-Max | None | C-Max | None |
| Maximum Split (s) | 38 | 12 | 26 | 22 |
| Maximum Split (%) | 63.3% | 20.0% | 43.3% | 36.7% |
| Minimum Split (s) | 24.5 | 12.5 | 28.5 | 24 |
| Yellow Time (s) | 4.5 | 3 | 4.5 | 4 |
| All-Red Time (s) | 2 | 1 | 2 | 2 |
| Minimum Initial (s) | 15 | 8 | 15 | 10 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | | | 7 | |
| Flash Don't Walk (s) | | | 15 | |
| Dual Entry | Yes | No | Yes | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 28.5 | 28.5 | 40.5 | 6.5 |
| End Time (s) | 6.5 | 40.5 | 6.5 | 28.5 |
| Yield/Force Off (s) | 0 | 36.5 | 0 | 22.5 |
| Yield/Force Off 170(s) | 0 | 36.5 | 45 | 22.5 |
| Local Start Time (s) | 28.5 | 28.5 | 40.5 | 6.5 |
| Local Yield (s) | 0 | 36.5 | 0 | 22.5 |
| Local Yield 170(s) | 0 | 36.5 | 45 | 22.5 |

| Intersection Summary | |
|---|---|
| Cycle Length | 60 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 65 |
| Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBT, Start of Yellow | |

Splits and Phases: 9: Legacy Drive & Williams Field Road

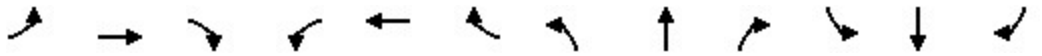
| Intersection | |
|---|---|
| Int Delay, s/veh | 0.3 |

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | ↑ | ↱ | | ↑ | | ↱ |
| Traffic Vol, veh/h | 42 | 2 | 7 | 124 | 0 | 1 |
| Future Vol, veh/h | 42 | 2 | 7 | 124 | 0 | 1 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 150 | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 77 | 77 | 77 | 77 | 77 | 77 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 55 | 3 | 9 | 161 | 0 | 1 |

| Major/Minor | Major1 | | Major2 | | Minor1 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 0 | 0 | 57 | 0 | - | 55 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | - | 4.12 | - | - | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | 2.218 | - | - | 3.318 |
| Pot Cap-1 Maneuver | - | - | 1550 | - | 0 | 1021 |
| Stage 1 | - | - | - | - | 0 | - |
| Stage 2 | - | - | - | - | 0 | - |
| Platoon blocked, % | - | - | 0 | - | | 0 |
| Mov Cap-1 Maneuver | - | - | 1550 | - | - | 1021 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | WB | NB |
|---|---|---|---|
| HCM Control Delay, s/v | 0 | 0.39 | 8.53 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1021 | - | - | 1550 | - |
| HCM Lane V/C Ratio | 0.001 | - | - | 0.006 | - |
| HCM Control Delay (s/veh) | 8.5 | - | - | 7.3 | - |
| HCM Lane LOS | A | - | - | A | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0 | - |



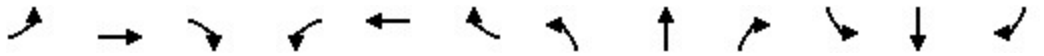
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 0 | 39 | 4 | 18 | 96 | 0 | 0 | 0 | 0 | 147 | 1189 | 38 |
| Future Volume (vph) | 0 | 39 | 4 | 18 | 96 | 0 | 0 | 0 | 0 | 147 | 1189 | 38 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 360 | | 285 | 290 | | 0 | 0 | | 0 | 400 | | 400 |
| Storage Lanes | 2 | | 1 | 0 | | 0 | 0 | | 0 | 2 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 1.00 | 0.86 | 1.00 | 0.97 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 0.91 | 0.91 | 0.95 |
| Frt | | | 0.850 | | | | | | | | 0.995 | |
| Flt Protected | | | | 0.950 | | | | | | 0.950 | 0.999 | |
| Satd. Flow (prot) | 0 | 6408 | 1583 | 3433 | 3539 | 0 | 0 | 0 | 0 | 1610 | 3370 | 0 |
| Flt Permitted | | | | 0.950 | | | | | | 0.950 | 0.999 | |
| Satd. Flow (perm) | 0 | 6408 | 1583 | 3433 | 3539 | 0 | 0 | 0 | 0 | 1610 | 3370 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 164 | | | | | | | | 4 | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 971 | | | 481 | | | 999 | | | 970 | |
| Travel Time (s) | | 22.1 | | | 10.9 | | | 22.7 | | | 22.0 | |
| 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 |
| Adj. Flow (vph) | 0 | 42 | 4 | 20 | 104 | 0 | 0 | 0 | 0 | 160 | 1292 | 41 |
| Shared Lane Traffic (%) | | | | | | | | | | 10% | | |
| Lane Group Flow (vph) | 0 | 42 | 4 | 20 | 104 | 0 | 0 | 0 | 0 | 144 | 1349 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 24 | | | 24 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | | 2 | 1 | 1 | 2 | | | | | 1 | 2 | |
| Detector Template | | Thru | Right | Left | Thru | | | | | Left | Thru | |
| Leading Detector (ft) | | 100 | 20 | 20 | 100 | | | | | 20 | 100 | |
| Trailing Detector (ft) | | 0 | 0 | 0 | 0 | | | | | 0 | 0 | |
| Detector 1 Position(ft) | | 0 | 0 | 0 | 0 | | | | | 0 | 0 | |
| Detector 1 Size(ft) | | 6 | 20 | 20 | 6 | | | | | 20 | 6 | |
| Detector 1 Type | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | | | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | | | | 0.0 | |
| Turn Type | | NA | Perm | Prot | NA | | | | | Perm | NA | |
| Protected Phases | | 2 | | 3 | 2 3 | | | | | | 4 | |
| Permitted Phases | | | 2 | | | | | | | 4 | | |

| Lane Group | Ø6 | Ø7 | Ø8 |
|---|---|---|---|
| Lane Configurations | | | |
| Traffic Volume (vph) | | | |
| Future Volume (vph) | | | |
| Ideal Flow (vphpl) | | | |
| Storage Length (ft) | | | |
| Storage Lanes | | | |
| Taper Length (ft) | | | |
| Lane Util. Factor | | | |
| Frt | | | |
| Flt Protected | | | |
| Satd. Flow (prot) | | | |
| Flt Permitted | | | |
| Satd. Flow (perm) | | | |
| Right Turn on Red | | | |
| Satd. Flow (RTOR) | | | |
| Link Speed (mph) | | | |
| Link Distance (ft) | | | |
| Travel Time (s) | | | |
| Peak Hour Factor | | | |
| Adj. Flow (vph) | | | |
| Shared Lane Traffic (%) | | | |
| Lane Group Flow (vph) | | | |
| Enter Blocked Intersection | | | |
| Lane Alignment | | | |
| Median Width(ft) | | | |
| Link Offset(ft) | | | |
| Crosswalk Width(ft) | | | |
| Two way Left Turn Lane | | | |
| Headway Factor | | | |
| Turning Speed (mph) | | | |
| Number of Detectors | | | |
| Detector Template | | | |
| Leading Detector (ft) | | | |
| Trailing Detector (ft) | | | |
| Detector 1 Position(ft) | | | |
| Detector 1 Size(ft) | | | |
| Detector 1 Type | | | |
| Detector 1 Channel | | | |
| Detector 1 Extend (s) | | | |
| Detector 1 Queue (s) | | | |
| Detector 1 Delay (s) | | | |
| Detector 2 Position(ft) | | | |
| Detector 2 Size(ft) | | | |
| Detector 2 Type | | | |
| Detector 2 Channel | | | |
| Detector 2 Extend (s) | | | |
| Turn Type | | | |
| Protected Phases | 6 | 7 | 8 |
| Permitted Phases | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | | 2 | 2 | 3 | 2 3 | | | | | 4 | 4 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | | 15.0 | 15.0 | 5.0 | | | | | | 10.0 | 10.0 | |
| Minimum Split (s) | | 25.5 | 25.5 | 11.0 | | | | | | 46.5 | 46.5 | |
| Total Split (s) | | 30.0 | 30.0 | 15.0 | | | | | | 75.0 | 75.0 | |
| Total Split (%) | | 25.0% | 25.0% | 12.5% | | | | | | 62.5% | 62.5% | |
| Maximum Green (s) | | 23.5 | 23.5 | 9.0 | | | | | | 67.5 | 67.5 | |
| Yellow Time (s) | | 4.5 | 4.5 | 4.0 | | | | | | 5.5 | 5.5 | |
| All-Red Time (s) | | 2.0 | 2.0 | 2.0 | | | | | | 2.0 | 2.0 | |
| Lost Time Adjust (s) | | 0.0 | 0.0 | 0.0 | | | | | | 0.0 | 0.0 | |
| Total Lost Time (s) | | 6.5 | 6.5 | 6.0 | | | | | | 7.5 | 7.5 | |
| Lead/Lag | | | | Lead | | | | | | Lag | Lag | |
| Lead-Lag Optimize? | | | | Yes | | | | | | Yes | Yes | |
| Vehicle Extension (s) | | 3.0 | 3.0 | 3.0 | | | | | | 3.0 | 3.0 | |
| Recall Mode | | C-Max | C-Max | None | | | | | | None | None | |
| Walk Time (s) | | 4.0 | 4.0 | | | | | | | 4.0 | 4.0 | |
| Flash Don't Walk (s) | | 15.0 | 15.0 | | | | | | | 35.0 | 35.0 | |
| Pedestrian Calls (#/hr) | | 0 | 0 | | | | | | | 0 | 0 | |
| Act Effct Green (s) | | 23.8 | 23.8 | 6.2 | 36.0 | | | | | 70.0 | 70.0 | |
| Actuated g/C Ratio | | 0.20 | 0.20 | 0.05 | 0.30 | | | | | 0.58 | 0.58 | |
| v/c Ratio | | 0.03 | 0.01 | 0.11 | 0.10 | | | | | 0.15 | 0.69 | |
| Control Delay (s/veh) | | 37.3 | 0.3 | 22.1 | 3.8 | | | | | 12.0 | 19.6 | |
| Queue Delay | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | |
| Total Delay (s/veh) | | 37.3 | 0.3 | 22.1 | 3.8 | | | | | 12.0 | 19.6 | |
| LOS | | D | A | C | A | | | | | B | B | |
| Approach Delay (s/veh) | | 34.1 | | | 6.8 | | | | | | 18.9 | |
| Approach LOS | | C | | | A | | | | | | B | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 120 | | | |
| Actuated Cycle Length: 120 | | | |
| Offset: 60 (50%), Referenced to phase 2:EBWB and 6:, Start of Yellow | | | |
| Natural Cycle: 145 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 1.21 | | | |
| Intersection Signal Delay (s/veh): 18.4 | | Intersection LOS: B | |
| Intersection Capacity Utilization 110.8% | | ICU Level of Service H | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 11: SR24 Eastbound Ramps & Williams Field Road



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 7 | 182 | 0 | 0 | 109 | 515 | 4 | 2090 | 11 | 0 | 0 | 0 |
| Future Volume (vph) | 7 | 182 | 0 | 0 | 109 | 515 | 4 | 2090 | 11 | 0 | 0 | 0 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 290 | | 0 | 365 | | 300 | 375 | | 375 | 0 | | 0 |
| Storage Lanes | 0 | | 0 | 2 | | 1 | 1 | | 1 | 0 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 0.97 | 0.95 | 1.00 | 1.00 | 0.86 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 |
| Frt | | | | | | 0.850 | | 0.999 | | | | |
| Flt Protected | 0.950 | | | | | | 0.950 | | | | | |
| Satd. Flow (prot) | 3433 | 3539 | 0 | 0 | 6408 | 1583 | 1770 | 3536 | 0 | 0 | 0 | 0 |
| Flt Permitted | 0.950 | | | | | | 0.950 | | | | | |
| Satd. Flow (perm) | 3433 | 3539 | 0 | 0 | 6408 | 1583 | 1770 | 3536 | 0 | 0 | 0 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | | | | 164 | | 1 | | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 481 | | | 1418 | | | 897 | | | 1176 | |
| Travel Time (s) | | 10.9 | | | 32.2 | | | 20.4 | | | 26.7 | |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Adj. Flow (vph) | 7 | 190 | 0 | 0 | 114 | 536 | 4 | 2177 | 11 | 0 | 0 | 0 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 7 | 190 | 0 | 0 | 114 | 536 | 4 | 2188 | 0 | 0 | 0 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 24 | | | 24 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | | 2 | 1 | 1 | 2 | | | | |
| Detector Template | Left | Thru | | | Thru | Right | Left | Thru | | | | |
| Leading Detector (ft) | 20 | 100 | | | 100 | 20 | 20 | 100 | | | | |
| Trailing Detector (ft) | 0 | 0 | | | 0 | 0 | 0 | 0 | | | | |
| Detector 1 Position(ft) | 0 | 0 | | | 0 | 0 | 0 | 0 | | | | |
| Detector 1 Size(ft) | 20 | 6 | | | 6 | 20 | 20 | 6 | | | | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | | | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | | |
| Turn Type | Prot | NA | | | NA | Perm | Perm | NA | | | | |
| Protected Phases | 7 | 6 7 | | | 6 | | | 8 | | | | |
| Permitted Phases | | | | | | 6 | 8 | | | | | |

| Lane Group | Ø2 | Ø3 | Ø4 |
|---|---|---|---|
| Lane Configurations | | | |
| Traffic Volume (vph) | | | |
| Future Volume (vph) | | | |
| Ideal Flow (vphpl) | | | |
| Storage Length (ft) | | | |
| Storage Lanes | | | |
| Taper Length (ft) | | | |
| Lane Util. Factor | | | |
| Frt | | | |
| Flt Protected | | | |
| Satd. Flow (prot) | | | |
| Flt Permitted | | | |
| Satd. Flow (perm) | | | |
| Right Turn on Red | | | |
| Satd. Flow (RTOR) | | | |
| Link Speed (mph) | | | |
| Link Distance (ft) | | | |
| Travel Time (s) | | | |
| Peak Hour Factor | | | |
| Adj. Flow (vph) | | | |
| Shared Lane Traffic (%) | | | |
| Lane Group Flow (vph) | | | |
| Enter Blocked Intersection | | | |
| Lane Alignment | | | |
| Median Width(ft) | | | |
| Link Offset(ft) | | | |
| Crosswalk Width(ft) | | | |
| Two way Left Turn Lane | | | |
| Headway Factor | | | |
| Turning Speed (mph) | | | |
| Number of Detectors | | | |
| Detector Template | | | |
| Leading Detector (ft) | | | |
| Trailing Detector (ft) | | | |
| Detector 1 Position(ft) | | | |
| Detector 1 Size(ft) | | | |
| Detector 1 Type | | | |
| Detector 1 Channel | | | |
| Detector 1 Extend (s) | | | |
| Detector 1 Queue (s) | | | |
| Detector 1 Delay (s) | | | |
| Detector 2 Position(ft) | | | |
| Detector 2 Size(ft) | | | |
| Detector 2 Type | | | |
| Detector 2 Channel | | | |
| Detector 2 Extend (s) | | | |
| Turn Type | | | |
| Protected Phases | 2 | 3 | 4 |
| Permitted Phases | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | 7 | 6 7 | | | 6 | 6 | 8 | 8 | | | | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | | | | 15.0 | 15.0 | 10.0 | 10.0 | | | | |
| Minimum Split (s) | 11.0 | | | | 26.5 | 26.5 | 45.5 | 45.5 | | | | |
| Total Split (s) | 15.0 | | | | 30.0 | 30.0 | 75.0 | 75.0 | | | | |
| Total Split (%) | 12.5% | | | | 25.0% | 25.0% | 62.5% | 62.5% | | | | |
| Maximum Green (s) | 9.0 | | | | 23.5 | 23.5 | 67.5 | 67.5 | | | | |
| Yellow Time (s) | 4.0 | | | | 4.5 | 4.5 | 5.5 | 5.5 | | | | |
| All-Red Time (s) | 2.0 | | | | 2.0 | 2.0 | 2.0 | 2.0 | | | | |
| Lost Time Adjust (s) | 0.0 | | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Total Lost Time (s) | 6.0 | | | | 6.5 | 6.5 | 7.5 | 7.5 | | | | |
| Lead/Lag | Lag | | | | | | Lead | Lead | | | | |
| Lead-Lag Optimize? | Yes | | | | | | Yes | Yes | | | | |
| Vehicle Extension (s) | 3.0 | | | | 3.0 | 3.0 | 3.0 | 3.0 | | | | |
| Recall Mode | None | | | | C-Max | C-Max | None | None | | | | |
| Walk Time (s) | | | | | 4.0 | 4.0 | 4.0 | 4.0 | | | | |
| Flash Don't Walk (s) | | | | | 16.0 | 16.0 | 34.0 | 34.0 | | | | |
| Pedestrian Calls (#/hr) | | | | | 0 | 0 | 0 | 0 | | | | |
| Act Effct Green (s) | 8.7 | 38.5 | | | 23.8 | 23.8 | 67.5 | 67.5 | | | | |
| Actuated g/C Ratio | 0.07 | 0.32 | | | 0.20 | 0.20 | 0.56 | 0.56 | | | | |
| v/c Ratio | 0.03 | 0.17 | | | 0.09 | 1.21 | 0.00 | 1.10 | | | | |
| Control Delay (s/veh) | 51.3 | 27.9 | | | 39.3 | 142.0 | 11.5 | 80.1 | | | | |
| Queue Delay | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Total Delay (s/veh) | 51.3 | 27.9 | | | 39.3 | 142.0 | 11.5 | 80.1 | | | | |
| LOS | D | C | | | D | F | B | F | | | | |
| Approach Delay (s/veh) | | 28.8 | | | 124.0 | | | 80.0 | | | | |
| Approach LOS | | C | | | F | | | E | | | | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 120 | | | |
| Actuated Cycle Length: 120 | | | |
| Offset: 60 (50%), Referenced to phase 2:EBWB and 6:, Start of Yellow | | | |
| Natural Cycle: 145 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 1.21 | | | |
| Intersection Signal Delay (s/veh): 86.1 | | Intersection LOS: F | |
| Intersection Capacity Utilization 110.8% | | ICU Level of Service H | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 12: SR24 Westbound Ramps & Williams Field Road

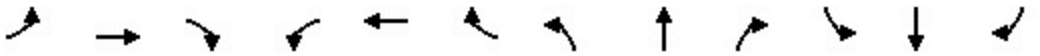
| Intersection | |
|---|---|
| Int Delay, s/veh | 5.8 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 82 | 107 | 311 | 57 | 49 | 310 |
| Future Vol, veh/h | 82 | 107 | 311 | 57 | 49 | 310 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | 0 | 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 | 89 | 116 | 338 | 62 | 53 | 337 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 400 | 0 | - | 0 | 664 | 200 |
| Stage 1 | - | - | - | - | 369 | - |
| Stage 2 | - | - | - | - | 295 | - |
| Critical Hdwy | 4.13 | - | - | - | 6.63 | 6.93 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.83 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.43 | - |
| Follow-up Hdwy | 2.219 | - | - | - | 3.519 | 3.319 |
| Pot Cap-1 Maneuver | 1157 | - | - | - | 467 | 808 |
| Stage 1 | - | - | - | - | 670 | - |
| Stage 2 | - | - | - | - | 838 | - |
| Platoon blocked, % | | - | - | - | 0 | |
| Mov Cap-1 Maneuver | 1157 | - | - | - | 431 | 808 |
| Mov Cap-2 Maneuver | - | - | - | - | 431 | - |
| Stage 1 | - | - | - | - | 619 | - |
| Stage 2 | - | - | - | - | 838 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 3.63 | 0 | 12.86 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 | SBLn2 |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1157 | - | - | - | 431 | 808 |
| HCM Lane V/C Ratio | 0.077 | - | - | - | 0.124 | 0.417 |
| HCM Control Delay (s/veh) | 8.4 | - | - | - | 14.5 | 12.6 |
| HCM Lane LOS | A | - | - | - | B | B |
| HCM 95th %tile Q(veh) | 0.2 | - | - | - | 0.4 | 2.1 |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 63 | 52 | 33 | 7 | 116 | 45 | 36 | 528 | 8 | 24 | 299 | 201 |
| Future Volume (veh/h) | 63 | 52 | 33 | 7 | 116 | 45 | 36 | 528 | 8 | 24 | 299 | 201 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 69 | 57 | 36 | 8 | 127 | 49 | 40 | 580 | 9 | 26 | 329 | 221 |
| Peak Hour Factor | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 782 | 2030 | 905 | 774 | 1872 | 835 | 239 | 715 | 11 | 166 | 672 | 300 |
| Arrive On Green | 0.06 | 0.57 | 0.57 | 0.02 | 0.53 | 0.53 | 0.05 | 0.20 | 0.20 | 0.04 | 0.19 | 0.19 |
| Sat Flow, veh/h | 1781 | 3554 | 1585 | 1781 | 3554 | 1585 | 1781 | 3582 | 56 | 1781 | 3554 | 1585 |
| Grp Volume(v), veh/h | 69 | 57 | 36 | 8 | 127 | 49 | 40 | 288 | 301 | 26 | 329 | 221 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1777 | 1585 | 1781 | 1777 | 1585 | 1781 | 1777 | 1860 | 1781 | 1777 | 1585 |
| Q Serve(g_s), s | 1.9 | 0.8 | 1.2 | 0.2 | 2.1 | 1.8 | 2.1 | 18.6 | 18.6 | 1.4 | 9.9 | 15.8 |
| Cycle Q Clear(g_c), s | 1.9 | 0.8 | 1.2 | 0.2 | 2.1 | 1.8 | 2.1 | 18.6 | 18.6 | 1.4 | 9.9 | 15.8 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.03 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 782 | 2030 | 905 | 774 | 1872 | 835 | 239 | 355 | 371 | 166 | 672 | 300 |
| V/C Ratio(X) | 0.09 | 0.03 | 0.04 | 0.01 | 0.07 | 0.06 | 0.17 | 0.81 | 0.81 | 0.16 | 0.49 | 0.74 |
| Avail Cap(c_a), veh/h | 883 | 2030 | 905 | 865 | 1872 | 835 | 300 | 570 | 597 | 246 | 1140 | 509 |
| 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 | 9.9 | 11.2 | 11.3 | 12.6 | 13.9 | 13.9 | 36.0 | 45.9 | 45.9 | 37.6 | 43.5 | 45.8 |
| Incr Delay (d2), s/veh | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.3 | 4.6 | 4.4 | 0.4 | 0.6 | 3.5 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 1.3 | 0.6 | 0.8 | 0.2 | 1.6 | 1.2 | 1.7 | 13.4 | 13.9 | 1.1 | 7.9 | 10.7 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 9.9 | 11.2 | 11.4 | 12.6 | 14.0 | 14.0 | 36.4 | 50.5 | 50.3 | 38.0 | 44.0 | 49.4 |
| LnGrp LOS | A | B | B | B | B | B | D | D | D | D | D | D |
| Approach Vol, veh/h | | 162 | | | 184 | | | 629 | | | 576 | |
| Approach Delay, s/veh | | 10.7 | | | 13.9 | | | 49.5 | | | 45.8 | |
| Approach LOS | | B | | | B | | | D | | | D | |

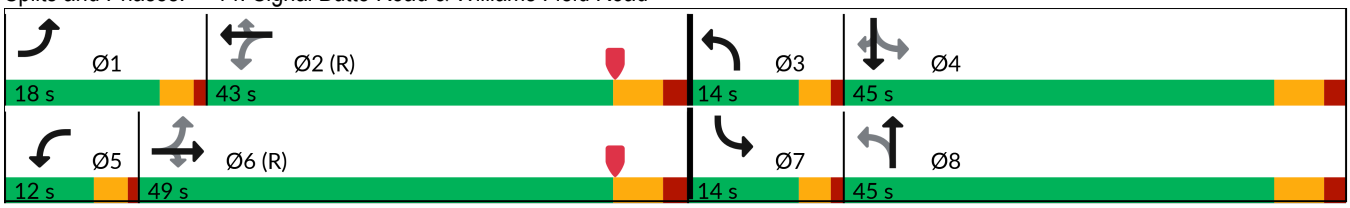
| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 11.2 | 69.7 | 9.9 | 29.2 | 5.9 | 75.0 | 8.6 | 30.4 |
| Change Period (Y+Rc), s | 4.0 | 6.5 | 4.0 | 6.5 | 4.0 | 6.5 | 4.0 | 6.5 |
| Max Green Setting (Gmax), s | 14.0 | 36.5 | 10.0 | 38.5 | 8.0 | 42.5 | 10.0 | 38.5 |
| Max Q Clear Time (g_c+I1), s | 3.9 | 4.1 | 4.1 | 17.8 | 2.2 | 3.2 | 3.4 | 20.6 |
| Green Ext Time (p_c), s | 0.1 | 1.0 | 0.0 | 2.8 | 0.0 | 0.5 | 0.0 | 3.4 |

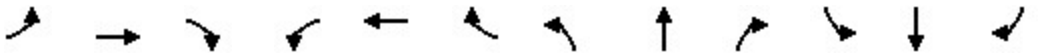
| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 39.9 |
| HCM 7th LOS | D |

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | EBL | WBTL | NBL | SBTL | WBL | EBTL | SBL | NBTL |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | None | C-Max | None | None | None | C-Max | None | None |
| Maximum Split (s) | 18 | 43 | 14 | 45 | 12 | 49 | 14 | 45 |
| Maximum Split (%) | 15.0% | 35.8% | 11.7% | 37.5% | 10.0% | 40.8% | 11.7% | 37.5% |
| Minimum Split (s) | 12 | 38.5 | 12 | 35.5 | 12 | 40.5 | 12 | 36.5 |
| Yellow Time (s) | 3 | 4.5 | 3 | 4.5 | 3 | 4.5 | 3 | 4.5 |
| All-Red Time (s) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| Minimum Initial (s) | 8 | 15 | 8 | 15 | 8 | 15 | 8 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 7 | | 7 | | 7 | | 7 |
| Flash Don't Walk (s) | | 25 | | 22 | | 27 | | 23 |
| Dual Entry | No | Yes | No | Yes | No | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 65.5 | 83.5 | 6.5 | 20.5 | 65.5 | 77.5 | 6.5 | 20.5 |
| End Time (s) | 83.5 | 6.5 | 20.5 | 65.5 | 77.5 | 6.5 | 20.5 | 65.5 |
| Yield/Force Off (s) | 79.5 | 0 | 16.5 | 59 | 73.5 | 0 | 16.5 | 59 |
| Yield/Force Off 170(s) | 79.5 | 95 | 16.5 | 37 | 73.5 | 93 | 16.5 | 36 |
| Local Start Time (s) | 65.5 | 83.5 | 6.5 | 20.5 | 65.5 | 77.5 | 6.5 | 20.5 |
| Local Yield (s) | 79.5 | 0 | 16.5 | 59 | 73.5 | 0 | 16.5 | 59 |
| Local Yield 170(s) | 79.5 | 95 | 16.5 | 37 | 73.5 | 93 | 16.5 | 36 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 105 |
| Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow | |

Splits and Phases: 14: Signal Butte Road & Williams Field Road





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 278 | 32 | 435 | 1 | 11 | 0 | 243 | 503 | 2 | 3 | 726 | 173 |
| Future Volume (veh/h) | 278 | 32 | 435 | 1 | 11 | 0 | 243 | 503 | 2 | 3 | 726 | 173 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 305 | 35 | 478 | 1 | 12 | 0 | 267 | 553 | 2 | 3 | 798 | 190 |
| Peak Hour Factor | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 650 | 45 | 612 | 198 | 767 | 0 | 335 | 1362 | 608 | 315 | 930 | 415 |
| Arrive On Green | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.00 | 0.13 | 0.38 | 0.38 | 0.01 | 0.26 | 0.26 |
| Sat Flow, veh/h | 1402 | 109 | 1492 | 887 | 1870 | 0 | 1781 | 3554 | 1585 | 1781 | 3554 | 1585 |
| Grp Volume(v), veh/h | 305 | 0 | 513 | 1 | 12 | 0 | 267 | 553 | 2 | 3 | 798 | 190 |
| Grp Sat Flow(s),veh/h/ln | 1402 | 0 | 1602 | 887 | 1870 | 0 | 1781 | 1777 | 1585 | 1781 | 1777 | 1585 |
| Q Serve(g_s), s | 14.8 | 0.0 | 25.0 | 0.1 | 0.3 | 0.0 | 9.3 | 10.2 | 0.1 | 0.1 | 19.2 | 9.1 |
| Cycle Q Clear(g_c), s | 15.2 | 0.0 | 25.0 | 25.1 | 0.3 | 0.0 | 9.3 | 10.2 | 0.1 | 0.1 | 19.2 | 9.1 |
| Prop In Lane | 1.00 | | 0.93 | 1.00 | | 0.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 650 | 0 | 657 | 198 | 767 | 0 | 335 | 1362 | 608 | 315 | 930 | 415 |
| V/C Ratio(X) | 0.47 | 0.00 | 0.78 | 0.01 | 0.02 | 0.00 | 0.80 | 0.41 | 0.00 | 0.01 | 0.86 | 0.46 |
| Avail Cap(c_a), veh/h | 650 | 0 | 657 | 198 | 767 | 0 | 384 | 1362 | 608 | 472 | 1007 | 449 |
| 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 | 0.00 | 1.00 | 1.00 | 1.00 | 0.00 | 0.88 | 0.88 | 0.88 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 20.3 | 0.0 | 23.0 | 33.9 | 15.8 | 0.0 | 21.7 | 20.3 | 17.1 | 24.2 | 31.6 | 27.9 |
| Incr Delay (d2), s/veh | 0.5 | 0.0 | 6.0 | 0.0 | 0.0 | 0.0 | 8.8 | 0.2 | 0.0 | 0.0 | 7.1 | 0.8 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 8.3 | 0.0 | 15.2 | 0.0 | 0.3 | 0.0 | 7.8 | 7.3 | 0.0 | 0.1 | 13.8 | 6.2 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 20.8 | 0.0 | 29.0 | 34.0 | 15.8 | 0.0 | 30.5 | 20.4 | 17.1 | 24.2 | 38.8 | 28.7 |
| LnGrp LOS | C | | C | C | B | | C | C | B | C | D | C |
| Approach Vol, veh/h | | 818 | | | 13 | | | 822 | | | 991 | |
| Approach Delay, s/veh | | 26.0 | | | 17.2 | | | 23.7 | | | 36.8 | |
| Approach LOS | | C | | | B | | | C | | | D | |

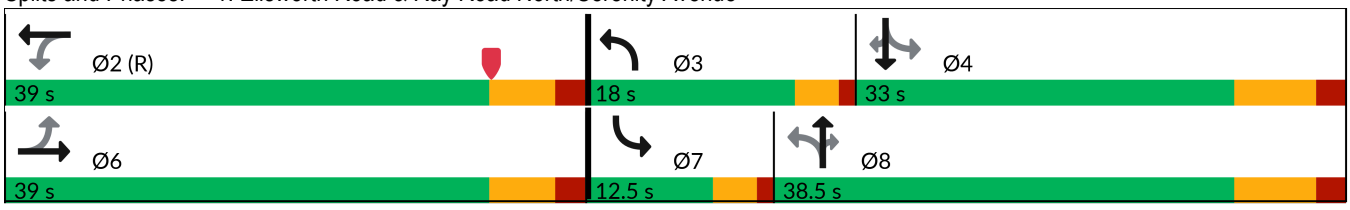
| Timer - Assigned Phs | | 2 | 3 | 4 | | 6 | 7 | 8 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 43.4 | 15.5 | 31.0 | | 43.4 | 4.6 | 42.0 | | | | |
| Change Period (Y+Rc), s | | 6.5 | 4.0 | 7.5 | | 6.5 | 4.0 | 7.5 | | | | |
| Max Green Setting (Gmax), s | | 32.5 | 14.0 | 25.5 | | 32.5 | 8.5 | 31.0 | | | | |
| Max Q Clear Time (g_c+I1), s | | 27.1 | 11.3 | 21.2 | | 27.0 | 2.1 | 12.2 | | | | |
| Green Ext Time (p_c), s | | 0.0 | 0.2 | 2.3 | | 2.2 | 0.0 | 3.6 | | | | |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 29.3 |
| HCM 7th LOS | C |

| Phase Number | 2 | 3 | 4 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|
| Movement | WBTL | NBL | SBTL | EBTL | SBL | NBTL |
| Lead/Lag | | Lead | Lag | | Lead | Lag |
| Lead-Lag Optimize | | Yes | Yes | | Yes | Yes |
| Recall Mode | C-Max | None | None | None | None | None |
| Maximum Split (s) | 39 | 18 | 33 | 39 | 12.5 | 38.5 |
| Maximum Split (%) | 43.3% | 20.0% | 36.7% | 43.3% | 13.9% | 42.8% |
| Minimum Split (s) | 34.5 | 12.5 | 25.5 | 35.5 | 12.5 | 25.5 |
| Yellow Time (s) | 4.5 | 3 | 5.5 | 4.5 | 3 | 5.5 |
| All-Red Time (s) | 2 | 1 | 2 | 2 | 1 | 2 |
| Minimum Initial (s) | 10 | 8 | 15 | 10 | 8 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | 4 | | 7 | 4 | | 7 |
| Flash Don't Walk (s) | 24 | | 10 | 25 | | 10 |
| Dual Entry | Yes | No | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 57.5 | 6.5 | 24.5 | 57.5 | 6.5 | 19 |
| End Time (s) | 6.5 | 24.5 | 57.5 | 6.5 | 19 | 57.5 |
| Yield/Force Off (s) | 0 | 20.5 | 50 | 0 | 15 | 50 |
| Yield/Force Off 170(s) | 66 | 20.5 | 40 | 65 | 15 | 40 |
| Local Start Time (s) | 57.5 | 6.5 | 24.5 | 57.5 | 6.5 | 19 |
| Local Yield (s) | 0 | 20.5 | 50 | 0 | 15 | 50 |
| Local Yield 170(s) | 66 | 20.5 | 40 | 65 | 15 | 40 |

| Intersection Summary | |
|---|---|
| Cycle Length | 90 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 80 |
| Offset: 0 (0%), Referenced to phase 2:WBTL, Start of Yellow | |

Splits and Phases: 1: Ellsworth Road & Ray Road North/Serenity Avenue



| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 285 | 190 | 552 | 335 | 405 | 763 |
| Future Volume (veh/h) | 285 | 190 | 552 | 335 | 405 | 763 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 313 | 209 | 607 | 368 | 445 | 838 |
| Peak Hour Factor | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 1094 | 502 | 1165 | 520 | 466 | 1876 |
| Arrive On Green | 0.32 | 0.32 | 0.33 | 0.33 | 0.31 | 1.00 |
| Sat Flow, veh/h | 3456 | 1585 | 3647 | 1585 | 1781 | 3647 |
| Grp Volume(v), veh/h | 313 | 209 | 607 | 368 | 445 | 838 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1585 | 1777 | 1585 | 1781 | 1777 |
| Q Serve(g_s), s | 6.1 | 9.3 | 12.5 | 18.3 | 14.0 | 0.0 |
| Cycle Q Clear(g_c), s | 6.1 | 9.3 | 12.5 | 18.3 | 14.0 | 0.0 |
| Prop In Lane | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Lane Grp Cap(c), veh/h | 1094 | 502 | 1165 | 520 | 466 | 1876 |
| V/C Ratio(X) | 0.29 | 0.42 | 0.52 | 0.71 | 0.95 | 0.45 |
| Avail Cap(c_a), veh/h | 1094 | 502 | 1165 | 520 | 466 | 1876 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 0.90 | 0.90 | 0.47 | 0.47 |
| Uniform Delay (d), s/veh | 23.1 | 24.2 | 24.5 | 26.5 | 17.7 | 0.0 |
| Incr Delay (d2), s/veh | 0.7 | 2.5 | 0.2 | 3.4 | 18.4 | 0.4 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 4.6 | 6.8 | 8.6 | 11.3 | 9.6 | 0.2 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 23.8 | 26.7 | 24.7 | 29.9 | 36.1 | 0.4 |
| LnGrp LOS | C | C | C | C | D | A |
| Approach Vol, veh/h | 522 | | 975 | | | 1283 |
| Approach Delay, s/veh | 25.0 | | 26.7 | | | 12.8 |
| Approach LOS | C | | C | | | B |

| Timer - Assigned Phs | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 35.0 | 55.0 | 18.0 | 37.0 |
| Change Period (Y+Rc), s | 6.5 | 7.5 | 4.0 | 7.5 |
| Max Green Setting (Gmax), s | 28.5 | 47.5 | 14.0 | 29.5 |
| Max Q Clear Time (g_c+I1), s | 11.3 | 2.0 | 16.0 | 20.3 |
| Green Ext Time (p_c), s | 0.9 | 1.3 | 0.0 | 0.7 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 19.9 |
| HCM 7th LOS | B |

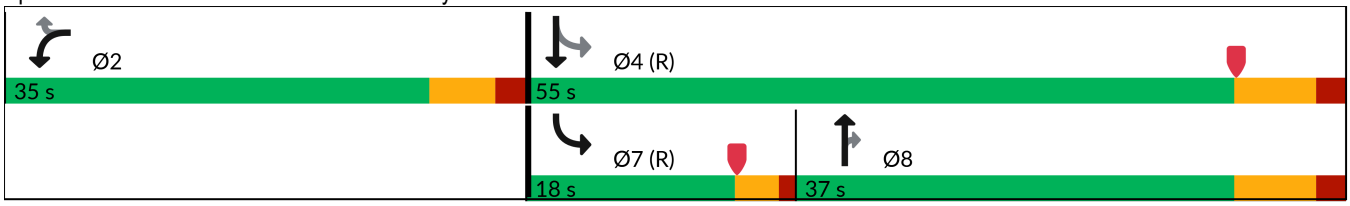
**Notes**

User approved pedestrian interval to be less than phase max green.

| Phase Number | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Movement | WBL | SBTL | SBL | NBT |
| Lead/Lag | | | Lead | Lag |
| Lead-Lag Optimize | | | Yes | Yes |
| Recall Mode | Max | C-Max | C-Max | None |
| Maximum Split (s) | 35 | 55 | 18 | 37 |
| Maximum Split (%) | 38.9% | 61.1% | 20.0% | 41.1% |
| Minimum Split (s) | 32.5 | 34.5 | 12 | 37.5 |
| Yellow Time (s) | 4.5 | 5.5 | 3 | 5.5 |
| All-Red Time (s) | 2 | 2 | 1 | 2 |
| Minimum Initial (s) | 10 | 15 | 8 | 15 |
| Vehicle Extension (s) | 2 | 0.2 | 2 | 0.2 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | 4 | 4 | | 4 |
| Flash Don't Walk (s) | 22 | 23 | | 26 |
| Dual Entry | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 87 | 32 | 32 | 50 |
| End Time (s) | 32 | 87 | 50 | 87 |
| Yield/Force Off (s) | 25.5 | 79.5 | 46 | 79.5 |
| Yield/Force Off 170(s) | 3.5 | 56.5 | 46 | 53.5 |
| Local Start Time (s) | 41 | 76 | 76 | 4 |
| Local Yield (s) | 69.5 | 33.5 | 0 | 33.5 |
| Local Yield 170(s) | 47.5 | 10.5 | 0 | 7.5 |

| Intersection Summary | |
|---|---|
| Cycle Length | 90 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 85 |
| Offset: 46 (51%), Referenced to phase 4:SBTL and 7:SBL, Start of Yellow | |

Splits and Phases: 2: Ellsworth Road & Ray Road



| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 250 | 134 | 761 | 278 | 158 | 885 |
| Future Volume (veh/h) | 250 | 134 | 761 | 278 | 158 | 885 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 269 | 144 | 818 | 299 | 170 | 952 |
| Peak Hour Factor | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 538 | 247 | 2024 | 903 | 239 | 2468 |
| Arrive On Green | 0.16 | 0.16 | 0.57 | 0.57 | 0.14 | 1.00 |
| Sat Flow, veh/h | 3456 | 1585 | 3647 | 1585 | 3456 | 3647 |
| Grp Volume(v), veh/h | 269 | 144 | 818 | 299 | 170 | 952 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1585 | 1777 | 1585 | 1728 | 1777 |
| Q Serve(g_s), s | 6.4 | 7.6 | 11.6 | 9.0 | 4.2 | 0.0 |
| Cycle Q Clear(g_c), s | 6.4 | 7.6 | 11.6 | 9.0 | 4.2 | 0.0 |
| Prop In Lane | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Lane Grp Cap(c), veh/h | 538 | 247 | 2024 | 903 | 239 | 2468 |
| V/C Ratio(X) | 0.50 | 0.58 | 0.40 | 0.33 | 0.71 | 0.39 |
| Avail Cap(c_a), veh/h | 538 | 247 | 2024 | 903 | 384 | 2468 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 0.94 | 0.94 | 0.92 | 0.92 |
| Uniform Delay (d), s/veh | 34.8 | 35.3 | 10.8 | 10.3 | 37.9 | 0.0 |
| Incr Delay (d2), s/veh | 3.3 | 9.7 | 0.0 | 0.1 | 1.3 | 0.4 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 5.2 | 6.4 | 7.4 | 5.3 | 3.0 | 0.3 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 38.1 | 45.0 | 10.9 | 10.3 | 39.3 | 0.4 |
| LnGrp LOS | D | D | B | B | D | A |
| Approach Vol, veh/h | 413 | | 1117 | | | 1122 |
| Approach Delay, s/veh | 40.5 | | 10.7 | | | 6.3 |
| Approach LOS | D | | B | | | A |

| Timer - Assigned Phs | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 20.0 | 70.0 | 11.2 | 58.8 |
| Change Period (Y+Rc), s | 6.0 | 7.5 | 5.0 | 7.5 |
| Max Green Setting (Gmax), s | 14.0 | 62.5 | 10.0 | 47.5 |
| Max Q Clear Time (g_c+I1), s | 9.6 | 2.0 | 6.2 | 13.6 |
| Green Ext Time (p_c), s | 0.4 | 1.0 | 0.1 | 1.1 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 13.5 |
| HCM 7th LOS | B |

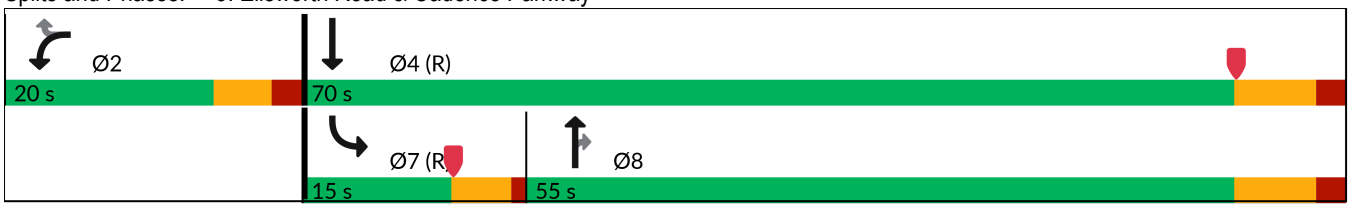
**Notes**

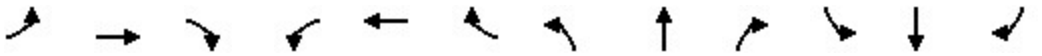
User approved pedestrian interval to be less than phase max green.

| Phase Number | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Movement | WBL | SBT | SBL | NBT |
| Lead/Lag | | | Lead | Lag |
| Lead-Lag Optimize | | | Yes | Yes |
| Recall Mode | Max | C-Max | C-Max | None |
| Maximum Split (s) | 20 | 70 | 15 | 55 |
| Maximum Split (%) | 22.2% | 77.8% | 16.7% | 61.1% |
| Minimum Split (s) | 35.5 | 25.5 | 13 | 32.5 |
| Yellow Time (s) | 4 | 5.5 | 4 | 5.5 |
| All-Red Time (s) | 2 | 2 | 1 | 2 |
| Minimum Initial (s) | 10 | 15 | 5 | 15 |
| Vehicle Extension (s) | 2 | 0.2 | 2 | 0.2 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | 4 | | | 7 |
| Flash Don't Walk (s) | 25 | | | 18 |
| Dual Entry | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 18 | 38 | 38 | 53 |
| End Time (s) | 38 | 18 | 53 | 18 |
| Yield/Force Off (s) | 32 | 10.5 | 48 | 10.5 |
| Yield/Force Off 170(s) | 7 | 10.5 | 48 | 82.5 |
| Local Start Time (s) | 60 | 80 | 80 | 5 |
| Local Yield (s) | 74 | 52.5 | 0 | 52.5 |
| Local Yield 170(s) | 49 | 52.5 | 0 | 34.5 |

| Intersection Summary | |
|---|---|
| Cycle Length | 90 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 85 |
| Offset: 48 (53%), Referenced to phase 4:SBT and 7:SBL, Start of Yellow | |

Splits and Phases: 3: Ellsworth Road & Cadence Parkway





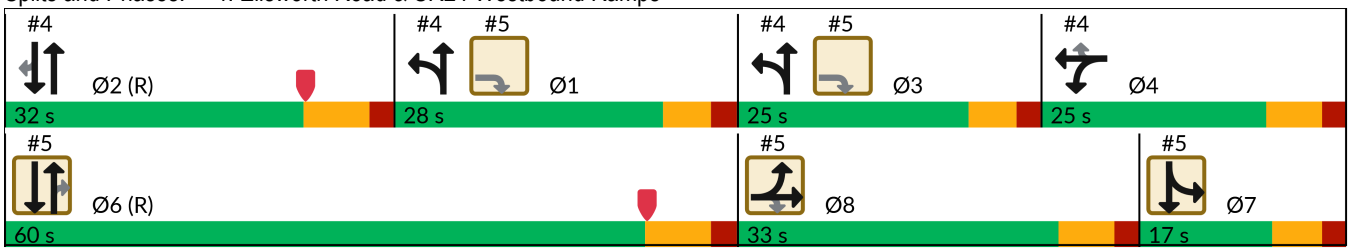
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 0 | 0 | 0 | 2 | 0 | 89 | 1005 | 961 | 0 | 0 | 615 | 503 |
| Future Volume (vph) | 0 | 0 | 0 | 2 | 0 | 89 | 1005 | 961 | 0 | 0 | 615 | 503 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | | 0 | 350 | | 350 | 525 | | 0 | 290 | | 285 |
| Storage Lanes | 0 | | 0 | 1 | | 1 | 2 | | 0 | 2 | | 2 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 0.91 | 0.86 | 0.91 | 0.97 | 0.95 | 1.00 | 1.00 | 0.86 | 0.88 |
| Frt | | | | | 0.850 | 0.850 | | | | | | 0.850 |
| Flt Protected | | | | 0.950 | | | 0.950 | | | | | |
| Satd. Flow (prot) | 0 | 0 | 0 | 1610 | 2723 | 1441 | 3433 | 3539 | 0 | 0 | 6408 | 2787 |
| Flt Permitted | | | | 0.950 | | | 0.950 | | | | | |
| Satd. Flow (perm) | 0 | 0 | 0 | 1610 | 2723 | 1441 | 3433 | 3539 | 0 | 0 | 6408 | 2787 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | | | 179 | 179 | | | | | | 498 |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 841 | | | 605 | | | 688 | | | 624 | |
| Travel Time (s) | | 19.1 | | | 13.8 | | | 15.6 | | | 14.2 | |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Adj. Flow (vph) | 0 | 0 | 0 | 2 | 0 | 95 | 1069 | 1022 | 0 | 0 | 654 | 535 |
| Shared Lane Traffic (%) | | | | 10% | | 50% | | | | | | |
| Lane Group Flow (vph) | 0 | 0 | 0 | 2 | 48 | 47 | 1069 | 1022 | 0 | 0 | 654 | 535 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 24 | | | 24 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | | | | 1 | 2 | 1 | 1 | 2 | | | 2 | 1 |
| Detector Template | | | | Left | Thru | Right | Left | Thru | | | Thru | Right |
| Leading Detector (ft) | | | | 20 | 100 | 20 | 20 | 100 | | | 100 | 20 |
| Trailing Detector (ft) | | | | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 |
| Detector 1 Position(ft) | | | | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 |
| Detector 1 Size(ft) | | | | 20 | 6 | 20 | 20 | 6 | | | 6 | 20 |
| Detector 1 Type | | | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | | Cl+Ex | Cl+Ex |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Detector 1 Queue (s) | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Detector 1 Delay (s) | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Detector 2 Position(ft) | | | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | | | | Split | NA | Perm | Prot | NA | | | NA | Perm |
| Protected Phases | | | | 4 | 4 | | 1 3 | 1 2 3 | | | 2 | |
| Permitted Phases | | | | | | 4 | | | | | | 2 |

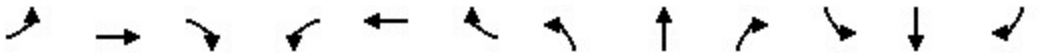
| Lane Group | Ø1 | Ø3 | Ø6 | Ø7 | Ø8 |
|---|---|---|---|---|---|
| Lane Configurations | | | | | |
| Traffic Volume (vph) | | | | | |
| Future Volume (vph) | | | | | |
| Ideal Flow (vphpl) | | | | | |
| Storage Length (ft) | | | | | |
| Storage Lanes | | | | | |
| Taper Length (ft) | | | | | |
| Lane Util. Factor | | | | | |
| Frt | | | | | |
| Flt Protected | | | | | |
| Satd. Flow (prot) | | | | | |
| Flt Permitted | | | | | |
| Satd. Flow (perm) | | | | | |
| Right Turn on Red | | | | | |
| Satd. Flow (RTOR) | | | | | |
| Link Speed (mph) | | | | | |
| Link Distance (ft) | | | | | |
| Travel Time (s) | | | | | |
| Peak Hour Factor | | | | | |
| Adj. Flow (vph) | | | | | |
| Shared Lane Traffic (%) | | | | | |
| Lane Group Flow (vph) | | | | | |
| Enter Blocked Intersection | | | | | |
| Lane Alignment | | | | | |
| Median Width(ft) | | | | | |
| Link Offset(ft) | | | | | |
| Crosswalk Width(ft) | | | | | |
| Two way Left Turn Lane | | | | | |
| Headway Factor | | | | | |
| Turning Speed (mph) | | | | | |
| Number of Detectors | | | | | |
| Detector Template | | | | | |
| Leading Detector (ft) | | | | | |
| Trailing Detector (ft) | | | | | |
| Detector 1 Position(ft) | | | | | |
| Detector 1 Size(ft) | | | | | |
| Detector 1 Type | | | | | |
| Detector 1 Channel | | | | | |
| Detector 1 Extend (s) | | | | | |
| Detector 1 Queue (s) | | | | | |
| Detector 1 Delay (s) | | | | | |
| Detector 2 Position(ft) | | | | | |
| Detector 2 Size(ft) | | | | | |
| Detector 2 Type | | | | | |
| Detector 2 Channel | | | | | |
| Detector 2 Extend (s) | | | | | |
| Turn Type | | | | | |
| Protected Phases | 1 | 3 | 6 | 7 | 8 |
| Permitted Phases | | | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | | | | 4 | 4 | 4 | 1 3 | 1 2 3 | | | 2 | 2 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | | | | 10.0 | 10.0 | 10.0 | | | | | 15.0 | 15.0 |
| Minimum Split (s) | | | | 48.5 | 48.5 | 48.5 | | | | | 25.5 | 25.5 |
| Total Split (s) | | | | 25.0 | 25.0 | 25.0 | | | | | 32.0 | 32.0 |
| Total Split (%) | | | | 22.7% | 22.7% | 22.7% | | | | | 29.1% | 29.1% |
| Maximum Green (s) | | | | 18.5 | 18.5 | 18.5 | | | | | 24.5 | 24.5 |
| Yellow Time (s) | | | | 4.5 | 4.5 | 4.5 | | | | | 5.5 | 5.5 |
| All-Red Time (s) | | | | 2.0 | 2.0 | 2.0 | | | | | 2.0 | 2.0 |
| Lost Time Adjust (s) | | | | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 |
| Total Lost Time (s) | | | | 6.5 | 6.5 | 6.5 | | | | | 7.5 | 7.5 |
| Lead/Lag | | | | Lag | Lag | Lag | | | | | Lead | Lead |
| Lead-Lag Optimize? | | | | Yes | Yes | Yes | | | | | Yes | Yes |
| Vehicle Extension (s) | | | | 4.0 | 4.0 | 4.0 | | | | | 2.0 | 2.0 |
| Recall Mode | | | | None | None | None | | | | | C-Max | C-Max |
| Walk Time (s) | | | | 4.0 | 4.0 | 4.0 | | | | | 4.0 | 4.0 |
| Flash Don't Walk (s) | | | | 38.0 | 38.0 | 38.0 | | | | | 13.0 | 13.0 |
| Pedestrian Calls (#/hr) | | | | 0 | 0 | 0 | | | | | 0 | 0 |
| Act Effct Green (s) | | | | 16.2 | 16.2 | 16.2 | 51.3 | 85.8 | | | 25.8 | 25.8 |
| Actuated g/C Ratio | | | | 0.15 | 0.15 | 0.15 | 0.47 | 0.78 | | | 0.23 | 0.23 |
| v/c Ratio | | | | 0.01 | 0.09 | 0.13 | 0.67 | 0.37 | | | 0.44 | 0.52 |
| Control Delay (s/veh) | | | | 38.5 | 0.3 | 0.7 | 27.1 | 5.0 | | | 37.2 | 6.5 |
| Queue Delay | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Total Delay (s/veh) | | | | 38.5 | 0.3 | 0.7 | 27.1 | 5.0 | | | 37.2 | 6.5 |
| LOS | | | | D | A | A | C | A | | | D | A |
| Approach Delay (s/veh) | | | | | 1.3 | | | 16.3 | | | 23.4 | |
| Approach LOS | | | | | A | | | B | | | C | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 110 | | | |
| Actuated Cycle Length: 110 | | | |
| Offset: 30 (27%), Referenced to phase 2:NBSB and 6:, Start of Yellow | | | |
| Natural Cycle: 110 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 1.04 | | | |
| Intersection Signal Delay (s/veh): 18.4 | | Intersection LOS: B | |
| Intersection Capacity Utilization 86.3% | | ICU Level of Service E | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 4: Ellsworth Road & SR24 Westbound Ramps





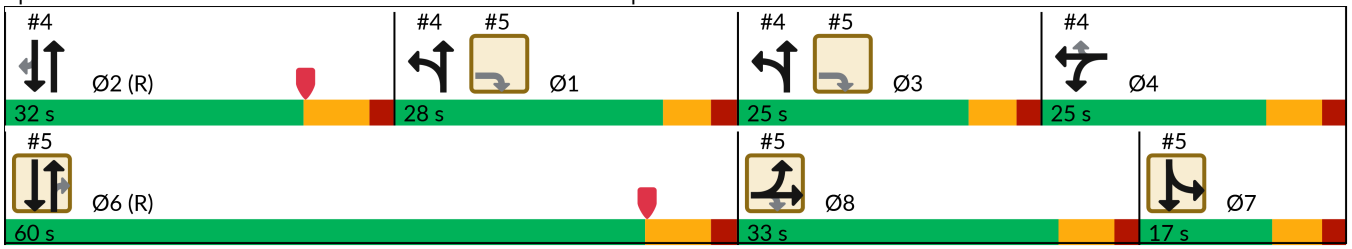
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 529 | 2 | 1788 | 0 | 0 | 0 | 0 | 1476 | 4 | 101 | 524 | 0 |
| Future Volume (vph) | 529 | 2 | 1788 | 0 | 0 | 0 | 0 | 1476 | 4 | 101 | 524 | 0 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 350 | | 350 | 0 | | 0 | 300 | | 300 | 550 | | 0 |
| Storage Lanes | 1 | | 2 | 0 | | 0 | 2 | | 1 | 2 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 0.95 | 0.95 | 0.88 | 1.00 | 1.00 | 1.00 | 1.00 | 0.86 | 1.00 | 0.97 | 0.91 | 1.00 |
| Frt | | | 0.850 | | | | | | 0.850 | | | |
| Flt Protected | 0.950 | 0.953 | | | | | | | | 0.950 | | |
| Satd. Flow (prot) | 1681 | 1686 | 2787 | 0 | 0 | 0 | 0 | 6408 | 1583 | 3433 | 5085 | 0 |
| Flt Permitted | 0.950 | 0.953 | | | | | | | | 0.950 | | |
| Satd. Flow (perm) | 1681 | 1686 | 2787 | 0 | 0 | 0 | 0 | 6408 | 1583 | 3433 | 5085 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 635 | | | | | | 159 | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 651 | | | 511 | | | 3939 | | | 688 | |
| Travel Time (s) | | 14.8 | | | 11.6 | | | 89.5 | | | 15.6 | |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Adj. Flow (vph) | 545 | 2 | 1843 | 0 | 0 | 0 | 0 | 1522 | 4 | 104 | 540 | 0 |
| Shared Lane Traffic (%) | 50% | | | | | | | | | | | |
| Lane Group Flow (vph) | 272 | 275 | 1843 | 0 | 0 | 0 | 0 | 1522 | 4 | 104 | 540 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 24 | | | 24 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | 1 | | | | | 2 | 1 | 1 | 2 | |
| Detector Template | Left | Thru | Right | | | | | Thru | Right | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | 20 | | | | | 100 | 20 | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | 0 | | | | | 0 | 0 | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | 0 | | | | | 0 | 0 | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | 20 | | | | | 6 | 20 | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | | | | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | | | | 0.0 | | | 0.0 | |
| Turn Type | Split | NA | custom | | | | | NA | Perm | Prot | NA | |
| Protected Phases | 8 | 8 | | | | | | 6 | | 7 | 6 7 | |
| Permitted Phases | | | 1 3 8 | | | | | | 6 | | | |

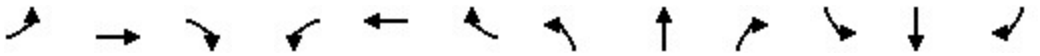
| Lane Group | Ø1 | Ø2 | Ø3 | Ø4 |
|---|---|---|---|---|
| Lane Configurations | | | | |
| Traffic Volume (vph) | | | | |
| Future Volume (vph) | | | | |
| Ideal Flow (vphpl) | | | | |
| Storage Length (ft) | | | | |
| Storage Lanes | | | | |
| Taper Length (ft) | | | | |
| Lane Util. Factor | | | | |
| Frt | | | | |
| Flt Protected | | | | |
| Satd. Flow (prot) | | | | |
| Flt Permitted | | | | |
| Satd. Flow (perm) | | | | |
| Right Turn on Red | | | | |
| Satd. Flow (RTOR) | | | | |
| Link Speed (mph) | | | | |
| Link Distance (ft) | | | | |
| Travel Time (s) | | | | |
| Peak Hour Factor | | | | |
| Adj. Flow (vph) | | | | |
| Shared Lane Traffic (%) | | | | |
| Lane Group Flow (vph) | | | | |
| Enter Blocked Intersection | | | | |
| Lane Alignment | | | | |
| Median Width(ft) | | | | |
| Link Offset(ft) | | | | |
| Crosswalk Width(ft) | | | | |
| Two way Left Turn Lane | | | | |
| Headway Factor | | | | |
| Turning Speed (mph) | | | | |
| Number of Detectors | | | | |
| Detector Template | | | | |
| Leading Detector (ft) | | | | |
| Trailing Detector (ft) | | | | |
| Detector 1 Position(ft) | | | | |
| Detector 1 Size(ft) | | | | |
| Detector 1 Type | | | | |
| Detector 1 Channel | | | | |
| Detector 1 Extend (s) | | | | |
| Detector 1 Queue (s) | | | | |
| Detector 1 Delay (s) | | | | |
| Detector 2 Position(ft) | | | | |
| Detector 2 Size(ft) | | | | |
| Detector 2 Type | | | | |
| Detector 2 Channel | | | | |
| Detector 2 Extend (s) | | | | |
| Turn Type | | | | |
| Protected Phases | 1 | 2 | 3 | 4 |
| Permitted Phases | | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | 8 | 8 | 1 3 8 | | | | | 6 | 6 | 7 | 6 7 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | | | | | 15.0 | 15.0 | 5.0 | | |
| Minimum Split (s) | 46.5 | 46.5 | | | | | | 26.5 | 26.5 | 11.0 | | |
| Total Split (s) | 33.0 | 33.0 | | | | | | 60.0 | 60.0 | 17.0 | | |
| Total Split (%) | 30.0% | 30.0% | | | | | | 54.5% | 54.5% | 15.5% | | |
| Maximum Green (s) | 26.5 | 26.5 | | | | | | 52.5 | 52.5 | 11.0 | | |
| Yellow Time (s) | 4.5 | 4.5 | | | | | | 5.5 | 5.5 | 4.0 | | |
| All-Red Time (s) | 2.0 | 2.0 | | | | | | 2.0 | 2.0 | 2.0 | | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | | | | | 0.0 | 0.0 | 0.0 | | |
| Total Lost Time (s) | 6.5 | 6.5 | | | | | | 7.5 | 7.5 | 6.0 | | |
| Lead/Lag | Lead | Lead | | | | | | | | Lag | | |
| Lead-Lag Optimize? | Yes | Yes | | | | | | | | Yes | | |
| Vehicle Extension (s) | 4.0 | 4.0 | | | | | | 2.0 | 2.0 | 2.0 | | |
| Recall Mode | None | None | | | | | | C-Max | C-Max | None | | |
| Walk Time (s) | 4.0 | 4.0 | | | | | | 4.0 | 4.0 | | | |
| Flash Don't Walk (s) | 36.0 | 36.0 | | | | | | 15.0 | 15.0 | | | |
| Pedestrian Calls (#/hr) | 0 | 0 | | | | | | 0 | 0 | | | |
| Act Effct Green (s) | 26.5 | 26.5 | 57.7 | | | | | 53.8 | 53.8 | 9.7 | 69.5 | |
| Actuated g/C Ratio | 0.24 | 0.24 | 0.52 | | | | | 0.49 | 0.49 | 0.09 | 0.63 | |
| v/c Ratio | 0.67 | 0.68 | 1.04 | | | | | 0.49 | 0.00 | 0.34 | 0.17 | |
| Control Delay (s/veh) | 47.3 | 47.4 | 52.9 | | | | | 19.6 | 0.0 | 76.4 | 0.3 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Delay (s/veh) | 47.3 | 47.4 | 52.9 | | | | | 19.6 | 0.0 | 76.4 | 0.3 | |
| LOS | D | D | D | | | | | B | A | E | A | |
| Approach Delay (s/veh) | | 51.7 | | | | | | 19.6 | | | 12.6 | |
| Approach LOS | | D | | | | | | B | | | B | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 110 | | | |
| Actuated Cycle Length: 110 | | | |
| Offset: 30 (27%), Referenced to phase 2:NBSB and 6:, Start of Yellow | | | |
| Natural Cycle: 110 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 1.04 | | | |
| Intersection Signal Delay (s/veh): 35.4 | | Intersection LOS: D | |
| Intersection Capacity Utilization 86.3% | | ICU Level of Service E | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 5: Ellsworth Road & SR24 Eastbound Ramps





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 0 | 0 | 0 | 76 | 0 | 34 | 0 | 1454 | 62 | 276 | 2091 | 0 |
| Future Volume (veh/h) | 0 | 0 | 0 | 76 | 0 | 34 | 0 | 1454 | 62 | 276 | 2091 | 0 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 0 | 0 | 0 | 78 | 0 | 35 | 0 | 1484 | 63 | 282 | 2134 | 0 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.98 | 0.92 | 0.98 | 0.92 | 0.98 | 0.98 | 0.98 | 0.98 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 3 | 273 | 231 | 141 | 427 | 362 | 1 | 1819 | 811 | 351 | 3345 | 0 |
| Arrive On Green | 0.00 | 0.00 | 0.00 | 0.04 | 0.00 | 0.23 | 0.00 | 0.17 | 0.17 | 0.10 | 0.66 | 0.00 |
| Sat Flow, veh/h | 3456 | 1870 | 1585 | 3456 | 1870 | 1585 | 1781 | 3554 | 1585 | 3456 | 5274 | 0 |
| Grp Volume(v), veh/h | 0 | 0 | 0 | 78 | 0 | 35 | 0 | 1484 | 63 | 282 | 2134 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1870 | 1585 | 1728 | 1870 | 1585 | 1781 | 1777 | 1585 | 1728 | 1702 | 0 |
| Q Serve(g_s), s | 0.0 | 0.0 | 0.0 | 2.7 | 0.0 | 2.1 | 0.0 | 48.3 | 4.0 | 9.6 | 29.7 | 0.0 |
| Cycle Q Clear(g_c), s | 0.0 | 0.0 | 0.0 | 2.7 | 0.0 | 2.1 | 0.0 | 48.3 | 4.0 | 9.6 | 29.7 | 0.0 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.00 |
| Lane Grp Cap(c), veh/h | 3 | 273 | 231 | 141 | 427 | 362 | 1 | 1819 | 811 | 351 | 3345 | 0 |
| V/C Ratio(X) | 0.00 | 0.00 | 0.00 | 0.55 | 0.00 | 0.10 | 0.00 | 0.82 | 0.08 | 0.80 | 0.64 | 0.00 |
| Avail Cap(c_a), veh/h | 202 | 273 | 231 | 374 | 427 | 362 | 119 | 1819 | 811 | 576 | 3345 | 0 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.33 | 0.33 | 0.33 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.00 | 0.00 | 0.00 | 0.98 | 0.00 | 0.98 | 0.00 | 0.62 | 0.62 | 0.42 | 0.42 | 0.00 |
| Uniform Delay (d), s/veh | 0.0 | 0.0 | 0.0 | 56.5 | 0.0 | 36.5 | 0.0 | 44.4 | 26.0 | 52.7 | 12.3 | 0.0 |
| Incr Delay (d2), s/veh | 0.0 | 0.0 | 0.0 | 3.3 | 0.0 | 0.1 | 0.0 | 2.6 | 0.1 | 1.9 | 0.4 | 0.0 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 0.0 | 0.0 | 0.0 | 2.2 | 0.0 | 1.5 | 0.0 | 30.0 | 2.8 | 6.4 | 14.1 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 0.0 | 0.0 | 0.0 | 59.8 | 0.0 | 36.7 | 0.0 | 47.1 | 26.1 | 54.6 | 12.7 | 0.0 |
| LnGrp LOS | | | | E | | D | | D | C | D | B | |
| Approach Vol, veh/h | | 0 | | | 113 | | | 1547 | | | 2416 | |
| Approach Delay, s/veh | | 0.0 | | | 52.6 | | | 46.2 | | | 17.5 | |
| Approach LOS | | | | | D | | | D | | | B | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 9.9 | 24.0 | 0.0 | 86.1 | 0.0 | 33.9 | 17.2 | 68.9 |
| Change Period (Y+Rc), s | 5.0 | 6.5 | 4.0 | 7.5 | 5.0 | 6.5 | 5.0 | 7.5 |
| Max Green Setting (Gmax), s | 13.0 | 17.5 | 8.0 | 58.5 | 7.0 | 23.5 | 20.0 | 45.5 |
| Max Q Clear Time (g_c+I1), s | 4.7 | 0.0 | 0.0 | 31.7 | 0.0 | 4.1 | 11.6 | 50.3 |
| Green Ext Time (p_c), s | 0.1 | 0.0 | 0.0 | 19.6 | 0.0 | 0.1 | 0.6 | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 29.4 |
| HCM 7th LOS | C |

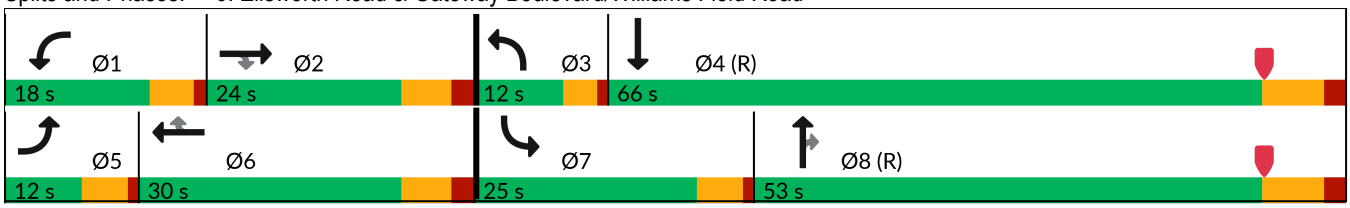
**Notes**

User approved pedestrian interval to be less than phase max green.

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | WBL | EBT | NBL | SBT | EBL | WBT | SBL | NBT |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | None | Max | None | C-Max | None | None | None | C-Max |
| Maximum Split (s) | 18 | 24 | 12 | 66 | 12 | 30 | 25 | 53 |
| Maximum Split (%) | 15.0% | 20.0% | 10.0% | 55.0% | 10.0% | 25.0% | 20.8% | 44.2% |
| Minimum Split (s) | 24 | 36.5 | 9.5 | 35.5 | 24 | 37.5 | 21 | 37.5 |
| Yellow Time (s) | 4 | 4.5 | 3 | 5.5 | 4 | 4.5 | 4 | 5.5 |
| All-Red Time (s) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| Minimum Initial (s) | 5 | 15 | 5 | 15 | 5 | 15 | 5 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 4 | | 7 | | 4 | | 7 |
| Flash Don't Walk (s) | | 26 | | 21 | | 27 | | 23 |
| Dual Entry | Yes | Yes | No | Yes | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 57.5 | 75.5 | 99.5 | 111.5 | 57.5 | 69.5 | 99.5 | 4.5 |
| End Time (s) | 75.5 | 99.5 | 111.5 | 57.5 | 69.5 | 99.5 | 4.5 | 57.5 |
| Yield/Force Off (s) | 70.5 | 93 | 107.5 | 50 | 64.5 | 93 | 119.5 | 50 |
| Yield/Force Off 170(s) | 70.5 | 67 | 107.5 | 29 | 64.5 | 66 | 119.5 | 27 |
| Local Start Time (s) | 7.5 | 25.5 | 49.5 | 61.5 | 7.5 | 19.5 | 49.5 | 74.5 |
| Local Yield (s) | 20.5 | 43 | 57.5 | 0 | 14.5 | 43 | 69.5 | 0 |
| Local Yield 170(s) | 20.5 | 17 | 57.5 | 99 | 14.5 | 16 | 69.5 | 97 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 150 |
| Offset: 50 (42%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow | |

Splits and Phases: 6: Ellsworth Road & Gateway Boulevard/Williams Field Road



| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 46 | 19 | 1512 | 262 | 30 | 2154 |
| Future Volume (veh/h) | 46 | 19 | 1512 | 262 | 30 | 2154 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 47 | 19 | 1543 | 267 | 31 | 2198 |
| Peak Hour Factor | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 861 | 383 | 2052 | 915 | 93 | 3298 |
| Arrive On Green | 0.24 | 0.24 | 1.00 | 1.00 | 0.05 | 1.00 |
| Sat Flow, veh/h | 3563 | 1585 | 3647 | 1585 | 3456 | 5274 |
| Grp Volume(v), veh/h | 47 | 19 | 1543 | 267 | 31 | 2198 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1585 | 1777 | 1585 | 1728 | 1702 |
| Q Serve(g_s), s | 1.2 | 1.1 | 0.0 | 0.0 | 1.0 | 0.0 |
| Cycle Q Clear(g_c), s | 1.2 | 1.1 | 0.0 | 0.0 | 1.0 | 0.0 |
| Prop In Lane | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Lane Grp Cap(c), veh/h | 861 | 383 | 2052 | 915 | 93 | 3298 |
| V/C Ratio(X) | 0.05 | 0.05 | 0.75 | 0.29 | 0.33 | 0.67 |
| Avail Cap(c_a), veh/h | 861 | 383 | 2052 | 915 | 144 | 3298 |
| HCM Platoon Ratio | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 0.36 | 0.36 | 0.65 | 0.65 |
| Uniform Delay (d), s/veh | 35.0 | 34.9 | 0.0 | 0.0 | 55.7 | 0.0 |
| Incr Delay (d2), s/veh | 0.1 | 0.2 | 1.0 | 0.3 | 1.4 | 0.7 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 1.0 | 0.8 | 0.5 | 0.1 | 0.8 | 0.4 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 35.1 | 35.2 | 1.0 | 0.3 | 57.1 | 0.7 |
| LnGrp LOS | D | D | A | A | E | A |
| Approach Vol, veh/h | 66 | | 1810 | | | 2229 |
| Approach Delay, s/veh | 35.1 | | 0.9 | | | 1.5 |
| Approach LOS | D | | A | | | A |

| Timer - Assigned Phs | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 35.0 | 85.0 | 8.2 | 76.8 |
| Change Period (Y+Rc), s | 6.0 | 7.5 | 5.0 | 7.5 |
| Max Green Setting (Gmax), s | 29.0 | 77.5 | 5.0 | 67.5 |
| Max Q Clear Time (g_c+I1), s | 3.2 | 2.0 | 3.0 | 2.0 |
| Green Ext Time (p_c), s | 0.2 | 31.8 | 0.0 | 18.7 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 1.7 |
| HCM 7th LOS | A |

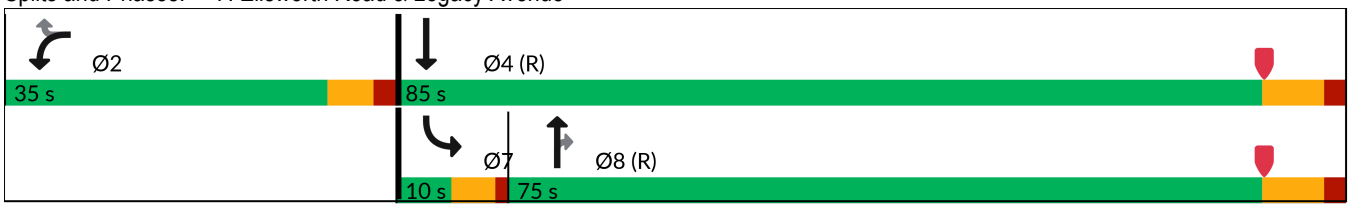
**Notes**

User approved volume balancing among the lanes for turning movement.

| Phase Number | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Movement | WBL | SBT | SBL | NBT |
| Lead/Lag | | | Lead | Lag |
| Lead-Lag Optimize | | | Yes | Yes |
| Recall Mode | Max | C-Max | None | C-Max |
| Maximum Split (s) | 35 | 85 | 10 | 75 |
| Maximum Split (%) | 29.2% | 70.8% | 8.3% | 62.5% |
| Minimum Split (s) | 35 | 39.5 | 10 | 26.5 |
| Yellow Time (s) | 4 | 5.5 | 4 | 5.5 |
| All-Red Time (s) | 2 | 2 | 1 | 2 |
| Minimum Initial (s) | 10 | 15 | 5 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | 4 | 4 | | 7 |
| Flash Don't Walk (s) | 25 | 28 | | 12 |
| Dual Entry | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 7.5 | 42.5 | 42.5 | 52.5 |
| End Time (s) | 42.5 | 7.5 | 52.5 | 7.5 |
| Yield/Force Off (s) | 36.5 | 0 | 47.5 | 0 |
| Yield/Force Off 170(s) | 11.5 | 92 | 47.5 | 108 |
| Local Start Time (s) | 7.5 | 42.5 | 42.5 | 52.5 |
| Local Yield (s) | 36.5 | 0 | 47.5 | 0 |
| Local Yield 170(s) | 11.5 | 92 | 47.5 | 108 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 90 |
| Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow | |

Splits and Phases: 7: Ellsworth Road & Legacy Avenue



| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 48 | 67 | 1720 | 54 | 236 | 1972 |
| Future Volume (veh/h) | 48 | 67 | 1720 | 54 | 236 | 1972 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 49 | 68 | 1755 | 55 | 241 | 2012 |
| Peak Hour Factor | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 269 | 239 | 2150 | 67 | 274 | 2603 |
| Arrive On Green | 0.15 | 0.15 | 0.61 | 0.61 | 0.06 | 0.49 |
| Sat Flow, veh/h | 1781 | 1585 | 3611 | 110 | 1781 | 3647 |
| Grp Volume(v), veh/h | 49 | 68 | 883 | 927 | 241 | 2012 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1585 | 1777 | 1851 | 1781 | 1777 |
| Q Serve(g_s), s | 2.9 | 4.6 | 46.1 | 46.8 | 8.1 | 55.7 |
| Cycle Q Clear(g_c), s | 2.9 | 4.6 | 46.1 | 46.8 | 8.1 | 55.7 |
| Prop In Lane | 1.00 | 1.00 | | 0.06 | 1.00 | |
| Lane Grp Cap(c), veh/h | 269 | 239 | 1086 | 1131 | 274 | 2603 |
| V/C Ratio(X) | 0.18 | 0.28 | 0.81 | 0.82 | 0.88 | 0.77 |
| Avail Cap(c_a), veh/h | 269 | 239 | 1086 | 1131 | 393 | 2603 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 0.67 | 0.67 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 0.71 | 0.71 |
| Uniform Delay (d), s/veh | 44.5 | 45.2 | 18.0 | 18.2 | 33.6 | 22.4 |
| Incr Delay (d2), s/veh | 1.5 | 3.0 | 6.7 | 6.7 | 11.1 | 1.6 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 2.5 | 3.6 | 27.0 | 28.3 | 12.1 | 31.9 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 46.0 | 48.2 | 24.7 | 24.9 | 44.7 | 24.0 |
| LnGrp LOS | D | D | C | C | D | C |
| Approach Vol, veh/h | 117 | | 1810 | | | 2253 |
| Approach Delay, s/veh | 47.3 | | 24.8 | | | 26.2 |
| Approach LOS | D | | C | | | C |

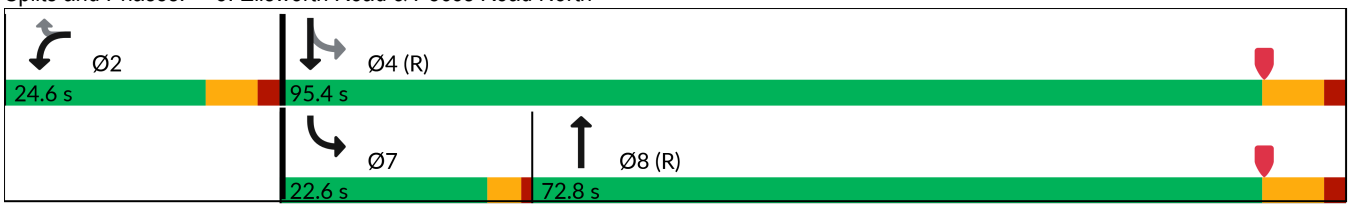
| Timer - Assigned Phs | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 24.6 | 95.4 | 14.6 | 80.8 |
| Change Period (Y+Rc), s | 6.5 | 7.5 | 4.0 | 7.5 |
| Max Green Setting (Gmax), s | 18.1 | 87.9 | 18.6 | 65.3 |
| Max Q Clear Time (g_c+I1), s | 6.6 | 57.7 | 10.1 | 48.8 |
| Green Ext Time (p_c), s | 0.2 | 21.4 | 0.4 | 12.0 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 26.2 |
| HCM 7th LOS | C |

| Phase Number | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Movement | WBL | SBTL | SBL | NBT |
| Lead/Lag | | | Lead | Lag |
| Lead-Lag Optimize | | | Yes | Yes |
| Recall Mode | Max | C-Max | None | C-Max |
| Maximum Split (s) | 24.6 | 95.4 | 22.6 | 72.8 |
| Maximum Split (%) | 20.5% | 79.5% | 18.8% | 60.7% |
| Minimum Split (s) | 24.5 | 25.5 | 22.5 | 25.5 |
| Yellow Time (s) | 4.5 | 5.5 | 3 | 5.5 |
| All-Red Time (s) | 2 | 2 | 1 | 2 |
| Minimum Initial (s) | 5 | 15 | 8 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | 0 | 0 | 0 | 0 |
| Flash Don't Walk (s) | 0 | 0 | 0 | 0 |
| Dual Entry | Yes | Yes | Yes | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 7.5 | 32.1 | 32.1 | 54.7 |
| End Time (s) | 32.1 | 7.5 | 54.7 | 7.5 |
| Yield/Force Off (s) | 25.6 | 0 | 50.7 | 0 |
| Yield/Force Off 170(s) | 25.6 | 0 | 50.7 | 0 |
| Local Start Time (s) | 7.5 | 32.1 | 32.1 | 54.7 |
| Local Yield (s) | 25.6 | 0 | 50.7 | 0 |
| Local Yield 170(s) | 25.6 | 0 | 50.7 | 0 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 110 |
| Offset: 0 (0%), Referenced to phase 4:SBTL and 8:NBT, Start of Yellow | |

Splits and Phases: 8: Ellsworth Road & Pecos Road North



| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 230 | 96 | 135 | 64 | 48 | 14 |
| Future Volume (veh/h) | 230 | 96 | 135 | 64 | 48 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 383 | 160 | 225 | 107 | 80 | 23 |
| Peak Hour Factor | 0.60 | 0.60 | 0.60 | 0.60 | 0.60 | 0.60 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 1338 | 1134 | 796 | 1525 | 144 | 128 |
| Arrive On Green | 1.00 | 1.00 | 0.11 | 1.00 | 0.08 | 0.08 |
| Sat Flow, veh/h | 1870 | 1585 | 1781 | 1870 | 1781 | 1585 |
| Grp Volume(v), veh/h | 383 | 160 | 225 | 107 | 80 | 23 |
| Grp Sat Flow(s),veh/h/ln | 1870 | 1585 | 1781 | 1870 | 1781 | 1585 |
| Q Serve(g_s), s | 0.0 | 0.0 | 3.7 | 0.0 | 5.2 | 1.6 |
| Cycle Q Clear(g_c), s | 0.0 | 0.0 | 3.7 | 0.0 | 5.2 | 1.6 |
| Prop In Lane | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Lane Grp Cap(c), veh/h | 1338 | 1134 | 796 | 1525 | 144 | 128 |
| V/C Ratio(X) | 0.29 | 0.14 | 0.28 | 0.07 | 0.56 | 0.18 |
| Avail Cap(c_a), veh/h | 1338 | 1134 | 974 | 1525 | 356 | 317 |
| HCM Platoon Ratio | 2.00 | 2.00 | 1.67 | 1.67 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.82 | 0.82 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 0.0 | 0.0 | 2.7 | 0.0 | 53.1 | 51.5 |
| Incr Delay (d2), s/veh | 0.4 | 0.2 | 0.1 | 0.1 | 1.3 | 0.2 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 0.3 | 0.1 | 1.4 | 0.1 | 4.3 | 1.2 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 0.4 | 0.2 | 2.8 | 0.1 | 54.4 | 51.7 |
| LnGrp LOS | A | A | A | A | D | D |
| Approach Vol, veh/h | 543 | | | 332 | 103 | |
| Approach Delay, s/veh | 0.4 | | | 1.9 | 53.8 | |
| Approach LOS | A | | | A | D | |

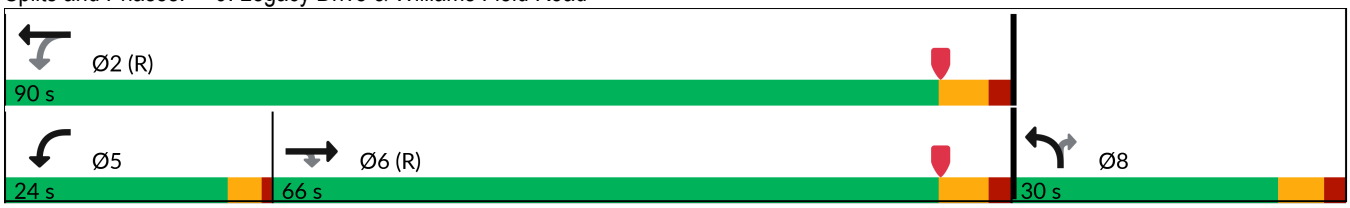
| Timer - Assigned Phs | 2 | | | 5 | 6 | 8 |
|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 104.3 | | | 12.0 | 92.3 | 15.7 |
| Change Period (Y+Rc), s | 6.5 | | | 4.0 | 6.5 | 6.0 |
| Max Green Setting (Gmax), s | 83.5 | | | 20.0 | 59.5 | 24.0 |
| Max Q Clear Time (g_c+I1), s | 2.0 | | | 5.7 | 2.0 | 7.2 |
| Green Ext Time (p_c), s | 0.3 | | | 0.1 | 1.5 | 0.1 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 6.5 |
| HCM 7th LOS | A |

| Phase Number | 2 | 5 | 6 | 8 |
|---|---|---|---|---|
| Movement | WBTL | WBL | EBT | NBL |
| Lead/Lag | | Lead | Lag | |
| Lead-Lag Optimize | | Yes | Yes | |
| Recall Mode | C-Max | None | C-Max | None |
| Maximum Split (s) | 90 | 24 | 66 | 30 |
| Maximum Split (%) | 75.0% | 20.0% | 55.0% | 25.0% |
| Minimum Split (s) | 24.5 | 12.5 | 28.5 | 24 |
| Yellow Time (s) | 4.5 | 3 | 4.5 | 4 |
| All-Red Time (s) | 2 | 1 | 2 | 2 |
| Minimum Initial (s) | 15 | 8 | 15 | 10 |
| Vehicle Extension (s) | 2 | 1 | 2 | 2 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | | | 7 | |
| Flash Don't Walk (s) | | | 15 | |
| Dual Entry | Yes | No | Yes | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 36.5 | 36.5 | 60.5 | 6.5 |
| End Time (s) | 6.5 | 60.5 | 6.5 | 36.5 |
| Yield/Force Off (s) | 0 | 56.5 | 0 | 30.5 |
| Yield/Force Off 170(s) | 0 | 56.5 | 105 | 30.5 |
| Local Start Time (s) | 36.5 | 36.5 | 60.5 | 6.5 |
| Local Yield (s) | 0 | 56.5 | 0 | 30.5 |
| Local Yield 170(s) | 0 | 56.5 | 105 | 30.5 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 65 |
| Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBT, Start of Yellow | |

Splits and Phases: 9: Legacy Drive & Williams Field Road



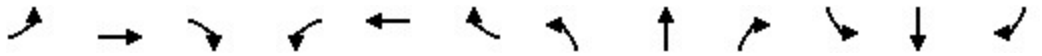
| Intersection | |
|---|---|
| Int Delay, s/veh | 3.6 |

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | ↑ | ↱ | | ↑ | | ↱ |
| Traffic Vol, veh/h | 64 | 180 | 150 | 199 | 0 | 119 |
| Future Vol, veh/h | 64 | 180 | 150 | 199 | 0 | 119 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 150 | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 56 | 56 | 56 | 56 | 56 | 56 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 114 | 321 | 268 | 355 | 0 | 213 |

| Major/Minor | Major1 | | Major2 | | Minor1 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 0 | 0 | 436 | 0 | - | 114 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | - | 4.12 | - | - | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | 2.218 | - | - | 3.318 |
| Pot Cap-1 Maneuver | - | - | 1122 | - | 0 | 954 |
| Stage 1 | - | - | - | - | 0 | - |
| Stage 2 | - | - | - | - | 0 | - |
| Platoon blocked, % | - | - | 0 | - | | 0 |
| Mov Cap-1 Maneuver | - | - | 1122 | - | - | 954 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | WB | NB |
|---|---|---|---|
| HCM Control Delay, s/v | 0 | 3.96 | 9.85 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT |
|---|---|---|---|---|---|
| Capacity (veh/h) | 954 | - | - | 1122 | - |
| HCM Lane V/C Ratio | 0.223 | - | - | 0.239 | - |
| HCM Control Delay (s/veh) | 9.9 | - | - | 9.2 | - |
| HCM Lane LOS | A | - | - | A | - |
| HCM 95th %tile Q(veh) | 0.9 | - | - | 0.9 | - |



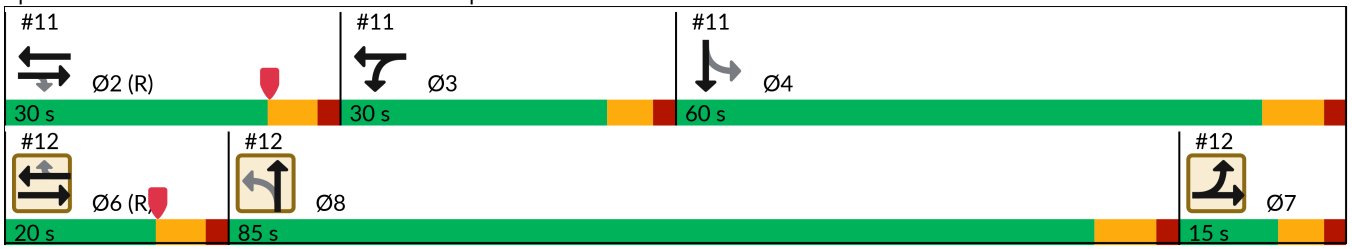
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 0 | 152 | 17 | 13 | 187 | 0 | 0 | 0 | 0 | 253 | 2235 | 163 |
| Future Volume (vph) | 0 | 152 | 17 | 13 | 187 | 0 | 0 | 0 | 0 | 253 | 2235 | 163 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 360 | | 285 | 290 | | 0 | 0 | | 0 | 400 | | 400 |
| Storage Lanes | 2 | | 1 | 2 | | 0 | 0 | | 0 | 2 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 1.00 | 0.86 | 1.00 | 0.97 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 0.91 | 0.91 | 0.95 |
| Frt | | | 0.850 | | | | | | | | 0.990 | |
| Flt Protected | | | | 0.950 | | | | | | 0.950 | 0.999 | |
| Satd. Flow (prot) | 0 | 6408 | 1583 | 3433 | 3539 | 0 | 0 | 0 | 0 | 1610 | 3353 | 0 |
| Flt Permitted | | | | 0.950 | | | | | | 0.950 | 0.999 | |
| Satd. Flow (perm) | 0 | 6408 | 1583 | 3433 | 3539 | 0 | 0 | 0 | 0 | 1610 | 3353 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 164 | | | | | | | | 7 | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 1001 | | | 454 | | | 798 | | | 970 | |
| Travel Time (s) | | 22.8 | | | 10.3 | | | 18.1 | | | 22.0 | |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Adj. Flow (vph) | 0 | 157 | 18 | 13 | 193 | 0 | 0 | 0 | 0 | 261 | 2304 | 168 |
| Shared Lane Traffic (%) | | | | | | | | | | 10% | | |
| Lane Group Flow (vph) | 0 | 157 | 18 | 13 | 193 | 0 | 0 | 0 | 0 | 235 | 2498 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 24 | | | 24 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | | 2 | 1 | 1 | 2 | | | | | 1 | 2 | |
| Detector Template | | Thru | Right | Left | Thru | | | | | Left | Thru | |
| Leading Detector (ft) | | 100 | 20 | 20 | 100 | | | | | 20 | 100 | |
| Trailing Detector (ft) | | 0 | 0 | 0 | 0 | | | | | 0 | 0 | |
| Detector 1 Position(ft) | | 0 | 0 | 0 | 0 | | | | | 0 | 0 | |
| Detector 1 Size(ft) | | 6 | 20 | 20 | 6 | | | | | 20 | 6 | |
| Detector 1 Type | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | | | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | | | | 0.0 | |
| Turn Type | | NA | Perm | Prot | NA | | | | | Perm | NA | |
| Protected Phases | | 2 | | 3 | 2 3 | | | | | | 4 | |
| Permitted Phases | | | 2 | | | | | | | 4 | | |

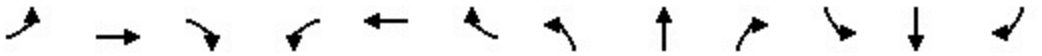
| Lane Group | Ø6 | Ø7 | Ø8 |
|---|---|---|---|
| Lane Configurations | | | |
| Traffic Volume (vph) | | | |
| Future Volume (vph) | | | |
| Ideal Flow (vphpl) | | | |
| Storage Length (ft) | | | |
| Storage Lanes | | | |
| Taper Length (ft) | | | |
| Lane Util. Factor | | | |
| Frt | | | |
| Flt Protected | | | |
| Satd. Flow (prot) | | | |
| Flt Permitted | | | |
| Satd. Flow (perm) | | | |
| Right Turn on Red | | | |
| Satd. Flow (RTOR) | | | |
| Link Speed (mph) | | | |
| Link Distance (ft) | | | |
| Travel Time (s) | | | |
| Peak Hour Factor | | | |
| Adj. Flow (vph) | | | |
| Shared Lane Traffic (%) | | | |
| Lane Group Flow (vph) | | | |
| Enter Blocked Intersection | | | |
| Lane Alignment | | | |
| Median Width(ft) | | | |
| Link Offset(ft) | | | |
| Crosswalk Width(ft) | | | |
| Two way Left Turn Lane | | | |
| Headway Factor | | | |
| Turning Speed (mph) | | | |
| Number of Detectors | | | |
| Detector Template | | | |
| Leading Detector (ft) | | | |
| Trailing Detector (ft) | | | |
| Detector 1 Position(ft) | | | |
| Detector 1 Size(ft) | | | |
| Detector 1 Type | | | |
| Detector 1 Channel | | | |
| Detector 1 Extend (s) | | | |
| Detector 1 Queue (s) | | | |
| Detector 1 Delay (s) | | | |
| Detector 2 Position(ft) | | | |
| Detector 2 Size(ft) | | | |
| Detector 2 Type | | | |
| Detector 2 Channel | | | |
| Detector 2 Extend (s) | | | |
| Turn Type | | | |
| Protected Phases | 6 | 7 | 8 |
| Permitted Phases | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | | 2 | 2 | 3 | 2 3 | | | | | 4 | 4 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | | 15.0 | 15.0 | 5.0 | | | | | | 10.0 | 10.0 | |
| Minimum Split (s) | | 25.5 | 25.5 | 11.0 | | | | | | 46.5 | 46.5 | |
| Total Split (s) | | 30.0 | 30.0 | 30.0 | | | | | | 60.0 | 60.0 | |
| Total Split (%) | | 25.0% | 25.0% | 25.0% | | | | | | 50.0% | 50.0% | |
| Maximum Green (s) | | 23.5 | 23.5 | 24.0 | | | | | | 52.5 | 52.5 | |
| Yellow Time (s) | | 4.5 | 4.5 | 4.0 | | | | | | 5.5 | 5.5 | |
| All-Red Time (s) | | 2.0 | 2.0 | 2.0 | | | | | | 2.0 | 2.0 | |
| Lost Time Adjust (s) | | 0.0 | 0.0 | 0.0 | | | | | | 0.0 | 0.0 | |
| Total Lost Time (s) | | 6.5 | 6.5 | 6.0 | | | | | | 7.5 | 7.5 | |
| Lead/Lag | | | | Lead | | | | | | Lag | Lag | |
| Lead-Lag Optimize? | | | | Yes | | | | | | Yes | Yes | |
| Vehicle Extension (s) | | 3.0 | 3.0 | 3.0 | | | | | | 3.0 | 3.0 | |
| Recall Mode | | C-Max | C-Max | None | | | | | | None | None | |
| Walk Time (s) | | 4.0 | 4.0 | | | | | | | 4.0 | 4.0 | |
| Flash Don't Walk (s) | | 15.0 | 15.0 | | | | | | | 35.0 | 35.0 | |
| Pedestrian Calls (#/hr) | | 0 | 0 | | | | | | | 0 | 0 | |
| Act Effct Green (s) | | 23.5 | 23.5 | 6.0 | 35.5 | | | | | 70.5 | 70.5 | |
| Actuated g/C Ratio | | 0.20 | 0.20 | 0.05 | 0.30 | | | | | 0.59 | 0.59 | |
| v/c Ratio | | 0.13 | 0.04 | 0.08 | 0.18 | | | | | 0.25 | 1.27 | |
| Control Delay (s/veh) | | 33.0 | 0.2 | 24.5 | 6.8 | | | | | 12.9 | 149.6 | |
| Queue Delay | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | |
| Total Delay (s/veh) | | 33.0 | 0.2 | 24.5 | 6.8 | | | | | 12.9 | 149.6 | |
| LOS | | C | A | C | A | | | | | B | F | |
| Approach Delay (s/veh) | | 29.6 | | | 7.9 | | | | | | 137.9 | |
| Approach LOS | | C | | | A | | | | | | F | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 120 | | | |
| Actuated Cycle Length: 120 | | | |
| Offset: 0 (0%), Referenced to phase 2:EBWB and 6:, Start of Yellow | | | |
| Natural Cycle: 145 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 1.27 | | | |
| Intersection Signal Delay (s/veh): 123.2 | | Intersection LOS: F | |
| Intersection Capacity Utilization 82.9% | | ICU Level of Service E | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 11: SR24 Eastbound Ramps & Williams Field Road





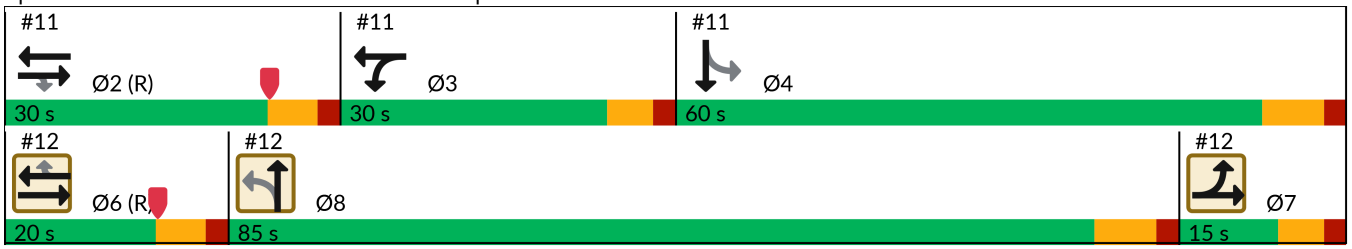
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 82 | 324 | 0 | 0 | 160 | 308 | 38 | 1325 | 6 | 0 | 0 | 0 |
| Future Volume (vph) | 82 | 324 | 0 | 0 | 160 | 308 | 38 | 1325 | 6 | 0 | 0 | 0 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 290 | | 0 | 365 | | 300 | 375 | | 375 | 0 | | 0 |
| Storage Lanes | 2 | | 0 | 2 | | 1 | 1 | | 1 | 0 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 0.97 | 0.95 | 1.00 | 1.00 | 0.86 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 |
| Frt | | | | | | 0.850 | | 0.999 | | | | |
| Flt Protected | 0.950 | | | | | | 0.950 | | | | | |
| Satd. Flow (prot) | 3433 | 3539 | 0 | 0 | 6408 | 1583 | 1770 | 3536 | 0 | 0 | 0 | 0 |
| Flt Permitted | 0.950 | | | | | | 0.950 | | | | | |
| Satd. Flow (perm) | 3433 | 3539 | 0 | 0 | 6408 | 1583 | 1770 | 3536 | 0 | 0 | 0 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | | | | 223 | | 1 | | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 454 | | | 1453 | | | 897 | | | 1176 | |
| Travel Time (s) | | 10.3 | | | 33.0 | | | 20.4 | | | 26.7 | |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Adj. Flow (vph) | 87 | 345 | 0 | 0 | 170 | 328 | 40 | 1410 | 6 | 0 | 0 | 0 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 87 | 345 | 0 | 0 | 170 | 328 | 40 | 1416 | 0 | 0 | 0 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 24 | | | 24 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | | 2 | 1 | 1 | 2 | | | | |
| Detector Template | Left | Thru | | | Thru | Right | Left | Thru | | | | |
| Leading Detector (ft) | 20 | 100 | | | 100 | 20 | 20 | 100 | | | | |
| Trailing Detector (ft) | 0 | 0 | | | 0 | 0 | 0 | 0 | | | | |
| Detector 1 Position(ft) | 0 | 0 | | | 0 | 0 | 0 | 0 | | | | |
| Detector 1 Size(ft) | 20 | 6 | | | 6 | 20 | 20 | 6 | | | | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | | | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | | |
| Turn Type | Prot | NA | | | NA | Perm | Perm | NA | | | | |
| Protected Phases | 7 | 6 7 | | | 6 | | | 8 | | | | |
| Permitted Phases | | | | | | 6 | 8 | | | | | |

| Lane Group | Ø2 | Ø3 | Ø4 |
|---|---|---|---|
| Lane Configurations | | | |
| Traffic Volume (vph) | | | |
| Future Volume (vph) | | | |
| Ideal Flow (vphpl) | | | |
| Storage Length (ft) | | | |
| Storage Lanes | | | |
| Taper Length (ft) | | | |
| Lane Util. Factor | | | |
| Frt | | | |
| Flt Protected | | | |
| Satd. Flow (prot) | | | |
| Flt Permitted | | | |
| Satd. Flow (perm) | | | |
| Right Turn on Red | | | |
| Satd. Flow (RTOR) | | | |
| Link Speed (mph) | | | |
| Link Distance (ft) | | | |
| Travel Time (s) | | | |
| Peak Hour Factor | | | |
| Adj. Flow (vph) | | | |
| Shared Lane Traffic (%) | | | |
| Lane Group Flow (vph) | | | |
| Enter Blocked Intersection | | | |
| Lane Alignment | | | |
| Median Width(ft) | | | |
| Link Offset(ft) | | | |
| Crosswalk Width(ft) | | | |
| Two way Left Turn Lane | | | |
| Headway Factor | | | |
| Turning Speed (mph) | | | |
| Number of Detectors | | | |
| Detector Template | | | |
| Leading Detector (ft) | | | |
| Trailing Detector (ft) | | | |
| Detector 1 Position(ft) | | | |
| Detector 1 Size(ft) | | | |
| Detector 1 Type | | | |
| Detector 1 Channel | | | |
| Detector 1 Extend (s) | | | |
| Detector 1 Queue (s) | | | |
| Detector 1 Delay (s) | | | |
| Detector 2 Position(ft) | | | |
| Detector 2 Size(ft) | | | |
| Detector 2 Type | | | |
| Detector 2 Channel | | | |
| Detector 2 Extend (s) | | | |
| Turn Type | | | |
| Protected Phases | 2 | 3 | 4 |
| Permitted Phases | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | 7 | 6 7 | | | 6 | 6 | 8 | 8 | | | | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | | | | 15.0 | 15.0 | 10.0 | 10.0 | | | | |
| Minimum Split (s) | 11.0 | | | | 26.5 | 26.5 | 45.5 | 45.5 | | | | |
| Total Split (s) | 15.0 | | | | 20.0 | 20.0 | 85.0 | 85.0 | | | | |
| Total Split (%) | 12.5% | | | | 16.7% | 16.7% | 70.8% | 70.8% | | | | |
| Maximum Green (s) | 9.0 | | | | 13.5 | 13.5 | 77.5 | 77.5 | | | | |
| Yellow Time (s) | 4.0 | | | | 4.5 | 4.5 | 5.5 | 5.5 | | | | |
| All-Red Time (s) | 2.0 | | | | 2.0 | 2.0 | 2.0 | 2.0 | | | | |
| Lost Time Adjust (s) | 0.0 | | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Total Lost Time (s) | 6.0 | | | | 6.5 | 6.5 | 7.5 | 7.5 | | | | |
| Lead/Lag | Lag | | | | | | Lead | Lead | | | | |
| Lead-Lag Optimize? | Yes | | | | | | Yes | Yes | | | | |
| Vehicle Extension (s) | 3.0 | | | | 3.0 | 3.0 | 3.0 | 3.0 | | | | |
| Recall Mode | None | | | | C-Max | C-Max | None | None | | | | |
| Walk Time (s) | | | | | 4.0 | 4.0 | 4.0 | 4.0 | | | | |
| Flash Don't Walk (s) | | | | | 16.0 | 16.0 | 34.0 | 34.0 | | | | |
| Pedestrian Calls (#/hr) | | | | | 0 | 0 | 0 | 0 | | | | |
| Act Effct Green (s) | 20.1 | 39.6 | | | 13.5 | 13.5 | 66.4 | 66.4 | | | | |
| Actuated g/C Ratio | 0.17 | 0.33 | | | 0.11 | 0.11 | 0.55 | 0.55 | | | | |
| v/c Ratio | 0.15 | 0.30 | | | 0.24 | 0.87 | 0.04 | 0.72 | | | | |
| Control Delay (s/veh) | 53.8 | 26.8 | | | 52.4 | 43.9 | 10.2 | 21.8 | | | | |
| Queue Delay | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Total Delay (s/veh) | 53.8 | 26.8 | | | 52.4 | 43.9 | 10.2 | 21.8 | | | | |
| LOS | D | C | | | D | D | B | C | | | | |
| Approach Delay (s/veh) | | 32.3 | | | 46.8 | | | 21.5 | | | | |
| Approach LOS | | C | | | D | | | C | | | | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 120 | | | |
| Actuated Cycle Length: 120 | | | |
| Offset: 0 (0%), Referenced to phase 2:EBWB and 6:, Start of Yellow | | | |
| Natural Cycle: 145 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 1.27 | | | |
| Intersection Signal Delay (s/veh): 28.7 | | Intersection LOS: C | |
| Intersection Capacity Utilization 82.9% | | ICU Level of Service E | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 12: SR24 Westbound Ramps & Williams Field Road



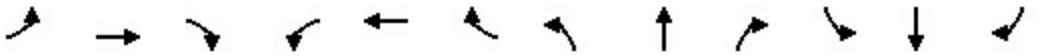
| Intersection | |
|---|---|
| Int Delay, s/veh | 5.1 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 159 | 172 | 237 | 32 | 35 | 232 |
| Future Vol, veh/h | 159 | 172 | 237 | 32 | 35 | 232 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | 0 | 0 |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 89 | 89 | 89 | 89 | 89 | 89 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 179 | 193 | 266 | 36 | 39 | 261 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 302 | 0 | - | 0 | 835 | 151 |
| Stage 1 | - | - | - | - | 284 | - |
| Stage 2 | - | - | - | - | 551 | - |
| Critical Hdwy | 4.13 | - | - | - | 6.63 | 6.93 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.83 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.43 | - |
| Follow-up Hdwy | 2.219 | - | - | - | 3.519 | 3.319 |
| Pot Cap-1 Maneuver | 1257 | - | - | - | 393 | 869 |
| Stage 1 | - | - | - | - | 739 | - |
| Stage 2 | - | - | - | - | 673 | - |
| Platoon blocked, % | | - | - | - | 0 | |
| Mov Cap-1 Maneuver | 1257 | - | - | - | 337 | 869 |
| Mov Cap-2 Maneuver | - | - | - | - | 337 | - |
| Stage 1 | - | - | - | - | 634 | - |
| Stage 2 | - | - | - | - | 673 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 4 | 0 | 11.72 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 | SBLn2 |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1257 | - | - | - | 337 | 869 |
| HCM Lane V/C Ratio | 0.142 | - | - | - | 0.117 | 0.3 |
| HCM Control Delay (s/veh) | 8.3 | - | - | - | 17.1 | 10.9 |
| HCM Lane LOS | A | - | - | - | C | B |
| HCM 95th %tile Q(veh) | 0.5 | - | - | - | 0.4 | 1.3 |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 110 | 78 | 22 | 4 | 101 | 25 | 16 | 280 | 4 | 27 | 428 | 139 |
| Future Volume (veh/h) | 110 | 78 | 22 | 4 | 101 | 25 | 16 | 280 | 4 | 27 | 428 | 139 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 124 | 88 | 25 | 4 | 113 | 28 | 18 | 315 | 4 | 30 | 481 | 156 |
| Peak Hour Factor | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 845 | 2174 | 970 | 779 | 1956 | 872 | 150 | 585 | 7 | 222 | 621 | 277 |
| Arrive On Green | 0.07 | 0.61 | 0.61 | 0.01 | 0.55 | 0.55 | 0.03 | 0.16 | 0.16 | 0.04 | 0.17 | 0.17 |
| Sat Flow, veh/h | 1781 | 3554 | 1585 | 1781 | 3554 | 1585 | 1781 | 3593 | 46 | 1781 | 3554 | 1585 |
| Grp Volume(v), veh/h | 124 | 88 | 25 | 4 | 113 | 28 | 18 | 156 | 163 | 30 | 481 | 156 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1777 | 1585 | 1781 | 1777 | 1585 | 1781 | 1777 | 1862 | 1781 | 1777 | 1585 |
| Q Serve(g_s), s | 3.3 | 1.2 | 0.7 | 0.1 | 1.8 | 1.0 | 1.0 | 9.6 | 9.7 | 1.6 | 15.5 | 10.8 |
| Cycle Q Clear(g_c), s | 3.3 | 1.2 | 0.7 | 0.1 | 1.8 | 1.0 | 1.0 | 9.6 | 9.7 | 1.6 | 15.5 | 10.8 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.02 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 845 | 2174 | 970 | 779 | 1956 | 872 | 150 | 289 | 303 | 222 | 621 | 277 |
| V/C Ratio(X) | 0.15 | 0.04 | 0.03 | 0.01 | 0.06 | 0.03 | 0.12 | 0.54 | 0.54 | 0.13 | 0.77 | 0.56 |
| Avail Cap(c_a), veh/h | 1018 | 2174 | 970 | 883 | 1956 | 872 | 215 | 496 | 520 | 281 | 1022 | 456 |
| 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 | 8.8 | 9.3 | 9.2 | 11.7 | 12.5 | 12.3 | 40.3 | 46.1 | 46.1 | 39.0 | 47.3 | 45.3 |
| Incr Delay (d2), s/veh | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.4 | 1.6 | 1.5 | 0.3 | 2.1 | 1.8 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 2.3 | 0.8 | 0.5 | 0.1 | 1.3 | 0.6 | 0.8 | 7.8 | 8.1 | 1.3 | 11.4 | 7.8 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 8.8 | 9.3 | 9.2 | 11.7 | 12.6 | 12.4 | 40.7 | 47.7 | 47.6 | 39.3 | 49.4 | 47.1 |
| LnGrp LOS | A | A | A | B | B | B | D | D | D | D | D | D |
| Approach Vol, veh/h | | 237 | | | 145 | | | 337 | | | 667 | |
| Approach Delay, s/veh | | 9.1 | | | 12.5 | | | 47.3 | | | 48.4 | |
| Approach LOS | | A | | | B | | | D | | | D | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 12.4 | 72.5 | 7.6 | 27.5 | 5.0 | 79.9 | 9.1 | 26.0 |
| Change Period (Y+Rc), s | 4.5 | 6.5 | 4.0 | 6.5 | 4.0 | 6.5 | 4.0 | 6.5 |
| Max Green Setting (Gmax), s | 19.5 | 36.5 | 8.0 | 34.5 | 8.0 | 48.5 | 9.0 | 33.5 |
| Max Q Clear Time (g_c+I1), s | 5.3 | 3.8 | 3.0 | 17.5 | 2.1 | 3.2 | 3.6 | 11.7 |
| Green Ext Time (p_c), s | 0.2 | 0.8 | 0.0 | 3.5 | 0.0 | 0.6 | 0.0 | 1.8 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 37.6 |
| HCM 7th LOS | D |

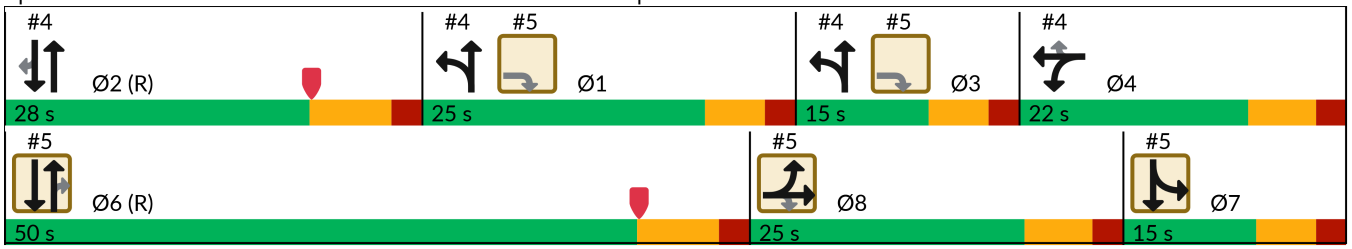
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 0 | 0 | 0 | 14 | 0 | 187 | 959 | 973 | 0 | 0 | 593 | 516 |
| Future Volume (vph) | 0 | 0 | 0 | 14 | 0 | 187 | 959 | 973 | 0 | 0 | 593 | 516 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | | 0 | 350 | | 350 | 525 | | 0 | 290 | | 285 |
| Storage Lanes | 0 | | 0 | 1 | | 1 | 0 | | 0 | 0 | | 2 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 0.91 | 0.86 | 0.91 | 0.97 | 0.95 | 1.00 | 1.00 | 0.86 | 0.88 |
| Frt | | | | | 0.852 | 0.850 | | | | | | 0.850 |
| Flt Protected | | | | 0.950 | 0.999 | | 0.950 | | | | | |
| Satd. Flow (prot) | 0 | 0 | 0 | 1610 | 2727 | 1441 | 3433 | 3539 | 0 | 0 | 6408 | 2787 |
| Flt Permitted | | | | 0.950 | 0.999 | | 0.950 | | | | | |
| Satd. Flow (perm) | 0 | 0 | 0 | 1610 | 2727 | 1441 | 3433 | 3539 | 0 | 0 | 6408 | 2787 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | | | 218 | 218 | | | | | | 532 |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 841 | | | 605 | | | 688 | | | 312 | |
| Travel Time (s) | | 19.1 | | | 13.8 | | | 15.6 | | | 7.1 | |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Adj. Flow (vph) | 0 | 0 | 0 | 14 | 0 | 193 | 989 | 1003 | 0 | 0 | 611 | 532 |
| Shared Lane Traffic (%) | | | | 10% | | 50% | | | | | | |
| Lane Group Flow (vph) | 0 | 0 | 0 | 13 | 98 | 96 | 989 | 1003 | 0 | 0 | 611 | 532 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 24 | | | 24 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | | | | 1 | 2 | 1 | 1 | 2 | | | 2 | 1 |
| Detector Template | | | | Left | Thru | Right | Left | Thru | | | Thru | Right |
| Leading Detector (ft) | | | | 20 | 100 | 20 | 20 | 100 | | | 100 | 20 |
| Trailing Detector (ft) | | | | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 |
| Detector 1 Position(ft) | | | | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 |
| Detector 1 Size(ft) | | | | 20 | 6 | 20 | 20 | 6 | | | 6 | 20 |
| Detector 1 Type | | | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | | Cl+Ex | Cl+Ex |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Detector 1 Queue (s) | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Detector 1 Delay (s) | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Detector 2 Position(ft) | | | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | | | | Split | NA | Perm | Prot | NA | | | NA | Perm |
| Protected Phases | | | | 4 | 4 | | 1 3 | 1 2 3 | | | 2 | |
| Permitted Phases | | | | | | 4 | | | | | | 2 |

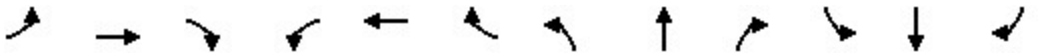
| Lane Group | Ø1 | Ø3 | Ø6 | Ø7 | Ø8 |
|---|---|---|---|---|---|
| Lane Configurations | | | | | |
| Traffic Volume (vph) | | | | | |
| Future Volume (vph) | | | | | |
| Ideal Flow (vphpl) | | | | | |
| Storage Length (ft) | | | | | |
| Storage Lanes | | | | | |
| Taper Length (ft) | | | | | |
| Lane Util. Factor | | | | | |
| Frt | | | | | |
| Flt Protected | | | | | |
| Satd. Flow (prot) | | | | | |
| Flt Permitted | | | | | |
| Satd. Flow (perm) | | | | | |
| Right Turn on Red | | | | | |
| Satd. Flow (RTOR) | | | | | |
| Link Speed (mph) | | | | | |
| Link Distance (ft) | | | | | |
| Travel Time (s) | | | | | |
| Peak Hour Factor | | | | | |
| Adj. Flow (vph) | | | | | |
| Shared Lane Traffic (%) | | | | | |
| Lane Group Flow (vph) | | | | | |
| Enter Blocked Intersection | | | | | |
| Lane Alignment | | | | | |
| Median Width(ft) | | | | | |
| Link Offset(ft) | | | | | |
| Crosswalk Width(ft) | | | | | |
| Two way Left Turn Lane | | | | | |
| Headway Factor | | | | | |
| Turning Speed (mph) | | | | | |
| Number of Detectors | | | | | |
| Detector Template | | | | | |
| Leading Detector (ft) | | | | | |
| Trailing Detector (ft) | | | | | |
| Detector 1 Position(ft) | | | | | |
| Detector 1 Size(ft) | | | | | |
| Detector 1 Type | | | | | |
| Detector 1 Channel | | | | | |
| Detector 1 Extend (s) | | | | | |
| Detector 1 Queue (s) | | | | | |
| Detector 1 Delay (s) | | | | | |
| Detector 2 Position(ft) | | | | | |
| Detector 2 Size(ft) | | | | | |
| Detector 2 Type | | | | | |
| Detector 2 Channel | | | | | |
| Detector 2 Extend (s) | | | | | |
| Turn Type | | | | | |
| Protected Phases | 1 | 3 | 6 | 7 | 8 |
| Permitted Phases | | | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | | | | 4 | 4 | 4 | 1 3 | 1 2 3 | | | 2 | 2 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | | | | 10.0 | 10.0 | 10.0 | | | | | 15.0 | 15.0 |
| Minimum Split (s) | | | | 48.5 | 48.5 | 48.5 | | | | | 25.5 | 25.5 |
| Total Split (s) | | | | 22.0 | 22.0 | 22.0 | | | | | 28.0 | 28.0 |
| Total Split (%) | | | | 24.4% | 24.4% | 24.4% | | | | | 31.1% | 31.1% |
| Maximum Green (s) | | | | 15.5 | 15.5 | 15.5 | | | | | 20.5 | 20.5 |
| Yellow Time (s) | | | | 4.5 | 4.5 | 4.5 | | | | | 5.5 | 5.5 |
| All-Red Time (s) | | | | 2.0 | 2.0 | 2.0 | | | | | 2.0 | 2.0 |
| Lost Time Adjust (s) | | | | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 |
| Total Lost Time (s) | | | | 6.5 | 6.5 | 6.5 | | | | | 7.5 | 7.5 |
| Lead/Lag | | | | Lag | Lag | Lag | | | | | Lead | Lead |
| Lead-Lag Optimize? | | | | Yes | Yes | Yes | | | | | Yes | Yes |
| Vehicle Extension (s) | | | | 4.0 | 4.0 | 4.0 | | | | | 2.0 | 2.0 |
| Recall Mode | | | | None | None | None | | | | | C-Max | C-Max |
| Walk Time (s) | | | | 4.0 | 4.0 | 4.0 | | | | | 4.0 | 4.0 |
| Flash Don't Walk (s) | | | | 38.0 | 38.0 | 38.0 | | | | | 13.0 | 13.0 |
| Pedestrian Calls (#/hr) | | | | 0 | 0 | 0 | | | | | 0 | 0 |
| Act Effct Green (s) | | | | 14.9 | 14.9 | 14.9 | 34.0 | 62.6 | | | 21.1 | 21.1 |
| Actuated g/C Ratio | | | | 0.17 | 0.17 | 0.17 | 0.38 | 0.70 | | | 0.23 | 0.23 |
| v/c Ratio | | | | 0.05 | 0.16 | 0.23 | 0.76 | 0.41 | | | 0.41 | 0.50 |
| Control Delay (s/veh) | | | | 31.8 | 0.5 | 1.3 | 28.7 | 5.9 | | | 30.2 | 4.6 |
| Queue Delay | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Total Delay (s/veh) | | | | 31.8 | 0.5 | 1.3 | 28.7 | 5.9 | | | 30.2 | 4.6 |
| LOS | | | | C | A | A | C | A | | | C | A |
| Approach Delay (s/veh) | | | | | 2.8 | | | 17.2 | | | 18.3 | |
| Approach LOS | | | | | A | | | B | | | B | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 90 | | | |
| Actuated Cycle Length: 90 | | | |
| Offset: 30 (33%), Referenced to phase 2:NBSB and 6:, Start of Yellow | | | |
| Natural Cycle: 110 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 1.11 | | | |
| Intersection Signal Delay (s/veh): 16.7 | | Intersection LOS: B | |
| Intersection Capacity Utilization 82.7% | | ICU Level of Service E | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 4: Ellsworth Road & SR24 Westbound Ramps





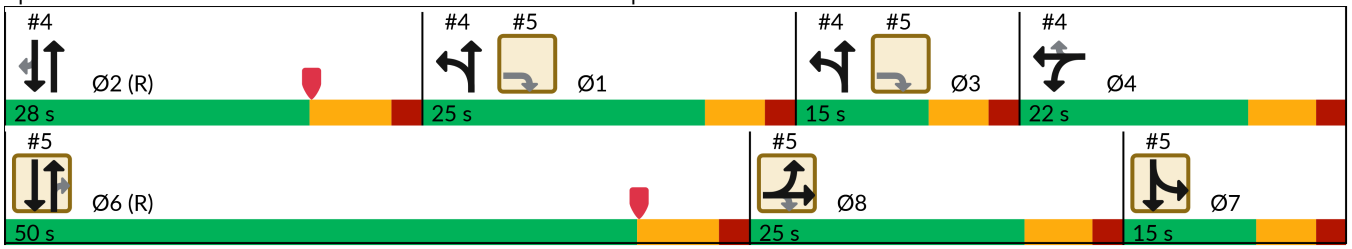
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 528 | 9 | 1684 | 0 | 0 | 0 | 0 | 1406 | 15 | 60 | 550 | 0 |
| Future Volume (vph) | 528 | 9 | 1684 | 0 | 0 | 0 | 0 | 1406 | 15 | 60 | 550 | 0 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 350 | | 350 | 0 | | 0 | 300 | | 300 | 550 | | 0 |
| Storage Lanes | 1 | | 2 | 0 | | 0 | 0 | | 1 | 0 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 0.95 | 0.95 | 0.88 | 1.00 | 1.00 | 1.00 | 1.00 | 0.86 | 1.00 | 0.97 | 0.91 | 1.00 |
| Frt | | | 0.850 | | | | | | 0.850 | | | |
| Flt Protected | 0.950 | 0.954 | | | | | | | | 0.950 | | |
| Satd. Flow (prot) | 1681 | 1688 | 2787 | 0 | 0 | 0 | 0 | 6408 | 1583 | 3433 | 5085 | 0 |
| Flt Permitted | 0.950 | 0.954 | | | | | | | | 0.950 | | |
| Satd. Flow (perm) | 1681 | 1688 | 2787 | 0 | 0 | 0 | 0 | 6408 | 1583 | 3433 | 5085 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 623 | | | | | | 194 | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 651 | | | 550 | | | 3939 | | | 688 | |
| Travel Time (s) | | 14.8 | | | 12.5 | | | 89.5 | | | 15.6 | |
| Peak Hour Factor | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 |
| Adj. Flow (vph) | 533 | 9 | 1701 | 0 | 0 | 0 | 0 | 1420 | 15 | 61 | 556 | 0 |
| Shared Lane Traffic (%) | 49% | | | | | | | | | | | |
| Lane Group Flow (vph) | 272 | 270 | 1701 | 0 | 0 | 0 | 0 | 1420 | 15 | 61 | 556 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 24 | | | 24 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | 1 | | | | | 2 | 1 | 1 | 2 | |
| Detector Template | Left | Thru | Right | | | | | Thru | Right | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | 20 | | | | | 100 | 20 | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | 0 | | | | | 0 | 0 | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | 0 | | | | | 0 | 0 | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | 20 | | | | | 6 | 20 | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | | | | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | | | | 0.0 | | | 0.0 | |
| Turn Type | Split | NA | custom | | | | | NA | Perm | Prot | NA | |
| Protected Phases | 8 | 8 | | | | | | 6 | | 7 | 6 7 | |
| Permitted Phases | | | 1 3 8 | | | | | | 6 | | | |

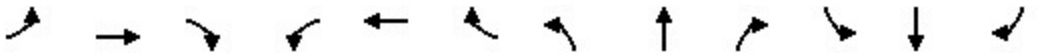
| Lane Group | Ø1 | Ø2 | Ø3 | Ø4 |
|---|---|---|---|---|
| Lane Configurations | | | | |
| Traffic Volume (vph) | | | | |
| Future Volume (vph) | | | | |
| Ideal Flow (vphpl) | | | | |
| Storage Length (ft) | | | | |
| Storage Lanes | | | | |
| Taper Length (ft) | | | | |
| Lane Util. Factor | | | | |
| Frt | | | | |
| Flt Protected | | | | |
| Satd. Flow (prot) | | | | |
| Flt Permitted | | | | |
| Satd. Flow (perm) | | | | |
| Right Turn on Red | | | | |
| Satd. Flow (RTOR) | | | | |
| Link Speed (mph) | | | | |
| Link Distance (ft) | | | | |
| Travel Time (s) | | | | |
| Peak Hour Factor | | | | |
| Adj. Flow (vph) | | | | |
| Shared Lane Traffic (%) | | | | |
| Lane Group Flow (vph) | | | | |
| Enter Blocked Intersection | | | | |
| Lane Alignment | | | | |
| Median Width(ft) | | | | |
| Link Offset(ft) | | | | |
| Crosswalk Width(ft) | | | | |
| Two way Left Turn Lane | | | | |
| Headway Factor | | | | |
| Turning Speed (mph) | | | | |
| Number of Detectors | | | | |
| Detector Template | | | | |
| Leading Detector (ft) | | | | |
| Trailing Detector (ft) | | | | |
| Detector 1 Position(ft) | | | | |
| Detector 1 Size(ft) | | | | |
| Detector 1 Type | | | | |
| Detector 1 Channel | | | | |
| Detector 1 Extend (s) | | | | |
| Detector 1 Queue (s) | | | | |
| Detector 1 Delay (s) | | | | |
| Detector 2 Position(ft) | | | | |
| Detector 2 Size(ft) | | | | |
| Detector 2 Type | | | | |
| Detector 2 Channel | | | | |
| Detector 2 Extend (s) | | | | |
| Turn Type | | | | |
| Protected Phases | 1 | 2 | 3 | 4 |
| Permitted Phases | | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | 8 | 8 | 1 3 8 | | | | | 6 | 6 | 7 | 6 7 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | | | | | 15.0 | 15.0 | 5.0 | | |
| Minimum Split (s) | 46.5 | 46.5 | | | | | | 26.5 | 26.5 | 11.0 | | |
| Total Split (s) | 25.0 | 25.0 | | | | | | 50.0 | 50.0 | 15.0 | | |
| Total Split (%) | 27.8% | 27.8% | | | | | | 55.6% | 55.6% | 16.7% | | |
| Maximum Green (s) | 18.5 | 18.5 | | | | | | 42.5 | 42.5 | 9.0 | | |
| Yellow Time (s) | 4.5 | 4.5 | | | | | | 5.5 | 5.5 | 4.0 | | |
| All-Red Time (s) | 2.0 | 2.0 | | | | | | 2.0 | 2.0 | 2.0 | | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | | | | | 0.0 | 0.0 | 0.0 | | |
| Total Lost Time (s) | 6.5 | 6.5 | | | | | | 7.5 | 7.5 | 6.0 | | |
| Lead/Lag | Lead | Lead | | | | | | | | Lag | | |
| Lead-Lag Optimize? | Yes | Yes | | | | | | | | Yes | | |
| Vehicle Extension (s) | 4.0 | 4.0 | | | | | | 2.0 | 2.0 | 2.0 | | |
| Recall Mode | None | None | | | | | | C-Max | C-Max | None | | |
| Walk Time (s) | 4.0 | 4.0 | | | | | | 4.0 | 4.0 | | | |
| Flash Don't Walk (s) | 36.0 | 36.0 | | | | | | 15.0 | 15.0 | | | |
| Pedestrian Calls (#/hr) | 0 | 0 | | | | | | 0 | 0 | | | |
| Act Effct Green (s) | 18.5 | 18.5 | 38.0 | | | | | 43.1 | 43.1 | 8.4 | 57.5 | |
| Actuated g/C Ratio | 0.21 | 0.21 | 0.42 | | | | | 0.48 | 0.48 | 0.09 | 0.64 | |
| v/c Ratio | 0.79 | 0.78 | 1.11 | | | | | 0.46 | 0.02 | 0.19 | 0.17 | |
| Control Delay (s/veh) | 51.9 | 51.1 | 75.8 | | | | | 16.4 | 0.1 | 56.8 | 0.6 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Delay (s/veh) | 51.9 | 51.1 | 75.8 | | | | | 16.4 | 0.1 | 56.8 | 0.6 | |
| LOS | D | D | E | | | | | B | A | E | A | |
| Approach Delay (s/veh) | | 70.0 | | | | | | 16.2 | | | 6.1 | |
| Approach LOS | | E | | | | | | B | | | A | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 90 | | | |
| Actuated Cycle Length: 90 | | | |
| Offset: 30 (33%), Referenced to phase 2:NBSB and 6:, Start of Yellow | | | |
| Natural Cycle: 110 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 1.11 | | | |
| Intersection Signal Delay (s/veh): 42.8 | | Intersection LOS: D | |
| Intersection Capacity Utilization 82.7% | | ICU Level of Service E | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 5: Ellsworth Road & SR24 Eastbound Ramps





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 5 | 1 | 3 | 164 | 0 | 354 | 6 | 1095 | 82 | 567 | 1661 | 8 |
| Future Volume (veh/h) | 5 | 1 | 3 | 164 | 0 | 354 | 6 | 1095 | 82 | 567 | 1661 | 8 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 5 | 1 | 3 | 169 | 0 | 365 | 6 | 1129 | 85 | 585 | 1712 | 8 |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 119 | 380 | 322 | 216 | 432 | 366 | 61 | 1358 | 606 | 646 | 2840 | 13 |
| Arrive On Green | 0.03 | 0.20 | 0.20 | 0.06 | 0.00 | 0.23 | 0.03 | 0.38 | 0.38 | 0.19 | 0.54 | 0.54 |
| Sat Flow, veh/h | 3456 | 1870 | 1585 | 3456 | 1870 | 1585 | 1781 | 3554 | 1585 | 3456 | 5245 | 25 |
| Grp Volume(v), veh/h | 5 | 1 | 3 | 169 | 0 | 365 | 6 | 1129 | 85 | 585 | 1111 | 609 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1870 | 1585 | 1728 | 1870 | 1585 | 1781 | 1777 | 1585 | 1728 | 1702 | 1866 |
| Q Serve(g_s), s | 0.2 | 0.1 | 0.2 | 7.0 | 0.0 | 33.4 | 0.5 | 41.7 | 5.1 | 24.0 | 32.2 | 32.2 |
| Cycle Q Clear(g_c), s | 0.2 | 0.1 | 0.2 | 7.0 | 0.0 | 33.4 | 0.5 | 41.7 | 5.1 | 24.0 | 32.2 | 32.2 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.01 |
| Lane Grp Cap(c), veh/h | 119 | 380 | 322 | 216 | 432 | 366 | 61 | 1358 | 606 | 646 | 1843 | 1010 |
| V/C Ratio(X) | 0.04 | 0.00 | 0.01 | 0.78 | 0.00 | 1.00 | 0.10 | 0.83 | 0.14 | 0.91 | 0.60 | 0.60 |
| Avail Cap(c_a), veh/h | 238 | 381 | 322 | 357 | 432 | 366 | 98 | 1358 | 606 | 977 | 1843 | 1010 |
| 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 | 0.67 | 0.00 | 0.67 | 0.75 | 0.75 | 0.75 | 0.36 | 0.36 | 0.36 |
| Uniform Delay (d), s/veh | 67.7 | 46.1 | 46.1 | 67.0 | 0.0 | 55.7 | 67.8 | 40.6 | 29.3 | 57.7 | 22.6 | 22.6 |
| Incr Delay (d2), s/veh | 0.1 | 0.0 | 0.0 | 1.6 | 0.0 | 37.7 | 0.5 | 4.6 | 0.4 | 2.4 | 0.5 | 1.0 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.1 | 0.0 | 0.1 | 3.1 | 0.0 | 17.1 | 0.2 | 19.1 | 2.0 | 10.7 | 13.0 | 14.3 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 67.7 | 46.1 | 46.1 | 68.6 | 0.0 | 93.4 | 68.3 | 45.2 | 29.6 | 60.1 | 23.2 | 23.6 |
| LnGrp LOS | E | D | D | E | | F | E | D | C | E | C | C |
| Approach Vol, veh/h | | 9 | | | 534 | | | 1220 | | | 2305 | |
| Approach Delay, s/veh | | 58.1 | | | 85.5 | | | 44.2 | | | 32.7 | |
| Approach LOS | | E | | | F | | | D | | | C | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 10.0 | 40.0 | 9.0 | 86.0 | 14.1 | 35.9 | 32.1 | 62.9 |
| Change Period (Y+Rc), s | 5.0 | 6.5 | 4.0 | 7.5 | 5.0 | * 6.5 | 5.0 | 7.5 |
| Max Green Setting (Gmax), s | 10.0 | 33.5 | 8.0 | 67.5 | 15.0 | * 30 | 41.0 | 36.5 |
| Max Q Clear Time (g_c+I1), s | 2.2 | 35.4 | 2.5 | 34.2 | 9.0 | 2.2 | 26.0 | 43.7 |
| Green Ext Time (p_c), s | 0.0 | 0.0 | 0.0 | 10.7 | 0.1 | 0.0 | 1.1 | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 43.1 |
| HCM 7th LOS | D |

**Notes**

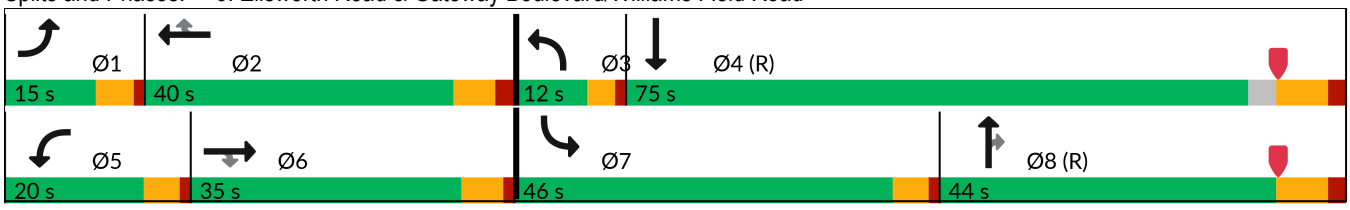
User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | EBL | WBT | NBL | SBT | WBL | EBT | SBL | NBT |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | None | Max | None | C-Max | None | None | None | C-Max |
| Maximum Split (s) | 15 | 40 | 12 | 75 | 20 | 35 | 46 | 44 |
| Maximum Split (%) | 10.3% | 27.6% | 8.3% | 51.7% | 13.8% | 24.1% | 31.7% | 30.3% |
| Minimum Split (s) | 10 | 36.5 | 9 | 35.5 | 10 | 36.5 | 10 | 37.5 |
| Yellow Time (s) | 4 | 4.5 | 3 | 5.5 | 4 | 4.5 | 4 | 5.5 |
| All-Red Time (s) | 1 | 2 | 1 | 2 | 1 | 1 | 1 | 2 |
| Minimum Initial (s) | 5 | 15 | 5 | 15 | 5 | 15 | 5 | 15 |
| Vehicle Extension (s) | 1 | 2 | 3 | 2 | 1 | 2 | 2 | 2 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 4 | | 7 | | 4 | | 7 |
| Flash Don't Walk (s) | | 26 | | 21 | | 27 | | 23 |
| Dual Entry | Yes | Yes | Yes | Yes | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 89.5 | 104.5 | 144.5 | 11.5 | 89.5 | 109.5 | 144.5 | 45.5 |
| End Time (s) | 104.5 | 144.5 | 11.5 | 89.5 | 109.5 | 144.5 | 45.5 | 89.5 |
| Yield/Force Off (s) | 99.5 | 138 | 7.5 | 82 | 104.5 | 139 | 40.5 | 82 |
| Yield/Force Off 170(s) | 99.5 | 112 | 7.5 | 61 | 104.5 | 112 | 40.5 | 59 |
| Local Start Time (s) | 7.5 | 22.5 | 62.5 | 74.5 | 7.5 | 27.5 | 62.5 | 108.5 |
| Local Yield (s) | 17.5 | 56 | 70.5 | 0 | 22.5 | 57 | 103.5 | 0 |
| Local Yield 170(s) | 17.5 | 30 | 70.5 | 124 | 22.5 | 30 | 103.5 | 122 |

| Intersection Summary | |
|---|---|
| Cycle Length | 145 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 115 |
| Offset: 82 (57%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow | |

Splits and Phases: 6: Ellsworth Road & Gateway Boulevard/Williams Field Road



| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 161 | 227 | 944 | 194 | 339 | 1478 |
| Future Volume (veh/h) | 161 | 227 | 944 | 194 | 339 | 1478 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 137 | 277 | 1004 | 206 | 361 | 1572 |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 430 | 766 | 1525 | 680 | 605 | 2295 |
| Arrive On Green | 0.24 | 0.24 | 0.43 | 0.43 | 0.17 | 0.65 |
| Sat Flow, veh/h | 1781 | 3170 | 3647 | 1585 | 3456 | 3647 |
| Grp Volume(v), veh/h | 137 | 277 | 1004 | 206 | 361 | 1572 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1585 | 1777 | 1585 | 1728 | 1777 |
| Q Serve(g_s), s | 7.6 | 8.7 | 27.0 | 10.2 | 11.5 | 33.7 |
| Cycle Q Clear(g_c), s | 7.6 | 8.7 | 27.0 | 10.2 | 11.5 | 33.7 |
| Prop In Lane | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Lane Grp Cap(c), veh/h | 430 | 766 | 1525 | 680 | 605 | 2295 |
| V/C Ratio(X) | 0.32 | 0.36 | 0.66 | 0.30 | 0.60 | 0.68 |
| Avail Cap(c_a), veh/h | 430 | 766 | 1525 | 680 | 605 | 2295 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 0.80 | 0.80 |
| Uniform Delay (d), s/veh | 37.4 | 37.8 | 27.2 | 22.5 | 45.6 | 13.5 |
| Incr Delay (d2), s/veh | 1.9 | 1.3 | 2.2 | 1.1 | 3.5 | 1.4 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 3.6 | 3.5 | 11.1 | 3.8 | 5.1 | 11.7 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 39.3 | 39.1 | 29.5 | 23.6 | 49.1 | 14.8 |
| LnGrp LOS | D | D | C | C | D | B |
| Approach Vol, veh/h | 414 | | 1210 | | | 1933 |
| Approach Delay, s/veh | 39.2 | | 28.5 | | | 21.2 |
| Approach LOS | D | | C | | | C |

| Timer - Assigned Phs | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 35.0 | 85.0 | 26.0 | 59.0 |
| Change Period (Y+Rc), s | 6.0 | 7.5 | 5.0 | 7.5 |
| Max Green Setting (Gmax), s | 29.0 | 77.5 | 21.0 | 51.5 |
| Max Q Clear Time (g_c+I1), s | 10.7 | 35.7 | 13.5 | 29.0 |
| Green Ext Time (p_c), s | 1.4 | 15.4 | 0.7 | 7.4 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 25.8 |
| HCM 7th LOS | C |

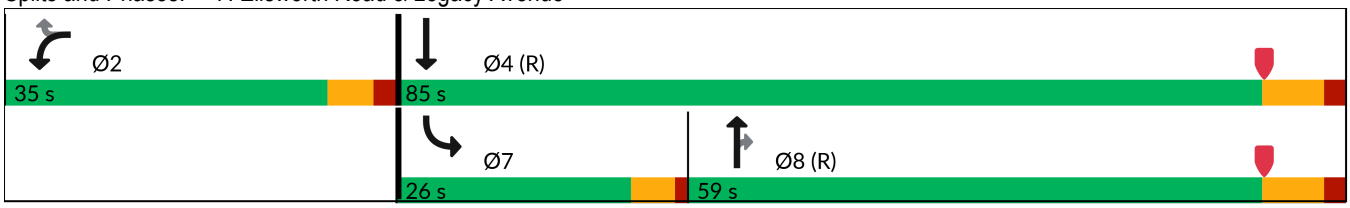
**Notes**

User approved volume balancing among the lanes for turning movement.

| Phase Number | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Movement | WBL | SBT | SBL | NBT |
| Lead/Lag | | | Lead | Lag |
| Lead-Lag Optimize | | | Yes | Yes |
| Recall Mode | Max | C-Max | Max | C-Max |
| Maximum Split (s) | 35 | 85 | 26 | 59 |
| Maximum Split (%) | 29.2% | 70.8% | 21.7% | 49.2% |
| Minimum Split (s) | 35 | 39.5 | 10 | 26.5 |
| Yellow Time (s) | 4 | 5.5 | 4 | 5.5 |
| All-Red Time (s) | 2 | 2 | 1 | 2 |
| Minimum Initial (s) | 10 | 15 | 5 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | 4 | 4 | | 7 |
| Flash Don't Walk (s) | 25 | 28 | | 12 |
| Dual Entry | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 7.5 | 42.5 | 42.5 | 68.5 |
| End Time (s) | 42.5 | 7.5 | 68.5 | 7.5 |
| Yield/Force Off (s) | 36.5 | 0 | 63.5 | 0 |
| Yield/Force Off 170(s) | 11.5 | 92 | 63.5 | 108 |
| Local Start Time (s) | 7.5 | 42.5 | 42.5 | 68.5 |
| Local Yield (s) | 36.5 | 0 | 63.5 | 0 |
| Local Yield 170(s) | 11.5 | 92 | 63.5 | 108 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 80 |
| Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow | |

Splits and Phases: 7: Ellsworth Road & Legacy Avenue



| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 447 | 174 | 150 | 119 | 391 | 115 |
| Future Volume (veh/h) | 447 | 174 | 150 | 119 | 391 | 115 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 508 | 198 | 170 | 135 | 444 | 131 |
| Peak Hour Factor | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 818 | 693 | 418 | 1079 | 492 | 438 |
| Arrive On Green | 0.44 | 0.44 | 0.09 | 0.58 | 0.28 | 0.28 |
| Sat Flow, veh/h | 1870 | 1585 | 1781 | 1870 | 1781 | 1585 |
| Grp Volume(v), veh/h | 508 | 198 | 170 | 135 | 444 | 131 |
| Grp Sat Flow(s),veh/h/ln | 1870 | 1585 | 1781 | 1870 | 1781 | 1585 |
| Q Serve(g_s), s | 17.8 | 6.8 | 4.0 | 2.8 | 20.4 | 5.5 |
| Cycle Q Clear(g_c), s | 17.8 | 6.8 | 4.0 | 2.8 | 20.4 | 5.5 |
| Prop In Lane | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Lane Grp Cap(c), veh/h | 818 | 693 | 418 | 1079 | 492 | 438 |
| V/C Ratio(X) | 0.62 | 0.29 | 0.41 | 0.13 | 0.90 | 0.30 |
| Avail Cap(c_a), veh/h | 818 | 693 | 432 | 1079 | 587 | 522 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.57 | 0.57 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 18.5 | 15.4 | 12.4 | 8.2 | 29.7 | 24.3 |
| Incr Delay (d2), s/veh | 2.0 | 0.6 | 0.6 | 0.2 | 15.5 | 0.4 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 7.2 | 2.3 | 1.4 | 1.0 | 10.5 | 2.1 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 20.5 | 16.0 | 13.0 | 8.4 | 45.2 | 24.7 |
| LnGrp LOS | C | B | B | A | D | C |
| Approach Vol, veh/h | 706 | | | 305 | 575 | |
| Approach Delay, s/veh | 19.2 | | | 11.0 | 40.5 | |
| Approach LOS | B | | | B | D | |

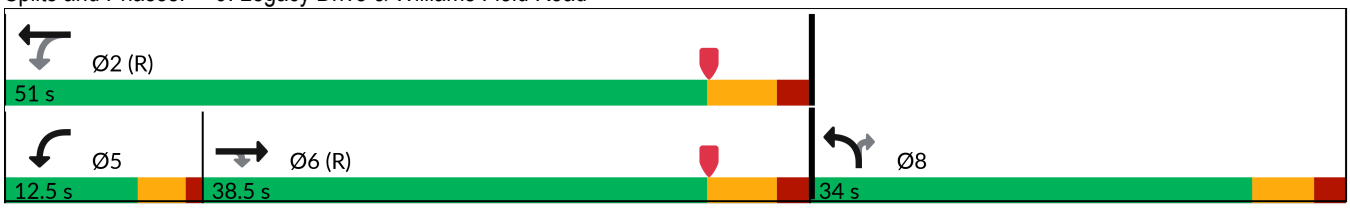
| Timer - Assigned Phs | 2 | | | 5 | 6 | 8 |
|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 55.5 | | | 11.9 | 43.7 | 29.5 |
| Change Period (Y+Rc), s | 6.5 | | | 4.0 | 6.5 | 6.0 |
| Max Green Setting (Gmax), s | 44.5 | | | 8.5 | 32.0 | 28.0 |
| Max Q Clear Time (g_c+I1), s | 4.8 | | | 6.0 | 19.8 | 22.4 |
| Green Ext Time (p_c), s | 0.7 | | | 0.1 | 2.9 | 1.0 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 25.4 |
| HCM 7th LOS | C |

| Phase Number | 2 | 5 | 6 | 8 |
|---|---|---|---|---|
| Movement | WBTL | WBL | EBT | NBL |
| Lead/Lag | | Lead | Lag | |
| Lead-Lag Optimize | | Yes | Yes | |
| Recall Mode | C-Max | None | C-Max | None |
| Maximum Split (s) | 51 | 12.5 | 38.5 | 34 |
| Maximum Split (%) | 60.0% | 14.7% | 45.3% | 40.0% |
| Minimum Split (s) | 24.5 | 12.5 | 24.5 | 24 |
| Yellow Time (s) | 4.5 | 3 | 4.5 | 4 |
| All-Red Time (s) | 2 | 1 | 2 | 2 |
| Minimum Initial (s) | 15 | 8 | 15 | 10 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | | | 7 | |
| Flash Don't Walk (s) | | | 11 | |
| Dual Entry | Yes | No | Yes | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 40.5 | 40.5 | 53 | 6.5 |
| End Time (s) | 6.5 | 53 | 6.5 | 40.5 |
| Yield/Force Off (s) | 0 | 49 | 0 | 34.5 |
| Yield/Force Off 170(s) | 0 | 49 | 74 | 34.5 |
| Local Start Time (s) | 40.5 | 40.5 | 53 | 6.5 |
| Local Yield (s) | 0 | 49 | 0 | 34.5 |
| Local Yield 170(s) | 0 | 49 | 74 | 34.5 |

| Intersection Summary | |
|---|---|
| Cycle Length | 85 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 65 |
| Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBT, Start of Yellow | |

Splits and Phases: 9: Legacy Drive & Williams Field Road



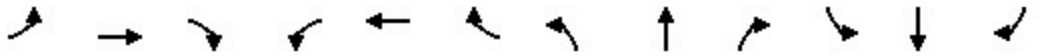
| Intersection | |
|---|---|
| Int Delay, s/veh | 19.6 |

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | ↑ | ↱ | | ↑ | | ↱ |
| Traffic Vol, veh/h | 410 | 235 | 77 | 253 | 26 | 635 |
| Future Vol, veh/h | 410 | 235 | 77 | 253 | 26 | 635 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 150 | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 94 | 94 | 94 | 94 | 94 | 94 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 436 | 250 | 82 | 269 | 28 | 676 |

| Major/Minor | Major1 | | Major2 | | Minor1 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 0 | 0 | 686 | 0 | 869 | 436 |
| Stage 1 | - | - | - | - | 436 | - |
| Stage 2 | - | - | - | - | 433 | - |
| Critical Hdwy | - | - | 4.12 | - | 6.42 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | - | - | 2.218 | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | - | - | 862 | - | 322 | 708 |
| Stage 1 | - | - | - | - | 693 | - |
| Stage 2 | - | - | - | - | 670 | - |
| Platoon blocked, % | - | - | 0 | - | | 0 |
| Mov Cap-1 Maneuver | - | - | 862 | - | 286 | 708 |
| Mov Cap-2 Maneuver | - | - | - | - | 286 | - |
| Stage 1 | - | - | - | - | 693 | - |
| Stage 2 | - | - | - | - | 595 | - |

| Approach | EB | WB | NB |
|---|---|---|---|
| HCM Control Delay, s/v | 0 | 2.24 | 47.47 |
| HCM LOS | | | E |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT |
|---|---|---|---|---|---|
| Capacity (veh/h) | 708 | - | - | 862 | - |
| HCM Lane V/C Ratio | 0.953 | - | - | 0.095 | - |
| HCM Control Delay (s/veh) | 47.5 | - | - | 9.6 | - |
| HCM Lane LOS | E | - | - | A | - |
| HCM 95th %tile Q(veh) | 14 | - | - | 0.3 | - |



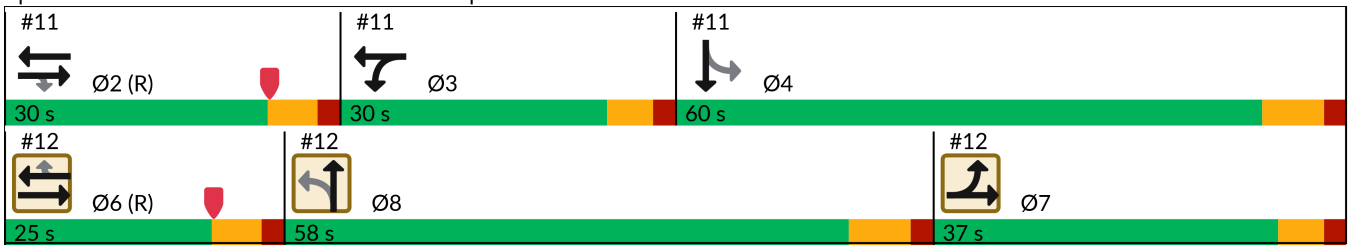
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 0 | 657 | 85 | 19 | 125 | 0 | 0 | 0 | 0 | 275 | 1761 | 206 |
| Future Volume (vph) | 0 | 657 | 85 | 19 | 125 | 0 | 0 | 0 | 0 | 275 | 1761 | 206 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 360 | | 285 | 290 | | 0 | 0 | | 0 | 400 | | 400 |
| Storage Lanes | 2 | | 1 | 0 | | 0 | 0 | | 0 | 2 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 1.00 | 0.86 | 1.00 | 0.97 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 0.91 | 0.91 | 0.95 |
| Frt | | | 0.850 | | | | | | | | 0.985 | |
| Flt Protected | | | | 0.950 | | | | | | 0.950 | 0.999 | |
| Satd. Flow (prot) | 0 | 6408 | 1583 | 3433 | 3539 | 0 | 0 | 0 | 0 | 1610 | 3336 | 0 |
| Flt Permitted | | | | 0.950 | | | | | | 0.950 | 0.999 | |
| Satd. Flow (perm) | 0 | 6408 | 1583 | 3433 | 3539 | 0 | 0 | 0 | 0 | 1610 | 3336 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 164 | | | | | | | | 12 | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 971 | | | 481 | | | 999 | | | 970 | |
| Travel Time (s) | | 22.1 | | | 10.9 | | | 22.7 | | | 22.0 | |
| Peak Hour Factor | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 |
| Adj. Flow (vph) | 0 | 664 | 86 | 19 | 126 | 0 | 0 | 0 | 0 | 278 | 1779 | 208 |
| Shared Lane Traffic (%) | | | | | | | | | | 10% | | |
| Lane Group Flow (vph) | 0 | 664 | 86 | 19 | 126 | 0 | 0 | 0 | 0 | 250 | 2015 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 24 | | | 24 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | | 2 | 1 | 1 | 2 | | | | | 1 | 2 | |
| Detector Template | | Thru | Right | Left | Thru | | | | | Left | Thru | |
| Leading Detector (ft) | | 100 | 20 | 20 | 100 | | | | | 20 | 100 | |
| Trailing Detector (ft) | | 0 | 0 | 0 | 0 | | | | | 0 | 0 | |
| Detector 1 Position(ft) | | 0 | 0 | 0 | 0 | | | | | 0 | 0 | |
| Detector 1 Size(ft) | | 6 | 20 | 20 | 6 | | | | | 20 | 6 | |
| Detector 1 Type | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | | | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | | | | 0.0 | |
| Turn Type | | NA | Perm | Prot | NA | | | | | Perm | NA | |
| Protected Phases | | 2 | | 3 | 2 3 | | | | | | 4 | |
| Permitted Phases | | | 2 | | | | | | | 4 | | |

| Lane Group | Ø6 | Ø7 | Ø8 |
|---|---|---|---|
| Lane Configurations | | | |
| Traffic Volume (vph) | | | |
| Future Volume (vph) | | | |
| Ideal Flow (vphpl) | | | |
| Storage Length (ft) | | | |
| Storage Lanes | | | |
| Taper Length (ft) | | | |
| Lane Util. Factor | | | |
| Frt | | | |
| Flt Protected | | | |
| Satd. Flow (prot) | | | |
| Flt Permitted | | | |
| Satd. Flow (perm) | | | |
| Right Turn on Red | | | |
| Satd. Flow (RTOR) | | | |
| Link Speed (mph) | | | |
| Link Distance (ft) | | | |
| Travel Time (s) | | | |
| Peak Hour Factor | | | |
| Adj. Flow (vph) | | | |
| Shared Lane Traffic (%) | | | |
| Lane Group Flow (vph) | | | |
| Enter Blocked Intersection | | | |
| Lane Alignment | | | |
| Median Width(ft) | | | |
| Link Offset(ft) | | | |
| Crosswalk Width(ft) | | | |
| Two way Left Turn Lane | | | |
| Headway Factor | | | |
| Turning Speed (mph) | | | |
| Number of Detectors | | | |
| Detector Template | | | |
| Leading Detector (ft) | | | |
| Trailing Detector (ft) | | | |
| Detector 1 Position(ft) | | | |
| Detector 1 Size(ft) | | | |
| Detector 1 Type | | | |
| Detector 1 Channel | | | |
| Detector 1 Extend (s) | | | |
| Detector 1 Queue (s) | | | |
| Detector 1 Delay (s) | | | |
| Detector 2 Position(ft) | | | |
| Detector 2 Size(ft) | | | |
| Detector 2 Type | | | |
| Detector 2 Channel | | | |
| Detector 2 Extend (s) | | | |
| Turn Type | | | |
| Protected Phases | 6 | 7 | 8 |
| Permitted Phases | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | | 2 | 2 | 3 | 2 3 | | | | | 4 | 4 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | | 15.0 | 15.0 | 5.0 | | | | | | 10.0 | 10.0 | |
| Minimum Split (s) | | 25.5 | 25.5 | 11.0 | | | | | | 46.5 | 46.5 | |
| Total Split (s) | | 30.0 | 30.0 | 30.0 | | | | | | 60.0 | 60.0 | |
| Total Split (%) | | 25.0% | 25.0% | 25.0% | | | | | | 50.0% | 50.0% | |
| Maximum Green (s) | | 23.5 | 23.5 | 24.0 | | | | | | 52.5 | 52.5 | |
| Yellow Time (s) | | 4.5 | 4.5 | 4.0 | | | | | | 5.5 | 5.5 | |
| All-Red Time (s) | | 2.0 | 2.0 | 2.0 | | | | | | 2.0 | 2.0 | |
| Lost Time Adjust (s) | | 0.0 | 0.0 | 0.0 | | | | | | 0.0 | 0.0 | |
| Total Lost Time (s) | | 6.5 | 6.5 | 6.0 | | | | | | 7.5 | 7.5 | |
| Lead/Lag | | | | Lead | | | | | | Lag | Lag | |
| Lead-Lag Optimize? | | | | Yes | | | | | | Yes | Yes | |
| Vehicle Extension (s) | | 3.0 | 3.0 | 3.0 | | | | | | 3.0 | 3.0 | |
| Recall Mode | | C-Max | C-Max | None | | | | | | None | None | |
| Walk Time (s) | | 4.0 | 4.0 | | | | | | | 4.0 | 4.0 | |
| Flash Don't Walk (s) | | 15.0 | 15.0 | | | | | | | 35.0 | 35.0 | |
| Pedestrian Calls (#/hr) | | 0 | 0 | | | | | | | 0 | 0 | |
| Act Effct Green (s) | | 23.5 | 23.5 | 6.2 | 35.7 | | | | | 70.3 | 70.3 | |
| Actuated g/C Ratio | | 0.20 | 0.20 | 0.05 | 0.30 | | | | | 0.59 | 0.59 | |
| v/c Ratio | | 0.53 | 0.20 | 0.11 | 0.12 | | | | | 0.27 | 1.03 | |
| Control Delay (s/veh) | | 45.1 | 1.0 | 45.9 | 25.4 | | | | | 13.2 | 53.3 | |
| Queue Delay | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | |
| Total Delay (s/veh) | | 45.1 | 1.0 | 45.9 | 25.4 | | | | | 13.2 | 53.3 | |
| LOS | | D | A | D | C | | | | | B | D | |
| Approach Delay (s/veh) | | 40.0 | | | 28.1 | | | | | | 48.9 | |
| Approach LOS | | D | | | C | | | | | | D | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 120 | | | |
| Actuated Cycle Length: 120 | | | |
| Offset: 28.5 (24%), Referenced to phase 2:EBWB and 6:, Start of Yellow | | | |
| Natural Cycle: 105 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 1.07 | | | |
| Intersection Signal Delay (s/veh): 45.8 | | Intersection LOS: D | |
| Intersection Capacity Utilization 98.7% | | ICU Level of Service F | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 11: SR24 Eastbound Ramps & Williams Field Road



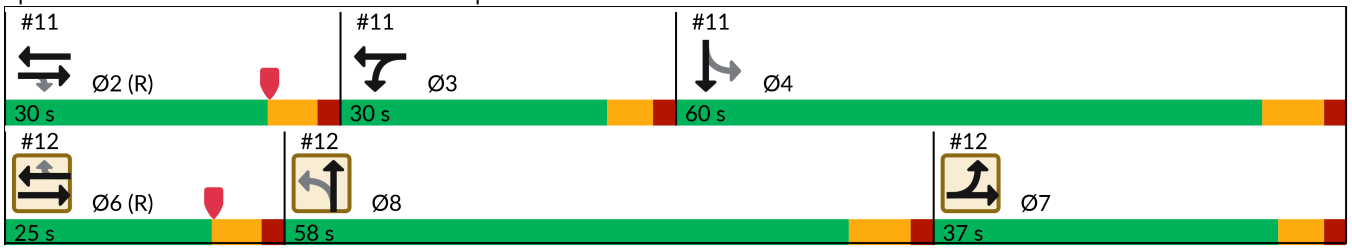
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 560 | 388 | 0 | 0 | 88 | 370 | 52 | 1553 | 6 | 0 | 0 | 0 |
| Future Volume (vph) | 560 | 388 | 0 | 0 | 88 | 370 | 52 | 1553 | 6 | 0 | 0 | 0 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 290 | | 0 | 365 | | 300 | 375 | | 375 | 0 | | 0 |
| Storage Lanes | 0 | | 0 | 2 | | 1 | 1 | | 1 | 0 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 0.97 | 0.95 | 1.00 | 1.00 | 0.86 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 |
| Frt | | | | | | 0.850 | | 0.999 | | | | |
| Flt Protected | 0.950 | | | | | | 0.950 | | | | | |
| Satd. Flow (prot) | 3433 | 3539 | 0 | 0 | 6408 | 1583 | 1770 | 3536 | 0 | 0 | 0 | 0 |
| Flt Permitted | 0.950 | | | | | | 0.950 | | | | | |
| Satd. Flow (perm) | 3433 | 3539 | 0 | 0 | 6408 | 1583 | 1770 | 3536 | 0 | 0 | 0 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | | | | 164 | | | | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 481 | | | 854 | | | 897 | | | 1176 | |
| Travel Time (s) | | 10.9 | | | 19.4 | | | 20.4 | | | 26.7 | |
| Peak Hour Factor | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 |
| Adj. Flow (vph) | 571 | 396 | 0 | 0 | 90 | 378 | 53 | 1585 | 6 | 0 | 0 | 0 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 571 | 396 | 0 | 0 | 90 | 378 | 53 | 1591 | 0 | 0 | 0 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 24 | | | 24 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | | 2 | 1 | 1 | 2 | | | | |
| Detector Template | Left | Thru | | | Thru | Right | Left | Thru | | | | |
| Leading Detector (ft) | 20 | 100 | | | 100 | 20 | 20 | 100 | | | | |
| Trailing Detector (ft) | 0 | 0 | | | 0 | 0 | 0 | 0 | | | | |
| Detector 1 Position(ft) | 0 | 0 | | | 0 | 0 | 0 | 0 | | | | |
| Detector 1 Size(ft) | 20 | 6 | | | 6 | 20 | 20 | 6 | | | | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | | | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | | |
| Turn Type | Prot | NA | | | NA | Perm | Perm | NA | | | | |
| Protected Phases | 7 | 6 7 | | | 6 | | | 8 | | | | |
| Permitted Phases | | | | | | 6 | 8 | | | | | |

| Lane Group | Ø2 | Ø3 | Ø4 |
|---|---|---|---|
| Lane Configurations | | | |
| Traffic Volume (vph) | | | |
| Future Volume (vph) | | | |
| Ideal Flow (vphpl) | | | |
| Storage Length (ft) | | | |
| Storage Lanes | | | |
| Taper Length (ft) | | | |
| Lane Util. Factor | | | |
| Frt | | | |
| Flt Protected | | | |
| Satd. Flow (prot) | | | |
| Flt Permitted | | | |
| Satd. Flow (perm) | | | |
| Right Turn on Red | | | |
| Satd. Flow (RTOR) | | | |
| Link Speed (mph) | | | |
| Link Distance (ft) | | | |
| Travel Time (s) | | | |
| Peak Hour Factor | | | |
| Adj. Flow (vph) | | | |
| Shared Lane Traffic (%) | | | |
| Lane Group Flow (vph) | | | |
| Enter Blocked Intersection | | | |
| Lane Alignment | | | |
| Median Width(ft) | | | |
| Link Offset(ft) | | | |
| Crosswalk Width(ft) | | | |
| Two way Left Turn Lane | | | |
| Headway Factor | | | |
| Turning Speed (mph) | | | |
| Number of Detectors | | | |
| Detector Template | | | |
| Leading Detector (ft) | | | |
| Trailing Detector (ft) | | | |
| Detector 1 Position(ft) | | | |
| Detector 1 Size(ft) | | | |
| Detector 1 Type | | | |
| Detector 1 Channel | | | |
| Detector 1 Extend (s) | | | |
| Detector 1 Queue (s) | | | |
| Detector 1 Delay (s) | | | |
| Detector 2 Position(ft) | | | |
| Detector 2 Size(ft) | | | |
| Detector 2 Type | | | |
| Detector 2 Channel | | | |
| Detector 2 Extend (s) | | | |
| Turn Type | | | |
| Protected Phases | 2 | 3 | 4 |
| Permitted Phases | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | 7 | 6 7 | | | 6 | 6 | 8 | 8 | | | | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | | | | 15.0 | 15.0 | 10.0 | 10.0 | | | | |
| Minimum Split (s) | 11.0 | | | | 26.5 | 26.5 | 45.5 | 45.5 | | | | |
| Total Split (s) | 37.0 | | | | 25.0 | 25.0 | 58.0 | 58.0 | | | | |
| Total Split (%) | 30.8% | | | | 20.8% | 20.8% | 48.3% | 48.3% | | | | |
| Maximum Green (s) | 31.0 | | | | 18.5 | 18.5 | 50.5 | 50.5 | | | | |
| Yellow Time (s) | 4.0 | | | | 4.5 | 4.5 | 5.5 | 5.5 | | | | |
| All-Red Time (s) | 2.0 | | | | 2.0 | 2.0 | 2.0 | 2.0 | | | | |
| Lost Time Adjust (s) | 0.0 | | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Total Lost Time (s) | 6.0 | | | | 6.5 | 6.5 | 7.5 | 7.5 | | | | |
| Lead/Lag | Lag | | | | | | Lead | Lead | | | | |
| Lead-Lag Optimize? | Yes | | | | | | Yes | Yes | | | | |
| Vehicle Extension (s) | 3.0 | | | | 3.0 | 3.0 | 3.0 | 3.0 | | | | |
| Recall Mode | None | | | | C-Max | C-Max | None | None | | | | |
| Walk Time (s) | | | | | 4.0 | 4.0 | 4.0 | 4.0 | | | | |
| Flash Don't Walk (s) | | | | | 16.0 | 16.0 | 34.0 | 34.0 | | | | |
| Pedestrian Calls (#/hr) | | | | | 0 | 0 | 0 | 0 | | | | |
| Act Effct Green (s) | 31.0 | 55.5 | | | 18.5 | 18.5 | 50.5 | 50.5 | | | | |
| Actuated g/C Ratio | 0.26 | 0.46 | | | 0.15 | 0.15 | 0.42 | 0.42 | | | | |
| v/c Ratio | 0.64 | 0.24 | | | 0.09 | 0.99 | 0.07 | 1.07 | | | | |
| Control Delay (s/veh) | 63.9 | 22.5 | | | 43.9 | 72.7 | 21.2 | 78.4 | | | | |
| Queue Delay | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Total Delay (s/veh) | 63.9 | 22.5 | | | 43.9 | 72.7 | 21.2 | 78.4 | | | | |
| LOS | E | C | | | D | E | C | E | | | | |
| Approach Delay (s/veh) | | 46.9 | | | 67.1 | | | 76.6 | | | | |
| Approach LOS | | D | | | E | | | E | | | | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 120 | | | |
| Actuated Cycle Length: 120 | | | |
| Offset: 28.5 (24%), Referenced to phase 2:EBWB and 6:, Start of Yellow | | | |
| Natural Cycle: 105 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 1.07 | | | |
| Intersection Signal Delay (s/veh): 65.8 | | Intersection LOS: E | |
| Intersection Capacity Utilization 98.7% | | ICU Level of Service F | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 12: SR24 Westbound Ramps & Williams Field Road



# Appendix F – Trip Generation

**Legacy Park CORE (Phase 1) - Weekday**
12th Edition

## Trip Generation Calculations

820 Shopping Center

| Land Use | ITE Code | Qty | Unit | Weekday Rate | Weekday % In | Weekday % Out | AM Peak Hour Rate | AM Peak Hour % In | AM Peak Hour % Out | PM Peak Hour Rate | PM Peak Hour % In | PM Peak Hour % Out | Weekday Total | Weekday In | Weekday Out | AM Peak Hour Total | AM Peak Hour In | AM Peak Hour Out | PM Peak Hour Total | PM Peak Hour In | PM Peak Hour Out | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Shopping Center | 820 | 411.40 | 1000 SF GLA | 36.39 | 50% | 50% | 0.88 | 62% | 38% | 3.26 | 49% | 51% | 14,971 | 7485 | 7486 | 362 | 224 | 138 | 1,341 | 657 | 684 | Average |
| Shopping Center | 820 | 411.40 | 1000 SF GLA | 17.27 | 50% | 50% | 0.4 | 62% | 38% | 1.57 | 49% | 51% | 7,105 | 3552 | 3553 | 165 | 102 | 63 | 646 | 317 | 329 | Minimum |
| Shopping Center | 820 | 411.40 | 1000 SF GLA | 77.31 | 50% | 50% | 3.1 | 62% | 38% | 7.22 | 49% | 51% | 31,805 | 15902 | 15903 | 1,275 | 791 | 484 | 2,970 | 1455 | 1515 | Maximum |
| Land Use | ITE Code | Qty | Unit | Weekday Equation | Weekday % In | Weekday % Out | AM Peak Hour Equation | AM Peak Hour % In | AM Peak Hour % Out | PM Peak Hour Equation | PM Peak Hour % In | PM Peak Hour % Out | Weekday Total | Weekday In | Weekday Out | AM Peak Hour Total | AM Peak Hour In | AM Peak Hour Out | PM Peak Hour Total | PM Peak Hour In | PM Peak Hour Out | |
| Shopping Center | 820 | 411.40 | 1000 SF GLA | N/A | | | T=0.61(X)+132.89 | 62% | 38% | Ln(T)=0.66Ln(X)+3.23 | 49% | 51% | N/A | | | 384 | 238 | 146 | 1,343 | 658 | 685 | Equation |

| | | | | | |
|---|---|---|---|---|---|
| Shopping Center | Standard Deviation | 15.38 | 0.45 | 1.25 | |
| | Number of Studies | 32 | 32 | 55 | |
| | Average Size | 459 | 498 | 460 | |
| | $R^2$ | N/A | 0.52 | 0.63 | |

710 General Office Building

| Land Use | ITE Code | Qty | Unit | Weekday Rate | Weekday % In | Weekday % Out | AM Peak Hour Rate | AM Peak Hour % In | AM Peak Hour % Out | PM Peak Hour Rate | PM Peak Hour % In | PM Peak Hour % Out | Weekday Total | Weekday In | Weekday Out | AM Peak Hour Total | AM Peak Hour In | AM Peak Hour Out | PM Peak Hour Total | PM Peak Hour In | PM Peak Hour Out | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| General Office Building | 710 | 161.0 | 1000 SF GFA | 7.83 | 50% | 50% | 1.24 | 88% | 12% | 1.18 | 16% | 84% | 1,261 | 630 | 631 | 200 | 176 | 24 | 190 | 30 | 160 | Average |
| General Office Building | 710 | 161.0 | 1000 SF GFA | 3.27 | 50% | 50% | 0.32 | 88% | 12% | 0.26 | 16% | 84% | 526 | 263 | 263 | 52 | 46 | 6 | 42 | 7 | 35 | Minimum |
| General Office Building | 710 | 161.0 | 1000 SF GFA | 27.56 | 50% | 50% | 2.83 | 88% | 12% | 2.59 | 16% | 84% | 4,437 | 2,219 | 2,218 | 456 | 401 | 55 | 417 | 67 | 350 | Maximum |
| Land Use | ITE Code | Qty | Unit | Weekday Rate | Weekday % In | Weekday % Out | AM Peak Hour Rate | AM Peak Hour % In | AM Peak Hour % Out | PM Peak Hour Rate | PM Peak Hour % In | PM Peak Hour % Out | Weekday Total | Weekday In | Weekday Out | AM Peak Hour Total | AM Peak Hour In | AM Peak Hour Out | PM Peak Hour Total | PM Peak Hour In | PM Peak Hour Out | |
| General Office Building | 710 | 161.0 | 1000 SF GFA | T=6.18(X)+207.96 | 50% | 50% | T=1.12(X)+19.95 | 88% | 12% | T=0.99(X)+31.14 | 16% | 84% | 1,203 | 601 | 602 | 200 | 176 | 24 | 191 | 30 | 161 | Equation |

| | | | | | |
|---|---|---|---|---|---|
| General Office Building | Standard Deviation | 3.71 | 0.4 | 0.41 | |
| | Number of Studies | 22 | 54 | 53 | |
| | Average Size | 126 | 170 | 166 | |
| | $R^2$ | 0.86 | 0.89 | 0.89 | |

330 Resort Hotel

| Land Use | ITE Code | Qty | Unit | Weekday Rate | Weekday % In | Weekday % Out | AM Peak Hour Rate | AM Peak Hour % In | AM Peak Hour % Out | PM Peak Hour Rate | PM Peak Hour % In | PM Peak Hour % Out | Weekday Total | Weekday In | Weekday Out | AM Peak Hour Total | AM Peak Hour In | AM Peak Hour Out | PM Peak Hour Total | PM Peak Hour In | PM Peak Hour Out | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Resort Hotel | 330 | 600 | Rooms | 2.67 | 50% | 50% | 0.33 | 70% | 30% | 0.39 | 43% | 57% | 1,602 | 801 | 801 | 198 | 139 | 59 | 234 | 101 | 133 | Average |
| Resort Hotel | 330 | 600 | Rooms | 2.67 | 50% | 50% | 0.12 | 70% | 30% | 0.22 | 43% | 57% | 1,602 | 801 | 801 | 72 | 50 | 22 | 132 | 57 | 75 | Minimum |
| Resort Hotel | 330 | 600 | Rooms | 2.67 | 50% | 50% | 0.41 | 70% | 30% | 0.51 | 43% | 57% | 1,602 | 801 | 801 | 246 | 172 | 74 | 306 | 132 | 174 | Maximum |
| Land Use | ITE Code | Qty | Unit | Weekday Equation | Weekday % In | Weekday % Out | AM Peak Hour Equation | AM Peak Hour % In | AM Peak Hour % Out | PM Peak Hour Equation | PM Peak Hour % In | PM Peak Hour % Out | Weekday Total | Weekday In | Weekday Out | AM Peak Hour Total | AM Peak Hour In | AM Peak Hour Out | PM Peak Hour Total | PM Peak Hour In | PM Peak Hour Out | |
| Resort Hotel | 330 | 600 | Rooms | N/A | | | N/A | | | N/A | | | N/A | | | N/A | | | N/A | | | Equation |

| | | | | | |
|---|---|---|---|---|---|
| Resort Hotel | Standard Deviation | N/A | 0.15 | 0.15 | |
| | Number of Studies | 1 | 3 | 3 | |
| | Average Size | 404 | 574 | 574 | |
| | $R^2$ | N/A | N/A | N/A | |

221 Multifamily Housing (Mid-Rise) (Four to Ten Levels)

| Land Use | ITE Code | Qty | Unit | Weekday Rate | Weekday % In | Weekday % Out | AM Peak Hour Rate | AM Peak Hour % In | AM Peak Hour % Out | PM Peak Hour Rate | PM Peak Hour % In | PM Peak Hour % Out | Weekday Total | Weekday In | Weekday Out | AM Peak Hour Total | AM Peak Hour In | AM Peak Hour Out | PM Peak Hour Total | PM Peak Hour In | PM Peak Hour Out | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Multifamily Housing (Mid-Rise) | 221 | 770 | Dwelling Units | 4.46 | 50% | 50% | 0.38 | 23% | 77% | 0.38 | 64% | 36% | 3,434 | 1,717 | 1,717 | 293 | 67 | 226 | 293 | 187 | 106 | Average |
| Multifamily Housing (Mid-Rise) | 221 | 770 | Dwelling Units | 3.76 | 50% | 50% | 0.15 | 23% | 77% | 0.26 | 64% | 36% | 2,895 | 1,448 | 1,447 | 116 | 27 | 89 | 200 | 128 | 72 | Minimum |
| Multifamily Housing (Mid-Rise) | 221 | 770 | Dwelling Units | 5.40 | 50% | 50% | 0.67 | 23% | 77% | 0.57 | 64% | 36% | 4,158 | 2,079 | 2,079 | 516 | 119 | 397 | 439 | 281 | 158 | Maximum |
| Land Use | ITE Code | Qty | Unit | Weekday Equation | Weekday % In | Weekday % Out | AM Peak Hour Equation | AM Peak Hour % In | AM Peak Hour % Out | PM Peak Hour Equation | PM Peak Hour % In | PM Peak Hour % Out | Weekday Total | Weekday In | Weekday Out | AM Peak Hour Total | AM Peak Hour In | AM Peak Hour Out | PM Peak Hour Total | PM Peak Hour In | PM Peak Hour Out | |
| Multifamily Housing (Mid-Rise) | 221 | 770 | Dwelling Units | T=4.55(X)-17.52 | 50% | 50% | T=.42(X)-7.77 | 23% | 77% | T=.36+(X)+3.07 | 64% | 36% | 3,486 | 1,743 | 1,743 | 316 | 73 | 243 | 280 | 179 | 101 | Equation |

| | | | | | |
|---|---|---|---|---|---|
| Multifamily Housing (Mid-Rise) | Standard Deviation | 0.62 | 0.10 | 0.07 | |
| | Number of Studies | 7 | 20 | 21 | |
| | Average Size | 192 | 184 | 179 | |
| | $R^2$ | 0.90 | 0.87 | 0.92 | |

231 Mid-Rise Residential with 1st-Flo (Three to Ten Levels)

| Land Use | ITE Code | Qty | Unit | Weekday Rate | Weekday % In | Weekday % Out | AM Peak Hour Rate | AM Peak Hour % In | AM Peak Hour % Out | PM Peak Hour of Generator Rate | PM Peak Hour of Generator % In | PM Peak Hour of Generator % Out | Weekday Total | Weekday In | Weekday Out | AM Peak Hour Total | AM Peak Hour In | AM Peak Hour Out | PM Peak Hour of Generator Total | PM Peak Hour of Generator In | PM Peak Hour of Generator Out | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mid-Rise Residential with 1st-Floor Commercial | 231 | 770 | Dwelling Units | N/A | N/A | N/A | 0.34 | 30% | 70% | 0.40 | 70% | 30% | N/A | N/A | N/A | 262 | 79 | 183 | 308 | 216 | 92 | **Average** |
| Mid-Rise Residential with 1st-Floor Commercial | 231 | 770 | Dwelling Units | N/A | N/A | N/A | 0.21 | 30% | 70% | 0.23 | 70% | 30% | N/A | N/A | N/A | 162 | 49 | 113 | 177 | 124 | 53 | Minimum |
| Mid-Rise Residential with 1st-Floor Commercial | 231 | 770 | Dwelling Units | N/A | N/A | N/A | 0.42 | 30% | 70% | 0.50 | 70% | 30% | N/A | N/A | N/A | 323 | 97 | 226 | 385 | 270 | 115 | Maximum |
| Land Use | ITE Code | Qty | Unit | Weekday Equation | Weekday % In | Weekday % Out | AM Peak Hour Equation | AM Peak Hour % In | AM Peak Hour % Out | PM Peak Hour of Generator Equation | PM Peak Hour of Generator % In | PM Peak Hour of Generator % Out | Weekday Total | Weekday In | Weekday Out | AM Peak Hour Total | AM Peak Hour In | AM Peak Hour Out | PM Peak Hour of Generator Total | PM Peak Hour of Generator In | PM Peak Hour of Generator Out | |
| Mid-Rise Residential with 1st-Floor Commercial | 231 | 770 | Dwelling Units | N/A | N/A | N/A | N/A | 50% | 50% | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | Equation |

| | | | | | |
|---|---|---|---|---|---|
| Mid-Rise Residential with 1st-Floor Commercial | Standard Deviation | N/A | N/A | N/A | |
| | Number of Studies | N/A | 2 | 2 | |
| | Average Size | N/A | 168 | 168 | |
| | $R^2$ | N/A | N/A | N/A | |

**Reductions - Legacy Park CORE (Phase 1)**

*Weekday*

AM PEAK HOUR

| Land Use | LUC | BEFORE REDUCTION | | | IC | NCHRP INTERNAL CAPTURE | | | I | PED INTERACTION WITH AAG | | | AFTER INTERNAL CAPTURE/PED INTERACTION | | | PASS-BY | PASS-BY | | | AFTER PASS-BY | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | TOTAL | ENTER | EXIT | Rate % | TOTAL | ENTER | EXIT | Rate % | TOTAL | ENTER | EXIT | TOTAL | ENTER | EXIT | Rate % | TOTAL | ENTER | EXIT | TOTAL | ENTER | EXIT |
| Shopping Center | 820 | 384 | 238 | 146 | 7% | 26 | 17 | 9 | 5% | 19 | 12 | 7 | 339 | 209 | 130 | 0% | - | - | - | 339 | 209 | 130 |
| General Office Building | 710 | 200 | 176 | 24 | 12% | 23 | 16 | 7 | 0% | - | - | - | 177 | 160 | 17 | 0% | - | - | - | 177 | 160 | 17 |
| Hotel | 330 | 198 | 139 | 59 | 7% | 13 | - | 13 | 5% | 10 | 7 | 3 | 175 | 132 | 43 | 0% | - | - | - | 175 | 132 | 43 |
| Multifamily Housing (Mid-Rise) | 221/231 | 262 | 79 | 183 | 3% | 8 | 2 | 6 | 0% | - | - | - | 254 | 77 | 177 | 0% | - | - | - | 254 | 77 | 177 |
| | TOTAL | 1,044 | 632 | 412 | | 70 | 35 | 35 | | 29 | 19 | 10 | 945 | 578 | 367 | | - | - | - | 945 | 578 | 367 |
| | | % Internal Capture | | | | 7% | 6% | 8% | | | | | | | | % Pass-by | 0% | 0% | 0% | | | |

PM PEAK HOUR

| Land Use | LUC | BEFORE REDUCTION | | | IC | NCHRP INTERNAL CAPTURE | | | I | PED INTERACTION WITH AAG | | | AFTER INTERNAL CAPTURE/PED INTERACTION | | | PASS-BY | PASS-BY | | | AFTER PASS-BY | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | TOTAL | ENTER | EXIT | Rate % | TOTAL | ENTER | EXIT | Rate % | TOTAL | ENTER | EXIT | TOTAL | ENTER | EXIT | Rate % | TOTAL | ENTER | EXIT | TOTAL | ENTER | EXIT |
| Shopping Center | 820 | 1,343 | 658 | 685 | 16% | 209 | 84 | 125 | 5% | 67 | 33 | 34 | 1,067 | 541 | 526 | 19% | 203 | 103 | 100 | 864 | 438 | 426 |
| General Office Building | 710 | 191 | 30 | 161 | 25% | 48 | 13 | 35 | 0% | - | - | - | 143 | 17 | 126 | 0% | - | - | - | 143 | 17 | 126 |
| Hotel | 330 | 234 | 101 | 133 | 14% | 33 | 20 | 13 | 5% | 12 | 5 | 7 | 189 | 76 | 113 | 0% | - | - | - | 189 | 76 | 113 |
| Multifamily Housing (Mid-Rise) | 221/231 | 308 | 216 | 92 | 48% | 148 | 102 | 46 | 0% | - | - | - | 160 | 114 | 46 | 0% | - | - | - | 160 | 114 | 46 |
| | TOTAL | 2,076 | 1,005 | 1,071 | | 438 | 219 | 219 | | 79 | 38 | 41 | 1,559 | 748 | 811 | | 203 | 103 | 100 | 1,356 | 645 | 711 |
| | | % Internal Capture | | | | 21% | 22% | 20% | | | | | | | | % Pass-by | 10% | 10% | 9% | | | |

| Weekday After IC | | | Weekday After Ped Interaction | | Weekday After Pass-by | |
|---|---|---|---|---|---|---|
| Rate (Avg) | Original ADT | ADT After IC | Rate (Avg) | ADT After Ped | Rate (Avg) | ADT After Pass-by |
| 88.8% | 14,971 | 13,299 | 95.0% | 12,634 | 90.5% | 11,434 |
| 81.7% | 1,203 | 983 | 100.0% | 983 | 100.0% | 983 |
| 89.7% | 1,602 | 1,436 | 95.0% | 1,364 | 100.0% | 1,364 |
| 74.4% | 3,434 | 2,557 | 100.0% | 2,557 | 100.0% | 2,557 |
| Total | 21,210 | 18,275 | Total | 17,538 | Total | 16,338 |
| IC Reduced | | 2,935 | *Ped Interaction* | 737 | PB Reduced | 1,937 |

| NCHRP 8-51 Internal Trip Capture Estimation Tool | | | |
|---|---|---|---|
| **Project Name:** | Vestar CORE | **Organization:** | Lokahi |
| **Project Location:** | Mesa, Arizona | **Performed By:** | CD |
| **Scenario Description:** | Phase 1 (CORE) | **Date:** | 2/20/2026 |
| **Analysis Year:** | | **Checked By:** | - |
| **Analysis Period:** | **AM Street Peak Hour** | **Date:** | - |

**Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)**

| Land Use | Development Data (*For Information Only*) | | | Estimated Vehicle-Trips | | |
|---|---|---|---|---|---|---|
| | ITE LUCs[1] | Quantity | Units | Total | Entering | Exiting |
| Office | 710 | 161 | 1000 SF GLA | 200 | 176 | 24 |
| Retail | 820 | 411.4 | 1000 SF GFA | 384 | 238 | 146 |
| Restaurant | | | | 0 | | |
| Cinema/Entertainment | | | | 0 | | |
| Residential | 221 | 770 | Dwelling Units | 262 | 79 | 183 |
| Hotel | 310 | 600 | Rooms | 198 | 139 | 59 |
| All Other Land Uses[2] | | | | 0 | | |
| Total | | | | 1044 | 632 | 412 |

**Table 2-A: Mode Split and Vehicle Occupancy Estimates**

| Land Use | Entering Trips | | | Exiting Trips | | |
|---|---|---|---|---|---|---|
| | Veh. Occ. | % Transit | % Non-Motorized | Veh. Occ. | % Transit | % Non-Motorized |
| Office | | | | | | |
| Retail | | | | | | |
| Restaurant | | | | | | |
| Cinema/Entertainment | | | | | | |
| Residential | | | | | | |
| Hotel | | | | | | |
| All Other Land Uses[2] | | | | | | |

**Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)**

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | | | | | |
| Retail | | | | | | |
| Restaurant | | | | | | |
| Cinema/Entertainment | | | | | | |
| Residential | | | | | | |
| Hotel | | | | | | |

**Table 4-A: Internal Person-Trip Origin-Destination Matrix***

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | 7 | 0 | 0 | 0 | 0 |
| Retail | 7 | | 0 | 0 | 2 | 0 |
| Restaurant | 0 | 0 | | 0 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | | 0 | 0 |
| Residential | 4 | 2 | 0 | 0 | | 0 |
| Hotel | 5 | 8 | 0 | 0 | 0 | |

**Table 5-A: Computations Summary**

| | Total | Entering | Exiting |
|---|---|---|---|
| All Person-Trips | 1,044 | 632 | 412 |
| Internal Capture Percentage | 7% | 6% | 8% |
| | | | |
| External Vehicle-Trips[3] | 974 | 597 | 377 |
| External Transit-Trips[4] | 0 | 0 | 0 |
| External Non-Motorized Trips[4] | 0 | 0 | 0 |

**Table 6-A: Internal Trip Capture Percentages by Land Use**

| Land Use | Entering Trips | Exiting Trips |
|---|---|---|
| Office | 9% | 29% |
| Retail | 7% | 6% |
| Restaurant | N/A | N/A |
| Cinema/Entertainment | N/A | N/A |
| Residential | 3% | 3% |
| Hotel | 0% | 22% |

[1]Land Use Codes (LUCs) from *Trip Generation Informational Report*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

[3]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

[4]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

*Estimation Tool Developed by the Texas Transportation Institute*

| | |
|---|---|
| **Project Name:** | Vestar CORE |
| **Analysis Period:** | **AM Street Peak Hour** |

**Table 7-A: Conversion of Vehicle-Trip Ends to Person-Trip Ends**

| Land Use | Table 7-A (D): Entering Trips | | | Table 7-A (O): Exiting Trips | | |
|---|---|---|---|---|---|---|
| | Veh. Occ. | Vehicle-Trips | Person-Trips* | Veh. Occ. | Vehicle-Trips | Person-Trips* |
| Office | 1.00 | 176 | 176 | 1.00 | 24 | 24 |
| Retail | 1.00 | 238 | 238 | 1.00 | 146 | 146 |
| Restaurant | 1.00 | 0 | 0 | 1.00 | 0 | 0 |
| Cinema/Entertainment | 1.00 | 0 | 0 | 1.00 | 0 | 0 |
| Residential | 1.00 | 79 | 79 | 1.00 | 183 | 183 |
| Hotel | 1.00 | 139 | 139 | 1.00 | 59 | 59 |

**Table 8-A (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)**

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | 7 | 15 | 0 | 0 | 0 |
| Retail | 42 | | 19 | 0 | 20 | 0 |
| Restaurant | 0 | 0 | | 0 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | | 0 | 0 |
| Residential | 4 | 2 | 37 | 0 | | 0 |
| Hotel | 44 | 8 | 5 | 0 | 0 | |

**Table 8-A (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)**

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | 76 | 0 | 0 | 0 | 0 |
| Retail | 7 | | 0 | 0 | 2 | 0 |
| Restaurant | 25 | 19 | | 0 | 4 | 6 |
| Cinema/Entertainment | 0 | 0 | 0 | | 0 | 0 |
| Residential | 5 | 40 | 0 | 0 | | 0 |
| Hotel | 5 | 10 | 0 | 0 | 0 | |

**Table 9-A (D): Internal and External Trips Summary (Entering Trips)**

| Destination Land Use | Person-Trip Estimates | | | External Trips by Mode* | | |
|---|---|---|---|---|---|---|
| | Internal | External | Total | Vehicles[1] | Transit[2] | Non-Motorized[2] |
| Office | 16 | 160 | 176 | 160 | 0 | 0 |
| Retail | 17 | 221 | 238 | 221 | 0 | 0 |
| Restaurant | 0 | 0 | 0 | 0 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | 0 | 0 | 0 |
| Residential | 2 | 77 | 79 | 77 | 0 | 0 |
| Hotel | 0 | 139 | 139 | 139 | 0 | 0 |
| All Other Land Uses[3] | 0 | 0 | 0 | 0 | 0 | 0 |

**Table 9-A (O): Internal and External Trips Summary (Exiting Trips)**

| Origin Land Use | Person-Trip Estimates | | | External Trips by Mode* | | |
|---|---|---|---|---|---|---|
| | Internal | External | Total | Vehicles[1] | Transit[2] | Non-Motorized[2] |
| Office | 7 | 17 | 24 | 17 | 0 | 0 |
| Retail | 9 | 137 | 146 | 137 | 0 | 0 |
| Restaurant | 0 | 0 | 0 | 0 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | 0 | 0 | 0 |
| Residential | 6 | 177 | 183 | 177 | 0 | 0 |
| Hotel | 13 | 46 | 59 | 46 | 0 | 0 |
| All Other Land Uses[3] | 0 | 0 | 0 | 0 | 0 | 0 |

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

| NCHRP 8-51 Internal Trip Capture Estimation Tool | | | |
|---|---|---|---|
| **Project Name:** | Vestar CORE | **Organization:** | Lokahi |
| **Project Location:** | Mesa, Arizona | **Performed By:** | CD |
| **Scenario Description:** | Phase 1 (CORE) | **Date:** | 2/20/2026 |
| **Analysis Year:** | | **Checked By:** | |
| **Analysis Period:** | **PM Street Peak Hour** | **Date:** | |

**Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)**

| Land Use | Development Data (*For Information Only*) | | | Estimated Vehicle-Trips | | |
|---|---|---|---|---|---|---|
| | ITE LUCs[1] | Quantity | Units | Total | Entering | Exiting |
| Office | 710 | 161 | 1000 SF GLA | 191 | 30 | 161 |
| Retail | 820 | 411.4 | 1000 SF GFA | 1343 | 658 | 685 |
| Restaurant | | | | 0 | | |
| Cinema/Entertainment | | | | 0 | | |
| Residential | 221 | 770 | Dwelling Units | 308 | 216 | 92 |
| Hotel | 330 | 600 | Rooms | 234 | 101 | 133 |
| All Other Land Uses[2] | | | | 0 | | |
| Total | | | | 2076 | 1005 | 1071 |

**Table 2-P: Mode Split and Vehicle Occupancy Estimates**

| Land Use | Entering Trips | | | Exiting Trips | | |
|---|---|---|---|---|---|---|
| | Veh. Occ. | % Transit | % Non-Motorized | Veh. Occ. | % Transit | % Non-Motorized |
| Office | | | | | | |
| Retail | | | | | | |
| Restaurant | | | | | | |
| Cinema/Entertainment | | | | | | |
| Residential | | | | | | |
| Hotel | | | | | | |
| All Other Land Uses[2] | | | | | | |

**Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)**

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | | | | | |
| Retail | | | | | | |
| Restaurant | | | | | | |
| Cinema/Entertainment | | | | | | |
| Residential | | | | | | |
| Hotel | | | | | | |

**Table 4-P: Internal Person-Trip Origin-Destination Matrix***

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | 32 | 0 | 0 | 3 | 0 |
| Retail | 9 | | 0 | 0 | 99 | 17 |
| Restaurant | 0 | 0 | | 0 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | | 0 | 0 |
| Residential | 4 | 39 | 0 | 0 | | 3 |
| Hotel | 0 | 13 | 0 | 0 | 0 | |

**Table 5-P: Computations Summary**

| | Total | Entering | Exiting |
|---|---|---|---|
| All Person-Trips | 2,076 | 1,005 | 1,071 |
| Internal Capture Percentage | 21% | 22% | 20% |
| | | | |
| External Vehicle-Trips[3] | 1,638 | 786 | 852 |
| External Transit-Trips[4] | 0 | 0 | 0 |
| External Non-Motorized Trips[4] | 0 | 0 | 0 |

**Table 6-P: Internal Trip Capture Percentages by Land Use**

| Land Use | Entering Trips | Exiting Trips |
|---|---|---|
| Office | 43% | 22% |
| Retail | 13% | 18% |
| Restaurant | N/A | N/A |
| Cinema/Entertainment | N/A | N/A |
| Residential | 47% | 50% |
| Hotel | 20% | 10% |

[1]Land Use Codes (LUCs) from *Trip Generation Informational Report*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

[3]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

[4]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

*Estimation Tool Developed by the Texas Transportation Institute*

| | |
|---|---|
| **Project Name:** | Vestar CORE |
| **Analysis Period:** | **PM Street Peak Hour** |

**Table 7-P: Conversion of Vehicle-Trip Ends to Person-Trip Ends**

| Land Use | Table 7-P (D): Entering Trips | | | Table 7-P (O): Exiting Trips | | |
|---|---|---|---|---|---|---|
| | Veh. Occ. | Vehicle-Trips | Person-Trips* | Veh. Occ. | Vehicle-Trips | Person-Trips* |
| Office | 1.00 | 30 | 30 | 1.00 | 161 | 161 |
| Retail | 1.00 | 658 | 658 | 1.00 | 685 | 685 |
| Restaurant | 1.00 | 0 | 0 | 1.00 | 0 | 0 |
| Cinema/Entertainment | 1.00 | 0 | 0 | 1.00 | 0 | 0 |
| Residential | 1.00 | 216 | 216 | 1.00 | 92 | 92 |
| Hotel | 1.00 | 101 | 101 | 1.00 | 133 | 133 |

**Table 8-P (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)**

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | 32 | 6 | 0 | 3 | 0 |
| Retail | 14 | | 199 | 27 | 178 | 34 |
| Restaurant | 0 | 0 | | 0 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | | 0 | 0 |
| Residential | 4 | 39 | 19 | 0 | | 3 |
| Hotel | 0 | 21 | 90 | 0 | 3 | |

**Table 8-P (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)**

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | 53 | 0 | 0 | 9 | 0 |
| Retail | 9 | | 0 | 0 | 99 | 17 |
| Restaurant | 9 | 329 | | 0 | 35 | 72 |
| Cinema/Entertainment | 2 | 26 | 0 | | 9 | 1 |
| Residential | 17 | 66 | 0 | 0 | | 12 |
| Hotel | 0 | 13 | 0 | 0 | 0 | |

**Table 9-P (D): Internal and External Trips Summary (Entering Trips)**

| Destination Land Use | Person-Trip Estimates | | | External Trips by Mode* | | |
|---|---|---|---|---|---|---|
| | Internal | External | Total | Vehicles[1] | Transit[2] | Non-Motorized[2] |
| Office | 13 | 17 | 30 | 17 | 0 | 0 |
| Retail | 84 | 574 | 658 | 574 | 0 | 0 |
| Restaurant | 0 | 0 | 0 | 0 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | 0 | 0 | 0 |
| Residential | 102 | 114 | 216 | 114 | 0 | 0 |
| Hotel | 20 | 81 | 101 | 81 | 0 | 0 |
| All Other Land Uses[3] | 0 | 0 | 0 | 0 | 0 | 0 |

**Table 9-P (O): Internal and External Trips Summary (Exiting Trips)**

| Origin Land Use | Person-Trip Estimates | | | External Trips by Mode* | | |
|---|---|---|---|---|---|---|
| | Internal | External | Total | Vehicles[1] | Transit[2] | Non-Motorized[2] |
| Office | 35 | 126 | 161 | 126 | 0 | 0 |
| Retail | 125 | 560 | 685 | 560 | 0 | 0 |
| Restaurant | 0 | 0 | 0 | 0 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | 0 | 0 | 0 |
| Residential | 46 | 46 | 92 | 46 | 0 | 0 |
| Hotel | 13 | 120 | 133 | 120 | 0 | 0 |
| All Other Land Uses[3] | 0 | 0 | 0 | 0 | 0 | 0 |

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

**Legacy Park CORE (Phase 1) - Saturday**
12th Edition

## Trip Generation Calculations

820 Shopping Center

| Land Use | ITE Code | Qty | Unit | Saturday Rate | % In | % Out | Peak Hour of Generator Rate | % In | % Out | Saturday Total | Saturday In | Saturday Out | Peak Hour of Generator Total | Peak Hour of Generator In | Peak Hour of Generator Out | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Shopping Center | 820 | 411.40 | 1000 SF GLA | 39.83 | 50% | 50% | 4.28 | 51% | 49% | 16,386 | 8193 | 8193 | 1,761 | 898 | 863 | Average |
| Shopping Center | 820 | 411.40 | 1000 SF GLA | 32.93 | 50% | 50% | 2.09 | 51% | 49% | 13,547 | 6773 | 6774 | 860 | 439 | 421 | Minimum |
| Shopping Center | 820 | 411.40 | 1000 SF GLA | 58.46 | 50% | 50% | 8.85 | 51% | 49% | 24,050 | 12025 | 12025 | 3,641 | 1857 | 1784 | Maximum |
| Land Use | ITE Code | Qty | Unit | Saturday Equation | % In | % Out | Peak Hour of Generator Equation | % In | % Out | Saturday Total | Saturday In | Saturday Out | Peak Hour of Generator Total | Peak Hour of Generator In | Peak Hour of Generator Out | |
| Shopping Center | 820 | 411.40 | 1000 SF GLA | T=34.31(X)+2795.03 | 50% | 50% | Ln(T)=0.69Ln(X)+3.33 | 51% | 49% | 16,910 | 8,455 | 8,455 | 1,778 | 907 | 871 | Equation |

| | | | | | |
|---|---|---|---|---|---|
| Shopping Center | Standard Deviation | 8.79 | | 1.68 | |
| | Number of Studies | 4 | | 29 | |
| | Average Size | 506 | | 404 | |
| | $R^2$ | 0.98 | | 0.73 | |

710 General Office Building

| Land Use | ITE Code | Qty | Unit | Saturday Rate | % In | % Out | Peak Hour of Generator Rate | % In | % Out | Saturday Total | Saturday In | Saturday Out | Peak Hour of Generator Total | Peak Hour of Generator In | Peak Hour of Generator Out | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| General Office Building | 710 | 161.0 | 1000 SF GFA | 2.21 | 50% | 50% | 0.53 | 54% | 46% | 356 | 178 | 178 | 85 | 46 | 39 | Average |
| General Office Building | 710 | 161.0 | 1000 SF GFA | 1.24 | 50% | 50% | 0.30 | 54% | 46% | 200 | 100 | 100 | 48 | 26 | 22 | Minimum |
| General Office Building | 710 | 161.0 | 1000 SF GFA | 7.46 | 50% | 50% | 1.57 | 54% | 46% | 1,201 | 601 | 600 | 253 | 137 | 116 | Maximum |
| Land Use | ITE Code | Qty | Unit | Saturday Rate | % In | % Out | Peak Hour of Generator Rate | % In | % Out | Saturday Total | Saturday In | Saturday Out | Peak Hour of Generator Total | Peak Hour of Generator In | Peak Hour of Generator Out | |
| General Office Building | 710 | 161.0 | 1000 SF GFA | N/A | 50% | 50% | N/A | 54% | 46% | N/A | N/A | N/A | N/A | N/A | N/A | Equation |

| | | | | | |
|---|---|---|---|---|---|
| General Office Building | Standard Deviation | 1.70 | | 0.52 | |
| | Number of Studies | 5 | | 3 | |
| | Average Size | 94 | | 82 | |
| | $R^2$ | N/A | | N/A | |

**Saturday rates for ITE Land Use 710 were obtained from ITE Trip Generation, 11th Edition.

330 Resort Hotel

| Land Use | ITE Code | Qty | Unit | Saturday Rate | % In | % Out | Peak Hour of Generator Rate | % In | % Out | Saturday Total | Saturday In | Saturday Out | Peak Hour of Generator Total | Peak Hour of Generator In | Peak Hour of Generator Out | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Resort Hotel | 330 | 600 | Rooms | 3.65 | 50% | 50% | 0.31 | 50% | 50% | 2,190 | 1,095 | 1,095 | 186 | 93 | 93 | Average |
| Resort Hotel | 330 | 600 | Rooms | 3.65 | 50% | 50% | 0.31 | 50% | 50% | 2,190 | 1,095 | 1,095 | 186 | 93 | 93 | Minimum |
| Resort Hotel | 330 | 600 | Rooms | 3.65 | 50% | 50% | 0.31 | 50% | 50% | 2,190 | 1,095 | 1,095 | 186 | 93 | 93 | Maximum |
| Land Use | ITE Code | Qty | Unit | Saturday Equation | % In | % Out | Peak Hour of Generator Equation | % In | % Out | Saturday Total | Saturday In | Saturday Out | Peak Hour of Generator Total | Peak Hour of Generator In | Peak Hour of Generator Out | |
| Resort Hotel | 330 | 600 | Rooms | N/A | 50% | 50% | N/A | 50% | 50% | N/A | N/A | N/A | N/A | N/A | N/A | Equation |

| | | | | | |
|---|---|---|---|---|---|
| Resort Hotel | Standard Deviation | N/A | | N/A | |
| | Number of Studies | 1 | | 1 | |
| | Average Size | 404 | | 404 | |
| | $R^2$ | N/A | | N/A | |

221 Multifamily Housing (Mid-Rise) (Four to Ten Levels)

| Land Use | ITE Code | Qty | Unit | Saturday Rate | % In | % Out | Peak Hour of Generator Rate | % In | % Out | Saturday Total | Saturday In | Saturday Out | Peak Hour of Generator Total | Peak Hour of Generator In | Peak Hour of Generator Out | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Multifamily Housing (Mid-Rise) | 221 | 770 | Dwelling Units | 4.30 | 50% | 50% | 0.36 | 51% | 49% | 3,311 | 1,656 | 1,655 | 277 | 141 | 136 | Average |
| Multifamily Housing (Mid-Rise) | 221 | 770 | Dwelling Units | 4.03 | 50% | 50% | 0.34 | 51% | 49% | 3,103 | 1,552 | 1,551 | 262 | 134 | 128 | Minimum |
| Multifamily Housing (Mid-Rise) | 221 | 770 | Dwelling Units | 4.50 | 50% | 50% | 0.37 | 51% | 49% | 3,465 | 1,733 | 1,732 | 285 | 145 | 140 | Maximum |
| Land Use | ITE Code | Qty | Unit | Saturday Equation | % In | % Out | Peak Hour of Generator Equation | % In | % Out | Saturday Total | Saturday In | Saturday Out | Peak Hour of Generator Total | Peak Hour of Generator In | Peak Hour of Generator Out | |
| Multifamily Housing (Mid-Rise) | 221 | 770 | Dwelling Units | N/A | 50% | 50% | N/A | 51% | 49% | N/A | N/A | N/A | N/A | N/A | N/A | Equation |

| | | | | | |
|---|---|---|---|---|---|
| Multifamily Housing (Mid-Rise) | Standard Deviation | N/A | | N/A | |
| | Number of Studies | 2 | | 2 | |
| | Average Size | 266 | | 266 | |
| | $R^2$ | N/A | | N/A | |

**Reductions - Legacy Park CORE (Phase 1)**

*Saturday*

| Land Use | LUC | SATURDAY MID-DAY | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | BEFORE REDUCTION | | | IC | NCHRP INTERNAL CAPTURE | | | I | PED INTERACTION WITH AAG | | | AFTER INTERNAL CAPTURE/PED INTERACTION | | | PASS-BY | PASS-BY | | | AFTER PASS-BY | | |
| | | TOTAL | ENTER | EXIT | Rate % | TOTAL | ENTER | EXIT | Rate % | TOTAL | ENTER | EXIT | TOTAL | ENTER | EXIT | Rate % | TOTAL | ENTER | EXIT | TOTAL | ENTER | EXIT |
| Shopping Center | 820 | 1,778 | 907 | 871 | 10% | 175 | 80 | 95 | 5% | 89 | 45 | 44 | 1,514 | 782 | 732 | 31% | 469 | 242 | 227 | 1,045 | 540 | 505 |
| General Office Building | 710 | 85 | 46 | 39 | 33% | 28 | 19 | 9 | 0% | - | - | - | 57 | 27 | 30 | 0% | - | - | - | 57 | 27 | 30 |
| Hotel | 330 | 186 | 93 | 93 | 19% | 35 | 20 | 15 | 5% | 10 | 5 | 5 | 141 | 68 | 73 | 0% | - | - | - | 141 | 68 | 73 |
| Multifamily Housing (Mid-Rise) | 221 | 277 | 141 | 136 | 48% | 132 | 66 | 66 | 0% | - | - | - | 145 | 75 | 70 | 0% | - | - | - | 145 | 75 | 70 |
| TOTAL | | 2,326 | 1,187 | 1,139 | | 370 | 185 | 185 | | 99 | 50 | 49 | 1,857 | 952 | 905 | | 469 | 242 | 227 | 1,388 | 710 | 678 |
| | | % Internal Capture | | | | 16% | 16% | 16% | | | | | | | | % Pass-by | 20% | 20% | 20% | | | |

| Saturday After IC | | | Weekday After Ped Interaction | | Weekday After Pass-by | |
|---|---|---|---|---|---|---|
| Rate (Avg) | Original ADT | ADT After IC | Rate (Avg) | ADT After Ped | Rate (Avg) | ADT After Pass-by |
| 90.2% | 16,910 | 15,246 | 95.0% | 14,484 | 69.0% | 9,994 |
| 67.1% | 356 | 239 | 100.0% | 239 | 100.0% | 239 |
| 81.2% | 2,190 | 1,778 | 95.0% | 1,689 | 100.0% | 1,689 |
| 52.3% | 3,311 | 1,733 | 100.0% | 1,733 | 100.0% | 1,733 |
| Total | 22,767 | 18,996 | Total | 18,145 | Total | 13,655 |
| IC Reduced | | 3,771 | *Ped Interaction* | 851 | PB Reduced | 5,341 |

| NCHRP 8-51 Internal Trip Capture Estimation Tool | | | |
|---|---|---|---|
| **Project Name:** | Vestar CORE | **Organization:** | Lokahi |
| **Project Location:** | Mesa, Arizona | **Performed By:** | CD |
| **Scenario Description:** | Phase 1 (CORE) - Saturday Test | **Date:** | 2/25/2026 |
| **Analysis Year:** | | **Checked By:** | |
| **Analysis Period:** | **Actually Saturday MD** | **Date:** | |

**Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)**

| Land Use | Development Data (*For Information Only*) | | | Estimated Vehicle-Trips | | |
|---|---|---|---|---|---|---|
| | ITE LUCs[1] | Quantity | Units | Total | Entering | Exiting |
| Office | 710 | 161 | 1000 SF GLA | 85 | 46 | 39 |
| Retail | 820 | 411.4 | 1000 SF GFA | 1778 | 907 | 871 |
| Restaurant | | | | 0 | | |
| Cinema/Entertainment | | | | 0 | | |
| Residential | 221 | 770 | Dwelling Units | 277 | 141 | 136 |
| Hotel | 310 | 600 | Rooms | 186 | 93 | 93 |
| All Other Land Uses[2] | | | | 0 | | |
| Total | | | | 2326 | 1187 | 1139 |

**Table 2-P: Mode Split and Vehicle Occupancy Estimates**

| Land Use | Entering Trips | | | Exiting Trips | | |
|---|---|---|---|---|---|---|
| | Veh. Occ. | % Transit | % Non-Motorized | Veh. Occ. | % Transit | % Non-Motorized |
| Office | | | | | | |
| Retail | | | | | | |
| Restaurant | | | | | | |
| Cinema/Entertainment | | | | | | |
| Residential | | | | | | |
| Hotel | | | | | | |
| All Other Land Uses[2] | | | | | | |

**Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)**

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | | | | | |
| Retail | | | | | | |
| Restaurant | | | | | | |
| Cinema/Entertainment | | | | | | |
| Residential | | | | | | |
| Hotel | | | | | | |

**Table 4-P: Internal Person-Trip Origin-Destination Matrix***

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | 8 | 0 | 0 | 1 | 0 |
| Retail | 14 | | 0 | 0 | 65 | 16 |
| Restaurant | 0 | 0 | | 0 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | | 0 | 0 |
| Residential | 5 | 57 | 0 | 0 | | 4 |
| Hotel | 0 | 15 | 0 | 0 | 0 | |

**Table 5-P: Computations Summary**

| | Total | Entering | Exiting |
|---|---|---|---|
| All Person-Trips | 2,326 | 1,187 | 1,139 |
| Internal Capture Percentage | 16% | 16% | 16% |
| | | | |
| External Vehicle-Trips[3] | 1,956 | 1,002 | 954 |
| External Transit-Trips[4] | 0 | 0 | 0 |
| External Non-Motorized Trips[4] | 0 | 0 | 0 |

**Table 6-P: Internal Trip Capture Percentages by Land Use**

| Land Use | Entering Trips | Exiting Trips |
|---|---|---|
| Office | 41% | 23% |
| Retail | 9% | 11% |
| Restaurant | N/A | N/A |
| Cinema/Entertainment | N/A | N/A |
| Residential | 47% | 49% |
| Hotel | 22% | 16% |

[1]Land Use Codes (LUCs) from *Trip Generation Informational Report*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

[3]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

[4]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

*Estimation Tool Developed by the Texas Transportation Institute*

| | |
|---|---|
| **Project Name:** | Vestar CORE |
| **Analysis Period:** | **PM Street Peak Hour** |

**Table 7-P: Conversion of Vehicle-Trip Ends to Person-Trip Ends**

| Land Use | Table 7-P (D): Entering Trips | | | Table 7-P (O): Exiting Trips | | |
|---|---|---|---|---|---|---|
| | Veh. Occ. | Vehicle-Trips | Person-Trips* | Veh. Occ. | Vehicle-Trips | Person-Trips* |
| Office | 1.00 | 46 | 46 | 1.00 | 39 | 39 |
| Retail | 1.00 | 907 | 907 | 1.00 | 871 | 871 |
| Restaurant | 1.00 | 0 | 0 | 1.00 | 0 | 0 |
| Cinema/Entertainment | 1.00 | 0 | 0 | 1.00 | 0 | 0 |
| Residential | 1.00 | 141 | 141 | 1.00 | 136 | 136 |
| Hotel | 1.00 | 93 | 93 | 1.00 | 93 | 93 |

**Table 8-P (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)**

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | 8 | 2 | 0 | 1 | 0 |
| Retail | 17 | | 253 | 35 | 226 | 44 |
| Restaurant | 0 | 0 | | 0 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | | 0 | 0 |
| Residential | 5 | 57 | 29 | 0 | | 4 |
| Hotel | 0 | 15 | 63 | 0 | 2 | |

**Table 8-P (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)**

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | 73 | 0 | 0 | 6 | 0 |
| Retail | 14 | | 0 | 0 | 65 | 16 |
| Restaurant | 14 | 454 | | 0 | 23 | 66 |
| Cinema/Entertainment | 3 | 36 | 0 | | 6 | 1 |
| Residential | 26 | 91 | 0 | 0 | | 11 |
| Hotel | 0 | 18 | 0 | 0 | 0 | |

**Table 9-P (D): Internal and External Trips Summary (Entering Trips)**

| Destination Land Use | Person-Trip Estimates | | | External Trips by Mode* | | |
|---|---|---|---|---|---|---|
| | Internal | External | Total | Vehicles[1] | Transit[2] | Non-Motorized[2] |
| Office | 19 | 27 | 46 | 27 | 0 | 0 |
| Retail | 80 | 827 | 907 | 827 | 0 | 0 |
| Restaurant | 0 | 0 | 0 | 0 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | 0 | 0 | 0 |
| Residential | 66 | 75 | 141 | 75 | 0 | 0 |
| Hotel | 20 | 73 | 93 | 73 | 0 | 0 |
| All Other Land Uses[3] | 0 | 0 | 0 | 0 | 0 | 0 |

**Table 9-P (O): Internal and External Trips Summary (Exiting Trips)**

| Origin Land Use | Person-Trip Estimates | | | External Trips by Mode* | | |
|---|---|---|---|---|---|---|
| | Internal | External | Total | Vehicles[1] | Transit[2] | Non-Motorized[2] |
| Office | 9 | 30 | 39 | 30 | 0 | 0 |
| Retail | 95 | 776 | 871 | 776 | 0 | 0 |
| Restaurant | 0 | 0 | 0 | 0 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | 0 | 0 | 0 |
| Residential | 66 | 70 | 136 | 70 | 0 | 0 |
| Hotel | 15 | 78 | 93 | 78 | 0 | 0 |
| All Other Land Uses[3] | 0 | 0 | 0 | 0 | 0 | 0 |

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

**Full Buildout Legacy Park**
**Trip Generation Calculations - Weekday**
12th Edition

710 General Office Building

| Land Use | ITE Code | Qty | Unit | Weekday Rate | Weekday % In | Weekday % Out | AM Peak Hour Rate | AM Peak Hour % In | AM Peak Hour % Out | PM Peak Hour Rate | PM Peak Hour % In | PM Peak Hour % Out | Weekday Total | Weekday In | Weekday Out | AM Peak Hour Total | AM Peak Hour In | AM Peak Hour Out | PM Peak Hour Total | PM Peak Hour In | PM Peak Hour Out | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| General Office Building | 710 | 3,676.0 | 1000 SF GFA | 7.83 | 50% | 50% | 1.24 | 88% | 12% | 1.18 | 16% | 84% | 28,783 | 14,392 | 14,391 | 4,558 | 4011 | 547 | 4,338 | 694 | 3644 | Average |
| General Office Building | 710 | 3,676.0 | 1000 SF GFA | 3.27 | 50% | 50% | 0.32 | 88% | 12% | 0.26 | 16% | 84% | 12,020 | 6010 | 6010 | 1,176 | 1035 | 141 | 956 | 153 | 803 | Minimum |
| General Office Building | 710 | 3,676.0 | 1000 SF GFA | 27.56 | 50% | 50% | 2.83 | 88% | 12% | 2.59 | 16% | 84% | 101,310 | 50,655 | 50,655 | 10,403 | 9,155 | 1248 | 9,521 | 1523 | 7998 | Maximum |
| Land Use | ITE Code | Qty | Unit | Weekday Rate | Weekday % In | Weekday % Out | AM Peak Hour Rate | AM Peak Hour % In | AM Peak Hour % Out | PM Peak Hour Rate | PM Peak Hour % In | PM Peak Hour % Out | Weekday Total | Weekday In | Weekday Out | AM Peak Hour Total | AM Peak Hour In | AM Peak Hour Out | PM Peak Hour Total | PM Peak Hour In | PM Peak Hour Out | |
| General Office Building | 710 | 3,676.0 | 1000 SF GFA | T=6.18(X)+207.96 | 50% | 50% | T=1.12(X)+19.95 | 88% | 12% | T=0.99(X)+31.14 | 16% | 84% | 22,925 | 11,463 | 11,462 | 4,137 | 3,641 | 496 | 3,670 | 587 | 3,083 | Equation |
| General Office Building | 710 | 3,676.0 | 1000 SF GFA | T=6.18(X)+207.96 | 50% | 50% | T=1.12(X)+19.95 | 88% | 12% | T=0.99(X)+31.14 | 16% | 84% | 18,340 | 9,170 | 9,170 | 3,310 | 2,913 | 397 | 2,936 | 470 | 2,466 | Reduced |
| General Office Building | 710 | 3,676.0 | 1000 SF GFA | T=4.74(X)+270.69 | 50% | 50% | T=0.89(X)+29.39 | 88% | 12% | Ln(T)=0.98Ln(X)+0.15 | 15% | 85% | 17,632 | 8,816 | 8,816 | 3,301 | 2,905 | 396 | 3,624 | 544 | 3,080 | Reduced |
| | | | | | | | | | | | | | 77% | 77% | 77% | 80% | 80% | 80% | 99% | 93% | 100% | |

| General Office Building | | | | | |
|---|---|---|---|---|---|
| | Standard Deviation | 3.71 | 0.4 | 0.41 | |
| | Number of Studies | 22 | 54 | 53 | |
| | Average Size | 126 | 170 | 166 | |
| | $R^2$ | 0.86 | 0.89 | 0.89 | |

330 Resort Hotel

| Land Use | ITE Code | Qty | Unit | Weekday Rate | Weekday % In | Weekday % Out | AM Peak Hour Rate | AM Peak Hour % In | AM Peak Hour % Out | PM Peak Hour Rate | PM Peak Hour % In | PM Peak Hour % Out | Weekday Total | Weekday In | Weekday Out | AM Peak Hour Total | AM Peak Hour In | AM Peak Hour Out | PM Peak Hour Total | PM Peak Hour In | PM Peak Hour Out | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Resort Hotel | 330 | 750 | Rooms | 2.67 | 50% | 50% | 0.33 | 70% | 30% | 0.39 | 43% | 57% | 2,003 | 1,002 | 1,001 | 248 | 174 | 74 | 293 | 126 | 167 | Average |
| Resort Hotel | 330 | 750 | Rooms | 2.67 | 50% | 50% | 0.12 | 70% | 30% | 0.22 | 43% | 57% | 2,003 | 1,002 | 1,001 | 90 | 63 | 27 | 165 | 71 | 94 | Minimum |
| Resort Hotel | 330 | 750 | Rooms | 2.67 | 50% | 50% | 0.41 | 70% | 30% | 0.51 | 43% | 57% | 2,003 | 1,002 | 1,001 | 308 | 216 | 92 | 383 | 165 | 218 | Maximum |
| Land Use | ITE Code | Qty | Unit | Weekday Equation | Weekday % In | Weekday % Out | AM Peak Hour Equation | AM Peak Hour % In | AM Peak Hour % Out | PM Peak Hour Equation | PM Peak Hour % In | PM Peak Hour % Out | Weekday Total | Weekday In | Weekday Out | AM Peak Hour Total | AM Peak Hour In | AM Peak Hour Out | PM Peak Hour Total | PM Peak Hour In | PM Peak Hour Out | |
| Resort Hotel | 330 | 750 | Rooms | N/A | 50% | 50% | N/A | 70% | 30% | T=0.52(X)-55.42 | 43% | 57% | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | Equation |

| Resort Hotel | | | | | |
|---|---|---|---|---|---|
| | Standard Deviation | N/A | 0.15 | 0.15 | |
| | Number of Studies | 1 | 3 | 3 | |
| | Average Size | 404 | 574 | 574 | |
| | $R^2$ | N/A | N/A | N/A | |

820 Shopping Center

| Land Use | ITE Code | Qty | Unit | Weekday Rate | Weekday % In | Weekday % Out | AM Peak Hour Rate | AM Peak Hour % In | AM Peak Hour % Out | PM Peak Hour Rate | PM Peak Hour % In | PM Peak Hour % Out | Weekday Total | Weekday In | Weekday Out | AM Peak Hour Total | AM Peak Hour In | AM Peak Hour Out | PM Peak Hour Total | PM Peak Hour In | PM Peak Hour Out | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Shopping Center | 820 | 436.40 | 1000 SF GLA | 36.39 | 50% | 50% | 0.88 | 62% | 38% | 3.26 | 49% | 51% | 15,881 | 7940 | 7941 | 384 | 238 | 146 | 1,423 | 697 | 726 | Average |
| Shopping Center | 820 | 436.40 | 1000 SF GLA | 17.27 | 50% | 50% | 0.4 | 62% | 38% | 1.57 | 49% | 51% | 7,537 | 3768 | 3769 | 175 | 109 | 66 | 685 | 336 | 349 | Minimum |
| Shopping Center | 820 | 436.40 | 1000 SF GLA | 77.31 | 50% | 50% | 3.1 | 62% | 38% | 7.22 | 49% | 51% | 33,738 | 16869 | 16869 | 1,353 | 839 | 514 | 3,151 | 1544 | 1607 | Maximum |
| Land Use | ITE Code | Qty | Unit | Weekday Equation | Weekday % In | Weekday % Out | AM Peak Hour Equation | AM Peak Hour % In | AM Peak Hour % Out | PM Peak Hour Equation | PM Peak Hour % In | PM Peak Hour % Out | Weekday Total | Weekday In | Weekday Out | AM Peak Hour Total | AM Peak Hour In | AM Peak Hour Out | PM Peak Hour Total | PM Peak Hour In | PM Peak Hour Out | |
| Shopping Center | 820 | 436.40 | 1000 SF GLA | N/A | | | T=0.61(X)+132.89 | 62% | 38% | Ln(T)=0.66Ln(X)+3.23 | 49% | 51% | N/A | | | 399 | 247 | 152 | 1,397 | 685 | 712 | Equation |

| Shopping Center | | | | | |
|---|---|---|---|---|---|
| | Standard Deviation | 15.38 | 0.45 | 1.25 | |
| | Number of Studies | 32 | 32 | 55 | |
| | Average Size | 459 | 498 | 460 | |
| | $R^2$ | N/A | 0.52 | 0.63 | |

221 Multifamily Housing (Mid-Rise) (Four to Ten Levels)

| Land Use | ITE Code | Qty | Unit | Weekday Rate | Weekday % In | Weekday % Out | AM Peak Hour Rate | AM Peak Hour % In | AM Peak Hour % Out | PM Peak Hour Rate | PM Peak Hour % In | PM Peak Hour % Out | Weekday Total | Weekday In | Weekday Out | AM Peak Hour Total | AM Peak Hour In | AM Peak Hour Out | PM Peak Hour Total | PM Peak Hour In | PM Peak Hour Out | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Multifamily Housing (Mid-Rise) | 221 | 1,214 | Dwelling Units | 4.46 | 50% | 50% | 0.38 | 23% | 77% | 0.38 | 64% | 36% | 5,414 | 2,707 | 2,707 | 461 | 106 | 355 | 461 | 295 | 166 | Average |
| Multifamily Housing (Mid-Rise) | 221 | 1,214 | Dwelling Units | 3.76 | 50% | 50% | 0.15 | 23% | 77% | 0.26 | 64% | 36% | 4,565 | 2,283 | 2,282 | 182 | 42 | 140 | 316 | 202 | 114 | Minimum |
| Multifamily Housing (Mid-Rise) | 221 | 1,214 | Dwelling Units | 5.40 | 50% | 50% | 0.67 | 23% | 77% | 0.57 | 64% | 36% | 6,556 | 3,278 | 3,278 | 813 | 187 | 626 | 692 | 443 | 249 | Maximum |
| Land Use | ITE Code | Qty | Unit | Weekday Equation | Weekday % In | Weekday % Out | AM Peak Hour Equation | AM Peak Hour % In | AM Peak Hour % Out | PM Peak Hour Equation | PM Peak Hour % In | PM Peak Hour % Out | Weekday Total | Weekday In | Weekday Out | AM Peak Hour Total | AM Peak Hour In | AM Peak Hour Out | PM Peak Hour Total | PM Peak Hour In | PM Peak Hour Out | |
| Multifamily Housing (Mid-Rise) | 221 | 1,214 | Dwelling Units | T=4.55(X)-17.52 | 50% | 50% | T=.42(X)-7.77 | 23% | 77% | T=.36+(X)+3.07 | 64% | 36% | 5,506 | 2,753 | 2,753 | 502 | 115 | 387 | 440 | 282 | 158 | Equation |

| Multifamily Housing (Mid-Rise) | | | | | |
|---|---|---|---|---|---|
| | Standard Deviation | 0.62 | 0.10 | 0.07 | |
| | Number of Studies | 7 | 20 | 21 | |
| | Average Size | 192 | 184 | 179 | |
| | $R^2$ | 0.90 | 0.87 | 0.92 | |

221 Multifamily Housing (Mid-Rise) (Four to Ten Levels)

| Land Use | ITE Code | Qty | Unit | Weekday Rate | Weekday % In | Weekday % Out | AM Peak Hour Rate | AM Peak Hour % In | AM Peak Hour % Out | PM Peak Hour Rate | PM Peak Hour % In | PM Peak Hour % Out | Weekday Total | Weekday In | Weekday Out | AM Peak Hour Total | AM Peak Hour In | AM Peak Hour Out | PM Peak Hour Total | PM Peak Hour In | PM Peak Hour Out | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Multifamily Housing (Mid-Rise) | 221 | 1,107 | Dwelling Units | 4.46 | 50% | 50% | 0.38 | 23% | 77% | 0.38 | 64% | 36% | 4,937 | 2,469 | 2,468 | 421 | 97 | 324 | 421 | 269 | 152 | Average |
| Multifamily Housing (Mid-Rise) | 221 | 1,107 | Dwelling Units | 3.76 | 50% | 50% | 0.15 | 23% | 77% | 0.26 | 64% | 36% | 4,162 | 2,081 | 2,081 | 166 | 38 | 128 | 288 | 184 | 104 | Minimum |
| Multifamily Housing (Mid-Rise) | 221 | 1,107 | Dwelling Units | 5.40 | 50% | 50% | 0.67 | 23% | 77% | 0.57 | 64% | 36% | 5,978 | 2,989 | 2,989 | 742 | 171 | 571 | 631 | 404 | 227 | Maximum |
| Land Use | ITE Code | Qty | Unit | Weekday Equation | Weekday % In | Weekday % Out | AM Peak Hour Equation | AM Peak Hour % In | AM Peak Hour % Out | PM Peak Hour Equation | PM Peak Hour % In | PM Peak Hour % Out | Weekday Total | Weekday In | Weekday Out | AM Peak Hour Total | AM Peak Hour In | AM Peak Hour Out | PM Peak Hour Total | PM Peak Hour In | PM Peak Hour Out | |
| Multifamily Housing (Mid-Rise) | 221 | 1,107 | Dwelling Units | T=4.55(X)-17.52 | 50% | 50% | T=.42(X)-7.77 | 23% | 77% | T=.36+(X)+3.07 | 64% | 36% | 5,019 | 2,509 | 2,510 | 457 | 105 | 352 | 402 | 257 | 145 | Equation |

| Multifamily Housing (Mid-Rise) | | | | | |
|---|---|---|---|---|---|
| | Standard Deviation | 0.62 | 0.10 | 0.07 | |
| | Number of Studies | 7 | 20 | 21 | |
| | Average Size | 192 | 184 | 179 | |
| | $R^2$ | 0.90 | 0.87 | 0.92 | |

231 Mid-Rise Residential with 1st-Floo (Three to Ten Levels)

| Land Use | ITE Code | Qty | Unit | Weekday Rate | Weekday % In | Weekday % Out | AM Peak Hour Rate | AM Peak Hour % In | AM Peak Hour % Out | PM Peak Hour of Generator Rate | PM Peak Hour of Generator % In | PM Peak Hour of Generator % Out | Weekday Total | Weekday In | Weekday Out | AM Peak Hour Total | AM Peak Hour In | AM Peak Hour Out | PM Peak Hour of Generator Total | PM Peak Hour of Generator In | PM Peak Hour of Generator Out | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mid-Rise Residential with 1st-Floor Commercial | 231 | 1,107 | Dwelling Units | N/A | N/A | N/A | 0.34 | 30% | 70% | 0.40 | 70% | 30% | N/A | N/A | N/A | 376 | 113 | 263 | 443 | 310 | 133 | Average |
| Mid-Rise Residential with 1st-Floor Commercial | 231 | 1,107 | Dwelling Units | N/A | N/A | N/A | 0.21 | 30% | 70% | 0.23 | 70% | 30% | N/A | N/A | N/A | 232 | 70 | 162 | 255 | 179 | 76 | Minimum |
| Mid-Rise Residential with 1st-Floor Commercial | 231 | 1,107 | Dwelling Units | N/A | N/A | N/A | 0.42 | 30% | 70% | 0.50 | 70% | 30% | N/A | N/A | N/A | 465 | 140 | 325 | 554 | 388 | 166 | Maximum |
| Land Use | ITE Code | Qty | Unit | Weekday Equation | Weekday % In | Weekday % Out | AM Peak Hour Equation | AM Peak Hour % In | AM Peak Hour % Out | PM Peak Hour of Generator Equation | PM Peak Hour of Generator % In | PM Peak Hour of Generator % Out | Weekday Total | Weekday In | Weekday Out | AM Peak Hour Total | AM Peak Hour In | AM Peak Hour Out | PM Peak Hour of Generator Total | PM Peak Hour of Generator In | PM Peak Hour of Generator Out | |
| Mid-Rise Residential with 1st-Floor Commercial | 231 | 1,107 | Dwelling Units | N/A | N/A | N/A | N/A | 50% | 50% | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | Equation |

| Mid-Rise Residential with 1st-Floor Commercial | | | | | |
|---|---|---|---|---|---|
| | Standard Deviation | N/A | N/A | N/A | |
| | Number of Studies | N/A | 2 | 2 | |
| | Average Size | N/A | 168 | 168 | |
| | $R^2$ | N/A | N/A | N/A | |

**Reductions - Full Buildout Legacy Park - Weekday**

*Weekday*

AM PEAK HOUR

| Land Use | LUC | BEFORE REDUCTION | | | IC | NCHRP INTERNAL CAPTURE | | | I | INTERACTION WITH AAG | | | AFTER INTERNAL CAPTURE/PED INTERACTION | | | PASS-BY | PASS-BY | | | AFTER PASS-BY | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | TOTAL | ENTER | EXIT | Rate % | TOTAL | ENTER | EXIT | Rate % | TOTAL | ENTER | EXIT | TOTAL | ENTER | EXIT | Rate % | TOTAL | ENTER | EXIT | TOTAL | ENTER | EXIT |
| Shopping Center | 820 | 399 | 247 | 152 | 36% | 145 | 96 | 49 | 5% | 20 | 12 | 8 | 234 | 139 | 95 | 0% | - | - | - | 234 | 139 | 95 |
| General Office Building | 710 | 4,137 | 3,641 | 496 | 5% | 192 | 113 | 79 | 0% | - | - | - | 3,945 | 3,528 | 417 | 0% | - | - | - | 3,945 | 3,528 | 417 |
| Hotel | 330 | 248 | 174 | 74 | 27% | 66 | - | 66 | 5% | 13 | 9 | 4 | 169 | 165 | 4 | 0% | - | - | - | 169 | 165 | 4 |
| Residential | 221/231 | 878 | 228 | 650 | 3% | 25 | 5 | 20 | 0% | - | - | - | 853 | 223 | 630 | 0% | - | - | - | 853 | 223 | 630 |
| | TOTAL | 5,662 | 4,290 | 1,372 | | 428 | 214 | 214 | | 33 | 21 | 12 | 5,201 | 4,055 | 1,146 | | - | - | - | 5,201 | 4,055 | 1,146 |
| | | | % Internal Capture | | | 8% | 5% | 16% | | | | | | | | % Pass-by | 0% | 0% | 0% | | | |

PM PEAK HOUR

| Land Use | LUC | BEFORE REDUCTION | | | IC | NCHRP INTERNAL CAPTURE | | | I | INTERACTION WITH AAG | | | AFTER INTERNAL CAPTURE/PED INTERACTION | | | PASS-BY | PASS-BY | | | AFTER PASS-BY | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | TOTAL | ENTER | EXIT | Rate % | TOTAL | ENTER | EXIT | Rate % | TOTAL | ENTER | EXIT | TOTAL | ENTER | EXIT | Rate % | TOTAL | ENTER | EXIT | TOTAL | ENTER | EXIT |
| Shopping Center | 820 | 1,397 | 685 | 712 | 26% | 358 | 138 | 220 | 5% | 70 | 34 | 36 | 969 | 513 | 456 | 19% | 184 | 97 | 87 | 785 | 416 | 369 |
| General Office Building | 710 | 3,670 | 587 | 3,083 | 3% | 105 | 26 | 79 | 0% | - | - | - | 3,565 | 561 | 3,004 | 0% | - | - | - | 3,565 | 561 | 3,004 |
| Hotel | 330 | 293 | 126 | 167 | 15% | 44 | 30 | 14 | 5% | 14 | 6 | 8 | 235 | 90 | 145 | 0% | - | - | - | 235 | 90 | 145 |
| Residential | 221/231 | 883 | 592 | 291 | 34% | 299 | 209 | 90 | 0% | - | - | - | 584 | 383 | 201 | 0% | - | - | - | 584 | 383 | 201 |
| | TOTAL | 6,243 | 1,990 | 4,253 | | 806 | 403 | 403 | | 84 | 40 | 44 | 5,353 | 1,547 | 3,806 | | 184 | 97 | 87 | 5,169 | 1,450 | 3,719 |
| | | | % Internal Capture | | | 13% | 20% | 9% | | | | | | | | % Pass-by | 3% | 5% | 2% | | | |

| Weekday After IC | | | Weekday After Ped Interaction | | Weekday After Pass-by | |
|---|---|---|---|---|---|---|
| Rate (Avg) | Original ADT | ADT After IC | Rate (Avg) | ADT After Ped | Rate (Avg) | ADT After Pass-by |
| 69.0% | 15,881 | 10,960 | 95.0% | 10,412 | 90.5% | 9,423 |
| 96.2% | 22,925 | 22,065 | 100.0% | 22,065 | 100.0% | 22,065 |
| 79.2% | 2,003 | 1,586 | 95.0% | 1,507 | 100.0% | 1,507 |
| 81.6% | 10,443 | 8,526 | 100.0% | 8,526 | 100.0% | 8,526 |
| Total | 51,252 | 43,137 | Total | 42,510 | Total | 41,521 |
| IC Reduced | | 8,115 | *Ped Interaction* | 627 | PB Reduced | 1,616 |

| NCHRP 8-51 Internal Trip Capture Estimation Tool | | | |
|---|---|---|---|
| **Project Name:** | Vestar Full Buildout | **Organization:** | Lokahi |
| **Project Location:** | Mesa, Arizona | **Performed By:** | CD |
| **Scenario Description:** | Full Buildout (2044) | **Date:** | 2/20/2026 |
| **Analysis Year:** | | **Checked By:** | - |
| **Analysis Period:** | **AM Street Peak Hour** | **Date:** | - |

**Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)**

| Land Use | Development Data (*For Information Only*) | | | Estimated Vehicle-Trips | | |
|---|---|---|---|---|---|---|
| | ITE LUCs[1] | Quantity | Units | Total | Entering | Exiting |
| Office | 710 | 3,675.97 | 1000 SF GFA | 4137 | 3641 | 496 |
| Retail | 820 | 436.40 | 1000 SF GLA | 399 | 247 | 152 |
| Restaurant | | | | 0 | | |
| Cinema/Entertainment | | | | 0 | | |
| Residential | 221,231 | 2,321 | Dwelling Units | 878 | 228 | 650 |
| Hotel | 330 | 750 | Rooms | 248 | 174 | 74 |
| All Other Land Uses[2] | | | | 0 | | |
| Total | | | | 5662 | 4290 | 1372 |

**Table 2-A: Mode Split and Vehicle Occupancy Estimates**

| Land Use | Entering Trips | | | Exiting Trips | | |
|---|---|---|---|---|---|---|
| | Veh. Occ. | % Transit | % Non-Motorized | Veh. Occ. | % Transit | % Non-Motorized |
| Office | | | | | | |
| Retail | | | | | | |
| Restaurant | | | | | | |
| Cinema/Entertainment | | | | | | |
| Residential | | | | | | |
| Hotel | | | | | | |
| All Other Land Uses[2] | | | | | | |

**Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)**

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | | | | | |
| Retail | | | | | | |
| Restaurant | | | | | | |
| Cinema/Entertainment | | | | | | |
| Residential | | | | | | |
| Hotel | | | | | | |

**Table 4-A: Internal Person-Trip Origin-Destination Matrix***

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | 79 | 0 | 0 | 0 | 0 |
| Retail | 44 | | 0 | 0 | 5 | 0 |
| Restaurant | 0 | 0 | | 0 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | | 0 | 0 |
| Residential | 13 | 7 | 0 | 0 | | 0 |
| Hotel | 56 | 10 | 0 | 0 | 0 | |

**Table 5-A: Computations Summary**

| | Total | Entering | Exiting |
|---|---|---|---|
| All Person-Trips | 5,662 | 4,290 | 1,372 |
| Internal Capture Percentage | 8% | 5% | 16% |
| | | | |
| External Vehicle-Trips[3] | 5,234 | 4,076 | 1,158 |
| External Transit-Trips[4] | 0 | 0 | 0 |
| External Non-Motorized Trips[4] | 0 | 0 | 0 |

**Table 6-A: Internal Trip Capture Percentages by Land Use**

| Land Use | Entering Trips | Exiting Trips |
|---|---|---|
| Office | 3% | 16% |
| Retail | 39% | 32% |
| Restaurant | N/A | N/A |
| Cinema/Entertainment | N/A | N/A |
| Residential | 2% | 3% |
| Hotel | 0% | 89% |

[1]Land Use Codes (LUCs) from *Trip Generation Informational Report*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

[3]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

[4]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

*Estimation Tool Developed by the Texas Transportation Institute*

| | |
|---|---|
| **Project Name:** | Vestar Full Buildout |
| **Analysis Period:** | **AM Street Peak Hour** |

**Table 7-A: Conversion of Vehicle-Trip Ends to Person-Trip Ends**

| Land Use | Table 7-A (D): Entering Trips | | | Table 7-A (O): Exiting Trips | | |
|---|---|---|---|---|---|---|
| | Veh. Occ. | Vehicle-Trips | Person-Trips* | Veh. Occ. | Vehicle-Trips | Person-Trips* |
| Office | 1.00 | 3641 | 3641 | 1.00 | 496 | 496 |
| Retail | 1.00 | 247 | 247 | 1.00 | 152 | 152 |
| Restaurant | 1.00 | 0 | 0 | 1.00 | 0 | 0 |
| Cinema/Entertainment | 1.00 | 0 | 0 | 1.00 | 0 | 0 |
| Residential | 1.00 | 228 | 228 | 1.00 | 650 | 650 |
| Hotel | 1.00 | 174 | 174 | 1.00 | 74 | 74 |

**Table 8-A (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)**

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | 139 | 312 | 0 | 5 | 0 |
| Retail | 44 | | 20 | 0 | 21 | 0 |
| Restaurant | 0 | 0 | | 0 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | | 0 | 0 |
| Residential | 13 | 7 | 130 | 0 | | 0 |
| Hotel | 56 | 10 | 7 | 0 | 0 | |

**Table 8-A (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)**

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | 79 | 0 | 0 | 0 | 0 |
| Retail | 146 | | 0 | 0 | 5 | 0 |
| Restaurant | 510 | 20 | | 0 | 11 | 7 |
| Cinema/Entertainment | 0 | 0 | 0 | | 0 | 0 |
| Residential | 109 | 42 | 0 | 0 | | 0 |
| Hotel | 109 | 10 | 0 | 0 | 0 | |

**Table 9-A (D): Internal and External Trips Summary (Entering Trips)**

| Destination Land Use | Person-Trip Estimates | | | External Trips by Mode* | | |
|---|---|---|---|---|---|---|
| | Internal | External | Total | Vehicles[1] | Transit[2] | Non-Motorized[2] |
| Office | 113 | 3528 | 3641 | 3528 | 0 | 0 |
| Retail | 96 | 151 | 247 | 151 | 0 | 0 |
| Restaurant | 0 | 0 | 0 | 0 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | 0 | 0 | 0 |
| Residential | 5 | 223 | 228 | 223 | 0 | 0 |
| Hotel | 0 | 174 | 174 | 174 | 0 | 0 |
| All Other Land Uses[3] | 0 | 0 | 0 | 0 | 0 | 0 |

**Table 9-A (O): Internal and External Trips Summary (Exiting Trips)**

| Origin Land Use | Person-Trip Estimates | | | External Trips by Mode* | | |
|---|---|---|---|---|---|---|
| | Internal | External | Total | Vehicles[1] | Transit[2] | Non-Motorized[2] |
| Office | 79 | 417 | 496 | 417 | 0 | 0 |
| Retail | 49 | 103 | 152 | 103 | 0 | 0 |
| Restaurant | 0 | 0 | 0 | 0 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | 0 | 0 | 0 |
| Residential | 20 | 630 | 650 | 630 | 0 | 0 |
| Hotel | 66 | 8 | 74 | 8 | 0 | 0 |
| All Other Land Uses[3] | 0 | 0 | 0 | 0 | 0 | 0 |

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

| NCHRP 8-51 Internal Trip Capture Estimation Tool | | | |
|---|---|---|---|
| **Project Name:** | Vestar Full Buildout | **Organization:** | Lokahi |
| **Project Location:** | Mesa, Arizona | **Performed By:** | CD |
| **Scenario Description:** | Full Buildout (2044) | **Date:** | 2/20/2026 |
| **Analysis Year:** | | **Checked By:** | |
| **Analysis Period:** | **PM Street Peak Hour** | **Date:** | |

**Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)**

| Land Use | Development Data (*For Information Only*) | | | Estimated Vehicle-Trips | | |
|---|---|---|---|---|---|---|
| | ITE LUCs[1] | Quantity | Units | Total | Entering | Exiting |
| Office | 710 | 3,675.97 | 1000 SF GFA | 3670 | 587 | 3083 |
| Retail | 820 | 436.40 | 1000 SF GLA | 1397 | 685 | 712 |
| Restaurant | | | | 0 | | |
| Cinema/Entertainment | | | | 0 | | |
| Residential | 221,231 | 2,321 | Dwelling Units | 883 | 592 | 291 |
| Hotel | 330 | 750 | Rooms | 293 | 126 | 167 |
| All Other Land Uses[2] | | | | 0 | | |
| Total | | | | 6243 | 1990 | 4253 |

**Table 2-P: Mode Split and Vehicle Occupancy Estimates**

| Land Use | Entering Trips | | | Exiting Trips | | |
|---|---|---|---|---|---|---|
| | Veh. Occ. | % Transit | % Non-Motorized | Veh. Occ. | % Transit | % Non-Motorized |
| Office | | | | | | |
| Retail | | | | | | |
| Restaurant | | | | | | |
| Cinema/Entertainment | | | | | | |
| Residential | | | | | | |
| Hotel | | | | | | |
| All Other Land Uses[2] | | | | | | |

**Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)**

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | | | | | |
| Retail | | | | | | |
| Restaurant | | | | | | |
| Cinema/Entertainment | | | | | | |
| Residential | | | | | | |
| Hotel | | | | | | |

**Table 4-P: Internal Person-Trip Origin-Destination Matrix***

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | 55 | 0 | 0 | 24 | 0 |
| Retail | 14 | | 0 | 0 | 185 | 21 |
| Restaurant | 0 | 0 | | 0 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | | 0 | 0 |
| Residential | 12 | 69 | 0 | 0 | | 9 |
| Hotel | 0 | 14 | 0 | 0 | 0 | |

**Table 5-P: Computations Summary**

| | Total | Entering | Exiting |
|---|---|---|---|
| All Person-Trips | 6,243 | 1,990 | 4,253 |
| Internal Capture Percentage | 13% | 20% | 9% |
| | | | |
| External Vehicle-Trips[3] | 5,437 | 1,587 | 3,850 |
| External Transit-Trips[4] | 0 | 0 | 0 |
| External Non-Motorized Trips[4] | 0 | 0 | 0 |

**Table 6-P: Internal Trip Capture Percentages by Land Use**

| Land Use | Entering Trips | Exiting Trips |
|---|---|---|
| Office | 4% | 3% |
| Retail | 20% | 31% |
| Restaurant | N/A | N/A |
| Cinema/Entertainment | N/A | N/A |
| Residential | 35% | 31% |
| Hotel | 24% | 8% |

[1]Land Use Codes (LUCs) from *Trip Generation Informational Report*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

[3]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

[4]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

*Estimation Tool Developed by the Texas Transportation Institute*

| | |
|---|---|
| **Project Name:** | Vestar Full Buildout |
| **Analysis Period:** | **PM Street Peak Hour** |

**Table 7-P: Conversion of Vehicle-Trip Ends to Person-Trip Ends**

| Land Use | Table 7-P (D): Entering Trips | | | Table 7-P (O): Exiting Trips | | |
|---|---|---|---|---|---|---|
| | Veh. Occ. | Vehicle-Trips | Person-Trips* | Veh. Occ. | Vehicle-Trips | Person-Trips* |
| Office | 1.00 | 587 | 587 | 1.00 | 3083 | 3083 |
| Retail | 1.00 | 685 | 685 | 1.00 | 712 | 712 |
| Restaurant | 1.00 | 0 | 0 | 1.00 | 0 | 0 |
| Cinema/Entertainment | 1.00 | 0 | 0 | 1.00 | 0 | 0 |
| Residential | 1.00 | 592 | 592 | 1.00 | 291 | 291 |
| Hotel | 1.00 | 126 | 126 | 1.00 | 167 | 167 |

**Table 8-P (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)**

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | 617 | 123 | 0 | 62 | 0 |
| Retail | 14 | | 206 | 28 | 185 | 36 |
| Restaurant | 0 | 0 | | 0 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | | 0 | 0 |
| Residential | 12 | 122 | 61 | 0 | | 9 |
| Hotel | 0 | 27 | 114 | 0 | 3 | |

**Table 8-P (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)**

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | 55 | 0 | 0 | 24 | 0 |
| Retail | 182 | | 0 | 0 | 272 | 21 |
| Restaurant | 176 | 343 | | 0 | 95 | 89 |
| Cinema/Entertainment | 35 | 27 | 0 | | 24 | 1 |
| Residential | 335 | 69 | 0 | 0 | | 15 |
| Hotel | 0 | 14 | 0 | 0 | 0 | |

**Table 9-P (D): Internal and External Trips Summary (Entering Trips)**

| Destination Land Use | Person-Trip Estimates | | | External Trips by Mode* | | |
|---|---|---|---|---|---|---|
| | Internal | External | Total | Vehicles[1] | Transit[2] | Non-Motorized[2] |
| Office | 26 | 561 | 587 | 561 | 0 | 0 |
| Retail | 138 | 547 | 685 | 547 | 0 | 0 |
| Restaurant | 0 | 0 | 0 | 0 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | 0 | 0 | 0 |
| Residential | 209 | 383 | 592 | 383 | 0 | 0 |
| Hotel | 30 | 96 | 126 | 96 | 0 | 0 |
| All Other Land Uses[3] | 0 | 0 | 0 | 0 | 0 | 0 |

**Table 9-P (O): Internal and External Trips Summary (Exiting Trips)**

| Origin Land Use | Person-Trip Estimates | | | External Trips by Mode* | | |
|---|---|---|---|---|---|---|
| | Internal | External | Total | Vehicles[1] | Transit[2] | Non-Motorized[2] |
| Office | 79 | 3004 | 3083 | 3004 | 0 | 0 |
| Retail | 220 | 492 | 712 | 492 | 0 | 0 |
| Restaurant | 0 | 0 | 0 | 0 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | 0 | 0 | 0 |
| Residential | 90 | 201 | 291 | 201 | 0 | 0 |
| Hotel | 14 | 153 | 167 | 153 | 0 | 0 |
| All Other Land Uses[3] | 0 | 0 | 0 | 0 | 0 | 0 |

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

**Full Buildout Legacy Park**
**Trip Generation Calculations - Saturday**
12th Edition

710 General Office Building

| Land Use | ITE Code | Qty | Unit | Saturday Rate | Saturday % In | Saturday % Out | Peak Hour of Generator Rate | Peak Hour of Generator % In | Peak Hour of Generator % Out | Saturday Total | Saturday In | Saturday Out | Peak Hour of Generator Total | Peak Hour of Generator In | Peak Hour of Generator Out | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| General Office Building | 710 | 3,676.0 | 1000 SF GFA | 2.21 | 50% | 50% | 0.53 | 54% | 46% | 8,124 | 4,062 | 4,062 | 1,948 | 1052 | 896 | Average |
| General Office Building | 710 | 3,676.0 | 1000 SF GFA | 1.24 | 50% | 50% | 0.30 | 54% | 46% | 4,558 | 2279 | 2279 | 1,103 | 596 | 507 | Minimum |
| General Office Building | 710 | 3,676.0 | 1000 SF GFA | 7.46 | 50% | 50% | 1.57 | 54% | 46% | 27,423 | 13,712 | 13,711 | 5,771 | 3,116 | 2655 | Maximum |
| Land Use | ITE Code | Qty | Unit | Saturday Rate | Saturday % In | Saturday % Out | Peak Hour of Generator Rate | Peak Hour of Generator % In | Peak Hour of Generator % Out | Saturday Total | Saturday In | Saturday Out | Peak Hour of Generator Total | Peak Hour of Generator In | Peak Hour of Generator Out | |
| General Office Building | 710 | 3,676.0 | 1000 SF GFA | N/A | 50% | 50% | N/A | 54% | 46% | N/A | N/A | N/A | N/A | N/A | N/A | Equation |
| General Office Building | 710 | 3,676.0 | 1000 SF GFA | N/A | 50% | 50% | N/A | 54% | 46% | 6,499 | 3,250 | 3,250 | 1,558 | 842 | 717 | Reduced |

| | | | | | |
|---|---|---|---|---|---|
| General Office Building | Standard Deviation | 1.70 | | 0.52 | |
| | Number of Studies | 5 | | 3 | |
| | Average Size | 94 | | 82 | |
| | $R^2$ | N/A | | N/A | |

**Saturday rates for ITE Land Use 710 were obtained from ITE Trip Generation, 11th Edition.

330 Resort Hotel

| Land Use | ITE Code | Qty | Unit | Saturday Rate | Saturday % In | Saturday % Out | Peak Hour of Generator Rate | Peak Hour of Generator % In | Peak Hour of Generator % Out | Saturday Total | Saturday In | Saturday Out | Peak Hour of Generator Total | Peak Hour of Generator In | Peak Hour of Generator Out | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Resort Hotel | 330 | 750 | Rooms | 3.65 | 50% | 50% | 0.31 | 50% | 50% | 2,738 | 1,369 | 1,369 | 233 | 116 | 117 | Average |
| Resort Hotel | 330 | 750 | Rooms | 3.65 | 50% | 50% | 0.31 | 50% | 50% | 2,738 | 1,369 | 1,369 | 233 | 117 | 116 | Minimum |
| Resort Hotel | 330 | 750 | Rooms | 3.65 | 50% | 50% | 0.31 | 50% | 50% | 2,738 | 1,369 | 1,369 | 233 | 117 | 116 | Maximum |
| Land Use | ITE Code | Qty | Unit | Saturday Equation | Saturday % In | Saturday % Out | Peak Hour of Generator Equation | Peak Hour of Generator % In | Peak Hour of Generator % Out | Saturday Total | Saturday In | Saturday Out | Peak Hour of Generator Total | Peak Hour of Generator In | Peak Hour of Generator Out | |
| Resort Hotel | 330 | 750 | Rooms | N/A | 50% | 50% | N/A | 50% | 50% | N/A | N/A | N/A | N/A | N/A | N/A | Equation |

| | | | | | |
|---|---|---|---|---|---|
| Resort Hotel | Standard Deviation | N/A | | N/A | |
| | Number of Studies | 1 | | 1 | |
| | Average Size | 404 | | 404 | |
| | $R^2$ | N/A | | N/A | |

820 Shopping Center

| Land Use | ITE Code | Qty | Unit | Saturday Rate | Saturday % In | Saturday % Out | Peak Hour of Generator Rate | Peak Hour of Generator % In | Peak Hour of Generator % Out | Saturday Total | Saturday In | Saturday Out | Peak Hour of Generator Total | Peak Hour of Generator In | Peak Hour of Generator Out | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Shopping Center | 820 | 436.40 | 1000 SF GLA | 39.83 | 50% | 50% | 4.28 | 51% | 49% | 17,382 | 8691 | 8691 | 1,868 | 953 | 915 | Average |
| Shopping Center | 820 | 436.40 | 1000 SF GLA | 32.93 | 50% | 50% | 2.09 | 51% | 49% | 14,371 | 7185 | 7186 | 912 | 465 | 447 | Minimum |
| Shopping Center | 820 | 436.40 | 1000 SF GLA | 58.46 | 50% | 50% | 8.85 | 51% | 49% | 25,512 | 12756 | 12756 | 3,862 | 1970 | 1892 | Maximum |
| Land Use | ITE Code | Qty | Unit | Saturday Equation | Saturday % In | Saturday % Out | Peak Hour of Generator Equation | Peak Hour of Generator % In | Peak Hour of Generator % Out | Saturday Total | Saturday In | Saturday Out | Peak Hour of Generator Total | Peak Hour of Generator In | Peak Hour of Generator Out | |
| Shopping Center | 820 | 436.40 | 1000 SF GLA | T=34.31(X)+2795.03 | 50% | 50% | Ln(T)=0.69Ln(X)+3.33 | 51% | 49% | 17,768 | 8,884 | 8,884 | 1,852 | 945 | 907 | Equation |

| | | | | | |
|---|---|---|---|---|---|
| Shopping Center | Standard Deviation | 8.79 | | 1.68 | |
| | Number of Studies | 4 | | 29 | |
| | Average Size | 506 | | 404 | |
| | $R^2$ | 0.98 | | 0.73 | |

221 Multifamily Housing (Mid-Rise) (Four to Ten Levels)

| Land Use | ITE Code | Qty | Unit | Saturday Rate | Saturday % In | Saturday % Out | Peak Hour of Generator Rate | Peak Hour of Generator % In | Peak Hour of Generator % Out | Saturday Total | Saturday In | Saturday Out | Peak Hour of Generator Total | Peak Hour of Generator In | Peak Hour of Generator Out | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Multifamily Housing (Mid-Rise) | 221 | 1,214 | Dwelling Units | 4.30 | 50% | 50% | 0.36 | 51% | 49% | 5,220 | 2,610 | 2,610 | 437 | 223 | 214 | Average |
| Multifamily Housing (Mid-Rise) | 221 | 1,214 | Dwelling Units | 4.03 | 50% | 50% | 0.34 | 51% | 49% | 4,892 | 2,446 | 2,446 | 413 | 211 | 202 | Minimum |
| Multifamily Housing (Mid-Rise) | 221 | 1,214 | Dwelling Units | 4.50 | 50% | 50% | 0.37 | 51% | 49% | 5,463 | 2,732 | 2,731 | 449 | 229 | 220 | Maximum |
| Land Use | ITE Code | Qty | Unit | Saturday Equation | Saturday % In | Saturday % Out | Peak Hour of Generator Equation | Peak Hour of Generator % In | Peak Hour of Generator % Out | Saturday Total | Saturday In | Saturday Out | Peak Hour of Generator Total | Peak Hour of Generator In | Peak Hour of Generator Out | |
| Multifamily Housing (Mid-Rise) | 221 | 1,214 | Dwelling Units | N/A | 50% | 50% | N/A | 51% | 49% | N/A | N/A | N/A | N/A | N/A | N/A | Equation |

| | | | | | |
|---|---|---|---|---|---|
| Multifamily Housing (Mid-Rise) | Standard Deviation | N/A | | N/A | |
| | Number of Studies | 2 | | 2 | |
| | Average Size | 266 | | 266 | |
| | $R^2$ | N/A | | N/A | |

221 Multifamily Housing (Mid-Rise) (Four to Ten Levels)

| Land Use | ITE Code | Qty | Unit | Saturday Rate | Saturday % In | Saturday % Out | Peak Hour of Generator Rate | Peak Hour of Generator % In | Peak Hour of Generator % Out | Saturday Total | Saturday In | Saturday Out | Peak Hour of Generator Total | Peak Hour of Generator In | Peak Hour of Generator Out | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Multifamily Housing (Mid-Rise) | 221 | 1,107 | Dwelling Units | 4.30 | 50% | 50% | 0.36 | 51% | 49% | 4,760 | 2,380 | 2,380 | 399 | 203 | 196 | Average |
| Multifamily Housing (Mid-Rise) | 221 | 1,107 | Dwelling Units | 4.03 | 50% | 50% | 0.34 | 51% | 49% | 4,461 | 2,231 | 2,230 | 376 | 192 | 184 | Minimum |
| Multifamily Housing (Mid-Rise) | 221 | 1,107 | Dwelling Units | 4.50 | 50% | 50% | 0.37 | 51% | 49% | 4,982 | 2,491 | 2,491 | 410 | 209 | 201 | Maximum |
| Land Use | ITE Code | Qty | Unit | Saturday Equation | Saturday % In | Saturday % Out | Peak Hour of Generator Equation | Peak Hour of Generator % In | Peak Hour of Generator % Out | Saturday Total | Saturday In | Saturday Out | Peak Hour of Generator Total | Peak Hour of Generator In | Peak Hour of Generator Out | |
| Multifamily Housing (Mid-Rise) | 221 | 1,107 | Dwelling Units | N/A | 50% | 50% | N/A | 51% | 49% | N/A | N/A | N/A | N/A | N/A | N/A | Equation |

| | | | | | |
|---|---|---|---|---|---|
| Multifamily Housing (Mid-Rise) | Standard Deviation | N/A | | N/A | |
| | Number of Studies | 2 | | 2 | |
| | Average Size | 266 | | 266 | |
| | $R^2$ | N/A | | N/A | |

**Reductions - Full Buildout Legacy Park - Weekday**

*Saturday*

| Land Use | LUC | SATURDAY MID-DAY | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | BEFORE REDUCTION | | | IC | NCHRP INTERNAL CAPTURE | | | I | PED INTERACTION WITH AAG | | | AFTER INTERNAL CAPTURE/PED INTERACTION | | | PASS-BY | PASS-BY | | | AFTER PASS-BY | | |
| | | TOTAL | ENTER | EXIT | Rate % | TOTAL | ENTER | EXIT | Rate % | TOTAL | ENTER | EXIT | TOTAL | ENTER | EXIT | Rate % | TOTAL | ENTER | EXIT | TOTAL | ENTER | EXIT |
| Shopping Center | 820 | 1,852 | 945 | 907 | 23% | 424 | 190 | 234 | 5% | 92 | 47 | 45 | 1,336 | 708 | 628 | 31% | 414 | 219 | 195 | 922 | 489 | 433 |
| General Office Building | 710 | 1,948 | 1,052 | 896 | 7% | 127 | 34 | 93 | 0% | - | - | - | 1,821 | 1,018 | 803 | 0% | - | - | - | 1,821 | 1,018 | 803 |
| Hotel | 330 | 233 | 116 | 117 | 22% | 51 | 32 | 19 | 5% | 12 | 6 | 6 | 170 | 78 | 92 | 0% | - | - | - | 170 | 78 | 92 |
| Residential | 221 | 836 | 426 | 410 | 40% | 336 | 213 | 123 | 0% | - | - | - | 500 | 213 | 287 | 0% | - | - | - | 500 | 213 | 287 |
| | TOTAL | 4,869 | 2,539 | 2,330 | | 938 | 469 | 469 | | 104 | 53 | 51 | 3,827 | 2,017 | 1,810 | | 414 | 219 | 195 | 3,413 | 1,798 | 1,615 |
| | | | % Internal Capture | | | 19% | 18% | 20% | | | | | | | | % Pass-by | 9% | 9% | 8% | | | |

| Saturday After IC | | | Weekday After Ped Interaction | | Saturday After Pass-by | |
|---|---|---|---|---|---|---|
| Rate (Avg) | Original ADT | ADT After IC | Rate (Avg) | ADT After Ped | Rate (Avg) | ADT After Pass-by |
| 77.1% | 17,768 | 13,700 | 95.0% | 13,015 | 69.0% | 8,980 |
| 93.5% | 8,124 | 7,594 | 100.0% | 7,594 | 100.0% | 7,594 |
| 78.1% | 2,738 | 2,139 | 95.0% | 2,032 | 100.0% | 2,032 |
| 59.8% | 9,980 | 5,969 | 100.0% | 5,969 | 100.0% | 5,969 |
| Total | 38,610 | 29,402 | Total | 28,610 | Total | 24,575 |
| IC Reduced | | 9,208 | *Ped Interaction* | 792 | PB Reduced | 4,827 |

| NCHRP 8-51 Internal Trip Capture Estimation Tool | | | |
|---|---|---|---|
| **Project Name:** | Vestar Full Buildout | **Organization:** | Lokahi |
| **Project Location:** | Mesa, Arizona | **Performed By:** | CD |
| **Scenario Description:** | Full Buildout (2044) SATURDAY Testing | **Date:** | 2/20/2026 |
| **Analysis Year:** | | **Checked By:** | |
| **Analysis Period:** | **Actually Saturday MD** | **Date:** | |

**Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)**

| Land Use | Development Data (*For Information Only*) | | | Estimated Vehicle-Trips | | |
|---|---|---|---|---|---|---|
| | ITE LUCs[1] | Quantity | Units | Total | Entering | Exiting |
| Office | 710 | 3,675.97 | 1000 SF GFA | 1948 | 1052 | 896 |
| Retail | 820 | 436.40 | 1000 SF GLA | 1852 | 945 | 907 |
| Restaurant | | | | 0 | | |
| Cinema/Entertainment | | | | 0 | | |
| Residential | 221,231 | 2,321 | Dwelling Units | 836 | 426 | 410 |
| Hotel | 330 | 750 | Rooms | 233 | 116 | 117 |
| All Other Land Uses[2] | | | | 0 | | |
| Total | | | | 4869 | 2539 | 2330 |

**Table 2-P: Mode Split and Vehicle Occupancy Estimates**

| Land Use | Entering Trips | | | Exiting Trips | | |
|---|---|---|---|---|---|---|
| | Veh. Occ. | % Transit | % Non-Motorized | Veh. Occ. | % Transit | % Non-Motorized |
| Office | | | | | | |
| Retail | | | | | | |
| Restaurant | | | | | | |
| Cinema/Entertainment | | | | | | |
| Residential | | | | | | |
| Hotel | | | | | | |
| All Other Land Uses[2] | | | | | | |

**Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)**

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | | | | | |
| Retail | | | | | | |
| Restaurant | | | | | | |
| Cinema/Entertainment | | | | | | |
| Residential | | | | | | |
| Hotel | | | | | | |

**Table 4-P: Internal Person-Trip Origin-Destination Matrix***

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | 76 | 0 | 0 | 17 | 0 |
| Retail | 18 | | 0 | 0 | 196 | 20 |
| Restaurant | 0 | 0 | | 0 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | | 0 | 0 |
| Residential | 16 | 95 | 0 | 0 | | 12 |
| Hotel | 0 | 19 | 0 | 0 | 0 | |

**Table 5-P: Computations Summary**

| | Total | Entering | Exiting |
|---|---|---|---|
| All Person-Trips | 4,869 | 2,539 | 2,330 |
| Internal Capture Percentage | 19% | 18% | 20% |
| | | | |
| External Vehicle-Trips[3] | 3,931 | 2,070 | 1,861 |
| External Transit-Trips[4] | 0 | 0 | 0 |
| External Non-Motorized Trips[4] | 0 | 0 | 0 |

**Table 6-P: Internal Trip Capture Percentages by Land Use**

| Land Use | Entering Trips | Exiting Trips |
|---|---|---|
| Office | 3% | 10% |
| Retail | 20% | 26% |
| Restaurant | N/A | N/A |
| Cinema/Entertainment | N/A | N/A |
| Residential | 50% | 30% |
| Hotel | 28% | 16% |

[1]Land Use Codes (LUCs) from *Trip Generation Informational Report*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

[3]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

[4]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

*Estimation Tool Developed by the Texas Transportation Institute*

| | |
|---|---|
| **Project Name:** | Vestar Full Buildout |
| **Analysis Period:** | **PM Street Peak Hour** |

**Table 7-P: Conversion of Vehicle-Trip Ends to Person-Trip Ends**

| Land Use | Table 7-P (D): Entering Trips | | | Table 7-P (O): Exiting Trips | | |
|---|---|---|---|---|---|---|
| | Veh. Occ. | Vehicle-Trips | Person-Trips* | Veh. Occ. | Vehicle-Trips | Person-Trips* |
| Office | 1.00 | 1052 | 1052 | 1.00 | 896 | 896 |
| Retail | 1.00 | 945 | 945 | 1.00 | 907 | 907 |
| Restaurant | 1.00 | 0 | 0 | 1.00 | 0 | 0 |
| Cinema/Entertainment | 1.00 | 0 | 0 | 1.00 | 0 | 0 |
| Residential | 1.00 | 426 | 426 | 1.00 | 410 | 410 |
| Hotel | 1.00 | 116 | 116 | 1.00 | 117 | 117 |

**Table 8-P (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)**

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | 179 | 36 | 0 | 18 | 0 |
| Retail | 18 | | 263 | 36 | 236 | 45 |
| Restaurant | 0 | 0 | | 0 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | | 0 | 0 |
| Residential | 16 | 172 | 86 | 0 | | 12 |
| Hotel | 0 | 19 | 80 | 0 | 2 | |

**Table 8-P (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)**

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | 76 | 0 | 0 | 17 | 0 |
| Retail | 326 | | 0 | 0 | 196 | 20 |
| Restaurant | 316 | 473 | | 0 | 68 | 82 |
| Cinema/Entertainment | 63 | 38 | 0 | | 17 | 1 |
| Residential | 600 | 95 | 0 | 0 | | 14 |
| Hotel | 0 | 19 | 0 | 0 | 0 | |

**Table 9-P (D): Internal and External Trips Summary (Entering Trips)**

| Destination Land Use | Person-Trip Estimates | | | External Trips by Mode* | | |
|---|---|---|---|---|---|---|
| | Internal | External | Total | Vehicles[1] | Transit[2] | Non-Motorized[2] |
| Office | 34 | 1018 | 1052 | 1018 | 0 | 0 |
| Retail | 190 | 755 | 945 | 755 | 0 | 0 |
| Restaurant | 0 | 0 | 0 | 0 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | 0 | 0 | 0 |
| Residential | 213 | 213 | 426 | 213 | 0 | 0 |
| Hotel | 32 | 84 | 116 | 84 | 0 | 0 |
| All Other Land Uses[3] | 0 | 0 | 0 | 0 | 0 | 0 |

**Table 9-P (O): Internal and External Trips Summary (Exiting Trips)**

| Origin Land Use | Person-Trip Estimates | | | External Trips by Mode* | | |
|---|---|---|---|---|---|---|
| | Internal | External | Total | Vehicles[1] | Transit[2] | Non-Motorized[2] |
| Office | 93 | 803 | 896 | 803 | 0 | 0 |
| Retail | 234 | 673 | 907 | 673 | 0 | 0 |
| Restaurant | 0 | 0 | 0 | 0 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | 0 | 0 | 0 |
| Residential | 123 | 287 | 410 | 287 | 0 | 0 |
| Hotel | 19 | 98 | 117 | 98 | 0 | 0 |
| All Other Land Uses[3] | 0 | 0 | 0 | 0 | 0 | 0 |

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

**Gateway Crossing**
**Weekday Trip Generation Calculations**
*12th Edition*

813 Free-Standing Discount Superstore

| Land Use | ITE Code | Qty | Unit | Weekday Rate | Weekday % In | Weekday % Out | AM Peak Hour Rate | AM Peak Hour % In | AM Peak Hour % Out | PM Peak Hour Rate | PM Peak Hour % In | PM Peak Hour % Out | Weekday Total | Weekday In | Weekday Out | AM Peak Hour Total | AM Peak Hour In | AM Peak Hour Out | PM Peak Hour Total | PM Peak Hour In | PM Peak Hour Out | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Free-Standing Discount Superstore | 813 | 166 | 1000 SF GFA | 50.52 | 50% | 50% | 1.88 | 56% | 44% | 4.32 | 49% | 51% | 8,386 | 4,193 | 4,193 | 312 | 175 | 137 | 717 | 351 | 366 | Average |
| Free-Standing Discount Superstore | 813 | 166 | 1000 SF GFA | 21.39 | 50% | 50% | 0.81 | 56% | 44% | 1.83 | 49% | 51% | 3,551 | 1,776 | 1,775 | 134 | 75 | 59 | 304 | 149 | 155 | Minimum |
| Free-Standing Discount Superstore | 813 | 166 | 1000 SF GFA | 85.01 | 50% | 50% | 3.86 | 56% | 44% | 7.40 | 49% | 51% | 14,112 | 7,056 | 7,056 | 641 | 359 | 282 | 1,228 | 602 | 626 | Maximum |
| Land Use | ITE Code | Qty | Unit | Weekday Equation | Weekday % In | Weekday % Out | AM Peak Hour Equation | AM Peak Hour % In | AM Peak Hour % Out | PM Peak Hour Equation | PM Peak Hour % In | PM Peak Hour % Out | Weekday Total | Weekday In | Weekday Out | AM Peak Hour Total | AM Peak Hour In | AM Peak Hour Out | PM Peak Hour Total | PM Peak Hour In | PM Peak Hour Out | |
| Free-Standing Discount Superstore | 813 | 166 | 1000 SF GFA | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | Equation |

| | | | |
|---|---|---|---|
| Free-Standing Discount Superstore | Standard Deviation | 12.61 | 0.75 | 1.10 |
| | Number of Studies | 72 | 73 | 97 |
| | Average Size | 193 | 192 | 196 |
| | $R^2$ | N/A | N/A | N/A |

310 Hotel

| Land Use | ITE Code | Qty | Unit | Weekday Rate | Weekday % In | Weekday % Out | AM Peak Hour Rate | AM Peak Hour % In | AM Peak Hour % Out | PM Peak Hour Rate | PM Peak Hour % In | PM Peak Hour % Out | Weekday Total | Weekday In | Weekday Out | AM Peak Hour Total | AM Peak Hour In | AM Peak Hour Out | PM Peak Hour Total | PM Peak Hour In | PM Peak Hour Out | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hotel | 310 | 212 | Rooms | 5.84 | 50% | 50% | 0.34 | 52% | 48% | 0.47 | 51% | 49% | 1,238 | 619 | 619 | 72 | 38 | 34 | 100 | 51 | 49 | Average |
| Hotel | 310 | 212 | Rooms | 5.58 | 50% | 50% | 0.03 | 52% | 48% | 0.11 | 51% | 49% | 1,183 | 592 | 591 | 7 | 4 | 3 | 24 | 12 | 12 | Minimum |
| Hotel | 310 | 212 | Rooms | 6.03 | 50% | 50% | 0.69 | 52% | 48% | 1.06 | 51% | 49% | 1,279 | 640 | 639 | 147 | 77 | 70 | 225 | 114 | 111 | Maximum |
| Land Use | ITE Code | Qty | Unit | Weekday Equation | Weekday % In | Weekday % Out | AM Peak Hour Equation | AM Peak Hour % In | AM Peak Hour % Out | PM Peak Hour Equation | PM Peak Hour % In | PM Peak Hour % Out | Weekday Total | Weekday In | Weekday Out | AM Peak Hour Total | AM Peak Hour In | AM Peak Hour Out | PM Peak Hour Total | PM Peak Hour In | PM Peak Hour Out | |
| Hotel | 310 | 212 | Rooms | Not Given | | | T=0.49(X)-18.48 | 52% | 48% | T=0.85(X)-55.22 | 51% | 49% | Not Given | | | 85 | 44 | 41 | 125 | 64 | 61 | Equation |

| | | | | |
|---|---|---|---|---|
| Hotel | Standard Deviation | Not Given | 0.16 | 0.28 |
| | Number of Studies | 2 | 17 | 20 |
| | Average Size | 143 | 128 | 142 |
| | $R^2$ | Not Given | 0.68 | 0.64 |

822 Strip Retail Plaza (<40k)

| Land Use | ITE Code | Qty | Unit | Weekday Rate | Weekday % In | Weekday % Out | AM Peak Hour Rate | AM Peak Hour % In | AM Peak Hour % Out | PM Peak Hour Rate | PM Peak Hour % In | PM Peak Hour % Out | Weekday Total | Weekday In | Weekday Out | AM Peak Hour Total | AM Peak Hour In | AM Peak Hour Out | PM Peak Hour Total | PM Peak Hour In | PM Peak Hour Out | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Strip Retail Plaza (<40k) | 822 | 27.95 | 1000 SF GLA | 54.45 | 50% | 50% | 3.93 | 55% | 45% | 6.29 | 50% | 50% | 1,522 | 760 | 762 | 110 | 60 | 50 | 176 | 88 | 88 | Average |
| Strip Retail Plaza (<40k) | 822 | 27.95 | 1000 SF GLA | 47.86 | 50% | 50% | 1.60 | 55% | 45% | 2.81 | 50% | 50% | 1,338 | 668 | 670 | 45 | 25 | 20 | 79 | 39 | 40 | Minimum |
| Strip Retail Plaza (<40k) | 822 | 27.95 | 1000 SF GLA | 65.07 | 50% | 50% | 17.44 | 55% | 45% | 17.72 | 50% | 50% | 1,819 | 909 | 910 | 487 | 269 | 218 | 495 | 247 | 248 | Maximum |
| Land Use | ITE Code | Qty | Unit | Weekday Equation | Weekday % In | Weekday % Out | AM Peak Hour Equation | AM Peak Hour % In | AM Peak Hour % Out | PM Peak Hour Equation | PM Peak Hour % In | PM Peak Hour % Out | Weekday Total | Weekday In | Weekday Out | AM Peak Hour Total | AM Peak Hour In | AM Peak Hour Out | PM Peak Hour Total | PM Peak Hour In | PM Peak Hour Out | |
| Strip Retail Plaza (<40k) | 822 | 27.95 | 1000 SF GLA | T=42.20(X)+229.68 | 50% | 50% | Not Given | | | Ln(T)=0.68Ln(X)+2.77 | 50% | 50% | 1,410 | 705 | 705 | Not Given | | | 154 | 77 | 77 | Equation |

| | | | | |
|---|---|---|---|---|
| Strip Retail Plaza (<40k) | Standard Deviation | 7.81 | 5.12 | 3.02 |
| | Number of Studies | 4 | 6 | 24 |
| | Average Size | 19 | 17 | 22 |
| | $R^2$ | 0.96 | Not Given | 0.54 |

934 Fast-Food Restaurant with Drive-Through Window

| Land Use | ITE Code | Qty | Unit | Weekday Rate | Weekday % In | Weekday % Out | AM Peak Hour Rate | AM Peak Hour % In | AM Peak Hour % Out | PM Peak Hour Rate | PM Peak Hour % In | PM Peak Hour % Out | Weekday Total | Weekday In | Weekday Out | AM Peak Hour Total | AM Peak Hour In | AM Peak Hour Out | PM Peak Hour Total | PM Peak Hour In | PM Peak Hour Out | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Fast-Food Restaurant with Drive-Through Window | 934 | 1.75 | 1000 SF GFA | 448.12 | 50% | 50% | 33.24 | 51% | 49% | 31.60 | 52% | 48% | 783 | 392 | 391 | 58 | 30 | 28 | 55 | 29 | 26 | Average |
| Fast-Food Restaurant with Drive-Through Window | 934 | 1.75 | 1000 SF GFA | 98.89 | 50% | 50% | 1.05 | 51% | 49% | 8.77 | 52% | 48% | 173 | 87 | 86 | 2 | 1 | 1 | 15 | 8 | 7 | Minimum |
| Fast-Food Restaurant with Drive-Through Window | 934 | 1.75 | 1000 SF GFA | 1,122.37 | 50% | 50% | 115.38 | 51% | 49% | 106.20 | 52% | 48% | 1,961 | 981 | 980 | 202 | 103 | 99 | 186 | 97 | 89 | Maximum |
| Land Use | ITE Code | Qty | Unit | Weekday Equation | Weekday % In | Weekday % Out | AM Peak Hour Equation | AM Peak Hour % In | AM Peak Hour % Out | PM Peak Hour Equation | PM Peak Hour % In | PM Peak Hour % Out | Weekday Total | Weekday In | Weekday Out | AM Peak Hour Total | AM Peak Hour In | AM Peak Hour Out | PM Peak Hour Total | PM Peak Hour In | PM Peak Hour Out | |
| Fast-Food Restaurant with Drive-Through Window | 934 | 1.75 | 1000 SF GFA | Not Given | | | Not Given | | | Not Given | | | Not Given | | | Not Given | | | Not Given | | | Equation |

| | | | | |
|---|---|---|---|---|
| Fast-Food Restaurant with Drive-Through Window | Standard Deviation | 217.66 | 22.70 | 16.21 |
| | Number of Studies | 68 | 55 | 139 |
| | Average Size | 3 | 4 | 3 |
| | $R^2$ | Not Given | Not Given | Not Given |

929 High-Volume Fast-Food Restaurant

| Land Use | ITE Code | Qty | Unit | Weekday Rate | Weekday % In | Weekday % Out | AM Peak Hour* Rate | AM Peak Hour* % In | AM Peak Hour* % Out | PM Peak Hour Rate | PM Peak Hour % In | PM Peak Hour % Out | Weekday Total | Weekday In | Weekday Out | AM Peak Hour Total | AM Peak Hour In | AM Peak Hour Out | PM Peak Hour Total | PM Peak Hour In | PM Peak Hour Out | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High-Volume Fast-Food Restaurant | 929 | 4.63 | 1000 SF GFA | 653.22 | 50% | 50% | 26.02 | 52% | 48% | 58.43 | 50% | 50% | 3,022 | 1,511 | 1,511 | 120 | 62 | 58 | 270 | 135 | 135 | Average |
| High-Volume Fast-Food Restaurant | 929 | 4.63 | 1000 SF GFA | 453.05 | 50% | 50% | 6.80 | 52% | 48% | 30.97 | 50% | 50% | 2,096 | 1,048 | 1,048 | 31 | 16 | 15 | 143 | 72 | 71 | Minimum |
| High-Volume Fast-Food Restaurant | 929 | 4.63 | 1000 SF GFA | 1,045.83 | 50% | 50% | 49.37 | 52% | 48% | 96.93 | 50% | 50% | 4,838 | 2,419 | 2,419 | 228 | 119 | 109 | 448 | 224 | 224 | Maximum |
| Land Use | ITE Code | Qty | Unit | Weekday Equation | Weekday % In | Weekday % Out | AM Peak Hour Equation | AM Peak Hour % In | AM Peak Hour % Out | PM Peak Hour Equation | PM Peak Hour % In | PM Peak Hour % Out | Weekday Total | Weekday In | Weekday Out | AM Peak Hour Total | AM Peak Hour In | AM Peak Hour Out | PM Peak Hour Total | PM Peak Hour In | PM Peak Hour Out | |
| High-Volume Fast-Food Restaurant | 929 | 4.63 | 1000 SF GFA | Not Given | | | Not Given | | | Not Given | | | Not Given | | | Not Given | | | Not Given | | | Equation |

| | | | | |
|---|---|---|---|---|
| High-Volume Fast-Food Restaurant | Standard Deviation | 209.04 | 13.38 | 15.13 |
| | Number of Studies | 7 | 21 | 21 |
| | Average Size | 5 | 5 | 5 |
| | $R^2$ | Not Given | Not Given | Not Given |

*The prospective tenant modeled using ITE LUC 929 is not open during the AM peak hour.

944 Gasoline/Service Station

| Land Use | ITE Code | Qty | Unit | Weekday Rate | Weekday % In | Weekday % Out | AM Peak Hour Rate | AM Peak Hour % In | AM Peak Hour % Out | PM Peak Hour Rate | PM Peak Hour % In | PM Peak Hour % Out | Weekday Total | Weekday In | Weekday Out | AM Peak Hour Total | AM Peak Hour In | AM Peak Hour Out | PM Peak Hour Total | PM Peak Hour In | PM Peak Hour Out | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline/Service Station | 944 | 28 | Vehicle Fueling Positions | 172.01 | 50% | 50% | 11.32 | 50% | 50% | 14.23 | 50% | 50% | 4,816 | 2,408 | 2,408 | 317 | 158 | 159 | 398 | 199 | 199 | Average |
| Gasoline/Service Station | 944 | 28 | Vehicle Fueling Positions | 77 | 50% | 50% | 5.00 | 50% | 50% | 5.75 | 50% | 50% | 2,156 | 1078 | 1078 | 140 | 70 | 70 | 161 | 80 | 81 | Minimum |
| Gasoline/Service Station | 944 | 28 | Vehicle Fueling Positions | 460 | 50% | 50% | 29.00 | 50% | 50% | 34.50 | 50% | 50% | 12,880 | 6,440 | 6,440 | 812 | 406 | 406 | 966 | 483 | 483 | Maximum |
| Land Use | ITE Code | Qty | Unit | Weekday Equation | Weekday % In | Weekday % Out | AM Peak Hour Equation | AM Peak Hour % In | AM Peak Hour % Out | PM Peak Hour Equation | PM Peak Hour % In | PM Peak Hour % Out | Weekday Total | Weekday In | Weekday Out | AM Peak Hour Total | AM Peak Hour In | AM Peak Hour Out | PM Peak Hour Total | PM Peak Hour In | PM Peak Hour Out | |
| Gasoline/Service Station | 944 | 28 | Vehicle Fueling Positions | Not Given | | | Not Given | | | Not Given | | | Not Given | | | Not Given | | | Not Given | | | Equation |

| | | | | |
|---|---|---|---|---|
| Gasoline/Service Station | Standard Deviation | 96.45 | 5.68 | 6.93 |
| | Number of Studies | 18 | 41 | 65 |
| | Average Size | 8 | 8 | 9 |
| | $R^2$ | N/A | N/A | N/A |

## Reductions - Gateway Crossing (Weekday)

| Land Use | LUC | AM PEAK HOUR | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | BEFORE REDUCTION | | | IC | NCHRP INTERNAL CAPTURE | | | I | PED INTERACTION WITH AAG | | | AFTER INTERNAL CAPTURE/PED INTERACTION | | | PASS-BY | PASS-BY | | | AFTER PASS-BY | | |
| | | TOTAL | ENTER | EXIT | Rate % | TOTAL | ENTER | EXIT | Rate % | TOTAL | ENTER | EXIT | TOTAL | ENTER | EXIT | Rate % | TOTAL | ENTER | EXIT | TOTAL | ENTER | EXIT |
| Discount Superstore | 813 | 312 | 175 | 137 | 3% | 10 | 4 | 6 | 0% | - | - | - | 302 | 171 | 131 | 0% | - | - | - | 302 | 171 | 131 |
| Hotel | 310 | 72 | 38 | 34 | 11% | 8 | 1 | 7 | 10% | 7 | 4 | 3 | 57 | 33 | 24 | 0% | - | - | - | 57 | 33 | 24 |
| Strip Retail | 822 | 110 | 60 | 50 | 3% | 3 | 1 | 2 | 10% | 11 | 6 | 5 | 96 | 53 | 43 | 0% | - | - | - | 96 | 53 | 43 |
| Drive-Through Fast-Food Restaurant | 934 | 58 | 30 | 28 | 38% | 22 | 17 | 5 | 10% | 6 | 3 | 3 | 30 | 10 | 20 | 50% | 15 | 5 | 10 | 15 | 5 | 10 |
| High-Volume Fast-Food Restaurant | 929 | - | - | - | 0% | - | - | - | 10% | - | - | - | - | - | - | 0% | - | - | - | - | - | - |
| Gasoline/Service Station | 944 | 317 | 158 | 159 | 3% | 11 | 4 | 7 | 0% | - | - | - | 306 | 154 | 152 | 63% | 193 | 97 | 96 | 113 | 57 | 56 |
| TOTAL | | 869 | 461 | 408 | | 54 | 27 | 27 | | 24 | 13 | 11 | 791 | 421 | 370 | | 208 | 102 | 106 | 583 | 319 | 264 |
| | | % Internal Capture | | | | 6% | 6% | 7% | | | | | | | | % Pass-by | 24% | 22% | 26% | | | |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | Shops & Fast Food | 111 | 58 | 53 | | | |

| Land Use | LUC | PM PEAK HOUR | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | BEFORE REDUCTION | | | IC | NCHRP INTERNAL CAPTURE | | | I | PED INTERACTION WITH AAG | | | AFTER INTERNAL CAPTURE/PED INTERACTION | | | PASS-BY | PASS-BY | | | AFTER PASS-BY | | |
| | | TOTAL | ENTER | EXIT | Rate % | TOTAL | ENTER | EXIT | Rate % | TOTAL | ENTER | EXIT | TOTAL | ENTER | EXIT | Rate % | TOTAL | ENTER | EXIT | TOTAL | ENTER | EXIT |
| Discount Superstore | 813 | 717 | 351 | 366 | 10% | 73 | 41 | 32 | 0% | - | - | - | 644 | 310 | 334 | 29% | 187 | 90 | 97 | 457 | 220 | 237 |
| Hotel | 310 | 100 | 51 | 49 | 36% | 36 | 20 | 16 | 10% | 10 | 5 | 5 | 54 | 26 | 28 | 0% | - | - | - | 54 | 26 | 28 |
| Strip Retail | 822 | 176 | 88 | 88 | 10% | 18 | 10 | 8 | 10% | 18 | 9 | 9 | 140 | 69 | 71 | 40% | 56 | 28 | 28 | 84 | 41 | 43 |
| Drive-Through Fast-Food Restaurant | 934 | 55 | 29 | 26 | 40% | 22 | 10 | 12 | 10% | 6 | 3 | 3 | 27 | 16 | 11 | 55% | 15 | 9 | 6 | 12 | 7 | 5 |
| High-Volume Fast-Food Restaurant | 929 | 270 | 135 | 135 | 41% | 111 | 46 | 65 | 10% | 28 | 14 | 14 | 131 | 75 | 56 | 55% | 72 | 41 | 31 | 59 | 34 | 25 |
| Gasoline/Service Station | 944 | 398 | 199 | 199 | 10% | 40 | 23 | 17 | 0% | - | - | - | 358 | 176 | 182 | 57% | 204 | 100 | 104 | 154 | 76 | 78 |
| TOTAL | | 1,716 | 853 | 863 | | 300 | 150 | 150 | | 62 | 31 | 31 | 1,354 | 672 | 682 | | 534 | 268 | 266 | 820 | 404 | 416 |

| Weekday After IC | | | Weekday After Ped Interaction | | Weekday After Pass-by | |
|---|---|---|---|---|---|---|
| Rate (Avg) | Original ADT | ADT After IC | Rate (Avg) | ADT After Ped | Rate (Avg) | ADT After Pass-by |
| 93.3% | 8,386 | 7,825 | 100.0% | 7,825 | 85.5% | 6,690 |
| 76.4% | 1,238 | 946 | 90.0% | 851 | 100.0% | 851 |
| 93.5% | 1,522 | 1,423 | 90.0% | 1,281 | 80.0% | 1,025 |
| 61.0% | 783 | 478 | 90.0% | 430 | 47.5% | 204 |
| 79.4% | 3,022 | 2,401 | 90.0% | 2,161 | 72.5% | 1,567 |
| 93.2% | 4,816 | 4,490 | 100.0% | 4,490 | 40.0% | 1,796 |
| Total | 19,767 | 17,563 | Total | 17,038 | Total | 12,133 |
| *Internal Capture* | | 2,204 | *Ped Interaction* | 525 | *PB* | 4,905 |

| NCHRP 8-51 Internal Trip Capture Estimation Tool | | | |
|---|---|---|---|
| **Project Name:** | Gateway Crossing | **Organization:** | Lokahi |
| **Project Location:** | Mesa, Arizona | **Performed By:** | CD |
| **Scenario Description:** | | **Date:** | 2/19/2026 |
| **Analysis Year:** | | **Checked By:** | - |
| **Analysis Period:** | **AM Street Peak Hour** | **Date:** | - |

**Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)**

| Land Use | Development Data (*For Information Only*) | | | Estimated Vehicle-Trips | | |
|---|---|---|---|---|---|---|
| | ITE LUCs[1] | Quantity | Units | Total | Entering | Exiting |
| Office | | | | 0 | | |
| Retail | 822,813, 944 | 194; 28 | SF GFA; Pumps | 739 | 393 | 346 |
| Restaurant | 934, 929 | 11.15; 4.34 | KSF GFA | 58 | 30 | 28 |
| Cinema/Entertainment | | | | 0 | | |
| Residential | | | | 0 | | |
| Hotel | 310 | 212 | Rooms | 72 | 38 | 34 |
| All Other Land Uses[2] | | | | 0 | | |
| Total | | | | 869 | 461 | 408 |

**Table 2-A: Mode Split and Vehicle Occupancy Estimates**

| Land Use | Entering Trips | | | Exiting Trips | | |
|---|---|---|---|---|---|---|
| | Veh. Occ. | % Transit | % Non-Motorized | Veh. Occ. | % Transit | % Non-Motorized |
| Office | | | | | | |
| Retail | | | | | | |
| Restaurant | | | | | | |
| Cinema/Entertainment | | | | | | |
| Residential | | | | | | |
| Hotel | | | | | | |
| All Other Land Uses[2] | | | | | | |

**Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)**

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | | | | | |
| Retail | | | | | | |
| Restaurant | | | | | | |
| Cinema/Entertainment | | | | | | |
| Residential | | | | | | |
| Hotel | | | | | | |

**Table 4-A: Internal Person-Trip Origin-Destination Matrix***

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | 0 | 0 | 0 | 0 | 0 |
| Retail | 0 | | 15 | 0 | 0 | 0 |
| Restaurant | 0 | 4 | | 0 | 0 | 1 |
| Cinema/Entertainment | 0 | 0 | 0 | | 0 | 0 |
| Residential | 0 | 0 | 0 | 0 | | 0 |
| Hotel | 0 | 5 | 2 | 0 | 0 | |

**Table 5-A: Computations Summary**

| | Total | Entering | Exiting |
|---|---|---|---|
| All Person-Trips | 869 | 461 | 408 |
| Internal Capture Percentage | 6% | 6% | 7% |
| | | | |
| External Vehicle-Trips[3] | 815 | 434 | 381 |
| External Transit-Trips[4] | 0 | 0 | 0 |
| External Non-Motorized Trips[4] | 0 | 0 | 0 |

**Table 6-A: Internal Trip Capture Percentages by Land Use**

| Land Use | Entering Trips | Exiting Trips |
|---|---|---|
| Office | N/A | N/A |
| Retail | 2% | 4% |
| Restaurant | 57% | 18% |
| Cinema/Entertainment | N/A | N/A |
| Residential | N/A | N/A |
| Hotel | 3% | 21% |

[1]Land Use Codes (LUCs) from *Trip Generation Informational Report*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

[3]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

[4]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

*Estimation Tool Developed by the Texas Transportation Institute*

| | |
|---|---|
| **Project Name:** | Gateway Crossing |
| **Analysis Period:** | **AM Street Peak Hour** |

**Table 7-A: Conversion of Vehicle-Trip Ends to Person-Trip Ends**

| Land Use | Table 7-A (D): Entering Trips | | | Table 7-A (O): Exiting Trips | | |
|---|---|---|---|---|---|---|
| | Veh. Occ. | Vehicle-Trips | Person-Trips* | Veh. Occ. | Vehicle-Trips | Person-Trips* |
| Office | 1.00 | 0 | 0 | 1.00 | 0 | 0 |
| Retail | 1.00 | 393 | 393 | 1.00 | 346 | 346 |
| Restaurant | 1.00 | 30 | 30 | 1.00 | 28 | 28 |
| Cinema/Entertainment | 1.00 | 0 | 0 | 1.00 | 0 | 0 |
| Residential | 1.00 | 0 | 0 | 1.00 | 0 | 0 |
| Hotel | 1.00 | 38 | 38 | 1.00 | 34 | 34 |

**Table 8-A (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)**

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | 0 | 0 | 0 | 0 | 0 |
| Retail | 100 | | 45 | 0 | 48 | 0 |
| Restaurant | 9 | 4 | | 0 | 1 | 1 |
| Cinema/Entertainment | 0 | 0 | 0 | | 0 | 0 |
| Residential | 0 | 0 | 0 | 0 | | 0 |
| Hotel | 26 | 5 | 3 | 0 | 0 | |

**Table 8-A (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)**

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | 126 | 7 | 0 | 0 | 0 |
| Retail | 0 | | 15 | 0 | 0 | 0 |
| Restaurant | 0 | 31 | | 0 | 0 | 2 |
| Cinema/Entertainment | 0 | 0 | 0 | | 0 | 0 |
| Residential | 0 | 67 | 6 | 0 | | 0 |
| Hotel | 0 | 16 | 2 | 0 | 0 | |

**Table 9-A (D): Internal and External Trips Summary (Entering Trips)**

| Destination Land Use | Person-Trip Estimates | | | External Trips by Mode* | | |
|---|---|---|---|---|---|---|
| | Internal | External | Total | Vehicles[1] | Transit[2] | Non-Motorized[2] |
| Office | 0 | 0 | 0 | 0 | 0 | 0 |
| Retail | 9 | 384 | 393 | 384 | 0 | 0 |
| Restaurant | 17 | 13 | 30 | 13 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | 0 | 0 | 0 |
| Residential | 0 | 0 | 0 | 0 | 0 | 0 |
| Hotel | 1 | 37 | 38 | 37 | 0 | 0 |
| All Other Land Uses[3] | 0 | 0 | 0 | 0 | 0 | 0 |

**Table 9-A (O): Internal and External Trips Summary (Exiting Trips)**

| Origin Land Use | Person-Trip Estimates | | | External Trips by Mode* | | |
|---|---|---|---|---|---|---|
| | Internal | External | Total | Vehicles[1] | Transit[2] | Non-Motorized[2] |
| Office | 0 | 0 | 0 | 0 | 0 | 0 |
| Retail | 15 | 331 | 346 | 331 | 0 | 0 |
| Restaurant | 5 | 23 | 28 | 23 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | 0 | 0 | 0 |
| Residential | 0 | 0 | 0 | 0 | 0 | 0 |
| Hotel | 7 | 27 | 34 | 27 | 0 | 0 |
| All Other Land Uses[3] | 0 | 0 | 0 | 0 | 0 | 0 |

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

| NCHRP 8-51 Internal Trip Capture Estimation Tool | | | |
|---|---|---|---|
| **Project Name:** | Gateway Crossing | **Organization:** | Lokahi |
| **Project Location:** | Mesa, Arizona | **Performed By:** | CD |
| **Scenario Description:** | | **Date:** | 2/19/2026 |
| **Analysis Year:** | | **Checked By:** | |
| **Analysis Period:** | **PM Street Peak Hour** | **Date:** | |

**Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)**

| Land Use | Development Data (*For Information Only*) | | | Estimated Vehicle-Trips | | |
|---|---|---|---|---|---|---|
| | ITE LUCs[1] | Quantity | Units | Total | Entering | Exiting |
| Office | | | | 0 | | |
| Retail | 822,813, 944 | 194; 28 | SF GFA; Pumps | 1291 | 638 | 653 |
| Restaurant | 934, 929 | 11.15; 4.34 | KSF GFA | 325 | 164 | 161 |
| Cinema/Entertainment | | | | 0 | | |
| Residential | | | | 0 | | |
| Hotel | 310 | 212 | Rooms | 100 | 51 | 49 |
| All Other Land Uses[2] | | | | 0 | | |
| Total | | | | 1716 | 853 | 863 |

**Table 2-P: Mode Split and Vehicle Occupancy Estimates**

| Land Use | Entering Trips | | | Exiting Trips | | |
|---|---|---|---|---|---|---|
| | Veh. Occ. | % Transit | % Non-Motorized | Veh. Occ. | % Transit | % Non-Motorized |
| Office | | | | | | |
| Retail | | | | | | |
| Restaurant | | | | | | |
| Cinema/Entertainment | | | | | | |
| Residential | | | | | | |
| Hotel | | | | | | |
| All Other Land Uses[2] | | | | | | |

**Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)**

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | | | | | |
| Retail | | | | | | |
| Restaurant | | | | | | |
| Cinema/Entertainment | | | | | | |
| Residential | | | | | | |
| Hotel | | | | | | |

**Table 4-P: Internal Person-Trip Origin-Destination Matrix***

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | 0 | 0 | 0 | 0 | 0 |
| Retail | 0 | | 48 | 0 | 0 | 9 |
| Restaurant | 0 | 66 | | 0 | 0 | 11 |
| Cinema/Entertainment | 0 | 0 | 0 | | 0 | 0 |
| Residential | 0 | 0 | 0 | 0 | | 0 |
| Hotel | 0 | 8 | 8 | 0 | 0 | |

**Table 5-P: Computations Summary**

| | Total | Entering | Exiting |
|---|---|---|---|
| All Person-Trips | 1,716 | 853 | 863 |
| Internal Capture Percentage | 17% | 18% | 17% |
| | | | |
| External Vehicle-Trips[3] | 1,416 | 703 | 713 |
| External Transit-Trips[4] | 0 | 0 | 0 |
| External Non-Motorized Trips[4] | 0 | 0 | 0 |

**Table 6-P: Internal Trip Capture Percentages by Land Use**

| Land Use | Entering Trips | Exiting Trips |
|---|---|---|
| Office | N/A | N/A |
| Retail | 12% | 9% |
| Restaurant | 34% | 48% |
| Cinema/Entertainment | N/A | N/A |
| Residential | N/A | N/A |
| Hotel | 39% | 33% |

[1]Land Use Codes (LUCs) from *Trip Generation Informational Report*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

[3]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

[4]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

*Estimation Tool Developed by the Texas Transportation Institute*

| | |
|---|---|
| **Project Name:** | Gateway Crossing |
| **Analysis Period:** | **PM Street Peak Hour** |

**Table 7-P: Conversion of Vehicle-Trip Ends to Person-Trip Ends**

| Land Use | Table 7-P (D): Entering Trips | | | Table 7-P (O): Exiting Trips | | |
|---|---|---|---|---|---|---|
| | Veh. Occ. | Vehicle-Trips | Person-Trips* | Veh. Occ. | Vehicle-Trips | Person-Trips* |
| Office | 1.00 | 0 | 0 | 1.00 | 0 | 0 |
| Retail | 1.00 | 638 | 638 | 1.00 | 653 | 653 |
| Restaurant | 1.00 | 164 | 164 | 1.00 | 161 | 161 |
| Cinema/Entertainment | 1.00 | 0 | 0 | 1.00 | 0 | 0 |
| Residential | 1.00 | 0 | 0 | 1.00 | 0 | 0 |
| Hotel | 1.00 | 51 | 51 | 1.00 | 49 | 49 |

**Table 8-P (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)**

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | 0 | 0 | 0 | 0 | 0 |
| Retail | 13 | | 189 | 26 | 170 | 33 |
| Restaurant | 5 | 66 | | 13 | 29 | 11 |
| Cinema/Entertainment | 0 | 0 | 0 | | 0 | 0 |
| Residential | 0 | 0 | 0 | 0 | | 0 |
| Hotel | 0 | 8 | 33 | 0 | 1 | |

**Table 8-P (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)**

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | 51 | 3 | 0 | 0 | 0 |
| Retail | 0 | | 48 | 0 | 0 | 9 |
| Restaurant | 0 | 319 | | 0 | 0 | 36 |
| Cinema/Entertainment | 0 | 26 | 5 | | 0 | 1 |
| Residential | 0 | 64 | 23 | 0 | | 6 |
| Hotel | 0 | 13 | 8 | 0 | 0 | |

**Table 9-P (D): Internal and External Trips Summary (Entering Trips)**

| Destination Land Use | Person-Trip Estimates | | | External Trips by Mode* | | |
|---|---|---|---|---|---|---|
| | Internal | External | Total | Vehicles[1] | Transit[2] | Non-Motorized[2] |
| Office | 0 | 0 | 0 | 0 | 0 | 0 |
| Retail | 74 | 564 | 638 | 564 | 0 | 0 |
| Restaurant | 56 | 108 | 164 | 108 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | 0 | 0 | 0 |
| Residential | 0 | 0 | 0 | 0 | 0 | 0 |
| Hotel | 20 | 31 | 51 | 31 | 0 | 0 |
| All Other Land Uses[3] | 0 | 0 | 0 | 0 | 0 | 0 |

**Table 9-P (O): Internal and External Trips Summary (Exiting Trips)**

| Origin Land Use | Person-Trip Estimates | | | External Trips by Mode* | | |
|---|---|---|---|---|---|---|
| | Internal | External | Total | Vehicles[1] | Transit[2] | Non-Motorized[2] |
| Office | 0 | 0 | 0 | 0 | 0 | 0 |
| Retail | 57 | 596 | 653 | 596 | 0 | 0 |
| Restaurant | 77 | 84 | 161 | 84 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | 0 | 0 | 0 |
| Residential | 0 | 0 | 0 | 0 | 0 | 0 |
| Hotel | 16 | 33 | 49 | 33 | 0 | 0 |
| All Other Land Uses[3] | 0 | 0 | 0 | 0 | 0 | 0 |

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

**Gateway Crossing**
**Saturday Trip Generation Calculations**
*12th Edition*

813 Free-Standing Discount Superstore

| Land Use | ITE Code | Qty | Unit | Saturday Rate | % In | % Out | Peak Hour of Generator Rate | % In | % Out | Saturday Total | Saturday In | Saturday Out | Peak Hour of Generator Total | Peak Hour of Generator In | Peak Hour of Generator Out | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Free-Standing Discount Superstore | 813 | 166.0 | 1000 SF GFA | 63.82 | 50% | 50% | 5.61 | 50% | 50% | 10,594 | 5,297 | 5,297 | 931 | 465 | 466 | Average |
| Free-Standing Discount Superstore | 813 | 166.0 | 1000 SF GFA | 29.11 | 50% | 50% | 2.94 | 50% | 50% | 4,832 | 2,416 | 2,416 | 488 | 244 | 244 | Minimum |
| Free-Standing Discount Superstore | 813 | 166.0 | 1000 SF GFA | 105.94 | 50% | 50% | 7.96 | 50% | 50% | 17,586 | 8,793 | 8,793 | 1,321 | 661 | 660 | Maximum |
| Land Use | ITE Code | Qty | Unit | Saturday Equation | % In | % Out | Peak Hour of Generator Equation | % In | % Out | Saturday Total | Saturday In | Saturday Out | Peak Hour of Generator Total | Peak Hour of Generator In | Peak Hour of Generator Out | |
| Free-Standing Discount Superstore | 813 | 166.0 | 1000 SF GFA | T = 91.17(X) - 5233.09 | 50% | 50% | T = 7.26(X) - 318.85 | 50% | 50% | 9,901 | 4,951 | 4,950 | 886 | 443 | 443 | Equation |

| | | | | |
|---|---|---|---|---|
| Free-Standing Discount Superstore | Standard Deviation | 14.84 | | 1.16 |
| | Number of Studies | 49 | | 65 |
| | Average Size | 191 | | 192 |
| | $R^2$ | 0.52 | | 0.52 |

310 Hotel

| Land Use | ITE Code | Qty | Unit | Saturday Rate | % In | % Out | Peak Hour of Generator Rate | % In | % Out | Saturday Total | Saturday In | Saturday Out | Peak Hour of Generator Total | Peak Hour of Generator In | Peak Hour of Generator Out | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hotel | 310 | 212 | Rooms | 6.92 | 50% | 50% | 0.47 | 51% | 49% | 1,467 | 734 | 733 | 100 | 51 | 49 | Average |
| Hotel | 310 | 212 | Rooms | 6.92 | 50% | 50% | 0.23 | 51% | 49% | 1,467 | 734 | 733 | 49 | 25 | 24 | Minimum |
| Hotel | 310 | 212 | Rooms | 6.92 | 50% | 50% | 0.78 | 51% | 49% | 1,467 | 734 | 733 | 166 | 85 | 81 | Maximum |
| Land Use | ITE Code | Qty | Unit | Saturday Equation | % In | % Out | Peak Hour of Generator Equation | % In | % Out | Saturday Total | Saturday In | Saturday Out | Peak Hour of Generator Total | Peak Hour of Generator In | Peak Hour of Generator Out | |
| Hotel | 310 | 212 | Rooms | Not Given | | | Not Given | | | Not Given | | | Not Given | | | Equation |

| | | | | |
|---|---|---|---|---|
| Hotel | Standard Deviation | N/A | | 0.33 |
| | Number of Studies | 1 | | 3 |
| | Average Size | 166 | | 130 |
| | $R^2$ | Not Given | | Not Given |

822 Strip Retail Plaza (<40k)

| Land Use | ITE Code | Qty | Unit | Saturday Rate | % In | % Out | Peak Hour of Generator Rate | % In | % Out | Saturday Total | Saturday In | Saturday Out | Peak Hour of Generator Total | Peak Hour of Generator In | Peak Hour of Generator Out | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Strip Retail Plaza (<40k) | 822 | 27.95 | 1000 SF GLA | Not Given | 50% | 50% | 6.63 | 51% | 49% | 1,975 | 987 | 988 | 185 | 95 | 90 | Average |
| Strip Retail Plaza (<40k) | 822 | 27.95 | 1000 SF GLA | Not Given | 50% | 50% | 1.88 | 51% | 49% | 895 | 447 | 448 | 53 | 27 | 26 | Minimum |
| Strip Retail Plaza (<40k) | 822 | 27.95 | 1000 SF GLA | Not Given | 50% | 50% | 18.48 | 51% | 49% | 1,897 | 948 | 949 | 517 | 264 | 253 | Maximum |
| Land Use | ITE Code | Qty | Unit | Saturday Equation | % In | % Out | Peak Hour of Generator Equation | % In | % Out | Saturday Total | Saturday In | Saturday Out | Peak Hour of Generator Total | Peak Hour of Generator In | Peak Hour of Generator Out | |
| Strip Retail Plaza (<40k) | 822 | 27.95 | 1000 SF GLA | Not Given | | | Not Given | | | Not Given | | | Not Given | | | Equation |

| | | | | |
|---|---|---|---|---|
| Strip Retail Plaza (<40k) | Standard Deviation | N/A | | 3.99 |
| | Number of Studies | N/A | | 14 |
| | Average Size | N/A | | 26 |
| | $R^2$ | Not Given | | Not Given |

934 Fast-Food Restaurant with Drive-Through Window

| Land Use | ITE Code | Qty | Unit | Saturday Rate | % In | % Out | Peak Hour of Generator Rate | % In | % Out | Saturday Total | Saturday In | Saturday Out | Peak Hour of Generator Total | Peak Hour of Generator In | Peak Hour of Generator Out | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Fast-Food Restaurant with Drive-Through Window | 934 | 1.75 | 1000 SF GFA | 522.28 | 50% | 50% | 50.75 | 51% | 49% | 912 | 456 | 456 | 89 | 45 | 44 | Average |
| Fast-Food Restaurant with Drive-Through Window | 934 | 1.75 | 1000 SF GFA | 218.91 | 50% | 50% | 11.25 | 51% | 49% | 382 | 191 | 191 | 20 | 10 | 10 | Minimum |
| Fast-Food Restaurant with Drive-Through Window | 934 | 1.75 | 1000 SF GFA | 1,024.67 | 50% | 50% | 112.33 | 51% | 49% | 1,790 | 895 | 895 | 196 | 100 | 96 | Maximum |
| Land Use | ITE Code | Qty | Unit | Saturday Equation | % In | % Out | Peak Hour of Generator Equation | % In | % Out | Saturday Total | Saturday In | Saturday Out | Peak Hour of Generator Total | Peak Hour of Generator In | Peak Hour of Generator Out | |
| Fast-Food Restaurant with Drive-Through Window | 934 | 1.75 | 1000 SF GFA | Not Given | | | Not Given | | | Not Given | | | Not Given | | | Equation |

| | | | | |
|---|---|---|---|---|
| Fast-Food Restaurant with Drive-Through Window | Standard Deviation | 231.69 | | 23.80 |
| | Number of Studies | 11 | | 36 |
| | Average Size | 4 | | 3 |
| | $R^2$ | Not Given | | Not Given |

929 High-Volume Fast-Food Restaurant

| Land Use | ITE Code | Qty | Unit | Saturday Rate | % In | % Out | Peak Hour of Generator Rate | % In | % Out | Saturday Total | Saturday In | Saturday Out | Peak Hour of Generator Total | Peak Hour of Generator In | Peak Hour of Generator Out | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High-Volume Fast-Food Restaurant | 929 | 4.63 | 1000 SF GFA | Not Given | 50% | 50% | 74.46 | 50% | 50% | 3,861 | 1,931 | 1,930 | 345 | 173 | 172 | Average |
| High-Volume Fast-Food Restaurant | 929 | 4.63 | 1000 SF GFA | Not Given | 50% | 50% | 63.91 | 50% | 50% | 4,339 | 2,170 | 2,169 | 296 | 148 | 148 | Minimum |
| High-Volume Fast-Food Restaurant | 929 | 4.63 | 1000 SF GFA | Not Given | 50% | 50% | 94.50 | 50% | 50% | 4,719 | 2,360 | 2,359 | 437 | 219 | 218 | Maximum |
| Land Use | ITE Code | Qty | Unit | Saturday Equation | % In | % Out | Peak Hour of Generator Equation | % In | % Out | Saturday Total | Saturday In | Saturday Out | Peak Hour of Generator Total | Peak Hour of Generator In | Peak Hour of Generator Out | |
| High-Volume Fast-Food Restaurant | 929 | 4.63 | 1000 SF GFA | Not Given | | | Not Given | | | Not Given | | | Not Given | | | Equation |

| | | | | |
|---|---|---|---|---|
| High-Volume Fast-Food Restaurant | Standard Deviation | Not Given | | 10.39 |
| | Number of Studies | Not Given | | 10 |
| | Average Size | Not Given | | 5 |
| | $R^2$ | Not Given | | Not Given |

944 Gasoline/Service Station

| Land Use | ITE Code | Qty | Unit | Saturday Rate | % In | % Out | Peak Hour of Generator Rate | % In | % Out | Saturday Total | Saturday In | Saturday Out | Peak Hour of Generator Total | Peak Hour of Generator In | Peak Hour of Generator Out | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline/Service Station | 944 | 28 | Vehicle Fueling | 119.00 | 50% | 50% | 12.19 | 51% | 49% | 3,332 | 1,666 | 1,666 | 341 | 174 | 167 | Average |
| Gasoline/Service Station | 944 | 28 | Vehicle Fueling | 119.00 | 50% | 50% | 9.00 | 51% | 49% | 3,332 | 1666 | 1666 | 252 | 128 | 124 | Minimum |
| Gasoline/Service Station | 944 | 28 | Vehicle Fueling | 119.00 | 50% | 50% | 16.75 | 51% | 49% | 3,332 | 1,666 | 1,666 | 469 | 239 | 230 | Maximum |
| Land Use | ITE Code | Qty | Unit | Saturday Equation | % In | % Out | Peak Hour of Generator Equation | % In | % Out | Saturday Total | Saturday In | Saturday Out | Peak Hour of Generator Total | Peak Hour of Generator In | Peak Hour of Generator Out | |
| Gasoline/Service Station | 944 | 28 | Vehicle Fueling | Not Given | | | Not Given | | | Not Given | | | Not Given | | | Equation |

| | | | | |
|---|---|---|---|---|
| Gasoline/Service Station | Standard Deviation | N/A | | 3.39 |
| | Number of Studies | 1 | | 5 |
| | Average Size | 12 | | 10 |
| | $R^2$ | Not Given | | Not Given |

## Reductions - Gateway Crossing (Saturday)

| Land Use | LUC | Saturday MD Peak Hour | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | BEFORE REDUCTION | | | IC | NCHRP INTERNAL CAPTURE | | | I | PED INTERACTION WITH AAG | | | AFTER INTERNAL CAPTURE/PED INTERACTION | | | PASS-BY | PASS-BY | | | AFTER PASS-BY | | |
| | | TOTAL | ENTER | EXIT | Rate % | TOTAL | ENTER | EXIT | Rate % | TOTAL | ENTER | EXIT | TOTAL | ENTER | EXIT | Rate % | TOTAL | ENTER | EXIT | TOTAL | ENTER | EXIT |
| Discount Superstore | 813 | 886 | 443 | 443 | 12% | 105 | 60 | 45 | 0% | - | - | - | 781 | 383 | 398 | 21% | 164 | 80 | 84 | 617 | 303 | 314 |
| Hotel | 310 | 100 | 51 | 49 | 43% | 43 | 24 | 19 | 10% | 10 | 5 | 5 | 47 | 22 | 25 | 0% | - | - | - | 47 | 22 | 25 |
| Strip Retail | 822 | 185 | 95 | 90 | 12% | 22 | 13 | 9 | 10% | 19 | 10 | 9 | 144 | 72 | 72 | 31% | 44 | 22 | 22 | 100 | 50 | 50 |
| Drive-Through Fast-Food Restaurant | 934 | 89 | 45 | 44 | 40% | 36 | 15 | 21 | 10% | 9 | 5 | 4 | 44 | 25 | 19 | 50% | 23 | 13 | 10 | 21 | 12 | 9 |
| High-Volume Fast-Food Restaurant | 929 | 345 | 173 | 172 | 41% | 142 | 59 | 83 | 10% | 34 | 17 | 17 | 169 | 97 | 72 | 50% | 85 | 49 | 36 | 84 | 48 | 36 |
| Gasoline/Service Station | 944 | 341 | 174 | 167 | 12% | 41 | 24 | 17 | 0% | - | - | - | 300 | 150 | 150 | 49% | 148 | 74 | 74 | 152 | 76 | 76 |
| TOTAL | | 1,946 | 981 | 965 | | 389 | 195 | 194 | | 72 | 37 | 35 | 1,485 | 749 | 736 | | 464 | 238 | 226 | 1,021 | 511 | 510 |
| | | % Internal Capture | | | | 20% | 20% | 20% | | | | | | | | % Pass-by | 24% | 24% | 23% | | | |

| Weekday After IC | | | Weekday After Ped Interaction | | Weekday After Pass-by | |
|---|---|---|---|---|---|---|
| Rate (Avg) | Original ADT | ADT After IC | Rate (Avg) | ADT After Ped | Rate (Avg) | ADT After Pass-by |
| 88.1% | 9,901 | 8,728 | 100.0% | 8,728 | 79.0% | 6,895 |
| 57.0% | 1,467 | 836 | 90.0% | 752 | 100.0% | 752 |
| 88.1% | 1,975 | 1,741 | 90.0% | 1,567 | 69.0% | 1,081 |
| 59.6% | 912 | 543 | 90.0% | 489 | 50.0% | 245 |
| 58.8% | 3,861 | 2,272 | 90.0% | 2,045 | 50.0% | 1,023 |
| 88.0% | 3,332 | 2,931 | 100.0% | 2,931 | 51.0% | 1,495 |
| Total | 21,448 | 17,051 | Total | 16,512 | Total | 11,491 |
| *Internal Capture* | | 4,397 | *Interaction* | 539 | *PB* | 5,560 |

| NCHRP 8-51 Internal Trip Capture Estimation Tool | | | |
|---|---|---|---|
| **Project Name:** | Gateway Crossing | **Organization:** | Lokahi |
| **Project Location:** | Mesa, Arizona | **Performed By:** | CD |
| **Scenario Description:** | Actually Saturday MD - Testing | **Date:** | 2/19/2026 |
| **Analysis Year:** | | **Checked By:** | |
| **Analysis Period:** | **PM Street Peak Hour** | **Date:** | |

**Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)**

| Land Use | Development Data (*For Information Only*) | | | Estimated Vehicle-Trips | | |
|---|---|---|---|---|---|---|
| | ITE LUCs[1] | Quantity | Units | Total | Entering | Exiting |
| Office | | | | 0 | | |
| Retail | 822,813, 944 | 194; 28 | SF GFA; Pumps | 1412 | 712 | 700 |
| Restaurant | 934, 929 | 11.15; 4.34 | KSF GFA | 434 | 218 | 216 |
| Cinema/Entertainment | | | | 0 | | |
| Residential | | | | 0 | | |
| Hotel | 310 | 212 | Rooms | 100 | 51 | 49 |
| All Other Land Uses[2] | | | | 0 | | |
| Total | | | | 1946 | 981 | 965 |

**Table 2-P: Mode Split and Vehicle Occupancy Estimates**

| Land Use | Entering Trips | | | Exiting Trips | | |
|---|---|---|---|---|---|---|
| | Veh. Occ. | % Transit | % Non-Motorized | Veh. Occ. | % Transit | % Non-Motorized |
| Office | | | | | | |
| Retail | | | | | | |
| Restaurant | | | | | | |
| Cinema/Entertainment | | | | | | |
| Residential | | | | | | |
| Hotel | | | | | | |
| All Other Land Uses[2] | | | | | | |

**Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)**

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | | | | | |
| Retail | | | | | | |
| Restaurant | | | | | | |
| Cinema/Entertainment | | | | | | |
| Residential | | | | | | |
| Hotel | | | | | | |

**Table 4-P: Internal Person-Trip Origin-Destination Matrix***

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | 0 | 0 | 0 | 0 | 0 |
| Retail | 0 | | 63 | 0 | 0 | 9 |
| Restaurant | 0 | 89 | | 0 | 0 | 15 |
| Cinema/Entertainment | 0 | 0 | 0 | | 0 | 0 |
| Residential | 0 | 0 | 0 | 0 | | 0 |
| Hotel | 0 | 8 | 11 | 0 | 0 | |

**Table 5-P: Computations Summary**

| | Total | Entering | Exiting |
|---|---|---|---|
| All Person-Trips | 1,946 | 981 | 965 |
| Internal Capture Percentage | 20% | 20% | 20% |
| | | | |
| External Vehicle-Trips[3] | 1,556 | 786 | 770 |
| External Transit-Trips[4] | 0 | 0 | 0 |
| External Non-Motorized Trips[4] | 0 | 0 | 0 |

**Table 6-P: Internal Trip Capture Percentages by Land Use**

| Land Use | Entering Trips | Exiting Trips |
|---|---|---|
| Office | N/A | N/A |
| Retail | 14% | 10% |
| Restaurant | 34% | 48% |
| Cinema/Entertainment | N/A | N/A |
| Residential | N/A | N/A |
| Hotel | 47% | 39% |

[1]Land Use Codes (LUCs) from *Trip Generation Informational Report*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

[3]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

[4]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

*Estimation Tool Developed by the Texas Transportation Institute*

| | |
|---|---|
| **Project Name:** | Gateway Crossing |
| **Analysis Period:** | **PM Street Peak Hour** |

**Table 7-P: Conversion of Vehicle-Trip Ends to Person-Trip Ends**

| Land Use | Table 7-P (D): Entering Trips | | | Table 7-P (O): Exiting Trips | | |
|---|---|---|---|---|---|---|
| | Veh. Occ. | Vehicle-Trips | Person-Trips* | Veh. Occ. | Vehicle-Trips | Person-Trips* |
| Office | 1.00 | 0 | 0 | 1.00 | 0 | 0 |
| Retail | 1.00 | 712 | 712 | 1.00 | 700 | 700 |
| Restaurant | 1.00 | 218 | 218 | 1.00 | 216 | 216 |
| Cinema/Entertainment | 1.00 | 0 | 0 | 1.00 | 0 | 0 |
| Residential | 1.00 | 0 | 0 | 1.00 | 0 | 0 |
| Hotel | 1.00 | 51 | 51 | 1.00 | 49 | 49 |

**Table 8-P (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)**

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | 0 | 0 | 0 | 0 | 0 |
| Retail | 14 | | 203 | 28 | 182 | 35 |
| Restaurant | 6 | 89 | | 17 | 39 | 15 |
| Cinema/Entertainment | 0 | 0 | 0 | | 0 | 0 |
| Residential | 0 | 0 | 0 | 0 | | 0 |
| Hotel | 0 | 8 | 33 | 0 | 1 | |

**Table 8-P (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)**

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | 57 | 4 | 0 | 0 | 0 |
| Retail | 0 | | 63 | 0 | 0 | 9 |
| Restaurant | 0 | 356 | | 0 | 0 | 36 |
| Cinema/Entertainment | 0 | 28 | 7 | | 0 | 1 |
| Residential | 0 | 71 | 31 | 0 | | 6 |
| Hotel | 0 | 14 | 11 | 0 | 0 | |

**Table 9-P (D): Internal and External Trips Summary (Entering Trips)**

| Destination Land Use | Person-Trip Estimates | | | External Trips by Mode* | | |
|---|---|---|---|---|---|---|
| | Internal | External | Total | Vehicles[1] | Transit[2] | Non-Motorized[2] |
| Office | 0 | 0 | 0 | 0 | 0 | 0 |
| Retail | 97 | 615 | 712 | 615 | 0 | 0 |
| Restaurant | 74 | 144 | 218 | 144 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | 0 | 0 | 0 |
| Residential | 0 | 0 | 0 | 0 | 0 | 0 |
| Hotel | 24 | 27 | 51 | 27 | 0 | 0 |
| All Other Land Uses[3] | 0 | 0 | 0 | 0 | 0 | 0 |

**Table 9-P (O): Internal and External Trips Summary (Exiting Trips)**

| Origin Land Use | Person-Trip Estimates | | | External Trips by Mode* | | |
|---|---|---|---|---|---|---|
| | Internal | External | Total | Vehicles[1] | Transit[2] | Non-Motorized[2] |
| Office | 0 | 0 | 0 | 0 | 0 | 0 |
| Retail | 72 | 628 | 700 | 628 | 0 | 0 |
| Restaurant | 104 | 112 | 216 | 112 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | 0 | 0 | 0 |
| Residential | 0 | 0 | 0 | 0 | 0 | 0 |
| Hotel | 19 | 30 | 49 | 30 | 0 | 0 |
| All Other Land Uses[3] | 0 | 0 | 0 | 0 | 0 | 0 |

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

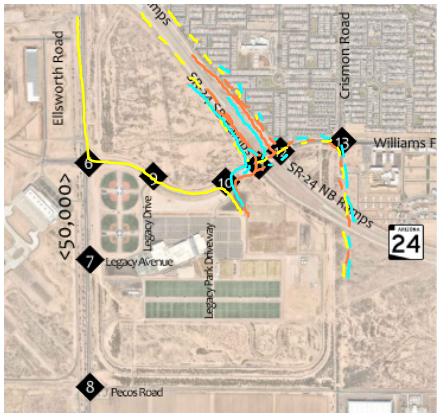
[2]Person-Trips

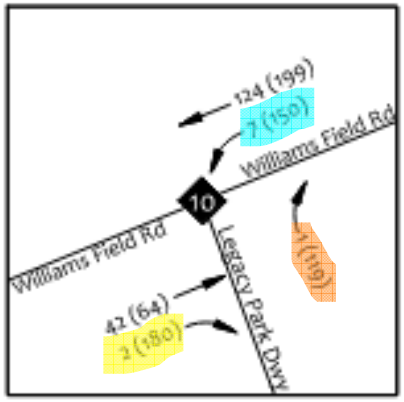
[3]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

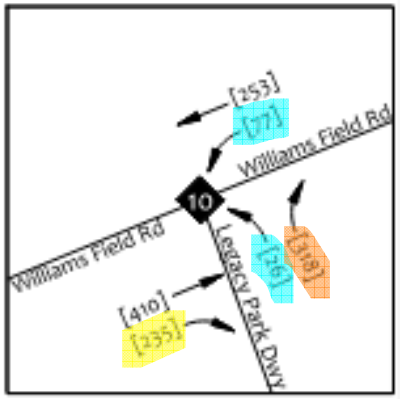
*Indicates computation that has been rounded to the nearest whole number.

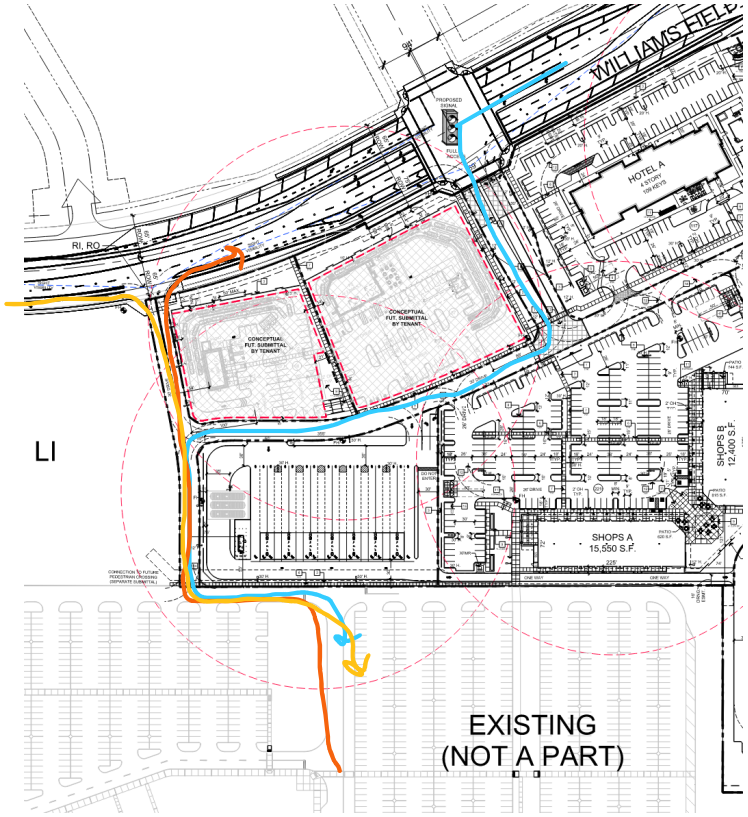
# Appendix G – Arizona Athletic Ground Redistribution Volumes

# Redistribution - AAG Traffic Volumes




- Redistribute
  - 100% Blue
  - 2/3 Orange
  - 2/3 Yellow (these volumes can now avoid congestion on Ellsworth as well)

**Ingress and egress volumes at eastern side of site – volumes to redistribute to future Crimson access.**

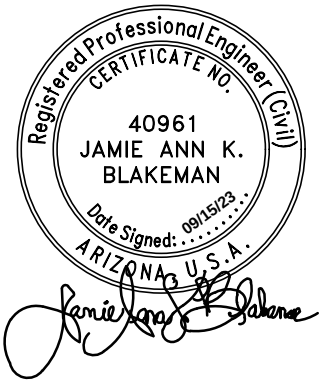
100% of the trips in blue were redistributed from path shown above in solid blue, to the path shown in dashed blue.
2/3 of the trips in orange were redistributed from path shown above in solid orange, to the path shown in dashed orange.
2/3 of the trips in yellow were redistributed from path shown above in solid yellow, to the path shown in dashed yellow.

# Appendix H – Relevant Background Studies

H

# *Gateway East*

## Traffic Impact Study



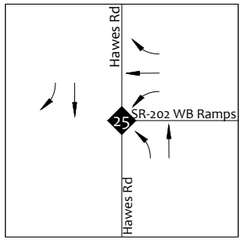

*Prepared for:*

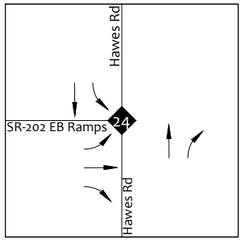
The Boyer Company
2850 E. Camelback Road, Suite 270
Phoenix, AZ 85251

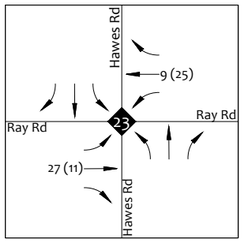
*Prepared by:*

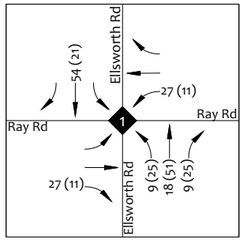
Lōkahi, LLC
10555 N. 114th Street, Suite 105
Scottsdale, AZ 85259

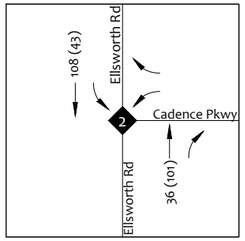
**Project Number: 23.5476**
**September 15, 2023**

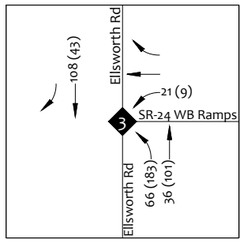


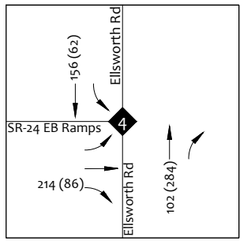



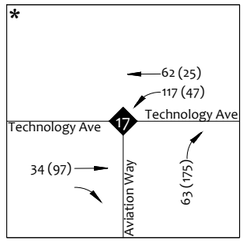



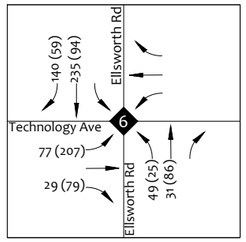



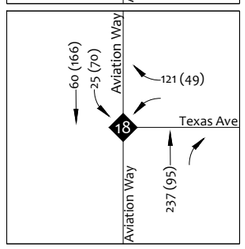



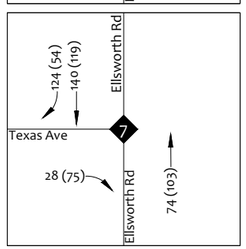



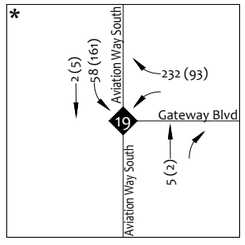



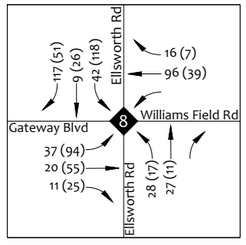



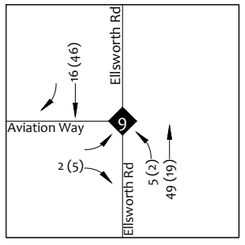



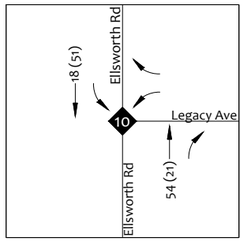



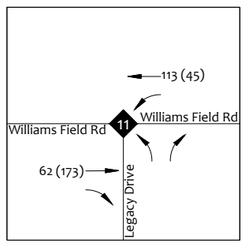



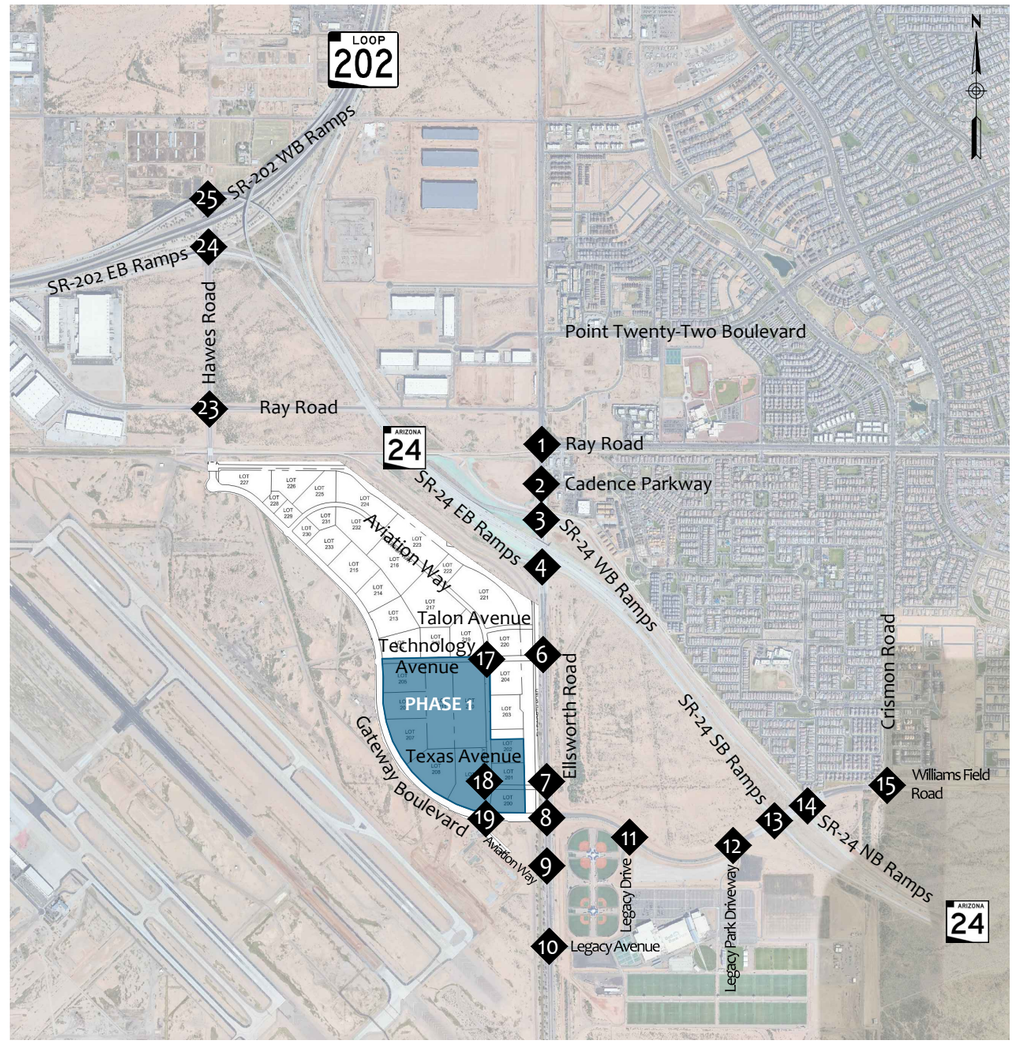



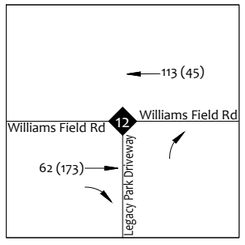



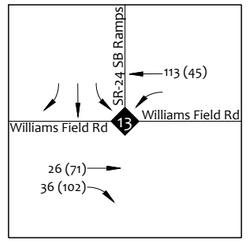

LEGEND

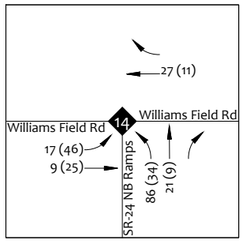
AM (PM) Peak Hour Traffic Volumes

X Intersection

* As each individual parcel of Phase 1 is developed it is understood that the adjacent roadway will be required to be built out to allow access to said parcels.



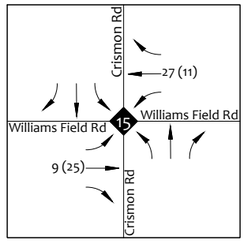




**FIGURE 8 | YEAR 2026 SITE TRAFFIC VOLUMES (PHASE 1)**

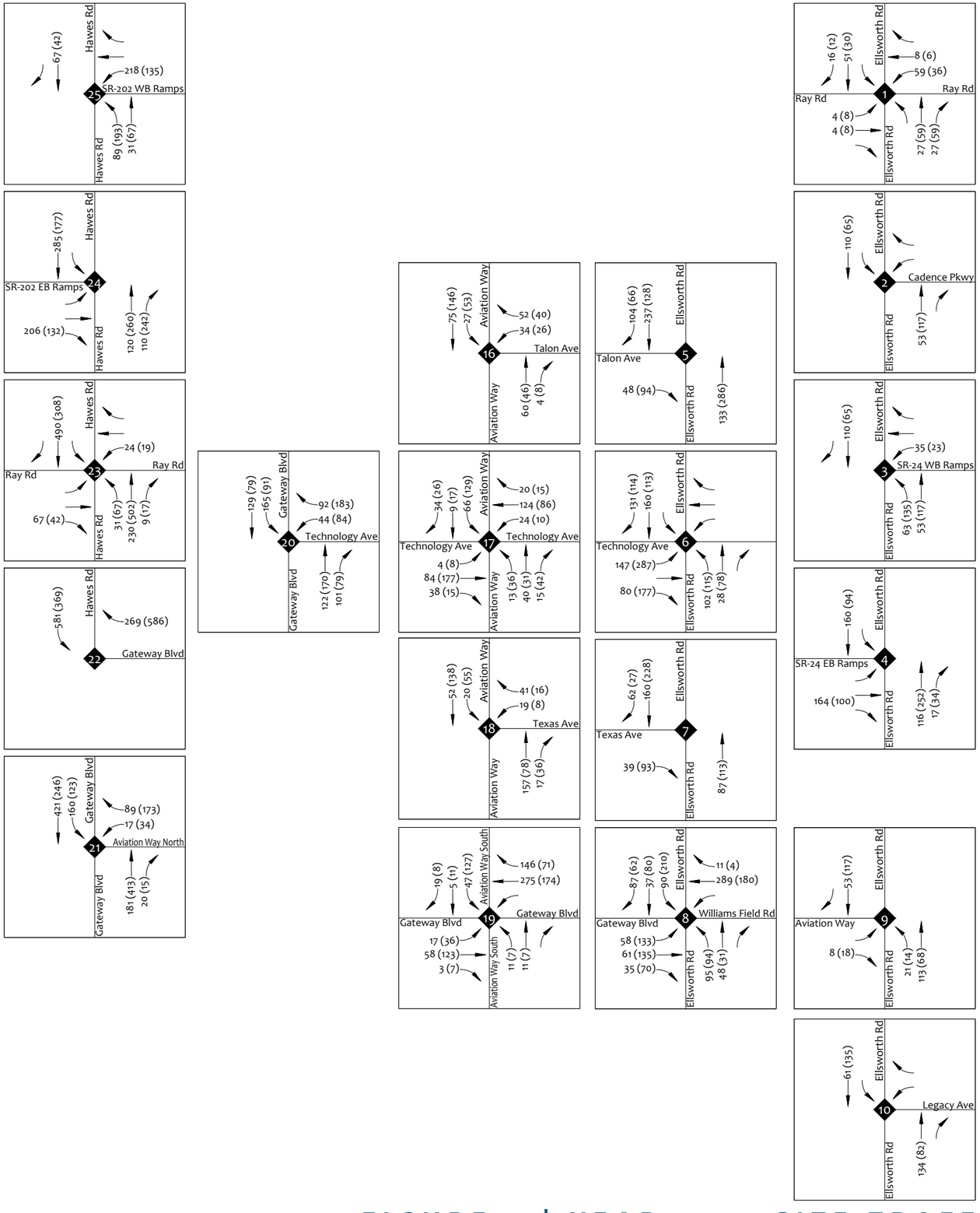
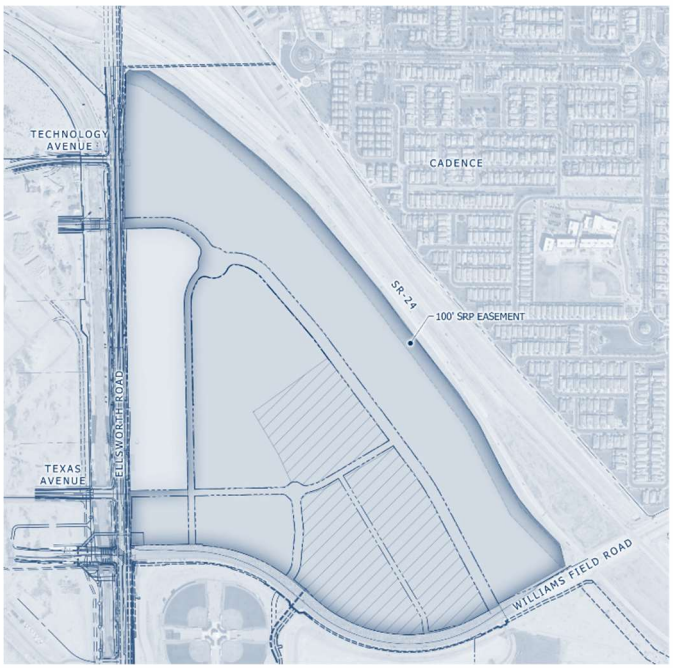



FIGURE 9 | YEAR 2033 SITE TRAFFIC VOLUMES (PHASE 1 + PHASE 2)

# *Legacy Park Mixed-Use*

## Traffic Impact Study

*Prepared for:*




Vestar Pacific Master Plan, LLC
P.O. Box 61209
Irvine, CA 92602

Registered Professional Engineer (Civil)
CERTIFICATE NO.
51806
SHELLY A.
SORENSEN
Date Signed: 01/31/25
ARIZONA, U.S.A.

*Prepared by:*

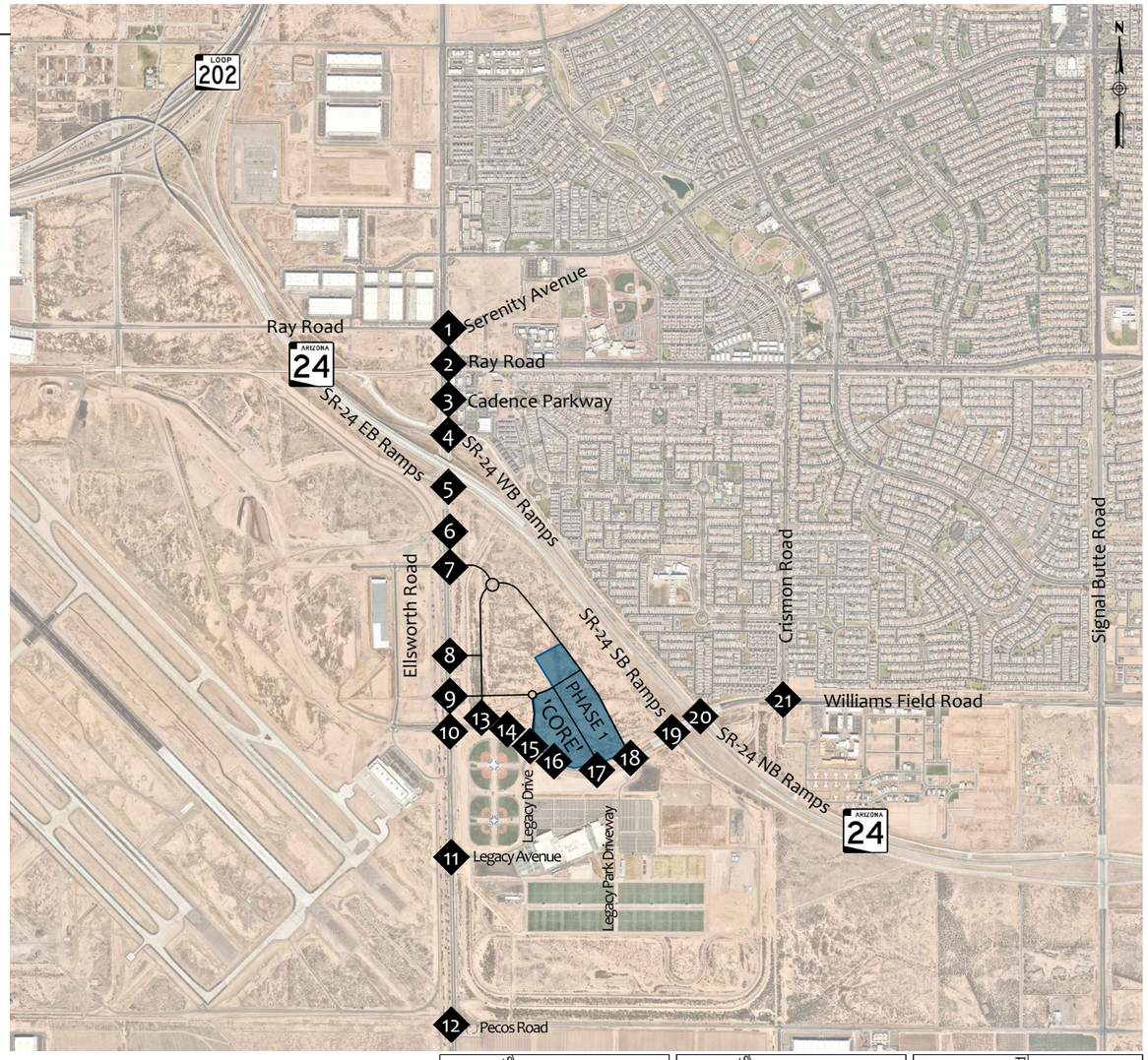
Lōkahi, LLC
10555 N. 114th Street, Suite 105
Scottsdale, AZ 85259

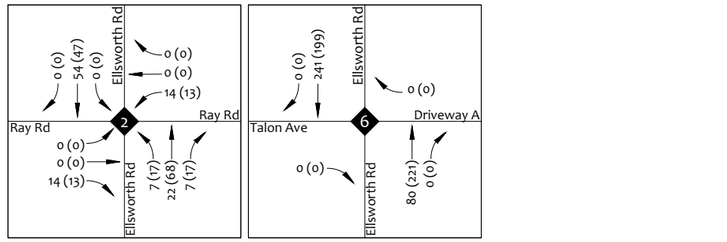
**Project Number 24.5641**
**January 31, 2025**

LEGEND

AM (PM) Peak Hour Traffic Volumes

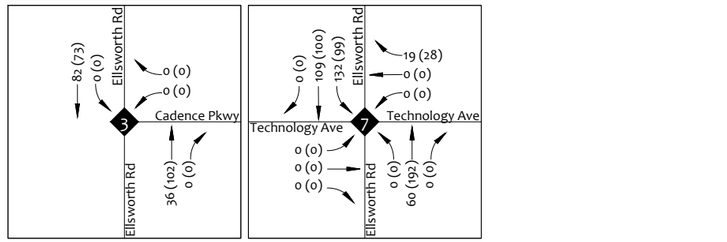
X Intersection





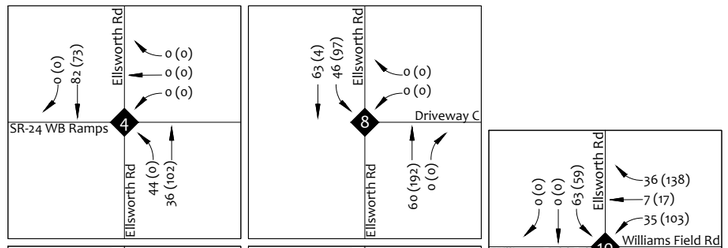






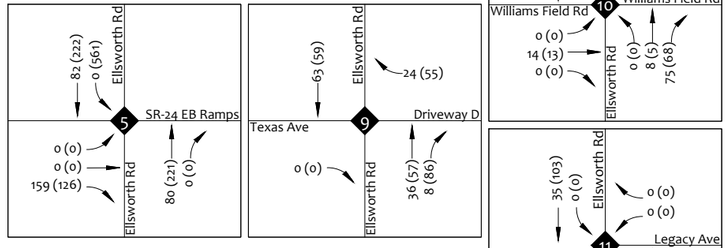






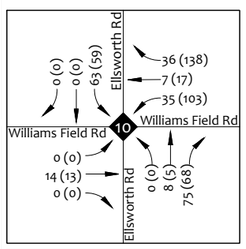


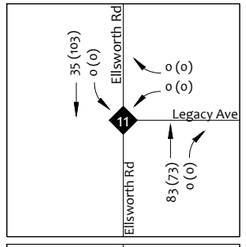


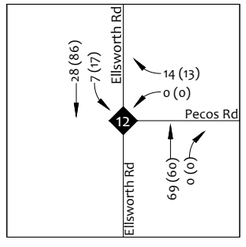


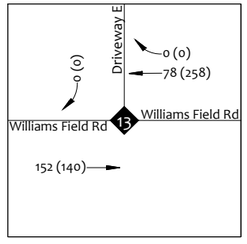


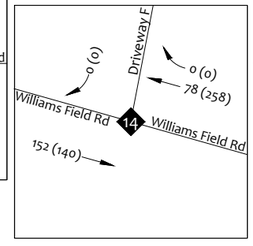


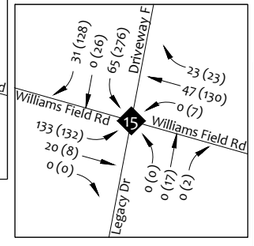


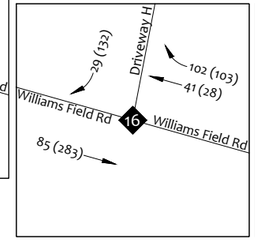



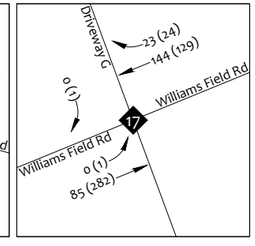



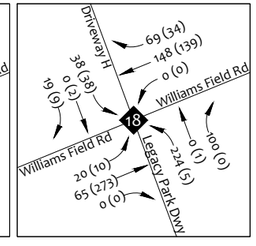



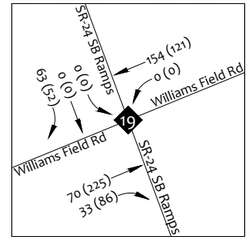



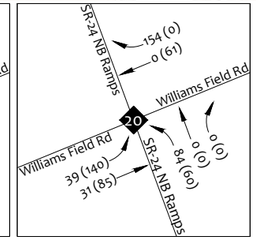



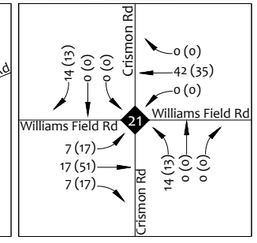




FIGURE 8 | YEAR 2029 SITE TRAFFIC VOLUMES

| | | | |
|---|---|---|---|
| **To:** | Andrew Cohn<br>Pacific Proving, LLC | **Date:** | July 8, 2024 |
| **From:** | Shelly Sorensen, PE, PTOE | | |
| **Job Number:** | 24.5614 | | |
| **RE:** | NEC Crismon and Pecos<br>Traffic Impact Statement | | |

## INTRODUCTION

Lōkahi, LLC (Lōkahi) has prepared a Traffic Statement for the proposed NEC Crismon and Pecos development, located on the northeast corner of Pecos Road and Crismon Road, in Mesa, Arizona. See **Figure 1** for the vicinity map.

The proposed development is comprised of nine (9) total buildings including office space, warehouse space and data halls. See **Attachment A** and **Figure 2** for the site plan.

The objective of this Traffic Statement is to analyze the proposed development's traffic related impacts to the adjacent street network.

**Figure 1 - Vicinity Map**

10555 N. 114th Street, Suite 105
Scottsdale, AZ 85259
480.536.7150
www.lokahigroup.com

collaboration unity harmony cooperation

## EXISTING CONDITIONS

The proposed site will occupy a portion of APN 313-25-859Y, which is zoned as Light Industrial (Ind-2). Per the site plan, the site encompasses approximately 178-acres. Currently, the site is undeveloped agricultural land. See **Attachment B** for Maricopa County Assessor's parcel information.

The proposed development is bordered by Pecos Road to the south, Crismon Road to the west, vacant land to the east, and Arizona State Route 24 to the north.

**Pecos Road** is an east-west roadway and provides one (1) lane in each direction of travel. According to the *City of Mesa 2022 Traffic Volume Map*, Pecos Road, between Ellsworth Road and Crismon Road alignment, has an ADT of 2,500 vpd. There is a posted speed limit of 45 mph.

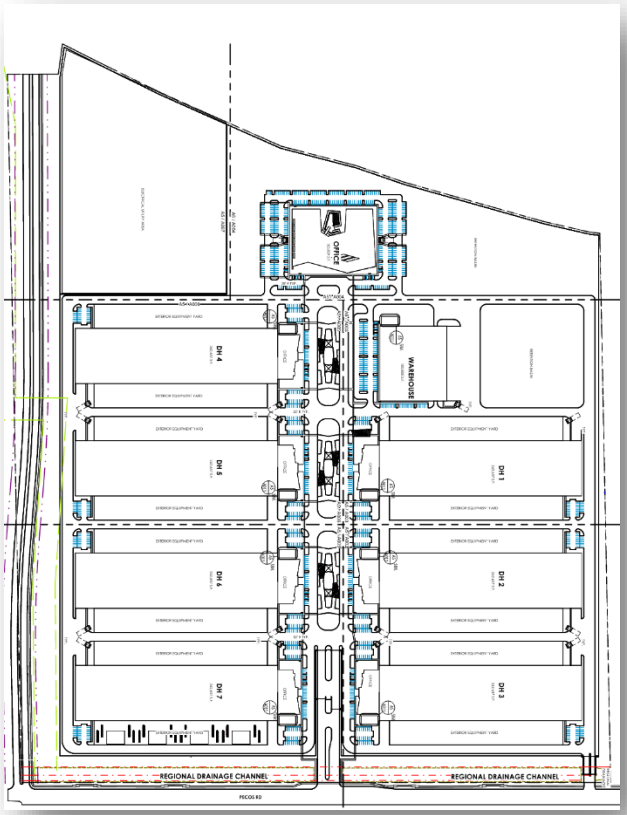



**Figure 2 – Site Plan**

## PROPOSED DEVELOPMENT

The proposed nine (9) buildings include an 105,859 square foot office building, a 100,800 square foot warehouse building, and seven (7) data halls. Each of the data halls will be comprised of 17,266 square feet of office space and 225,411 square feet of data hall area, for a total of 242,637 square feet.

The site plan indicates two (2) proposed access points to the proposed development along Pecos Road. One (1) access point is located approximately 1,250 feet east of the Crismon road alignment and one (1) access point at the Merrill Road alignment.

## SITE OPERATIONS

The below information was obtained from the developer regarding anticipated hourly site operations for the property on a typical weekday:

- **Office (*Open 24/7*)**
  - 9:00 AM to 5:00 PM
    - up to 100 employees (50% of employees work *remotely*)
    - up to 40 visitors (*random arrival and departure times*)
    - up to 10 deliveries (*random arrival and departure times*)

  *For the purposes of this memorandum, it is assumed that 10% of the visitors and deliveries arrive and depart within the typical morning and afternoon peak hours. It is assumed 50% of employees depart and return to the site for a lunch break.*

- **Warehouse (*Open 24/7*)**
  - 7:00 AM to 7:00 PM (*first shift*)
    - up to 20 employees
    - up to 20 deliveries (*random arrival and departure times*)

  *For the purposes of this memorandum, it is assumed that employees arrive 15-minutes prior to start of shift and depart 15 minutes after end of shift. It is assumed 50% of employees depart and return to the site for a lunch break.*
  - 7:00 PM to 7:00 AM (*second shift*)
    - up to 10 employees

  *For the purposes of this memorandum, it is assumed that 10% of the deliveries arrive and depart within the typical morning and afternoon peak hours.*

- **Data Hall (*Open 24/7*)**
  - 7:00 AM to 7:00 PM (*first shift*)
    - up to 360 employees (50% of employees work *remotely*)

  *For the purposes of this memorandum, it is assumed that employees arrive 15-minutes prior to start of shift and depart 15 minutes after end of shift. It is assumed 50% of employees depart and return to the site for a lunch break.*
  - 7:00 PM to 7:00 AM (*second shift*)
    - up to 180 employees (50% of employees work *remotely*)
  - 9:00 AM to 5:00 PM (*business hour shift*)
    - up to 180 employees (50% of employees work *remotely*)
    - up to 20 visitors (*random arrival and departure times*)
    - up to 20 deliveries (*random arrival and departure times*)

  *For the purposes of this memorandum, it is assumed that 10% of the visitors and deliveries arrive and depart within the typical morning and afternoon peak hours. It is assumed 50% of employees depart and return to the site for a lunch break.*

# TRIP GENERATION

The trip generation for the proposed development was calculated utilizing the Institute of Transportation Engineers (ITE) publication entitled *Trip Generation, 11th Edition*. The ITE trip generation rates and fitted curve equations are based on studies that measure trip generation characteristics for various types of land uses. The rates are expressed in terms of trips per unit of land use type. This publication is the standard for the transportation engineering profession.

The trip generation for the proposed NEC Crismon and Pecos development was calculated utilizing ITE Land Use 150 – Warehousing and ITE Land Use 710 – General Office Building. The total trip generation calculations are shown in **Table 1**. See **Attachment C** for detailed trip generation calculations.

**Table 1 – Trip Generation (Proposed Development)**

| Land Use | ITE Code | Qty | Unit | Weekday | AM Peak Hour | | | PM Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Total | Total | In | Out | Total | In | Out |
| Warehousing | 150 | 1,678.68 | 1000 Sq. Ft. GFA | 2,691 | 226 | 174 | 52 | 228 | 64 | 164 |
| General Office Building | 710 | 226.44 | 1000 Sq. Ft. GFA | 2,363 | 338 | 297 | 41 | 327 | 56 | 271 |
| | | | Total | 5,054 | 564 | 471 | 93 | 555 | 120 | 435 |

The proposed development is anticipated to generate 5,054 weekday trips, with 564 trips occurring during the AM peak hour and 555 trips occurring during the PM peak hour.

## Proposed Operations

The trip generation for the property was calculated using site operation information, as provided above. As shown above, a range of trips is provided for each trip type. For the purposes of this Traffic Statement and as a conservative approach, the maximum number of trips was utilized.

Trip generation calculations are shown in **Table 2**.

**Table 2 – Trip Generation (Proposed Operations)**

| Land Use | Weekday | AM Peak Hour | | | PM Peak Hour | | |
|---|---|---|---|---|---|---|---|
| | Total | Total | In | Out | Total | In | Out |
| Proposed Operations | 1,510 | 262 | 151 | 111 | 162 | 11 | 151 |

The proposed development is anticipated to generate 1,510 weekday trips, with 262 trips occurring during the AM peak hour and 162 trips occurring during the PM peak hour.

## SUMMARY

The proposed NEC Crismon and Pecos development will be comprised of nine (9) buildings including an 105,859 square foot office building, a 100,800 square foot warehouse building, and seven (7) data halls. Each of the data halls will be comprised of 17,266 square feet of office space and 225,411 square feet of data hall area, for a total of 242,637 square feet.

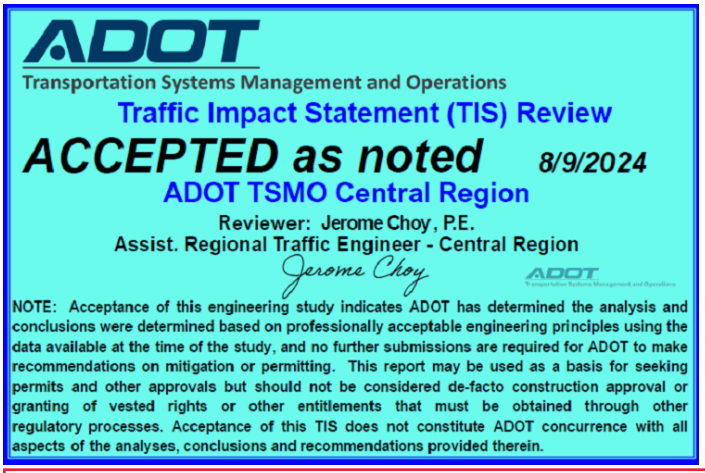
The site plan indicates two (2) proposed access points to the proposed development along Pecos Road. One (1) access point is located approximately 1,250 feet east of the Crismon road alignment and one (1) access point at the Merrill Road alignment.

An eastbound left turn deceleration lane and westbound right turn deceleration lane will be installed at the proposed entrance along Pecos Road approximately 1,250 feet east of Crismon Road.

Based upon information that was obtained from the developer regarding anticipated hourly site operations for the property on a typical weekday, the proposed site is anticipated to generate 1,510 weekday trips, with 262 trips occurring during the AM peak hour and 162 trips occurring during the PM peak hour.

As previously mentioned, the 2022 daily traffic along Pecos Road was 2,500 vpd. Conservatively assuming all daily trips utilizing Pecos Road would result in 4,010 vpd along Pecos Road upon build out. Based on the *MCDOT Roadway Design Manual* Pecos Road has a capacity of 15,000 vpd. This would result in Pecos Road operating at approximately 26.7% of its capacity upon build out of the proposed NEC Crismon and Pecos development.

**In conclusion, with the build out of the proposed NEC Crismon and Pecos development, the traffic is anticipated to result in acceptable traffic operations along the existing roadway network and the surrounding area.**


ADOT
Transportation Systems Management and Operations
Traffic Impact Statement (TIS) Review
ACCEPTED as noted 8/9/2024
ADOT TSMO Central Region
Reviewer: Jerome Choy, P.E.
Assist. Regional Traffic Engineer - Central Region
Jerome Choy
ADOT
NOTE: Acceptance of this engineering study indicates ADOT has determined the analysis and conclusions were determined based on professionally acceptable engineering principles using the data available at the time of the study, and no further submissions are required for ADOT to make recommendations on mitigation or permitting. This report may be used as a basis for seeking permits and other approvals but should not be considered de-facto construction approval or granting of vested rights or other entitlements that must be obtained through other regulatory processes. Acceptance of this TIS does not constitute ADOT concurrence with all aspects of the analyses, conclusions and recommendations provided therein.

Note: The overall traffic impacts from this development to the ADOT facilities should be addressed with the analysis of the SR24 design team based on MAG numbers.

| | | | |
|---|---|---|---|
| **To:** | Jack Czerwinski<br>Merit Partners, Inc. | **Date:** | June 21, 2024 |
| **From:** | Shelly Sorensen, PE, PTOE | | |
| **Job Number:** | 23.5572 | | |
| **RE:** | Legacy Business Park<br>Traffic Impact Statement | | |

## INTRODUCTION

Lōkahi, LLC (Lōkahi) has prepared a Traffic Statement for the proposed Legacy Business Park, located on the northwest corner of Pecos Road and Crismon Road, in Mesa, Arizona. See **Figure 1** for the vicinity map.

**Figure 1 - Vicinity Map**

The proposed development will be comprised of three (3) data center buildings. Building A will provide 430,000 square feet of data center space and Building B and C will provide 285,000 square feet of data center space. Combined, the proposed Legacy Business Park will provide a total of 1,000,000 square feet of data center space. See **Attachment A** and **Figure 2** for the site plan.

The objective of this Traffic Statement is to analyze the proposed development's traffic related impacts to the adjacent street network.

10555 N. 114th Street, Suite 105
Scottsdale, AZ 85259
480.536.7150
www.lokahigroup.com

collaboration unity harmony cooperation

## EXISTING CONDITIONS

The proposed site will occupy a portion of APN 313-25-859Y, which is zoned as Light Industrial (Ind-2). Per the site plan, the site encompasses approximately 42-acres. Currently, the site is undeveloped agricultural land. See **Attachment B** for Maricopa County Assessor's parcel information.

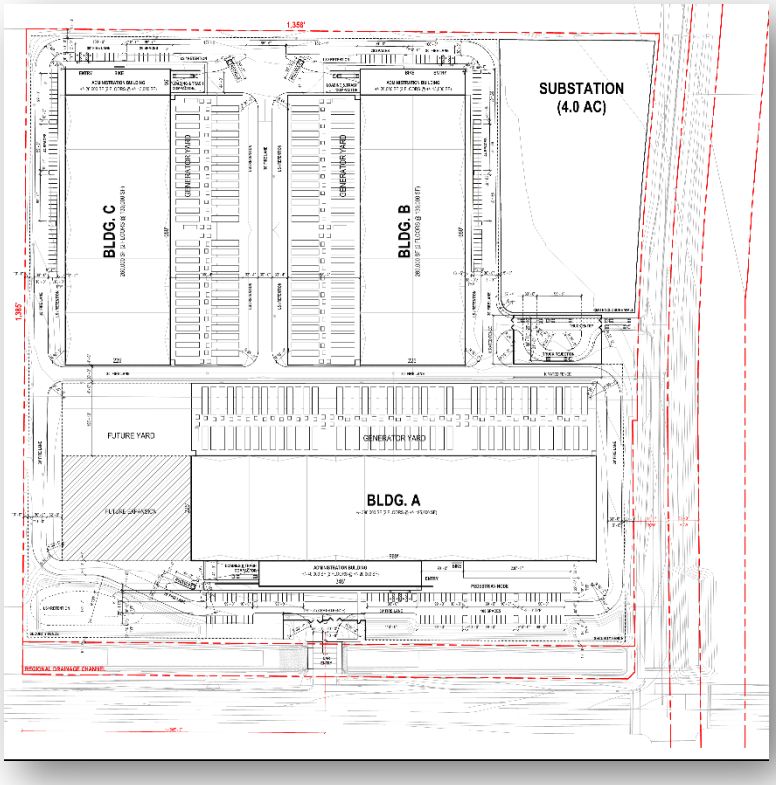



**Figure 2 – Site Plan**

The proposed development is bordered by Pecos Road to the south, Crismon Road to the east, vacant land to the west, and Legacy Sports Complex to the north.

**Pecos Road** is an east-west roadway and provides one (1) lane in each direction of travel. According to the *City of Mesa 2022 Traffic Volume Map*, Pecos Road, between Ellsworth Road and Crismon Road alignment, has an ADT of 2,500 vpd. There is a posted speed limit of 45 mph.

## PROPOSED DEVELOPMENT

The proposed development will be comprised of three (3) data center buildings. Building A will provide 430,000 square feet of data center space and Building B and C will provide 285,000 square feet of data center space. Combined, the proposed Legacy Business Park will provide a total of 1,000,000 square feet of data center space.

There will be a total of two (2) access points to the proposed development. Of which, there will be one (1) access point along Pecos Road and one (1) access point along Crismon Road.

**Pecos Road and Driveway A** is located approximately 740 feet west of Crismon Road. This driveway will provide full access and allow all movement into and out of the development. This access will serve as the passenger vehicle entrance and exit to the proposed development.

**Crismon Road and Driveway B** is located approximately 825 feet north of Pecos Road. This driveway will provide full access and allow all movement into and out of the development. This access will serve as the truck entrance and exit to the proposed development.

## TRIP GENERATION

The trip generation for the proposed development was calculated utilizing the Institute of Transportation Engineers (ITE) publication entitled *Trip Generation, 11th Edition*. The ITE trip generation rates and fitted curve equations are based on studies that measure trip generation characteristics for various types of land uses. The rates are expressed in terms of trips per unit of land use type. This publication is the standard for the transportation engineering profession.

The trip generation for the proposed Legacy Business Park was calculated utilizing ITE Land Use 160 – Data Center. The total trip generation calculations are shown in **Table 1**. See **Attachment C** for detailed trip generation calculations.

**Table 1 – Trip Generation (Proposed Development)**

| Land Use | ITE Code | Qty | Unit | Weekday | AM Peak Hour | | | PM Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Total | Total | In | Out | Total | In | Out |
| Data Center | 160 | 1,000 | 1000 Sq. Ft. GFA | 990 | 110 | 61 | 49 | 90 | 27 | 63 |

The proposed development is anticipated to generate 990 weekday trips, with 110 trips occurring during the AM peak hour and 90 trips occurring during the PM peak hour.

## SUMMARY

The proposed development will be comprised of three (3) data center buildings. Building A will provide 430,000 square feet of data center space and Building B and C will provide 285,000 square feet of data center space. Combined, the proposed Legacy Business Park will provide a total of 1,000,000 square feet of data center space.

The proposed Legacy Business Park is anticipated to generate 990 weekday trips, with 110 trips occurring during the AM peak hour and 90 trips occurring during the PM peak hour.

There will be a total of two (2) access points to the proposed development. Of which, there will be one (1) access point along Pecos Road and one (1) access point along Crismon Road.

As previously mentioned, the 2022 daily traffic along Pecos Road was 2,500 vpd. Conservatively assuming all daily trips utilizing Pecos Road would result in 3,400 vpd along Pecos Road upon build out. Based on the *MCDOT Roadway Design Manual* Pecos Road has a capacity of 15,000 vpd. This would result in Pecos Road operating at 22.7% of its capacity upon build out of the proposed Legacy Business Park.

**In conclusion, the additional traffic generated by the proposed Legacy Business Park is anticipated to result in minimal traffic-related impacts to the existing roadway network and the surrounding area.**

# Appendix I – MAG Socioeconomic Projections

# Socioeconomic Projections

## Population and Employment

### by Municipal Planning Area, Jurisdiction, and Regional Analysis Zone

**June 2023**

302 North 1st Avenue, Suite 300
Phoenix, Arizona 85003

MARICOPA ASSOCIATION of GOVERNMENTS

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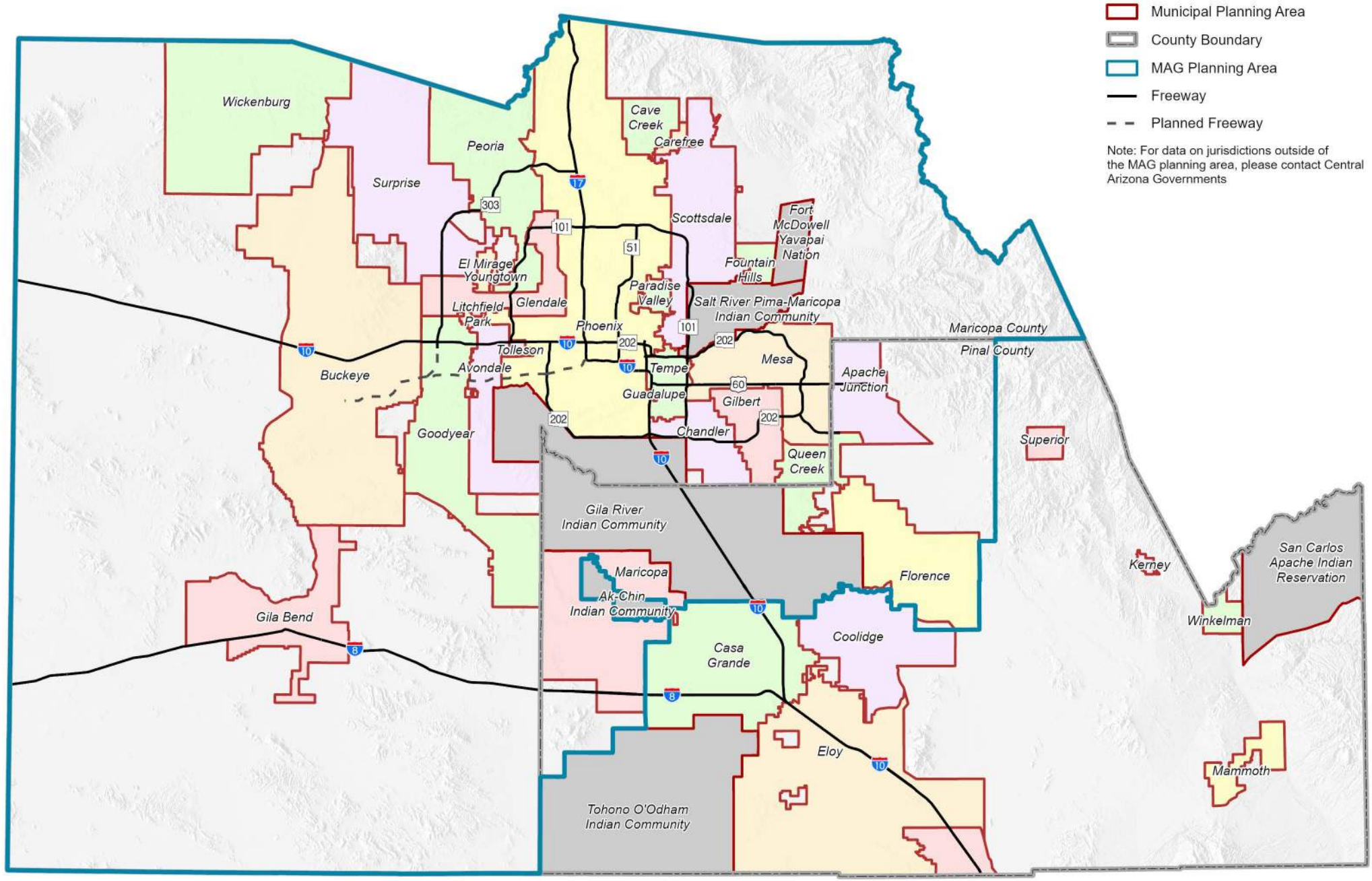
# Municipal Planning Areas (2023)
# Maricopa and Pinal Counties, Arizona

MARICOPA ASSOCIATION of GOVERNMENTS




0 5 10 15 20 25 30 35 40 Miles

Date: May 2023

Source: MAG and the MAG Member Agencies, CAG and the CAG Member Agencies

While every effort has been made to ensure the accuracy of this information, the Maricopa Association of Governments makes no warranty, expressed or implied, as to its accuracy and expressly disclaims liability for the accuracy thereof.

# Maricopa Association of Governments
## Table 1: Total Population by Municipal Planning Area
## July 1, 2020, 2022 and Projections July 1, 2030 to July 1, 2060

| Municipal Planning Area | Total Population | | | | | |
|---|---|---|---|---|---|---|
| | 2020 | 2022 | 2030 | 2040 | 2050 | 2060 |
| **Apache Junction** | 52,700 | 53,700 | 67,100 | 84,200 | 100,800 | 127,600 |
| **Avondale** | 91,100 | 94,000 | 117,800 | 130,900 | 135,400 | 137,700 |
| **Buckeye** | 109,700 | 124,400 | 194,400 | 296,200 | 397,800 | 491,000 |
| **Carefree** | 3,700 | 3,700 | 4,100 | 4,100 | 4,200 | 4,200 |
| **Cave Creek** | 5,000 | 5,300 | 5,600 | 5,900 | 6,100 | 6,200 |
| **Chandler** | 286,100 | 292,000 | 304,300 | 315,900 | 336,500 | 337,600 |
| **El Mirage** | 35,900 | 36,300 | 37,800 | 38,400 | 38,500 | 38,600 |
| **Florence** | 76,600 | 78,100 | 106,700 | 154,000 | 197,500 | 242,900 |
| **Fort McDowell Yavapai Native Nation** | 1,200 | 1,200 | 1,200 | 1,200 | 1,200 | 1,200 |
| **Fountain Hills** | 23,900 | 24,000 | 25,200 | 25,700 | 26,000 | 26,100 |
| **Gila Bend** | 2,100 | 2,100 | 2,500 | 2,500 | 2,500 | 2,500 |
| **Gila River Indian Native Nation** | 14,100 | 14,100 | 14,100 | 14,100 | 14,100 | 14,100 |
| **Gilbert** | 272,400 | 281,200 | 301,600 | 311,600 | 323,900 | 325,100 |
| **Glendale** | 282,200 | 291,000 | 323,600 | 345,300 | 353,200 | 354,900 |
| **Goodyear** | 99,900 | 109,200 | 165,100 | 210,000 | 241,200 | 276,700 |
| **Guadalupe** | 5,300 | 5,300 | 5,400 | 5,600 | 5,700 | 5,700 |
| **Litchfield Park** | 13,300 | 13,400 | 14,200 | 14,300 | 14,300 | 14,300 |
| **Maricopa** | 64,800 | 71,500 | 100,500 | 122,200 | 141,400 | 159,800 |
| **Mesa** | 550,300 | 561,500 | 589,900 | 624,200 | 645,500 | 661,200 |
| **Paradise Valley** | 12,700 | 12,700 | 13,300 | 13,300 | 13,400 | 13,400 |
| **Peoria** | 207,400 | 215,600 | 244,500 | 288,900 | 318,100 | 346,800 |
| **Phoenix** | 1,665,200 | 1,711,800 | 1,867,300 | 2,007,800 | 2,101,500 | 2,184,600 |
| **Queen Creek** | 72,700 | 84,700 | 121,000 | 135,700 | 149,400 | 154,900 |
| **Salt River Pima-Maricopa Native Nation** | 6,300 | 6,400 | 5,500 | 5,900 | 6,000 | 6,000 |
| **Scottsdale** | 241,800 | 245,100 | 275,700 | 286,700 | 301,300 | 307,300 |
| **Surprise** | 155,600 | 167,500 | 255,700 | 342,300 | 402,900 | 446,500 |
| **Tempe** | 181,600 | 187,400 | 219,300 | 247,500 | 258,000 | 269,700 |
| **Tolleson** | 7,300 | 7,300 | 8,100 | 8,900 | 9,600 | 10,300 |
| **Unincorporated Maricopa County** | 99,700 | 101,600 | 107,100 | 110,800 | 120,400 | 136,200 |
| **Unincorporated Pinal County** | 66,400 | 69,100 | 76,500 | 87,500 | 99,600 | 117,900 |
| **Wickenburg** | 7,800 | 8,000 | 8,600 | 8,600 | 8,700 | 8,700 |
| **Youngtown** | 7,100 | 7,100 | 7,500 | 7,700 | 7,800 | 7,800 |

*Notes: Numbers rounded to the nearest 100. These projections include both the Maricopa County and Pinal County portions for Apache Junction, Queen Creek, and the Gila River Indian Community. Peoria and Wickenburg include only the Maricopa County portion. Unincorporated Pinal County only includes portions in the MAG planning area.*

*Source: Maricopa Association of Governments (MAG) Socioeconomic Projections of Population and Employment by Municipal Planning Area (MPA) and Regional Analysis Zone (RAZ), June 2023*

*For explanation of variables and complete notation on this series, please refer to the Notes and Caveats in Appendix A.*

*For data on jurisdictions outside of the MAG planning area, please contact Central Arizona Governments.*

# Maricopa Association of Governments
## Table 2: Total Employment by Municipal Planning Area
## July 1, 2020, 2022 and Projections July 1, 2030 to July 1, 2060

| Municipal Planning Area | Total Employment | | | | | |
|---|---|---|---|---|---|---|
| | 2020 | 2022 | 2030 | 2040 | 2050 | 2060 |
| **Apache Junction** | 7,900 | 9,200 | 15,600 | 19,000 | 22,800 | 27,500 |
| **Avondale** | 24,900 | 28,100 | 33,600 | 39,600 | 42,400 | 46,800 |
| **Buckeye** | 25,900 | 26,200 | 50,100 | 92,400 | 126,800 | 183,600 |
| **Carefree** | 1,600 | 1,600 | 1,700 | 1,700 | 1,800 | 1,900 |
| **Cave Creek** | 2,400 | 2,600 | 2,800 | 3,000 | 3,300 | 3,500 |
| **Chandler** | 157,400 | 166,400 | 189,400 | 204,500 | 216,000 | 224,700 |
| **El Mirage** | 5,700 | 6,300 | 10,200 | 13,600 | 15,300 | 16,400 |
| **Florence** | 9,700 | 9,900 | 12,100 | 18,500 | 26,600 | 35,500 |
| **Fort McDowell Yavapai Native Nation** | 900 | 900 | 900 | 900 | 900 | 900 |
| **Fountain Hills** | 7,800 | 8,200 | 9,200 | 10,100 | 10,700 | 11,200 |
| **Gila Bend** | 1,000 | 1,000 | 1,100 | 1,200 | 1,300 | 2,000 |
| **Gila River Indian Native Nation** | 9,000 | 9,000 | 12,300 | 14,000 | 14,800 | 17,500 |
| **Gilbert** | 98,100 | 108,000 | 122,700 | 136,400 | 143,900 | 151,300 |
| **Glendale** | 103,300 | 111,900 | 136,400 | 155,800 | 171,900 | 183,900 |
| **Goodyear** | 46,000 | 59,200 | 87,200 | 110,600 | 124,100 | 142,800 |
| **Guadalupe** | 1,200 | 1,100 | 1,200 | 1,300 | 1,300 | 1,400 |
| **Litchfield Park** | 3,700 | 3,500 | 4,900 | 5,300 | 5,600 | 6,000 |
| **Maricopa** | 7,400 | 8,400 | 11,100 | 17,700 | 24,700 | 32,700 |
| **Mesa** | 197,400 | 208,200 | 237,500 | 277,300 | 308,900 | 331,500 |
| **Paradise Valley** | 4,700 | 4,700 | 5,100 | 5,500 | 5,500 | 5,800 |
| **Peoria** | 60,400 | 62,700 | 71,700 | 89,200 | 98,200 | 109,600 |
| **Phoenix** | 881,000 | 933,700 | 1,048,500 | 1,149,000 | 1,216,700 | 1,272,600 |
| **Queen Creek** | 21,100 | 22,300 | 30,700 | 35,000 | 39,700 | 42,900 |
| **Salt River Pima-Maricopa Native Nation** | 18,100 | 21,900 | 31,200 | 34,800 | 36,600 | 38,600 |
| **Scottsdale** | 188,900 | 207,100 | 230,500 | 246,500 | 255,000 | 264,000 |
| **Surprise** | 38,600 | 43,500 | 74,200 | 92,600 | 108,800 | 130,000 |
| **Tempe** | 192,400 | 207,900 | 233,700 | 253,400 | 264,400 | 273,000 |
| **Tolleson** | 17,600 | 19,000 | 20,600 | 21,500 | 22,000 | 22,400 |
| **Unincorporated Maricopa County** | 28,800 | 31,100 | 36,300 | 41,000 | 48,100 | 56,100 |
| **Unincorporated Pinal County** | 4,500 | 5,000 | 6,000 | 8,200 | 11,900 | 17,700 |
| **Wickenburg** | 4,300 | 4,200 | 4,400 | 4,500 | 4,500 | 4,600 |
| **Youngtown** | 1,600 | 1,600 | 1,700 | 2,200 | 2,300 | 2,500 |

*Notes: Numbers rounded to the nearest 100. These projections include both the Maricopa County and Pinal County portions for Apache Junction, Queen Creek, and the Gila River Indian Community. Peoria and Wickenburg include only the Maricopa County portion. Unincorporated Pinal County only includes portions in the MAG planning area.*

*Source: Maricopa Association of Governments (MAG) Socioeconomic Projections of Population and Employment by Municipal Planning Area (MPA) and Regional Analysis Zone (RAZ), June 2023*

*For explanation of variables and complete notation on this series, please refer to the Notes and Caveats in Appendix A.*

*For data on jurisdictions outside of the MAG planning area, please contact Central Arizona Governments.*

# Regional Analysis Zones (RAZ), 2023
# Maricopa and Pinal Counties, Arizona

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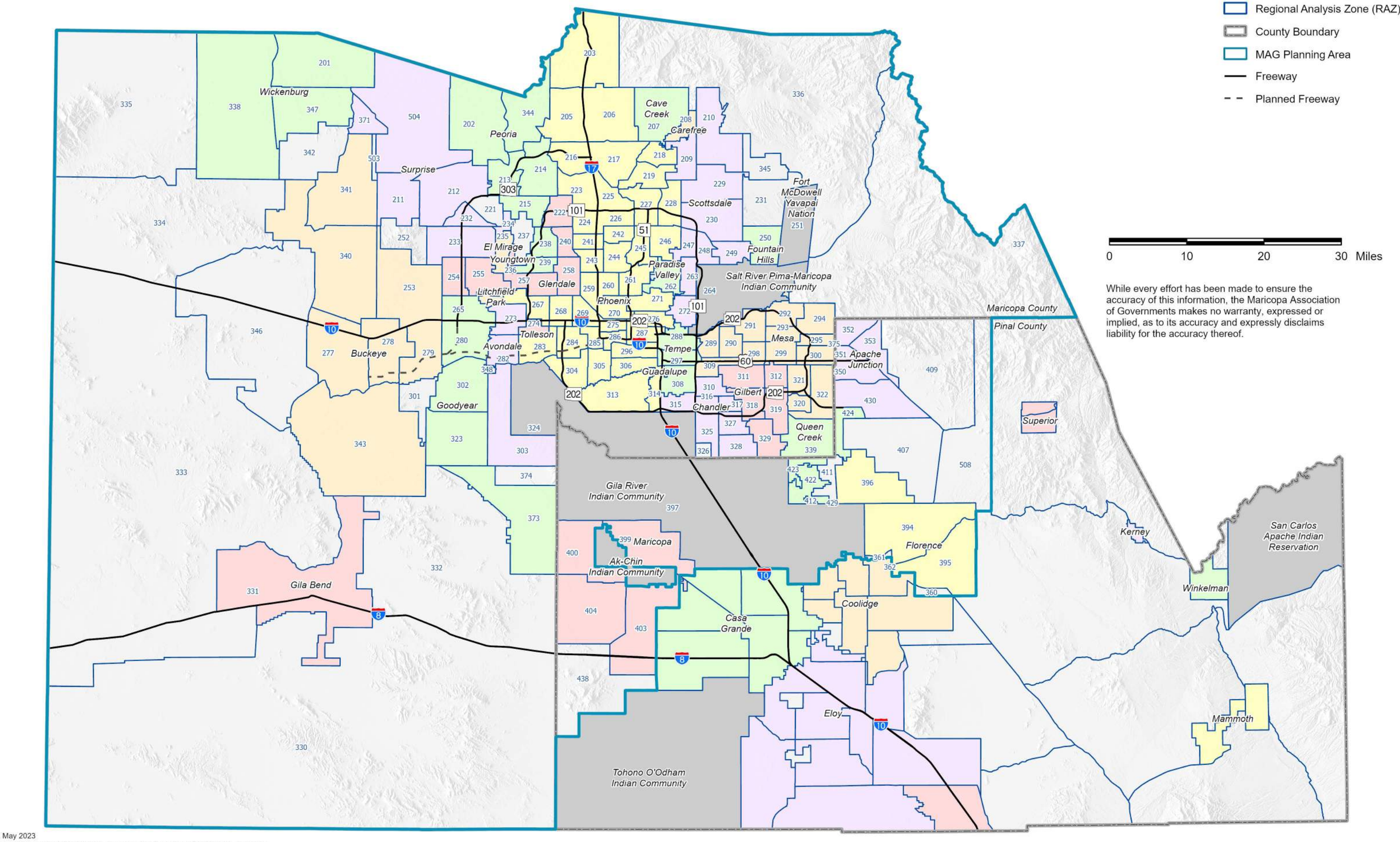


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Date: May 2023
Source: MAG and the MAG Member Agencies, CAG and the CAG Member Agencies

# Maricopa Association of Governments
## Table 4: Population by Regional Analysis Zone (RAZ) by MPA
## July 1, 2020, 2022 and Projections July 1, 2030 to July 1, 2060

| | | Total Population | | | | | |
|---|---|---|---|---|---|---|---|
| RAZ | County | 2020 | 2022 | 2030 | 2040 | 2050 | 2060 |
| **Mesa MPA** | | | | | | | |
| **289** | **Maricopa** | 61,363 | 61,990 | 63,704 | 73,872 | 77,197 | 79,794 |
| **290** | **Maricopa** | 77,816 | 78,733 | 81,667 | 90,338 | 100,200 | 104,837 |
| **291** | **Maricopa** | 48,178 | 48,335 | 50,819 | 54,026 | 54,403 | 54,645 |
| **292** | **Maricopa** | 23,477 | 23,614 | 24,730 | 24,944 | 24,974 | 25,011 |
| **293** | **Maricopa** | 32,057 | 32,192 | 32,498 | 32,571 | 32,574 | 32,667 |
| **294** | **Maricopa** | 11,120 | 11,248 | 11,717 | 11,979 | 12,002 | 12,007 |
| **295** | **Maricopa** | 22,502 | 23,247 | 23,820 | 24,730 | 24,756 | 24,792 |
| **298** | **Maricopa** | 54,657 | 54,707 | 54,846 | 54,994 | 55,915 | 57,072 |
| **299** | **Maricopa** | 44,407 | 45,334 | 47,086 | 48,682 | 48,980 | 49,724 |
| **300** | **Maricopa** | 48,743 | 50,173 | 54,401 | 55,788 | 57,080 | 57,897 |
| **309** | **Maricopa** | 47,261 | 48,389 | 48,776 | 49,042 | 49,144 | 49,993 |
| **320** | **Maricopa** | 986 | 1,409 | 1,469 | 1,537 | 1,572 | 1,791 |
| **321** | **Maricopa** | 24,022 | 24,365 | 27,907 | 32,803 | 34,575 | 35,951 |
| **322** | **Maricopa** | 53,753 | 57,756 | 66,431 | 68,881 | 72,115 | 74,991 |
| | **Total** | 550,342 | 561,492 | 589,871 | 624,187 | 645,487 | 661,172 |
| **Paradise Valley MPA** | | | | | | | |
| **262** | **Maricopa** | 12,705 | 12,734 | 13,329 | 13,347 | 13,360 | 13,383 |
| | **Total** | 12,705 | 12,734 | 13,329 | 13,347 | 13,360 | 13,383 |
| **Peoria MPA** | | | | | | | |
| **202** | **Maricopa** | 3,535 | 5,081 | 17,108 | 33,079 | 44,957 | 54,978 |
| **213** | **Maricopa** | 19,517 | 21,595 | 25,727 | 34,023 | 39,105 | 45,948 |
| **214** | **Maricopa** | 34,605 | 35,794 | 40,241 | 48,606 | 52,694 | 57,730 |
| **215** | **Maricopa** | 55,587 | 56,515 | 59,575 | 61,562 | 62,455 | 62,832 |
| **238** | **Maricopa** | 56,536 | 57,207 | 57,600 | 58,753 | 59,056 | 59,182 |
| **239** | **Maricopa** | 37,502 | 39,288 | 41,844 | 44,884 | 45,630 | 47,203 |
| **344** | **Maricopa** | 117 | 117 | 2,439 | 7,965 | 14,189 | 18,966 |
| | **Total** | 207,399 | 215,597 | 244,534 | 288,872 | 318,086 | 346,839 |

*Notes: These projections include both the Maricopa County and Pinal County portions for Apache Junction, Queen Creek, and the Gila River Indian Community. Peoria and Wickenburg include only the Maricopa County portion. Unincorporated Pinal County only includes portions in the MAG planning area.*

*Source: Maricopa Association of Governments (MAG) Socioeconomic Projections of Population and Employment by Municipal Planning Area (MPA) and Regional Analysis Zone (RAZ), June 2023*

*For explanation of variables and complete notation on this series, please refer to the Notes and Caveats in Appendix A.*

*For data on jurisdictions outside of the MAG planning area, please contact Central Arizona Governments.*

# Maricopa Association of Governments
## Table 5: Employment by Regional Analysis Zone (RAZ) by MPA
## July 1, 2020, 2022 and Projections July 1, 2030 to July 1, 2060

| | | Total Employment | | | | | |
|---|---|---|---|---|---|---|---|
| RAZ | County | 2020 | 2022 | 2030 | 2040 | 2050 | 2060 |
| **Mesa MPA** | | | | | | | |
| **289** | **Maricopa** | 23,744 | 26,233 | 27,828 | 32,732 | 34,435 | 35,321 |
| **290** | **Maricopa** | 22,402 | 22,835 | 24,513 | 28,633 | 31,667 | 34,230 |
| **291** | **Maricopa** | 11,770 | 12,215 | 14,821 | 16,304 | 18,248 | 18,972 |
| **292** | **Maricopa** | 13,839 | 14,280 | 15,070 | 16,766 | 17,369 | 18,521 |
| **293** | **Maricopa** | 10,632 | 11,350 | 12,170 | 12,949 | 13,456 | 13,823 |
| **294** | **Maricopa** | 1,192 | 1,336 | 1,497 | 1,596 | 1,736 | 1,872 |
| **295** | **Maricopa** | 3,331 | 3,432 | 3,737 | 4,052 | 4,250 | 4,486 |
| **298** | **Maricopa** | 13,663 | 14,237 | 14,808 | 15,692 | 16,457 | 17,160 |
| **299** | **Maricopa** | 27,991 | 29,640 | 31,213 | 32,933 | 34,095 | 35,479 |
| **300** | **Maricopa** | 10,566 | 11,297 | 14,468 | 17,030 | 18,156 | 19,471 |
| **309** | **Maricopa** | 35,488 | 35,870 | 37,759 | 39,634 | 41,093 | 42,337 |
| **320** | **Maricopa** | 3,415 | 3,303 | 4,153 | 5,249 | 5,940 | 7,093 |
| **321** | **Maricopa** | 5,937 | 8,154 | 14,286 | 23,611 | 27,297 | 33,363 |
| **322** | **Maricopa** | 13,451 | 14,060 | 21,190 | 30,154 | 44,704 | 49,385 |
| | **Total** | 197,421 | 208,242 | 237,513 | 277,335 | 308,903 | 331,513 |
| **Paradise Valley MPA** | | | | | | | |
| **262** | **Maricopa** | 4,703 | 4,673 | 5,138 | 5,485 | 5,545 | 5,774 |
| | **Total** | 4,703 | 4,673 | 5,138 | 5,485 | 5,545 | 5,774 |
| **Peoria MPA** | | | | | | | |
| **202** | **Maricopa** | 1,475 | 1,368 | 2,282 | 4,697 | 5,601 | 6,132 |
| **213** | **Maricopa** | 3,257 | 2,722 | 5,036 | 8,293 | 11,305 | 12,499 |
| **214** | **Maricopa** | 8,120 | 8,356 | 10,135 | 16,211 | 19,493 | 24,856 |
| **215** | **Maricopa** | 13,118 | 13,758 | 14,427 | 15,445 | 15,767 | 16,358 |
| **238** | **Maricopa** | 21,323 | 22,590 | 24,543 | 25,779 | 26,822 | 28,744 |
| **239** | **Maricopa** | 13,042 | 13,864 | 14,934 | 16,531 | 17,150 | 17,872 |
| **344** | **Maricopa** | 63 | 81 | 336 | 2,224 | 2,055 | 3,171 |
| | **Total** | 60,398 | 62,739 | 71,693 | 89,180 | 98,193 | 109,632 |

*Notes: These projections include both the Maricopa County and Pinal County portions for Apache Junction, Queen Creek, and the Gila River Indian Community. Peoria and Wickenburg include only the Maricopa County portion. Unincorporated Pinal County only includes portions in the MAG planning area.*

*Source: Maricopa Association of Governments (MAG) Socioeconomic Projections of Population and Employment by Municipal Planning Area (MPA) and Regional Analysis Zone (RAZ), June 2023*

*For explanation of variables and complete notation on this series, please refer to the Notes and Caveats in Appendix A.*

*For data on jurisdictions outside of the MAG planning area, please contact Central Arizona Governments.*

# Appendix J – Year 2029 No Build Capacity Analysis

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 163 | 8 | 1122 | 48 | 1 | 768 |
| Future Volume (veh/h) | 163 | 8 | 1122 | 48 | 1 | 768 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 177 | 9 | 1220 | 52 | 1 | 835 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 232 | 206 | 3675 | 1141 | 433 | 3675 |
| Arrive On Green | 0.13 | 0.13 | 1.00 | 1.00 | 0.72 | 0.72 |
| Sat Flow, veh/h | 1781 | 1585 | 5274 | 1585 | 435 | 5274 |
| Grp Volume(v), veh/h | 177 | 9 | 1220 | 52 | 1 | 835 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1585 | 1702 | 1585 | 435 | 1702 |
| Q Serve(g_s), s | 5.8 | 0.3 | 0.0 | 0.0 | 0.0 | 3.3 |
| Cycle Q Clear(g_c), s | 5.8 | 0.3 | 0.0 | 0.0 | 0.0 | 3.3 |
| Prop In Lane | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Lane Grp Cap(c), veh/h | 232 | 206 | 3675 | 1141 | 433 | 3675 |
| V/C Ratio(X) | 0.76 | 0.04 | 0.33 | 0.05 | 0.00 | 0.23 |
| Avail Cap(c_a), veh/h | 668 | 594 | 3675 | 1141 | 433 | 3675 |
| HCM Platoon Ratio | 1.00 | 1.00 | 2.00 | 2.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 0.89 | 0.89 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 25.2 | 22.8 | 0.0 | 0.0 | 2.4 | 2.8 |
| Incr Delay (d2), s/veh | 5.1 | 0.1 | 0.2 | 0.1 | 0.0 | 0.1 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 4.7 | 0.2 | 0.1 | 0.0 | 0.0 | 1.2 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 30.3 | 22.9 | 0.2 | 0.1 | 2.4 | 3.0 |
| LnGrp LOS | C | C | A | A | A | A |
| Approach Vol, veh/h | 186 | | 1272 | | | 836 |
| Approach Delay, s/veh | 30.0 | | 0.2 | | | 3.0 |
| Approach LOS | C | | A | | | A |

| Timer - Assigned Phs | 2 | | | 6 | 8 |
|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 47.7 | | | 47.7 | 12.3 |
| Change Period (Y+Rc), s | 4.5 | | | 4.5 | 4.5 |
| Max Green Setting (Gmax), s | 28.5 | | | 28.5 | 22.5 |
| Max Q Clear Time (g_c+I1), s | 2.0 | | | 5.3 | 7.8 |
| Green Ext Time (p_c), s | 10.4 | | | 6.2 | 0.4 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 3.6 |
| HCM 7th LOS | A |

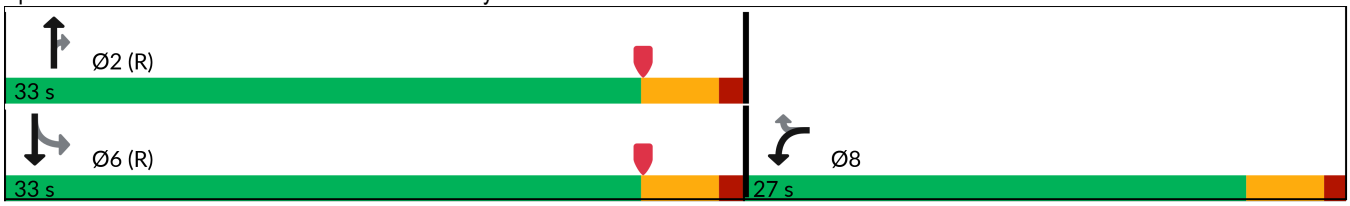
**Notes**

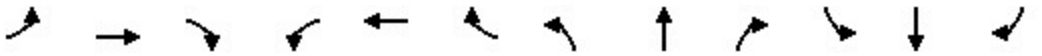
User approved pedestrian interval to be less than phase max green.

| Phase Number | 2 | 6 | 8 |
|---|---|---|---|
| Movement | NBT | SBTL | WBL |
| Lead/Lag | | | |
| Lead-Lag Optimize | | | |
| Recall Mode | C-Max | C-Max | None |
| Maximum Split (s) | 33 | 33 | 27 |
| Maximum Split (%) | 55.0% | 55.0% | 45.0% |
| Minimum Split (s) | 22.5 | 22.5 | 22.5 |
| Yellow Time (s) | 3.5 | 3.5 | 3.5 |
| All-Red Time (s) | 1 | 1 | 1 |
| Minimum Initial (s) | 5 | 5 | 5 |
| Vehicle Extension (s) | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 |
| Walk Time (s) | 7 | 7 | 7 |
| Flash Don't Walk (s) | 11 | 11 | 11 |
| Dual Entry | Yes | Yes | Yes |
| Inhibit Max | Yes | Yes | Yes |
| Start Time (s) | 31.5 | 31.5 | 4.5 |
| End Time (s) | 4.5 | 4.5 | 31.5 |
| Yield/Force Off (s) | 0 | 0 | 27 |
| Yield/Force Off 170(s) | 49 | 49 | 16 |
| Local Start Time (s) | 31.5 | 31.5 | 4.5 |
| Local Yield (s) | 0 | 0 | 27 |
| Local Yield 170(s) | 49 | 49 | 16 |

| Intersection Summary | |
|---|---|
| Cycle Length | 60 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 45 |
| Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Yellow | |

Splits and Phases: 1: Ellsworth Road & Serenity Avenue





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 153 | 63 | 90 | 340 | 165 | 165 | 507 | 846 | 186 | 68 | 377 | 486 |
| Future Volume (veh/h) | 153 | 63 | 90 | 340 | 165 | 165 | 507 | 846 | 186 | 68 | 377 | 486 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 166 | 68 | 98 | 370 | 179 | 179 | 551 | 920 | 202 | 74 | 410 | 528 |
| 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 | 490 | 1102 | 342 | 449 | 1042 | 324 | 806 | 1894 | 794 | 288 | 1170 | 588 |
| Arrive On Green | 0.14 | 0.22 | 0.22 | 0.13 | 0.20 | 0.20 | 0.08 | 0.12 | 0.12 | 0.14 | 0.38 | 0.38 |
| Sat Flow, veh/h | 3456 | 5106 | 1585 | 3456 | 5106 | 1585 | 3456 | 5106 | 1585 | 3456 | 5106 | 1585 |
| Grp Volume(v), veh/h | 166 | 68 | 98 | 370 | 179 | 179 | 551 | 920 | 202 | 74 | 410 | 528 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1702 | 1585 | 1728 | 1702 | 1585 | 1728 | 1702 | 1585 | 1728 | 1702 | 1585 |
| Q Serve(g_s), s | 5.2 | 1.3 | 6.2 | 12.5 | 3.5 | 12.2 | 18.6 | 20.2 | 11.1 | 2.3 | 6.9 | 27.5 |
| Cycle Q Clear(g_c), s | 5.2 | 1.3 | 6.2 | 12.5 | 3.5 | 12.2 | 18.6 | 20.2 | 11.1 | 2.3 | 6.9 | 27.5 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 490 | 1102 | 342 | 449 | 1042 | 324 | 806 | 1894 | 794 | 288 | 1170 | 588 |
| V/C Ratio(X) | 0.34 | 0.06 | 0.29 | 0.82 | 0.17 | 0.55 | 0.68 | 0.49 | 0.25 | 0.26 | 0.35 | 0.90 |
| Avail Cap(c_a), veh/h | 490 | 1102 | 342 | 778 | 1042 | 324 | 806 | 1894 | 794 | 288 | 1170 | 588 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.33 | 0.33 | 0.33 | 1.67 | 1.67 | 1.67 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.77 | 0.77 | 0.77 | 0.97 | 0.97 | 0.97 |
| Uniform Delay (d), s/veh | 46.4 | 37.4 | 39.3 | 50.9 | 39.4 | 42.8 | 51.1 | 42.0 | 24.7 | 48.3 | 30.7 | 29.8 |
| Incr Delay (d2), s/veh | 1.9 | 0.1 | 2.1 | 3.9 | 0.4 | 6.7 | 3.6 | 0.7 | 0.6 | 2.1 | 0.8 | 18.6 |
| 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(95%),veh/ln | 4.3 | 1.0 | 4.7 | 9.6 | 2.7 | 9.2 | 13.4 | 13.7 | 8.0 | 1.9 | 5.0 | 24.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 48.3 | 37.5 | 41.4 | 54.7 | 39.7 | 49.5 | 54.7 | 42.7 | 25.3 | 50.4 | 31.5 | 48.4 |
| LnGrp LOS | D | D | D | D | D | D | D | D | C | D | C | D |
| Approach Vol, veh/h | | 332 | | | 728 | | | 1673 | | | 1012 | |
| Approach Delay, s/veh | | 44.1 | | | 49.8 | | | 44.5 | | | 41.7 | |
| Approach LOS | | D | | | D | | | D | | | D | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 22.0 | 31.0 | 32.0 | 35.0 | 20.6 | 32.4 | 15.0 | 52.0 |
| Change Period (Y+Rc), s | 5.0 | 6.5 | 4.0 | 7.5 | 5.0 | 6.5 | 5.0 | 7.5 |
| Max Green Setting (Gmax), s | 17.0 | 24.5 | 28.0 | 27.5 | 27.0 | 14.5 | 10.0 | 44.5 |
| Max Q Clear Time (g_c+I1), s | 7.2 | 14.2 | 20.6 | 29.5 | 14.5 | 8.2 | 4.3 | 22.2 |
| Green Ext Time (p_c), s | 0.3 | 1.3 | 1.3 | 0.0 | 1.1 | 0.3 | 0.1 | 7.6 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 44.7 |
| HCM 7th LOS | D |

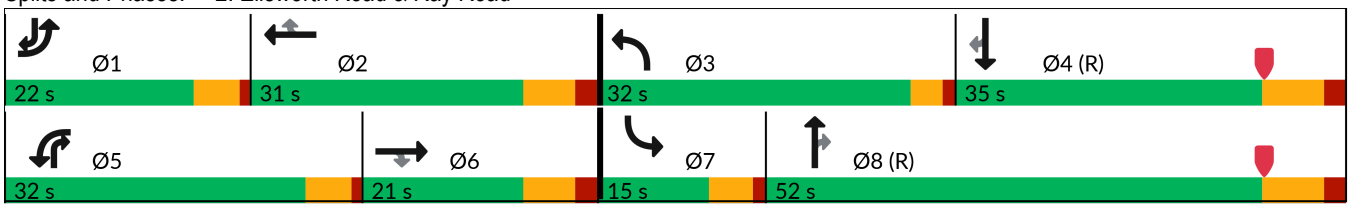
**Notes**

User approved pedestrian interval to be less than phase max green.

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | EBL | WBT | NBL | SBT | WBL | EBT | SBL | NBT |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | Max | Max | Max | C-Max | None | Max | Max | C-Max |
| Maximum Split (s) | 22 | 31 | 32 | 35 | 32 | 21 | 15 | 52 |
| Maximum Split (%) | 18.3% | 25.8% | 26.7% | 29.2% | 26.7% | 17.5% | 12.5% | 43.3% |
| Minimum Split (s) | 11 | 38 | 11 | 37.5 | 11 | 33.5 | 10 | 37.5 |
| Yellow Time (s) | 4 | 4.5 | 3 | 5.5 | 4 | 4.5 | 4 | 5.5 |
| All-Red Time (s) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| Minimum Initial (s) | 5 | 10 | 5 | 15 | 5 | 10 | 5 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 4 | | 4 | | 4 | | 4 |
| Flash Don't Walk (s) | | 22 | | 26 | | 23 | | 26 |
| Dual Entry | No | Yes | No | Yes | No | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 52 | 74 | 105 | 17 | 52 | 84 | 105 | 0 |
| End Time (s) | 74 | 105 | 17 | 52 | 84 | 105 | 0 | 52 |
| Yield/Force Off (s) | 69 | 98.5 | 13 | 44.5 | 79 | 98.5 | 115 | 44.5 |
| Yield/Force Off 170(s) | 69 | 76.5 | 13 | 18.5 | 79 | 75.5 | 115 | 18.5 |
| Local Start Time (s) | 7.5 | 29.5 | 60.5 | 92.5 | 7.5 | 39.5 | 60.5 | 75.5 |
| Local Yield (s) | 24.5 | 54 | 88.5 | 0 | 34.5 | 54 | 70.5 | 0 |
| Local Yield 170(s) | 24.5 | 32 | 88.5 | 94 | 34.5 | 31 | 70.5 | 94 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 100 |
| Offset: 44.5 (37%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow | |

Splits and Phases: 2: Ellsworth Road & Ray Road



| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 251 | 229 | 1299 | 191 | 110 | 696 |
| Future Volume (veh/h) | 251 | 229 | 1299 | 191 | 110 | 696 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 273 | 249 | 1412 | 208 | 120 | 757 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 1008 | 462 | 2234 | 693 | 403 | 3042 |
| Arrive On Green | 0.29 | 0.29 | 0.44 | 0.44 | 0.04 | 0.20 |
| Sat Flow, veh/h | 3456 | 1585 | 5274 | 1585 | 3456 | 5274 |
| Grp Volume(v), veh/h | 273 | 249 | 1412 | 208 | 120 | 757 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1585 | 1702 | 1585 | 1728 | 1702 |
| Q Serve(g_s), s | 7.3 | 15.8 | 25.8 | 10.2 | 4.1 | 15.0 |
| Cycle Q Clear(g_c), s | 7.3 | 15.8 | 25.8 | 10.2 | 4.1 | 15.0 |
| Prop In Lane | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Lane Grp Cap(c), veh/h | 1008 | 462 | 2234 | 693 | 403 | 3042 |
| V/C Ratio(X) | 0.27 | 0.54 | 0.63 | 0.30 | 0.30 | 0.25 |
| Avail Cap(c_a), veh/h | 1008 | 462 | 2234 | 693 | 403 | 3042 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 0.33 | 0.33 |
| Upstream Filter(I) | 1.00 | 1.00 | 0.90 | 0.90 | 0.87 | 0.87 |
| Uniform Delay (d), s/veh | 32.7 | 35.7 | 26.2 | 21.9 | 52.9 | 25.5 |
| Incr Delay (d2), s/veh | 0.7 | 4.4 | 1.2 | 1.0 | 1.6 | 0.2 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 5.7 | 10.9 | 15.6 | 7.1 | 3.3 | 10.8 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 33.3 | 40.2 | 27.5 | 22.8 | 54.5 | 25.7 |
| LnGrp LOS | C | D | C | C | D | C |
| Approach Vol, veh/h | 522 | | 1620 | | | 877 |
| Approach Delay, s/veh | 36.6 | | 26.9 | | | 29.6 |
| Approach LOS | D | | C | | | C |

| Timer - Assigned Phs | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 41.0 | 79.0 | 19.0 | 60.0 |
| Change Period (Y+Rc), s | 6.0 | 7.5 | 5.0 | 7.5 |
| Max Green Setting (Gmax), s | 35.0 | 71.5 | 14.0 | 52.5 |
| Max Q Clear Time (g_c+I1), s | 17.8 | 17.0 | 6.1 | 27.8 |
| Green Ext Time (p_c), s | 0.9 | 0.8 | 0.1 | 2.4 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 29.4 |
| HCM 7th LOS | C |

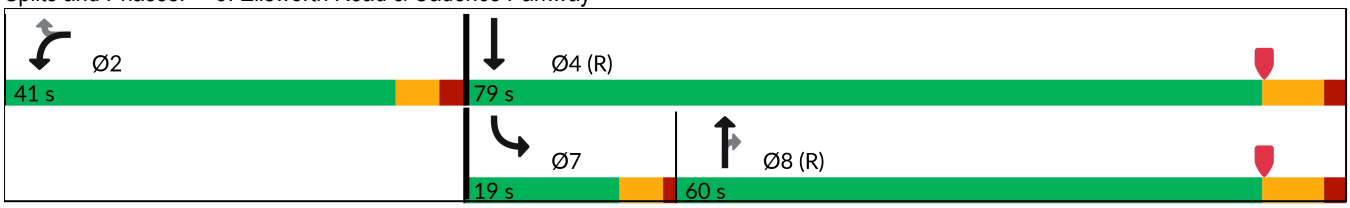
**Notes**

User approved pedestrian interval to be less than phase max green.

| Phase Number | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Movement | WBL | SBT | SBL | NBT |
| Lead/Lag | | | Lead | Lag |
| Lead-Lag Optimize | | | Yes | Yes |
| Recall Mode | Max | C-Max | Max | C-Max |
| Maximum Split (s) | 41 | 79 | 19 | 60 |
| Maximum Split (%) | 34.2% | 65.8% | 15.8% | 50.0% |
| Minimum Split (s) | 35.5 | 25.5 | 13 | 32.5 |
| Yellow Time (s) | 4 | 5.5 | 4 | 5.5 |
| All-Red Time (s) | 2 | 2 | 1 | 2 |
| Minimum Initial (s) | 10 | 15 | 5 | 15 |
| Vehicle Extension (s) | 2 | 0.2 | 2 | 0.2 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | 4 | | | 7 |
| Flash Don't Walk (s) | 25 | | | 18 |
| Dual Entry | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 7.5 | 48.5 | 48.5 | 67.5 |
| End Time (s) | 48.5 | 7.5 | 67.5 | 7.5 |
| Yield/Force Off (s) | 42.5 | 0 | 62.5 | 0 |
| Yield/Force Off 170(s) | 17.5 | 0 | 62.5 | 102 |
| Local Start Time (s) | 7.5 | 48.5 | 48.5 | 67.5 |
| Local Yield (s) | 42.5 | 0 | 62.5 | 0 |
| Local Yield 170(s) | 17.5 | 0 | 62.5 | 102 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 85 |
| Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow | |

Splits and Phases: 3: Ellsworth Road & Cadence Parkway



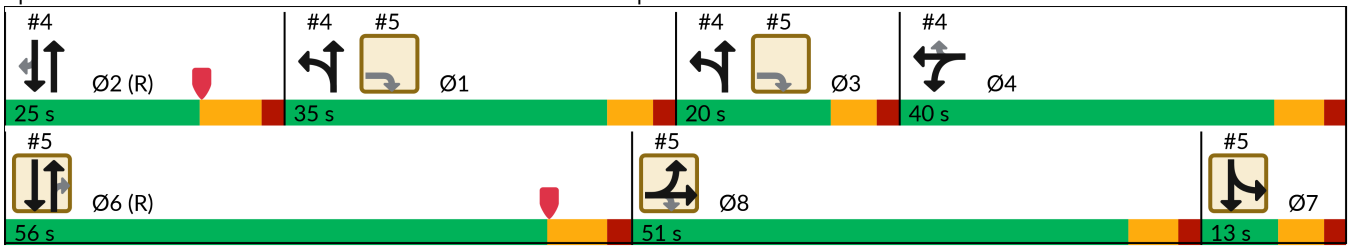
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 0 | 0 | 0 | 23 | 0 | 129 | 1330 | 1356 | 0 | 0 | 480 | 464 |
| Future Volume (vph) | 0 | 0 | 0 | 23 | 0 | 129 | 1330 | 1356 | 0 | 0 | 480 | 464 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | | 0 | 350 | | 350 | 525 | | 0 | 290 | | 285 |
| Storage Lanes | 0 | | 0 | 1 | | 1 | 0 | | 0 | 0 | | 2 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 0.91 | 0.86 | 0.91 | 0.97 | 0.91 | 1.00 | 1.00 | 0.86 | 0.88 |
| Frt | | | | | 0.856 | 0.850 | | | | | | 0.850 |
| Flt Protected | | | | 0.950 | 0.998 | | 0.950 | | | | | |
| Satd. Flow (prot) | 0 | 0 | 0 | 1610 | 2737 | 1441 | 3433 | 5085 | 0 | 0 | 6408 | 2787 |
| Flt Permitted | | | | 0.950 | 0.998 | | 0.950 | | | | | |
| Satd. Flow (perm) | 0 | 0 | 0 | 1610 | 2737 | 1441 | 3433 | 5085 | 0 | 0 | 6408 | 2787 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | | | 164 | 164 | | | | | | 504 |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 841 | | | 605 | | | 688 | | | 624 | |
| Travel Time (s) | | 19.1 | | | 13.8 | | | 15.6 | | | 14.2 | |
| 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 |
| Adj. Flow (vph) | 0 | 0 | 0 | 25 | 0 | 140 | 1446 | 1474 | 0 | 0 | 522 | 504 |
| Shared Lane Traffic (%) | | | | 10% | | 50% | | | | | | |
| Lane Group Flow (vph) | 0 | 0 | 0 | 22 | 73 | 70 | 1446 | 1474 | 0 | 0 | 522 | 504 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 24 | | | 24 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | | | | 1 | 2 | 1 | 1 | 2 | | | 2 | 1 |
| Detector Template | | | | Left | Thru | Right | Left | Thru | | | Thru | Right |
| Leading Detector (ft) | | | | 20 | 100 | 20 | 20 | 100 | | | 100 | 20 |
| Trailing Detector (ft) | | | | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 |
| Detector 1 Position(ft) | | | | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 |
| Detector 1 Size(ft) | | | | 20 | 6 | 20 | 20 | 6 | | | 6 | 20 |
| Detector 1 Type | | | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | | Cl+Ex | Cl+Ex |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Detector 1 Queue (s) | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Detector 1 Delay (s) | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Detector 2 Position(ft) | | | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | | | | Split | NA | Perm | Prot | NA | | | NA | Perm |
| Protected Phases | | | | 4 | 4 | | 1 3 | 1 2 3 | | | 2 | |
| Permitted Phases | | | | | | 4 | | | | | | 2 |

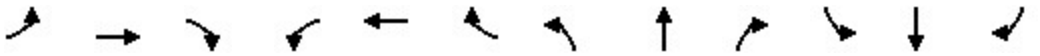
| Lane Group | Ø1 | Ø3 | Ø6 | Ø7 | Ø8 |
|---|---|---|---|---|---|
| Lane Configurations | | | | | |
| Traffic Volume (vph) | | | | | |
| Future Volume (vph) | | | | | |
| Ideal Flow (vphpl) | | | | | |
| Storage Length (ft) | | | | | |
| Storage Lanes | | | | | |
| Taper Length (ft) | | | | | |
| Lane Util. Factor | | | | | |
| Frt | | | | | |
| Flt Protected | | | | | |
| Satd. Flow (prot) | | | | | |
| Flt Permitted | | | | | |
| Satd. Flow (perm) | | | | | |
| Right Turn on Red | | | | | |
| Satd. Flow (RTOR) | | | | | |
| Link Speed (mph) | | | | | |
| Link Distance (ft) | | | | | |
| Travel Time (s) | | | | | |
| Peak Hour Factor | | | | | |
| Adj. Flow (vph) | | | | | |
| Shared Lane Traffic (%) | | | | | |
| Lane Group Flow (vph) | | | | | |
| Enter Blocked Intersection | | | | | |
| Lane Alignment | | | | | |
| Median Width(ft) | | | | | |
| Link Offset(ft) | | | | | |
| Crosswalk Width(ft) | | | | | |
| Two way Left Turn Lane | | | | | |
| Headway Factor | | | | | |
| Turning Speed (mph) | | | | | |
| Number of Detectors | | | | | |
| Detector Template | | | | | |
| Leading Detector (ft) | | | | | |
| Trailing Detector (ft) | | | | | |
| Detector 1 Position(ft) | | | | | |
| Detector 1 Size(ft) | | | | | |
| Detector 1 Type | | | | | |
| Detector 1 Channel | | | | | |
| Detector 1 Extend (s) | | | | | |
| Detector 1 Queue (s) | | | | | |
| Detector 1 Delay (s) | | | | | |
| Detector 2 Position(ft) | | | | | |
| Detector 2 Size(ft) | | | | | |
| Detector 2 Type | | | | | |
| Detector 2 Channel | | | | | |
| Detector 2 Extend (s) | | | | | |
| Turn Type | | | | | |
| Protected Phases | 1 | 3 | 6 | 7 | 8 |
| Permitted Phases | | | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | | | | 4 | 4 | 4 | 1 3 | 1 2 3 | | | 2 | 2 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | | | | 10.0 | 10.0 | 10.0 | | | | | 15.0 | 15.0 |
| Minimum Split (s) | | | | 48.5 | 48.5 | 48.5 | | | | | 25.5 | 25.5 |
| Total Split (s) | | | | 40.0 | 40.0 | 40.0 | | | | | 25.0 | 25.0 |
| Total Split (%) | | | | 33.3% | 33.3% | 33.3% | | | | | 20.8% | 20.8% |
| Maximum Green (s) | | | | 33.5 | 33.5 | 33.5 | | | | | 17.5 | 17.5 |
| Yellow Time (s) | | | | 4.5 | 4.5 | 4.5 | | | | | 5.5 | 5.5 |
| All-Red Time (s) | | | | 2.0 | 2.0 | 2.0 | | | | | 2.0 | 2.0 |
| Lost Time Adjust (s) | | | | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 |
| Total Lost Time (s) | | | | 6.5 | 6.5 | 6.5 | | | | | 7.5 | 7.5 |
| Lead/Lag | | | | Lag | Lag | Lag | | | | | Lead | Lead |
| Lead-Lag Optimize? | | | | Yes | Yes | Yes | | | | | Yes | Yes |
| Vehicle Extension (s) | | | | 3.0 | 3.0 | 3.0 | | | | | 2.0 | 2.0 |
| Recall Mode | | | | None | None | None | | | | | C-Max | C-Max |
| Walk Time (s) | | | | 4.0 | 4.0 | 4.0 | | | | | 4.0 | 4.0 |
| Flash Don't Walk (s) | | | | 38.0 | 38.0 | 38.0 | | | | | 13.0 | 13.0 |
| Pedestrian Calls (#/hr) | | | | 0 | 0 | 0 | | | | | 0 | 0 |
| Act Effct Green (s) | | | | 30.3 | 30.3 | 30.3 | 49.0 | 77.2 | | | 20.7 | 20.7 |
| Actuated g/C Ratio | | | | 0.25 | 0.25 | 0.25 | 0.41 | 0.64 | | | 0.17 | 0.17 |
| v/c Ratio | | | | 0.05 | 0.09 | 0.14 | 1.03 | 0.45 | | | 0.47 | 0.56 |
| Control Delay (s/veh) | | | | 32.2 | 0.2 | 0.6 | 50.7 | 3.4 | | | 44.7 | 19.7 |
| Queue Delay | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Total Delay (s/veh) | | | | 32.2 | 0.2 | 0.6 | 50.7 | 3.4 | | | 44.7 | 19.7 |
| LOS | | | | C | A | A | D | A | | | D | B |
| Approach Delay (s/veh) | | | | | 4.7 | | | 26.8 | | | 32.4 | |
| Approach LOS | | | | | A | | | C | | | C | |

| Intersection Summary | |
|---|---|
| Area Type: | Other |
| Cycle Length: 120 | |
| Actuated Cycle Length: 120 | |
| Offset: 0 (0%), Referenced to phase 2:NBSB and 6:, Start of Yellow | |
| Natural Cycle: 130 | |
| Control Type: Actuated-Coordinated | |
| Maximum v/c Ratio: 1.03 | |
| Intersection Signal Delay (s/veh): 27.3 | Intersection LOS: C |
| Intersection Capacity Utilization 79.2% | ICU Level of Service D |
| Analysis Period (min) 15 | |

Splits and Phases: 4: Ellsworth Road & SR24 Westbound Ramps





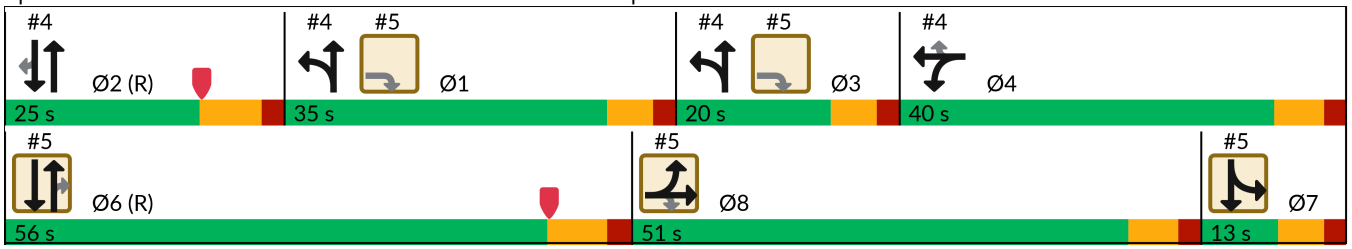
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 297 | 3 | 1401 | 0 | 0 | 0 | 0 | 2373 | 1 | 50 | 480 | 0 |
| Future Volume (vph) | 297 | 3 | 1401 | 0 | 0 | 0 | 0 | 2373 | 1 | 50 | 480 | 0 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 350 | | 350 | 0 | | 0 | 300 | | 300 | 550 | | 0 |
| Storage Lanes | 1 | | 2 | 0 | | 0 | 2 | | 1 | 0 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 0.95 | 0.95 | 0.88 | 1.00 | 1.00 | 1.00 | 1.00 | 0.81 | 1.00 | 0.97 | 0.91 | 1.00 |
| Frt | | | 0.850 | | | | | | 0.850 | | | |
| Flt Protected | 0.950 | 0.953 | | | | | | | | 0.950 | | |
| Satd. Flow (prot) | 1681 | 1686 | 2787 | 0 | 0 | 0 | 0 | 7544 | 1583 | 3433 | 5085 | 0 |
| Flt Permitted | 0.950 | 0.953 | | | | | | | | 0.950 | | |
| Satd. Flow (perm) | 1681 | 1686 | 2787 | 0 | 0 | 0 | 0 | 7544 | 1583 | 3433 | 5085 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 511 | | | | | | 145 | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 651 | | | 441 | | | 838 | | | 688 | |
| Travel Time (s) | | 14.8 | | | 10.0 | | | 19.0 | | | 15.6 | |
| 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 |
| Adj. Flow (vph) | 323 | 3 | 1523 | 0 | 0 | 0 | 0 | 2579 | 1 | 54 | 522 | 0 |
| Shared Lane Traffic (%) | 50% | | | | | | | | | | | |
| Lane Group Flow (vph) | 161 | 165 | 1523 | 0 | 0 | 0 | 0 | 2579 | 1 | 54 | 522 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 24 | | | 24 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | 1 | | | | | 2 | 1 | 1 | 2 | |
| Detector Template | Left | Thru | Right | | | | | Thru | Right | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | 20 | | | | | 100 | 20 | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | 0 | | | | | 0 | 0 | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | 0 | | | | | 0 | 0 | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | 20 | | | | | 6 | 20 | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | | | | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | | | | 0.0 | | | 0.0 | |
| Turn Type | Split | NA | custom | | | | | NA | Perm | Prot | NA | |
| Protected Phases | 8 | 8 | | | | | | 6 | | 7 | 6 7 | |
| Permitted Phases | | | 1 3 8 | | | | | | 6 | | | |

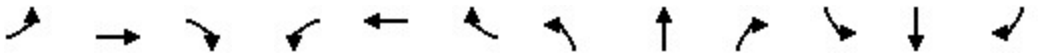
| Lane Group | Ø1 | Ø2 | Ø3 | Ø4 |
|---|---|---|---|---|
| Lane Configurations | | | | |
| Traffic Volume (vph) | | | | |
| Future Volume (vph) | | | | |
| Ideal Flow (vphpl) | | | | |
| Storage Length (ft) | | | | |
| Storage Lanes | | | | |
| Taper Length (ft) | | | | |
| Lane Util. Factor | | | | |
| Frt | | | | |
| Flt Protected | | | | |
| Satd. Flow (prot) | | | | |
| Flt Permitted | | | | |
| Satd. Flow (perm) | | | | |
| Right Turn on Red | | | | |
| Satd. Flow (RTOR) | | | | |
| Link Speed (mph) | | | | |
| Link Distance (ft) | | | | |
| Travel Time (s) | | | | |
| Peak Hour Factor | | | | |
| Adj. Flow (vph) | | | | |
| Shared Lane Traffic (%) | | | | |
| Lane Group Flow (vph) | | | | |
| Enter Blocked Intersection | | | | |
| Lane Alignment | | | | |
| Median Width(ft) | | | | |
| Link Offset(ft) | | | | |
| Crosswalk Width(ft) | | | | |
| Two way Left Turn Lane | | | | |
| Headway Factor | | | | |
| Turning Speed (mph) | | | | |
| Number of Detectors | | | | |
| Detector Template | | | | |
| Leading Detector (ft) | | | | |
| Trailing Detector (ft) | | | | |
| Detector 1 Position(ft) | | | | |
| Detector 1 Size(ft) | | | | |
| Detector 1 Type | | | | |
| Detector 1 Channel | | | | |
| Detector 1 Extend (s) | | | | |
| Detector 1 Queue (s) | | | | |
| Detector 1 Delay (s) | | | | |
| Detector 2 Position(ft) | | | | |
| Detector 2 Size(ft) | | | | |
| Detector 2 Type | | | | |
| Detector 2 Channel | | | | |
| Detector 2 Extend (s) | | | | |
| Turn Type | | | | |
| Protected Phases | 1 | 2 | 3 | 4 |
| Permitted Phases | | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | 8 | 8 | 1 3 8 | | | | | 6 | 6 | 7 | 6 7 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | | | | | 15.0 | 15.0 | 5.0 | | |
| Minimum Split (s) | 46.5 | 46.5 | | | | | | 26.5 | 26.5 | 11.0 | | |
| Total Split (s) | 51.0 | 51.0 | | | | | | 56.0 | 56.0 | 13.0 | | |
| Total Split (%) | 42.5% | 42.5% | | | | | | 46.7% | 46.7% | 10.8% | | |
| Maximum Green (s) | 44.5 | 44.5 | | | | | | 48.5 | 48.5 | 7.0 | | |
| Yellow Time (s) | 4.5 | 4.5 | | | | | | 5.5 | 5.5 | 4.0 | | |
| All-Red Time (s) | 2.0 | 2.0 | | | | | | 2.0 | 2.0 | 2.0 | | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | | | | | 0.0 | 0.0 | 0.0 | | |
| Total Lost Time (s) | 6.5 | 6.5 | | | | | | 7.5 | 7.5 | 6.0 | | |
| Lead/Lag | Lead | Lead | | | | | | | | Lag | | |
| Lead-Lag Optimize? | Yes | Yes | | | | | | | | Yes | | |
| Vehicle Extension (s) | 4.0 | 4.0 | | | | | | 2.0 | 2.0 | 3.0 | | |
| Recall Mode | None | None | | | | | | C-Max | C-Max | None | | |
| Walk Time (s) | 4.0 | 4.0 | | | | | | 4.0 | 4.0 | | | |
| Flash Don't Walk (s) | 36.0 | 36.0 | | | | | | 15.0 | 15.0 | | | |
| Pedestrian Calls (#/hr) | 0 | 0 | | | | | | 0 | 0 | | | |
| Act Effct Green (s) | 40.1 | 40.1 | 69.6 | | | | | 51.7 | 51.7 | 8.2 | 65.9 | |
| Actuated g/C Ratio | 0.33 | 0.33 | 0.58 | | | | | 0.43 | 0.43 | 0.07 | 0.55 | |
| v/c Ratio | 0.29 | 0.29 | 0.83 | | | | | 0.79 | 0.00 | 0.23 | 0.19 | |
| Control Delay (s/veh) | 29.6 | 29.7 | 16.4 | | | | | 30.4 | 0.0 | 84.9 | 1.9 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | | | | | 0.1 | 0.0 | 0.0 | 0.0 | |
| Total Delay (s/veh) | 29.6 | 29.7 | 16.4 | | | | | 30.5 | 0.0 | 84.9 | 1.9 | |
| LOS | C | C | B | | | | | C | A | F | A | |
| Approach Delay (s/veh) | | 18.8 | | | | | | 30.5 | | | 9.6 | |
| Approach LOS | | B | | | | | | C | | | A | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 120 | | | |
| Actuated Cycle Length: 120 | | | |
| Offset: 0 (0%), Referenced to phase 2:NBSB and 6:, Start of Yellow | | | |
| Natural Cycle: 130 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 1.03 | | | |
| Intersection Signal Delay (s/veh): 23.8 | | Intersection LOS: C | |
| Intersection Capacity Utilization 79.2% | | ICU Level of Service D | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 5: Ellsworth Road & SR24 Eastbound Ramps





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 37 | 26 | 17 | 98 | 96 | 39 | 28 | 2221 | 40 | 90 | 1489 | 117 |
| Future Volume (veh/h) | 37 | 26 | 17 | 98 | 96 | 39 | 28 | 2221 | 40 | 90 | 1489 | 117 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 40 | 28 | 18 | 107 | 104 | 42 | 30 | 2414 | 43 | 98 | 1618 | 127 |
| 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 | 106 | 400 | 179 | 163 | 459 | 273 | 91 | 3048 | 946 | 150 | 2983 | 234 |
| Arrive On Green | 0.03 | 0.11 | 0.11 | 0.05 | 0.13 | 0.13 | 0.05 | 1.00 | 1.00 | 0.09 | 1.00 | 1.00 |
| Sat Flow, veh/h | 3456 | 3554 | 1585 | 3456 | 3554 | 1585 | 3456 | 5106 | 1585 | 3456 | 4828 | 379 |
| Grp Volume(v), veh/h | 40 | 28 | 18 | 107 | 104 | 42 | 30 | 2414 | 43 | 98 | 1140 | 605 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1777 | 1585 | 1728 | 1777 | 1585 | 1728 | 1702 | 1585 | 1728 | 1702 | 1802 |
| Q Serve(g_s), s | 1.4 | 0.8 | 1.2 | 3.7 | 3.2 | 2.7 | 1.0 | 0.0 | 0.0 | 3.3 | 0.0 | 0.0 |
| Cycle Q Clear(g_c), s | 1.4 | 0.8 | 1.2 | 3.7 | 3.2 | 2.7 | 1.0 | 0.0 | 0.0 | 3.3 | 0.0 | 0.0 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.21 |
| Lane Grp Cap(c), veh/h | 106 | 400 | 179 | 163 | 459 | 273 | 91 | 3048 | 946 | 150 | 2104 | 1114 |
| V/C Ratio(X) | 0.38 | 0.07 | 0.10 | 0.66 | 0.23 | 0.15 | 0.33 | 0.79 | 0.05 | 0.66 | 0.54 | 0.54 |
| Avail Cap(c_a), veh/h | 202 | 459 | 205 | 202 | 459 | 273 | 216 | 3048 | 946 | 490 | 2104 | 1114 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 0.99 | 0.99 | 0.99 | 0.51 | 0.51 | 0.51 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 57.0 | 47.6 | 47.8 | 56.2 | 46.9 | 42.2 | 55.8 | 0.0 | 0.0 | 53.9 | 0.0 | 0.0 |
| Incr Delay (d2), s/veh | 0.8 | 0.0 | 0.1 | 2.8 | 1.1 | 1.2 | 0.4 | 1.1 | 0.0 | 1.8 | 1.0 | 1.9 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 1.1 | 0.7 | 0.9 | 3.0 | 2.6 | 2.1 | 0.8 | 0.6 | 0.0 | 2.6 | 0.5 | 1.1 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 57.9 | 47.6 | 47.9 | 59.0 | 48.0 | 43.4 | 56.2 | 1.1 | 0.0 | 55.8 | 1.0 | 1.9 |
| LnGrp LOS | E | D | D | E | D | D | E | A | A | E | A | A |
| Approach Vol, veh/h | | 86 | | | 253 | | | 2487 | | | 1843 | |
| Approach Delay, s/veh | | 52.4 | | | 51.9 | | | 1.8 | | | 4.2 | |
| Approach LOS | | D | | | D | | | A | | | A | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 8.7 | 22.0 | 7.7 | 81.7 | 10.7 | 20.0 | 10.2 | 79.1 |
| Change Period (Y+Rc), s | 5.0 | 6.5 | 4.5 | 7.5 | 5.0 | 6.5 | 5.0 | 7.5 |
| Max Green Setting (Gmax), s | 7.0 | 15.5 | 7.5 | 66.5 | 7.0 | 15.5 | 17.0 | 56.5 |
| Max Q Clear Time (g_c+I1), s | 3.4 | 5.2 | 3.0 | 2.0 | 5.7 | 3.2 | 5.3 | 2.0 |
| Green Ext Time (p_c), s | 0.0 | 0.3 | 0.0 | 12.4 | 0.0 | 0.1 | 0.1 | 25.8 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 6.4 |
| HCM 7th LOS | A |

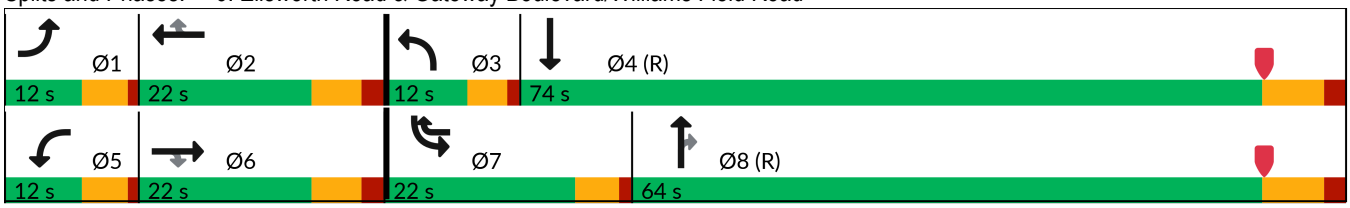
**Notes**

User approved pedestrian interval to be less than phase max green.

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | EBL | WBT | NBL | SBT | WBL | EBT | SBL | NBT |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | None | Max | None | C-Max | None | None | None | C-Max |
| Maximum Split (s) | 12 | 22 | 12 | 74 | 12 | 22 | 22 | 64 |
| Maximum Split (%) | 10.0% | 18.3% | 10.0% | 61.7% | 10.0% | 18.3% | 18.3% | 53.3% |
| Minimum Split (s) | 11 | 36.5 | 10.5 | 35.5 | 24 | 37.5 | 11 | 37.5 |
| Yellow Time (s) | 4 | 4.5 | 3.5 | 5.5 | 4 | 4.5 | 4 | 5.5 |
| All-Red Time (s) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| Minimum Initial (s) | 5 | 15 | 5 | 15 | 5 | 5 | 5 | 15 |
| Vehicle Extension (s) | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 2 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 4 | | 7 | | 4 | | 7 |
| Flash Don't Walk (s) | | 26 | | 21 | | 27 | | 23 |
| Dual Entry | No | Yes | No | Yes | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 32.5 | 44.5 | 66.5 | 78.5 | 32.5 | 44.5 | 66.5 | 88.5 |
| End Time (s) | 44.5 | 66.5 | 78.5 | 32.5 | 44.5 | 66.5 | 88.5 | 32.5 |
| Yield/Force Off (s) | 39.5 | 60 | 74 | 25 | 39.5 | 60 | 83.5 | 25 |
| Yield/Force Off 170(s) | 39.5 | 34 | 74 | 4 | 39.5 | 33 | 83.5 | 2 |
| Local Start Time (s) | 7.5 | 19.5 | 41.5 | 53.5 | 7.5 | 19.5 | 41.5 | 63.5 |
| Local Yield (s) | 14.5 | 35 | 49 | 0 | 14.5 | 35 | 58.5 | 0 |
| Local Yield 170(s) | 14.5 | 9 | 49 | 99 | 14.5 | 8 | 58.5 | 97 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 150 |
| Offset: 25 (21%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow | |

Splits and Phases: 6: Ellsworth Road & Gateway Boulevard/Williams Field Road



| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 0 | 1 | 2333 | 16 | 10 | 1580 |
| Future Volume (veh/h) | 0 | 1 | 2333 | 16 | 10 | 1580 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 0 | 1 | 2536 | 17 | 11 | 1717 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 430 | 766 | 3020 | 937 | 44 | 3298 |
| Arrive On Green | 0.00 | 0.24 | 1.00 | 1.00 | 0.01 | 0.65 |
| Sat Flow, veh/h | 1781 | 3170 | 5274 | 1585 | 3456 | 5274 |
| Grp Volume(v), veh/h | 0 | 1 | 2536 | 17 | 11 | 1717 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1585 | 1702 | 1585 | 1728 | 1702 |
| Q Serve(g_s), s | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 21.5 |
| Cycle Q Clear(g_c), s | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 21.5 |
| Prop In Lane | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Lane Grp Cap(c), veh/h | 430 | 766 | 3020 | 937 | 44 | 3298 |
| V/C Ratio(X) | 0.00 | 0.00 | 0.84 | 0.02 | 0.25 | 0.52 |
| Avail Cap(c_a), veh/h | 430 | 766 | 3020 | 937 | 202 | 3298 |
| HCM Platoon Ratio | 1.00 | 1.00 | 2.00 | 2.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.00 | 1.00 | 0.57 | 0.57 | 0.82 | 0.82 |
| Uniform Delay (d), s/veh | 0.0 | 34.5 | 0.0 | 0.0 | 58.7 | 11.3 |
| Incr Delay (d2), s/veh | 0.0 | 0.0 | 1.7 | 0.0 | 2.4 | 0.5 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 0.0 | 0.0 | 0.9 | 0.0 | 0.3 | 11.0 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 0.0 | 34.5 | 1.7 | 0.0 | 61.0 | 11.8 |
| LnGrp LOS | | C | A | A | E | B |
| Approach Vol, veh/h | 1 | | 2553 | | | 1728 |
| Approach Delay, s/veh | 34.5 | | 1.7 | | | 12.1 |
| Approach LOS | C | | A | | | B |

| Timer - Assigned Phs | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 35.0 | 85.0 | 6.5 | 78.5 |
| Change Period (Y+Rc), s | 6.0 | 7.5 | 5.0 | 7.5 |
| Max Green Setting (Gmax), s | 29.0 | 77.5 | 7.0 | 65.5 |
| Max Q Clear Time (g_c+I1), s | 2.0 | 23.5 | 2.4 | 2.0 |
| Green Ext Time (p_c), s | 0.0 | 17.8 | 0.0 | 39.1 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 5.9 |
| HCM 7th LOS | A |

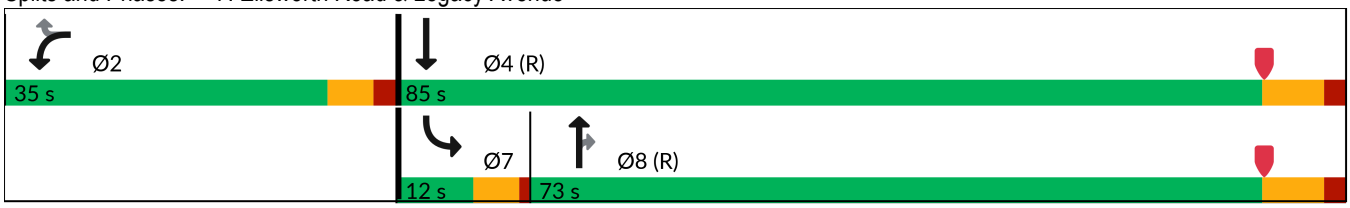
**Notes**

User approved volume balancing among the lanes for turning movement.

| Phase Number | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Movement | WBL | SBT | SBL | NBT |
| Lead/Lag | | | Lead | Lag |
| Lead-Lag Optimize | | | Yes | Yes |
| Recall Mode | Max | C-Max | None | C-Max |
| Maximum Split (s) | 35 | 85 | 12 | 73 |
| Maximum Split (%) | 29.2% | 70.8% | 10.0% | 60.8% |
| Minimum Split (s) | 35 | 39.5 | 10 | 26.5 |
| Yellow Time (s) | 4 | 5.5 | 4 | 5.5 |
| All-Red Time (s) | 2 | 2 | 1 | 2 |
| Minimum Initial (s) | 10 | 15 | 5 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | 4 | 4 | | 7 |
| Flash Don't Walk (s) | 25 | 28 | | 12 |
| Dual Entry | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 7.5 | 42.5 | 42.5 | 54.5 |
| End Time (s) | 42.5 | 7.5 | 54.5 | 7.5 |
| Yield/Force Off (s) | 36.5 | 0 | 49.5 | 0 |
| Yield/Force Off 170(s) | 11.5 | 92 | 49.5 | 108 |
| Local Start Time (s) | 7.5 | 42.5 | 42.5 | 54.5 |
| Local Yield (s) | 36.5 | 0 | 49.5 | 0 |
| Local Yield 170(s) | 11.5 | 92 | 49.5 | 108 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 100 |
| Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow | |

Splits and Phases: 7: Ellsworth Road & Legacy Avenue



| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 101 | 165 | 2208 | 64 | 72 | 1490 |
| Future Volume (veh/h) | 101 | 165 | 2208 | 64 | 72 | 1490 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 110 | 179 | 2400 | 70 | 78 | 1620 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 349 | 310 | 3122 | 969 | 165 | 3510 |
| Arrive On Green | 0.20 | 0.20 | 0.61 | 0.61 | 0.04 | 0.69 |
| Sat Flow, veh/h | 1781 | 1585 | 5274 | 1585 | 1781 | 5274 |
| Grp Volume(v), veh/h | 110 | 179 | 2400 | 70 | 78 | 1620 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1585 | 1702 | 1585 | 1781 | 1702 |
| Q Serve(g_s), s | 6.4 | 12.3 | 41.4 | 2.2 | 1.8 | 17.4 |
| Cycle Q Clear(g_c), s | 6.4 | 12.3 | 41.4 | 2.2 | 1.8 | 17.4 |
| Prop In Lane | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Lane Grp Cap(c), veh/h | 349 | 310 | 3122 | 969 | 165 | 3510 |
| V/C Ratio(X) | 0.32 | 0.58 | 0.77 | 0.07 | 0.47 | 0.46 |
| Avail Cap(c_a), veh/h | 349 | 310 | 3122 | 969 | 252 | 3510 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 0.84 | 0.84 |
| Uniform Delay (d), s/veh | 41.4 | 43.7 | 17.1 | 9.5 | 23.2 | 8.6 |
| Incr Delay (d2), s/veh | 2.4 | 7.6 | 1.9 | 0.1 | 1.8 | 0.4 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 5.5 | 9.3 | 22.3 | 1.4 | 2.7 | 9.8 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 43.7 | 51.3 | 19.0 | 9.6 | 25.0 | 9.0 |
| LnGrp LOS | D | D | B | A | C | A |
| Approach Vol, veh/h | 289 | | 2470 | | | 1698 |
| Approach Delay, s/veh | 48.4 | | 18.7 | | | 9.7 |
| Approach LOS | D | | B | | | A |

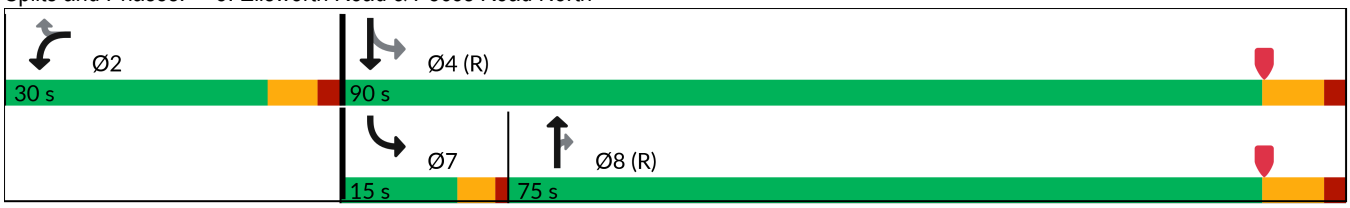
| Timer - Assigned Phs | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 30.0 | 90.0 | 9.1 | 80.9 |
| Change Period (Y+Rc), s | 6.5 | 7.5 | 4.5 | 7.5 |
| Max Green Setting (Gmax), s | 23.5 | 82.5 | 10.5 | 67.5 |
| Max Q Clear Time (g_c+I1), s | 14.3 | 19.4 | 3.8 | 43.4 |
| Green Ext Time (p_c), s | 0.6 | 20.4 | 0.1 | 20.1 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 17.2 |
| HCM 7th LOS | B |

| Phase Number | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Movement | WBL | SBTL | SBL | NBT |
| Lead/Lag | | | Lead | Lag |
| Lead-Lag Optimize | | | Yes | Yes |
| Recall Mode | Max | C-Max | None | C-Max |
| Maximum Split (s) | 30 | 90 | 15 | 75 |
| Maximum Split (%) | 25.0% | 75.0% | 12.5% | 62.5% |
| Minimum Split (s) | 24.5 | 25.5 | 9.5 | 25.5 |
| Yellow Time (s) | 4.5 | 5.5 | 3.5 | 5.5 |
| All-Red Time (s) | 2 | 2 | 1 | 2 |
| Minimum Initial (s) | 5 | 15 | 5 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | | | | |
| Flash Don't Walk (s) | | | | |
| Dual Entry | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 7.5 | 37.5 | 37.5 | 52.5 |
| End Time (s) | 37.5 | 7.5 | 52.5 | 7.5 |
| Yield/Force Off (s) | 31 | 0 | 48 | 0 |
| Yield/Force Off 170(s) | 31 | 0 | 48 | 0 |
| Local Start Time (s) | 7.5 | 37.5 | 37.5 | 52.5 |
| Local Yield (s) | 31 | 0 | 48 | 0 |
| Local Yield 170(s) | 31 | 0 | 48 | 0 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 80 |
| Offset: 0 (0%), Referenced to phase 4:SBTL and 8:NBT, Start of Yellow | |

Splits and Phases: 8: Ellsworth Road & Pecos Road North



| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 132 | 18 | 26 | 235 | 3 | 2 |
| Future Volume (veh/h) | 132 | 18 | 26 | 235 | 3 | 2 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 143 | 20 | 28 | 255 | 3 | 2 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 1238 | 1049 | 1018 | 1456 | 24 | 21 |
| Arrive On Green | 1.00 | 1.00 | 0.10 | 1.00 | 0.01 | 0.01 |
| Sat Flow, veh/h | 1870 | 1585 | 1781 | 1870 | 1781 | 1585 |
| Grp Volume(v), veh/h | 143 | 20 | 28 | 255 | 3 | 2 |
| Grp Sat Flow(s),veh/h/ln | 1870 | 1585 | 1781 | 1870 | 1781 | 1585 |
| Q Serve(g_s), s | 0.0 | 0.0 | 0.2 | 0.0 | 0.1 | 0.1 |
| Cycle Q Clear(g_c), s | 0.0 | 0.0 | 0.2 | 0.0 | 0.1 | 0.1 |
| Prop In Lane | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Lane Grp Cap(c), veh/h | 1238 | 1049 | 1018 | 1456 | 24 | 21 |
| V/C Ratio(X) | 0.12 | 0.02 | 0.03 | 0.18 | 0.13 | 0.09 |
| Avail Cap(c_a), veh/h | 1238 | 1049 | 1182 | 1456 | 534 | 476 |
| HCM Platoon Ratio | 2.00 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.97 | 0.97 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 0.0 | 0.0 | 1.9 | 0.0 | 29.3 | 29.2 |
| Incr Delay (d2), s/veh | 0.2 | 0.0 | 0.0 | 0.3 | 2.4 | 1.9 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 0.1 | 0.0 | 0.0 | 0.2 | 0.1 | 0.1 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 0.2 | 0.0 | 1.9 | 0.3 | 31.6 | 31.2 |
| LnGrp LOS | A | A | A | A | C | C |
| Approach Vol, veh/h | 163 | | | 283 | 5 | |
| Approach Delay, s/veh | 0.2 | | | 0.4 | 31.4 | |
| Approach LOS | A | | | A | C | |

| Timer - Assigned Phs | | 2 | | | 5 | 6 | 8 |
|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 53.2 | | | 7.0 | 46.2 | 6.8 |
| Change Period (Y+Rc), s | | 6.5 | | | 4.0 | 6.5 | 6.0 |
| Max Green Setting (Gmax), s | | 29.5 | | | 8.5 | 17.0 | 18.0 |
| Max Q Clear Time (g_c+I1), s | | 2.0 | | | 2.2 | 2.0 | 2.1 |
| Green Ext Time (p_c), s | | 1.3 | | | 0.0 | 0.6 | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 0.7 |
| HCM 7th LOS | A |

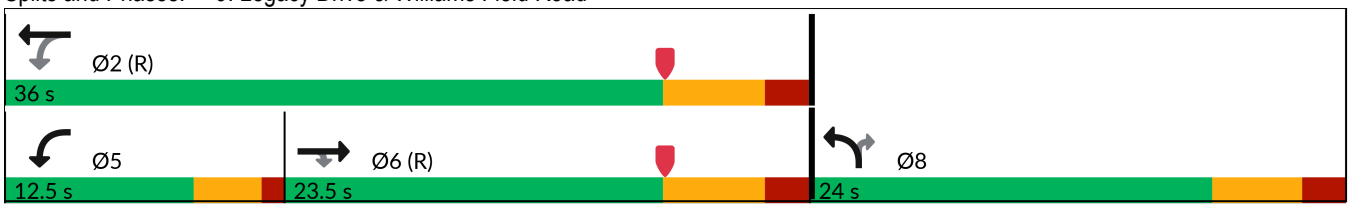
**Notes**

User approved pedestrian interval to be less than phase max green.

| Phase Number | 2 | 5 | 6 | 8 |
|---|---|---|---|---|
| Movement | WBTL | WBL | EBT | NBL |
| Lead/Lag | | Lead | Lag | |
| Lead-Lag Optimize | | Yes | Yes | |
| Recall Mode | C-Max | None | C-Max | None |
| Maximum Split (s) | 36 | 12.5 | 23.5 | 24 |
| Maximum Split (%) | 60.0% | 20.8% | 39.2% | 40.0% |
| Minimum Split (s) | 24.5 | 12.5 | 24.5 | 24 |
| Yellow Time (s) | 4.5 | 3 | 4.5 | 4 |
| All-Red Time (s) | 2 | 1 | 2 | 2 |
| Minimum Initial (s) | 15 | 8 | 15 | 10 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | | | 7 | |
| Flash Don't Walk (s) | | | 11 | |
| Dual Entry | Yes | No | Yes | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 30.5 | 30.5 | 43 | 6.5 |
| End Time (s) | 6.5 | 43 | 6.5 | 30.5 |
| Yield/Force Off (s) | 0 | 39 | 0 | 24.5 |
| Yield/Force Off 170(s) | 0 | 39 | 49 | 24.5 |
| Local Start Time (s) | 30.5 | 30.5 | 43 | 6.5 |
| Local Yield (s) | 0 | 39 | 0 | 24.5 |
| Local Yield 170(s) | 0 | 39 | 49 | 24.5 |

| Intersection Summary | |
|---|---|
| Cycle Length | 60 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 65 |
| Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBT, Start of Yellow | |

Splits and Phases: 9: Legacy Drive & Williams Field Road



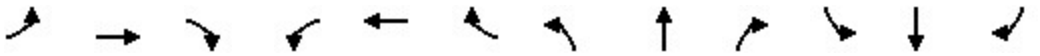
| Intersection | |
|---|---|
| Int Delay, s/veh | 0.2 |

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | ↑ | ↱ | | ↑ | | ↱ |
| Traffic Vol, veh/h | 133 | 2 | 7 | 262 | 0 | 1 |
| Future Vol, veh/h | 133 | 2 | 7 | 262 | 0 | 1 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 150 | - | - | - | - |
| 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 | 145 | 2 | 8 | 285 | 0 | 1 |

| Major/Minor | Major1 | | Major2 | | Minor1 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 0 | 0 | 147 | 0 | - | 145 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | - | 4.12 | - | - | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | 2.218 | - | - | 3.318 |
| Pot Cap-1 Maneuver | - | - | 1445 | - | 0 | 933 |
| Stage 1 | - | - | - | - | 0 | - |
| Stage 2 | - | - | - | - | 0 | - |
| Platoon blocked, % | - | - | 0 | - | | 0 |
| Mov Cap-1 Maneuver | - | - | 1445 | - | - | 933 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | WB | NB |
|---|---|---|---|
| HCM Control Delay, s/v | 0 | 0.2 | 8.86 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT |
|---|---|---|---|---|---|
| Capacity (veh/h) | 933 | - | - | 1445 | - |
| HCM Lane V/C Ratio | 0.001 | - | - | 0.005 | - |
| HCM Control Delay (s/veh) | 8.9 | - | - | 7.5 | - |
| HCM Lane LOS | A | - | - | A | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0 | - |



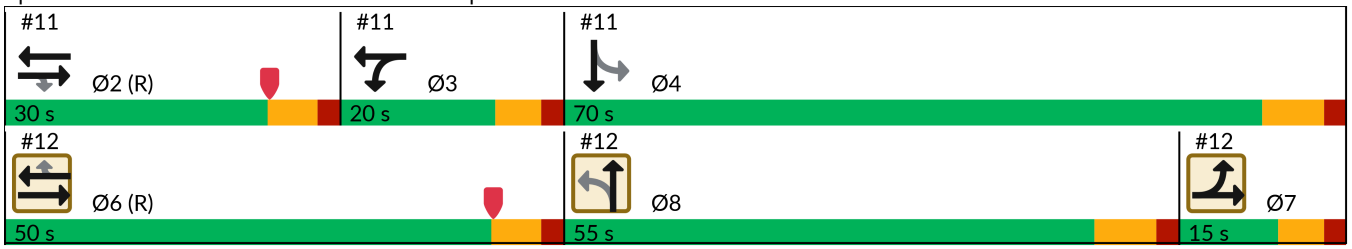
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 0 | 94 | 40 | 51 | 233 | 0 | 0 | 0 | 0 | 248 | 0 | 40 |
| Future Volume (vph) | 0 | 94 | 40 | 51 | 233 | 0 | 0 | 0 | 0 | 248 | 0 | 40 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 360 | | 285 | 290 | | 0 | 0 | | 0 | 400 | | 400 |
| Storage Lanes | 2 | | 1 | 0 | | 0 | 0 | | 0 | 2 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 1.00 | 0.86 | 1.00 | 0.97 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 0.91 | 0.91 | 0.95 |
| Frt | | | 0.850 | | | | | | | | 0.964 | |
| Flt Protected | | | | 0.950 | | | | | | 0.950 | 0.963 | |
| Satd. Flow (prot) | 0 | 6408 | 1583 | 3433 | 3539 | 0 | 0 | 0 | 0 | 1610 | 3147 | 0 |
| Flt Permitted | | | | 0.950 | | | | | | 0.950 | 0.963 | |
| Satd. Flow (perm) | 0 | 6408 | 1583 | 3433 | 3539 | 0 | 0 | 0 | 0 | 1610 | 3147 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 168 | | | | | | | | 91 | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 971 | | | 481 | | | 999 | | | 970 | |
| Travel Time (s) | | 22.1 | | | 10.9 | | | 22.7 | | | 22.0 | |
| 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 |
| Adj. Flow (vph) | 0 | 102 | 43 | 55 | 253 | 0 | 0 | 0 | 0 | 270 | 0 | 43 |
| Shared Lane Traffic (%) | | | | | | | | | | 50% | | |
| Lane Group Flow (vph) | 0 | 102 | 43 | 55 | 253 | 0 | 0 | 0 | 0 | 135 | 178 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 24 | | | 24 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | | 2 | 1 | 1 | 2 | | | | | 1 | 2 | |
| Detector Template | | Thru | Right | Left | Thru | | | | | Left | Thru | |
| Leading Detector (ft) | | 100 | 20 | 20 | 100 | | | | | 20 | 100 | |
| Trailing Detector (ft) | | 0 | 0 | 0 | 0 | | | | | 0 | 0 | |
| Detector 1 Position(ft) | | 0 | 0 | 0 | 0 | | | | | 0 | 0 | |
| Detector 1 Size(ft) | | 6 | 20 | 20 | 6 | | | | | 20 | 6 | |
| Detector 1 Type | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | | | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | | | | 0.0 | |
| Turn Type | | NA | Perm | Prot | NA | | | | | Perm | NA | |
| Protected Phases | | 2 | | 3 | 2 3 | | | | | | 4 | |
| Permitted Phases | | | 2 | | | | | | | 4 | | |

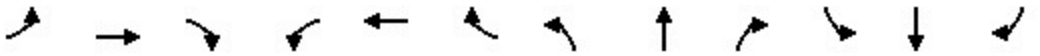
| Lane Group | Ø6 | Ø7 | Ø8 |
|---|---|---|---|
| Lane Configurations | | | |
| Traffic Volume (vph) | | | |
| Future Volume (vph) | | | |
| Ideal Flow (vphpl) | | | |
| Storage Length (ft) | | | |
| Storage Lanes | | | |
| Taper Length (ft) | | | |
| Lane Util. Factor | | | |
| Frt | | | |
| Flt Protected | | | |
| Satd. Flow (prot) | | | |
| Flt Permitted | | | |
| Satd. Flow (perm) | | | |
| Right Turn on Red | | | |
| Satd. Flow (RTOR) | | | |
| Link Speed (mph) | | | |
| Link Distance (ft) | | | |
| Travel Time (s) | | | |
| Peak Hour Factor | | | |
| Adj. Flow (vph) | | | |
| Shared Lane Traffic (%) | | | |
| Lane Group Flow (vph) | | | |
| Enter Blocked Intersection | | | |
| Lane Alignment | | | |
| Median Width(ft) | | | |
| Link Offset(ft) | | | |
| Crosswalk Width(ft) | | | |
| Two way Left Turn Lane | | | |
| Headway Factor | | | |
| Turning Speed (mph) | | | |
| Number of Detectors | | | |
| Detector Template | | | |
| Leading Detector (ft) | | | |
| Trailing Detector (ft) | | | |
| Detector 1 Position(ft) | | | |
| Detector 1 Size(ft) | | | |
| Detector 1 Type | | | |
| Detector 1 Channel | | | |
| Detector 1 Extend (s) | | | |
| Detector 1 Queue (s) | | | |
| Detector 1 Delay (s) | | | |
| Detector 2 Position(ft) | | | |
| Detector 2 Size(ft) | | | |
| Detector 2 Type | | | |
| Detector 2 Channel | | | |
| Detector 2 Extend (s) | | | |
| Turn Type | | | |
| Protected Phases | 6 | 7 | 8 |
| Permitted Phases | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | | 2 | 2 | 3 | 2 3 | | | | | 4 | 4 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | | 15.0 | 15.0 | 5.0 | | | | | | 10.0 | 10.0 | |
| Minimum Split (s) | | 25.5 | 25.5 | 21.0 | | | | | | 46.5 | 46.5 | |
| Total Split (s) | | 30.0 | 30.0 | 20.0 | | | | | | 70.0 | 70.0 | |
| Total Split (%) | | 25.0% | 25.0% | 16.7% | | | | | | 58.3% | 58.3% | |
| Maximum Green (s) | | 23.5 | 23.5 | 14.0 | | | | | | 62.5 | 62.5 | |
| Yellow Time (s) | | 4.5 | 4.5 | 4.0 | | | | | | 5.5 | 5.5 | |
| All-Red Time (s) | | 2.0 | 2.0 | 2.0 | | | | | | 2.0 | 2.0 | |
| Lost Time Adjust (s) | | 0.0 | 0.0 | 0.0 | | | | | | 0.0 | 0.0 | |
| Total Lost Time (s) | | 6.5 | 6.5 | 6.0 | | | | | | 7.5 | 7.5 | |
| Lead/Lag | | | | Lead | | | | | | Lag | Lag | |
| Lead-Lag Optimize? | | | | Yes | | | | | | Yes | Yes | |
| Vehicle Extension (s) | | 3.0 | 3.0 | 3.0 | | | | | | 3.0 | 3.0 | |
| Recall Mode | | C-Max | C-Max | None | | | | | | None | None | |
| Walk Time (s) | | 4.0 | 4.0 | | | | | | | 4.0 | 4.0 | |
| Flash Don't Walk (s) | | 15.0 | 15.0 | | | | | | | 35.0 | 35.0 | |
| Pedestrian Calls (#/hr) | | 0 | 0 | | | | | | | 0 | 0 | |
| Act Effct Green (s) | | 58.8 | 58.8 | 7.5 | 72.3 | | | | | 33.7 | 33.7 | |
| Actuated g/C Ratio | | 0.49 | 0.49 | 0.06 | 0.60 | | | | | 0.28 | 0.28 | |
| v/c Ratio | | 0.03 | 0.05 | 0.26 | 0.12 | | | | | 0.30 | 0.19 | |
| Control Delay (s/veh) | | 6.3 | 0.3 | 60.8 | 9.9 | | | | | 35.3 | 15.9 | |
| Queue Delay | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | |
| Total Delay (s/veh) | | 6.3 | 0.3 | 60.8 | 9.9 | | | | | 35.3 | 15.9 | |
| LOS | | A | A | E | A | | | | | D | B | |
| Approach Delay (s/veh) | | 4.5 | | | 19.0 | | | | | | 24.3 | |
| Approach LOS | | A | | | B | | | | | | C | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 120 | | | |
| Actuated Cycle Length: 120 | | | |
| Offset: 60 (50%), Referenced to phase 2:EBWB and 6:, Start of Yellow | | | |
| Natural Cycle: 95 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.53 | | | |
| Intersection Signal Delay (s/veh): 18.4 | | Intersection LOS: B | |
| Intersection Capacity Utilization 66.8% | | ICU Level of Service C | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 11: SR24 Eastbound Ramps & Williams Field Road





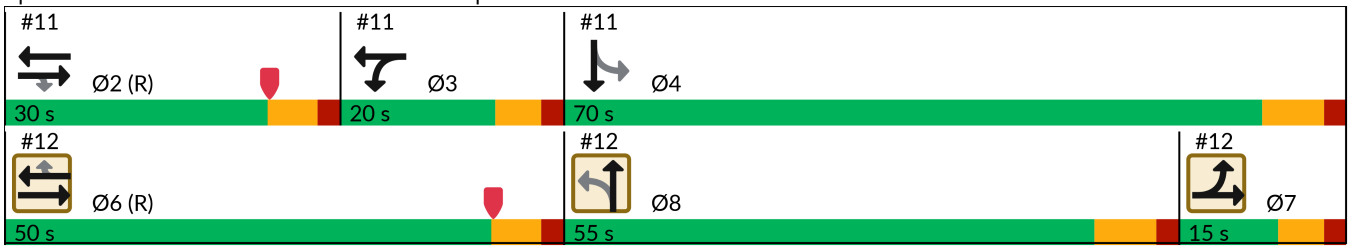
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 24 | 320 | 0 | 0 | 192 | 608 | 90 | 0 | 53 | 0 | 0 | 0 |
| Future Volume (vph) | 24 | 320 | 0 | 0 | 192 | 608 | 90 | 0 | 53 | 0 | 0 | 0 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 290 | | 0 | 365 | | 300 | 375 | | 375 | 0 | | 0 |
| Storage Lanes | 0 | | 0 | 2 | | 1 | 1 | | 1 | 0 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 0.97 | 0.95 | 1.00 | 1.00 | 0.86 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 |
| Frt | | | | | | 0.850 | | 0.850 | | | | |
| Flt Protected | 0.950 | | | | | | 0.950 | | | | | |
| Satd. Flow (prot) | 3433 | 3539 | 0 | 0 | 6408 | 1583 | 1770 | 3008 | 0 | 0 | 0 | 0 |
| Flt Permitted | 0.950 | | | | | | 0.950 | | | | | |
| Satd. Flow (perm) | 3433 | 3539 | 0 | 0 | 6408 | 1583 | 1770 | 3008 | 0 | 0 | 0 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | | | | 661 | | 435 | | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 481 | | | 1418 | | | 897 | | | 1176 | |
| Travel Time (s) | | 10.9 | | | 32.2 | | | 20.4 | | | 26.7 | |
| 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 |
| Adj. Flow (vph) | 26 | 348 | 0 | 0 | 209 | 661 | 98 | 0 | 58 | 0 | 0 | 0 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 26 | 348 | 0 | 0 | 209 | 661 | 98 | 58 | 0 | 0 | 0 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 24 | | | 24 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | | 2 | 1 | 1 | 2 | | | | |
| Detector Template | Left | Thru | | | Thru | Right | Left | Thru | | | | |
| Leading Detector (ft) | 20 | 100 | | | 100 | 20 | 20 | 100 | | | | |
| Trailing Detector (ft) | 0 | 0 | | | 0 | 0 | 0 | 0 | | | | |
| Detector 1 Position(ft) | 0 | 0 | | | 0 | 0 | 0 | 0 | | | | |
| Detector 1 Size(ft) | 20 | 6 | | | 6 | 20 | 20 | 6 | | | | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | | | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | | |
| Turn Type | Prot | NA | | | NA | Perm | Perm | NA | | | | |
| Protected Phases | 7 | 6 7 | | | 6 | | | 8 | | | | |
| Permitted Phases | | | | | | 6 | 8 | | | | | |

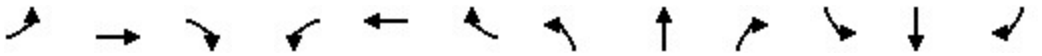
| Lane Group | Ø2 | Ø3 | Ø4 |
|---|---|---|---|
| Lane Configurations | | | |
| Traffic Volume (vph) | | | |
| Future Volume (vph) | | | |
| Ideal Flow (vphpl) | | | |
| Storage Length (ft) | | | |
| Storage Lanes | | | |
| Taper Length (ft) | | | |
| Lane Util. Factor | | | |
| Frt | | | |
| Flt Protected | | | |
| Satd. Flow (prot) | | | |
| Flt Permitted | | | |
| Satd. Flow (perm) | | | |
| Right Turn on Red | | | |
| Satd. Flow (RTOR) | | | |
| Link Speed (mph) | | | |
| Link Distance (ft) | | | |
| Travel Time (s) | | | |
| Peak Hour Factor | | | |
| Adj. Flow (vph) | | | |
| Shared Lane Traffic (%) | | | |
| Lane Group Flow (vph) | | | |
| Enter Blocked Intersection | | | |
| Lane Alignment | | | |
| Median Width(ft) | | | |
| Link Offset(ft) | | | |
| Crosswalk Width(ft) | | | |
| Two way Left Turn Lane | | | |
| Headway Factor | | | |
| Turning Speed (mph) | | | |
| Number of Detectors | | | |
| Detector Template | | | |
| Leading Detector (ft) | | | |
| Trailing Detector (ft) | | | |
| Detector 1 Position(ft) | | | |
| Detector 1 Size(ft) | | | |
| Detector 1 Type | | | |
| Detector 1 Channel | | | |
| Detector 1 Extend (s) | | | |
| Detector 1 Queue (s) | | | |
| Detector 1 Delay (s) | | | |
| Detector 2 Position(ft) | | | |
| Detector 2 Size(ft) | | | |
| Detector 2 Type | | | |
| Detector 2 Channel | | | |
| Detector 2 Extend (s) | | | |
| Turn Type | | | |
| Protected Phases | 2 | 3 | 4 |
| Permitted Phases | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | 7 | 6 7 | | | 6 | 6 | 8 | 8 | | | | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | | | | 15.0 | 15.0 | 10.0 | 10.0 | | | | |
| Minimum Split (s) | 11.0 | | | | 26.5 | 26.5 | 45.5 | 45.5 | | | | |
| Total Split (s) | 15.0 | | | | 50.0 | 50.0 | 55.0 | 55.0 | | | | |
| Total Split (%) | 12.5% | | | | 41.7% | 41.7% | 45.8% | 45.8% | | | | |
| Maximum Green (s) | 9.0 | | | | 43.5 | 43.5 | 47.5 | 47.5 | | | | |
| Yellow Time (s) | 4.0 | | | | 4.5 | 4.5 | 5.5 | 5.5 | | | | |
| All-Red Time (s) | 2.0 | | | | 2.0 | 2.0 | 2.0 | 2.0 | | | | |
| Lost Time Adjust (s) | 0.0 | | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Total Lost Time (s) | 6.0 | | | | 6.5 | 6.5 | 7.5 | 7.5 | | | | |
| Lead/Lag | Lag | | | | | | Lead | Lead | | | | |
| Lead-Lag Optimize? | Yes | | | | | | Yes | Yes | | | | |
| Vehicle Extension (s) | 3.0 | | | | 3.0 | 3.0 | 3.0 | 3.0 | | | | |
| Recall Mode | None | | | | C-Max | C-Max | None | None | | | | |
| Walk Time (s) | | | | | 4.0 | 4.0 | 4.0 | 4.0 | | | | |
| Flash Don't Walk (s) | | | | | 16.0 | 16.0 | 34.0 | 34.0 | | | | |
| Pedestrian Calls (#/hr) | | | | | 0 | 0 | 0 | 0 | | | | |
| Act Effct Green (s) | 8.6 | 93.4 | | | 78.8 | 78.8 | 12.6 | 12.6 | | | | |
| Actuated g/C Ratio | 0.07 | 0.78 | | | 0.66 | 0.66 | 0.11 | 0.11 | | | | |
| v/c Ratio | 0.11 | 0.13 | | | 0.05 | 0.52 | 0.53 | 0.08 | | | | |
| Control Delay (s/veh) | 40.0 | 7.7 | | | 5.9 | 6.5 | 60.8 | 0.2 | | | | |
| Queue Delay | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Total Delay (s/veh) | 40.0 | 7.7 | | | 5.9 | 6.5 | 60.8 | 0.2 | | | | |
| LOS | D | A | | | A | A | E | A | | | | |
| Approach Delay (s/veh) | | 9.9 | | | 6.3 | | | 38.3 | | | | |
| Approach LOS | | A | | | A | | | D | | | | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 120 | | | |
| Actuated Cycle Length: 120 | | | |
| Offset: 60 (50%), Referenced to phase 2:EBWB and 6:, Start of Yellow | | | |
| Natural Cycle: 95 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.53 | | | |
| Intersection Signal Delay (s/veh): 10.9 | | Intersection LOS: B | |
| Intersection Capacity Utilization 66.8% | | ICU Level of Service C | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 12: SR24 Westbound Ramps & Williams Field Road





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 85 | 120 | 0 | 0 | 350 | 59 | 124 | 0 | 0 | 51 | 0 | 322 |
| Future Volume (veh/h) | 85 | 120 | 0 | 0 | 350 | 59 | 124 | 0 | 0 | 51 | 0 | 322 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 92 | 130 | 0 | 0 | 380 | 64 | 135 | 0 | 0 | 55 | 0 | 350 |
| 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 | 458 | 1681 | 750 | 536 | 1337 | 596 | 508 | 1170 | 522 | 609 | 1126 | 502 |
| Arrive On Green | 0.02 | 0.16 | 0.00 | 0.00 | 0.38 | 0.38 | 0.07 | 0.00 | 0.00 | 0.06 | 0.00 | 0.32 |
| Sat Flow, veh/h | 1781 | 3554 | 1585 | 1781 | 3554 | 1585 | 1781 | 3554 | 1585 | 1781 | 3554 | 1585 |
| Grp Volume(v), veh/h | 92 | 130 | 0 | 0 | 380 | 64 | 135 | 0 | 0 | 55 | 0 | 350 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1777 | 1585 | 1781 | 1777 | 1585 | 1781 | 1777 | 1585 | 1781 | 1777 | 1585 |
| Q Serve(g_s), s | 3.6 | 3.7 | 0.0 | 0.0 | 9.0 | 3.1 | 6.1 | 0.0 | 0.0 | 2.4 | 0.0 | 23.2 |
| Cycle Q Clear(g_c), s | 3.6 | 3.7 | 0.0 | 0.0 | 9.0 | 3.1 | 6.1 | 0.0 | 0.0 | 2.4 | 0.0 | 23.2 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 458 | 1681 | 750 | 536 | 1337 | 596 | 508 | 1170 | 522 | 609 | 1126 | 502 |
| V/C Ratio(X) | 0.20 | 0.08 | 0.00 | 0.00 | 0.28 | 0.11 | 0.27 | 0.00 | 0.00 | 0.09 | 0.00 | 0.70 |
| Avail Cap(c_a), veh/h | 553 | 1681 | 750 | 653 | 1337 | 596 | 669 | 1170 | 522 | 658 | 1126 | 502 |
| HCM Platoon Ratio | 0.33 | 0.33 | 0.33 | 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 | 0.00 | 0.00 | 0.98 | 0.98 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 20.1 | 28.3 | 0.0 | 0.0 | 26.1 | 24.3 | 24.5 | 0.0 | 0.0 | 24.3 | 0.0 | 35.9 |
| Incr Delay (d2), s/veh | 0.2 | 0.1 | 0.0 | 0.0 | 0.5 | 0.4 | 0.3 | 0.0 | 0.0 | 0.1 | 0.0 | 7.8 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 2.8 | 3.0 | 0.0 | 0.0 | 7.0 | 2.3 | 4.7 | 0.0 | 0.0 | 1.9 | 0.0 | 15.2 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 20.3 | 28.3 | 0.0 | 0.0 | 26.7 | 24.7 | 24.8 | 0.0 | 0.0 | 24.4 | 0.0 | 43.7 |
| LnGrp LOS | C | C | | | C | C | C | | | C | | D |
| Approach Vol, veh/h | | 222 | | | 444 | | | 135 | | | 405 | |
| Approach Delay, s/veh | | 25.0 | | | 26.4 | | | 24.8 | | | 41.1 | |
| Approach LOS | | C | | | C | | | C | | | D | |

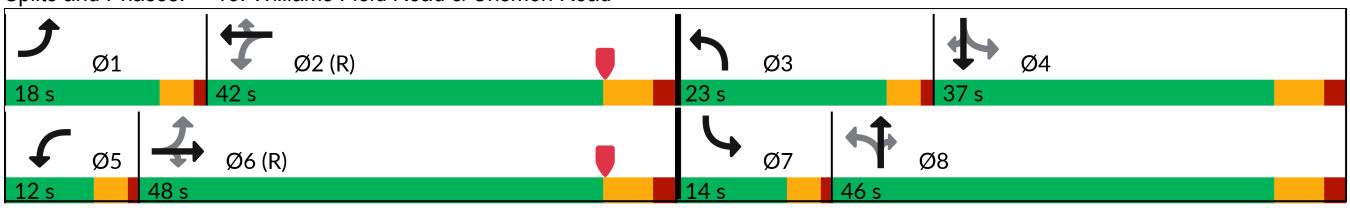
| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 11.6 | 51.7 | 12.2 | 44.5 | 0.0 | 63.3 | 10.7 | 46.0 |
| Change Period (Y+Rc), s | 4.0 | 6.5 | 4.0 | 6.5 | 4.0 | 6.5 | 4.0 | 6.5 |
| Max Green Setting (Gmax), s | 14.0 | 35.5 | 19.0 | 30.5 | 8.0 | 41.5 | 10.0 | 39.5 |
| Max Q Clear Time (g_c+I1), s | 5.6 | 11.0 | 8.1 | 25.2 | 0.0 | 5.7 | 4.4 | 0.0 |
| Green Ext Time (p_c), s | 0.1 | 2.8 | 0.2 | 0.6 | 0.0 | 0.8 | 0.0 | 0.0 |

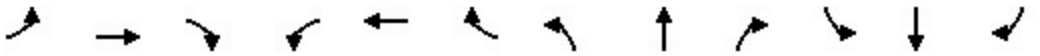
| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 30.9 |
| HCM 7th LOS | C |

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | EBL | WBTL | NBL | SBTL | WBL | EBTL | SBL | NBTL |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | None | C-Max | None | Max | None | C-Max | None | Max |
| Maximum Split (s) | 18 | 42 | 23 | 37 | 12 | 48 | 14 | 46 |
| Maximum Split (%) | 15.0% | 35.0% | 19.2% | 30.8% | 10.0% | 40.0% | 11.7% | 38.3% |
| Minimum Split (s) | 12.5 | 38.5 | 12.5 | 35.5 | 12.5 | 40.5 | 12.5 | 36.5 |
| Yellow Time (s) | 3 | 4.5 | 3 | 4.5 | 3 | 4.5 | 3 | 4.5 |
| All-Red Time (s) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| Minimum Initial (s) | 8 | 15 | 8 | 15 | 8 | 15 | 8 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 7 | | 7 | | 7 | | 7 |
| Flash Don't Walk (s) | | 25 | | 22 | | 27 | | 23 |
| Dual Entry | No | Yes | No | Yes | No | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 66.5 | 84.5 | 6.5 | 29.5 | 66.5 | 78.5 | 6.5 | 20.5 |
| End Time (s) | 84.5 | 6.5 | 29.5 | 66.5 | 78.5 | 6.5 | 20.5 | 66.5 |
| Yield/Force Off (s) | 80.5 | 0 | 25.5 | 60 | 74.5 | 0 | 16.5 | 60 |
| Yield/Force Off 170(s) | 80.5 | 95 | 25.5 | 38 | 74.5 | 93 | 16.5 | 37 |
| Local Start Time (s) | 66.5 | 84.5 | 6.5 | 29.5 | 66.5 | 78.5 | 6.5 | 20.5 |
| Local Yield (s) | 80.5 | 0 | 25.5 | 60 | 74.5 | 0 | 16.5 | 60 |
| Local Yield 170(s) | 80.5 | 95 | 25.5 | 38 | 74.5 | 93 | 16.5 | 37 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 105 |
| Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow | |

Splits and Phases: 13: Williams Field Road & Crismon Road





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 66 | 63 | 34 | 7 | 148 | 47 | 37 | 549 | 8 | 25 | 311 | 209 |
| Future Volume (veh/h) | 66 | 63 | 34 | 7 | 148 | 47 | 37 | 549 | 8 | 25 | 311 | 209 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 72 | 68 | 37 | 8 | 161 | 51 | 40 | 597 | 9 | 27 | 338 | 227 |
| 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 | 596 | 1562 | 697 | 596 | 1402 | 625 | 358 | 1184 | 18 | 290 | 1140 | 509 |
| Arrive On Green | 0.06 | 0.44 | 0.44 | 0.02 | 0.39 | 0.39 | 0.05 | 0.33 | 0.33 | 0.04 | 0.32 | 0.32 |
| Sat Flow, veh/h | 1781 | 3554 | 1585 | 1781 | 3554 | 1585 | 1781 | 3583 | 54 | 1781 | 3554 | 1585 |
| Grp Volume(v), veh/h | 72 | 68 | 37 | 8 | 161 | 51 | 40 | 296 | 310 | 27 | 338 | 227 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1777 | 1585 | 1781 | 1777 | 1585 | 1781 | 1777 | 1861 | 1781 | 1777 | 1585 |
| Q Serve(g_s), s | 2.7 | 1.3 | 1.6 | 0.3 | 3.4 | 2.4 | 1.7 | 16.1 | 16.1 | 1.2 | 8.6 | 13.6 |
| Cycle Q Clear(g_c), s | 2.7 | 1.3 | 1.6 | 0.3 | 3.4 | 2.4 | 1.7 | 16.1 | 16.1 | 1.2 | 8.6 | 13.6 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.03 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 596 | 1562 | 697 | 596 | 1402 | 625 | 358 | 587 | 615 | 290 | 1140 | 509 |
| V/C Ratio(X) | 0.12 | 0.04 | 0.05 | 0.01 | 0.11 | 0.08 | 0.11 | 0.50 | 0.50 | 0.09 | 0.30 | 0.45 |
| Avail Cap(c_a), veh/h | 681 | 1562 | 697 | 687 | 1402 | 625 | 419 | 587 | 615 | 368 | 1140 | 509 |
| 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 | 17.6 | 19.2 | 19.3 | 21.0 | 23.0 | 22.7 | 24.7 | 32.3 | 32.3 | 25.9 | 30.6 | 32.3 |
| Incr Delay (d2), s/veh | 0.1 | 0.1 | 0.1 | 0.0 | 0.2 | 0.3 | 0.1 | 3.1 | 2.9 | 0.1 | 0.7 | 2.8 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 2.0 | 1.0 | 1.1 | 0.2 | 2.7 | 1.7 | 1.4 | 11.9 | 12.3 | 0.9 | 6.8 | 9.5 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 17.7 | 19.3 | 19.4 | 21.0 | 23.2 | 23.0 | 24.8 | 35.4 | 35.2 | 26.0 | 31.2 | 35.1 |
| LnGrp LOS | B | B | B | C | C | C | C | D | D | C | C | D |
| Approach Vol, veh/h | | 177 | | | 220 | | | 646 | | | 592 | |
| Approach Delay, s/veh | | 18.7 | | | 23.1 | | | 34.6 | | | 32.5 | |
| Approach LOS | | B | | | C | | | C | | | C | |

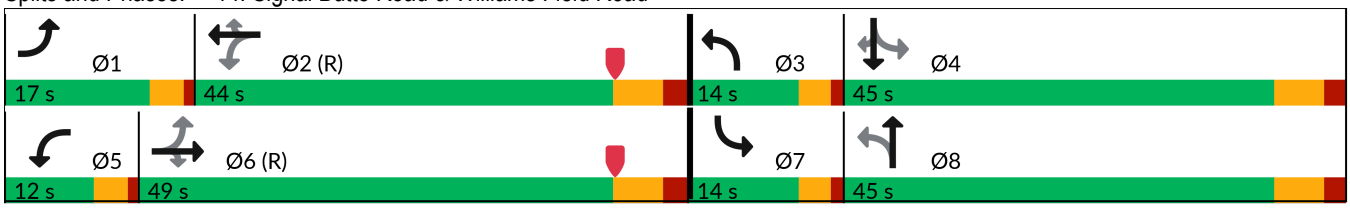
| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 11.3 | 53.8 | 9.9 | 45.0 | 5.9 | 59.2 | 8.7 | 46.1 |
| Change Period (Y+Rc), s | 4.0 | 6.5 | 4.0 | 6.5 | 4.0 | 6.5 | 4.0 | 6.5 |
| Max Green Setting (Gmax), s | 13.0 | 37.5 | 10.0 | 38.5 | 8.0 | 42.5 | 10.0 | 38.5 |
| Max Q Clear Time (g_c+I1), s | 4.7 | 5.4 | 3.7 | 15.6 | 2.3 | 3.6 | 3.2 | 18.1 |
| Green Ext Time (p_c), s | 0.1 | 1.2 | 0.0 | 3.0 | 0.0 | 0.5 | 0.0 | 3.7 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 30.6 |
| HCM 7th LOS | C |

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | EBL | WBTL | NBL | SBTL | WBL | EBTL | SBL | NBTL |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | None | C-Max | None | Max | None | C-Max | None | Max |
| Maximum Split (s) | 17 | 44 | 14 | 45 | 12 | 49 | 14 | 45 |
| Maximum Split (%) | 14.2% | 36.7% | 11.7% | 37.5% | 10.0% | 40.8% | 11.7% | 37.5% |
| Minimum Split (s) | 12 | 38.5 | 12 | 35.5 | 12 | 40.5 | 12 | 36.5 |
| Yellow Time (s) | 3 | 4.5 | 3 | 4.5 | 3 | 4.5 | 3 | 4.5 |
| All-Red Time (s) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| Minimum Initial (s) | 8 | 15 | 8 | 15 | 8 | 15 | 8 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 7 | | 7 | | 7 | | 7 |
| Flash Don't Walk (s) | | 25 | | 22 | | 27 | | 23 |
| Dual Entry | No | Yes | No | Yes | No | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 65.5 | 82.5 | 6.5 | 20.5 | 65.5 | 77.5 | 6.5 | 20.5 |
| End Time (s) | 82.5 | 6.5 | 20.5 | 65.5 | 77.5 | 6.5 | 20.5 | 65.5 |
| Yield/Force Off (s) | 78.5 | 0 | 16.5 | 59 | 73.5 | 0 | 16.5 | 59 |
| Yield/Force Off 170(s) | 78.5 | 95 | 16.5 | 37 | 73.5 | 93 | 16.5 | 36 |
| Local Start Time (s) | 65.5 | 82.5 | 6.5 | 20.5 | 65.5 | 77.5 | 6.5 | 20.5 |
| Local Yield (s) | 78.5 | 0 | 16.5 | 59 | 73.5 | 0 | 16.5 | 59 |
| Local Yield 170(s) | 78.5 | 95 | 16.5 | 37 | 73.5 | 93 | 16.5 | 36 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 105 |
| Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow | |

Splits and Phases: 14: Signal Butte Road & Williams Field Road



| Intersection | |
|---|---|
| Int Delay, s/veh | 0 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 0 | 0 | 0 | 2248 | 1886 | 0 |
| Future Vol, veh/h | 0 | 0 | 0 | 2248 | 1886 | 0 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 0 | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 0 | 0 | 2443 | 2050 | 0 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | - | 1025 | - | 0 | - | 0 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | 7.14 | - | - | - | - |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | 3.92 | - | - | - | - |
| Pot Cap-1 Maneuver | 0 | *613 | 0 | - | - | - |
| Stage 1 | 0 | - | 0 | - | - | - |
| Stage 2 | 0 | - | 0 | - | - | - |
| Platoon blocked, % | | 0 | | - | - | - |
| Mov Cap-1 Maneuver | - | *613 | - | - | - | - |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 0 | 0 | 0 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|
| Capacity (veh/h) | - | - | - | - |
| HCM Lane V/C Ratio | - | - | - | - |
| HCM Control Delay (s/veh) | - | 0 | - | - |
| HCM Lane LOS | - | A | - | - |
| HCM 95th %tile Q(veh) | - | - | - | - |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 77 | 29 | 49 | 2248 | 1746 | 140 |
| Future Volume (veh/h) | 77 | 29 | 49 | 2248 | 1746 | 140 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | 1.00 | | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 84 | 32 | 53 | 2443 | 1898 | 152 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 319 | 284 | 181 | 3659 | 3128 | 249 |
| Arrive On Green | 0.18 | 0.18 | 0.03 | 0.72 | 0.21 | 0.21 |
| Sat Flow, veh/h | 1781 | 1585 | 1781 | 5274 | 4989 | 384 |
| Grp Volume(v), veh/h | 84 | 32 | 53 | 2443 | 1338 | 712 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1585 | 1781 | 1702 | 1702 | 1801 |
| Q Serve(g_s), s | 4.9 | 2.0 | 1.1 | 31.2 | 42.6 | 42.9 |
| Cycle Q Clear(g_c), s | 4.9 | 2.0 | 1.1 | 31.2 | 42.6 | 42.9 |
| Prop In Lane | 1.00 | 1.00 | 1.00 | | | 0.21 |
| Lane Grp Cap(c), veh/h | 319 | 284 | 181 | 3659 | 2209 | 1169 |
| V/C Ratio(X) | 0.26 | 0.11 | 0.29 | 0.67 | 0.61 | 0.61 |
| Avail Cap(c_a), veh/h | 319 | 284 | 238 | 3659 | 2209 | 1169 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 0.33 | 0.33 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 42.4 | 41.3 | 16.9 | 9.2 | 33.3 | 33.4 |
| Incr Delay (d2), s/veh | 2.0 | 0.8 | 0.9 | 1.0 | 1.2 | 2.4 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 4.2 | 1.6 | 1.3 | 15.9 | 27.1 | 29.1 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 44.4 | 42.1 | 17.8 | 10.2 | 34.5 | 35.8 |
| LnGrp LOS | D | D | B | B | C | D |
| Approach Vol, veh/h | 116 | | | 2496 | 2050 | |
| Approach Delay, s/veh | 43.8 | | | 10.4 | 35.0 | |
| Approach LOS | D | | | B | C | |

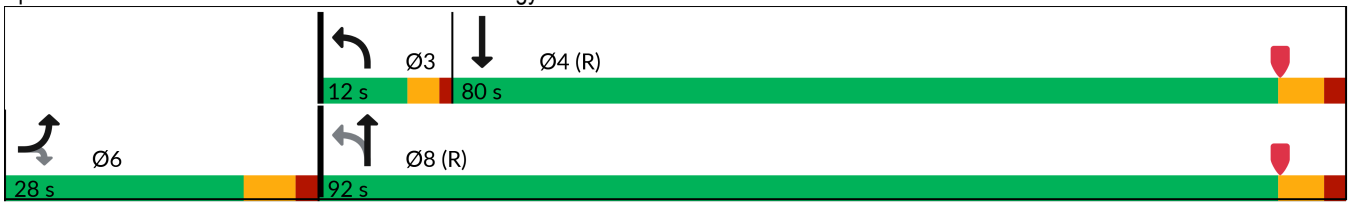
| Timer - Assigned Phs | | 3 | 4 | | 6 | 8 |
|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 8.1 | 83.9 | | 28.0 | 92.0 |
| Change Period (Y+Rc), s | | 4.0 | 6.0 | | 6.5 | 6.0 |
| Max Green Setting (Gmax), s | | 8.0 | 74.0 | | 21.5 | 86.0 |
| Max Q Clear Time (g_c+I1), s | | 3.1 | 44.9 | | 6.9 | 33.2 |
| Green Ext Time (p_c), s | | 0.0 | 19.3 | | 0.2 | 37.3 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 22.0 |
| HCM 7th LOS | C |

| Phase Number | 3 | 4 | 6 | 8 |
|---|---|---|---|---|
| Movement | NBL | SBT | EBL | NBTL |
| Lead/Lag | Lead | Lag | | |
| Lead-Lag Optimize | Yes | Yes | | |
| Recall Mode | None | C-Max | Max | C-Max |
| Maximum Split (s) | 12 | 80 | 28 | 92 |
| Maximum Split (%) | 10.0% | 66.7% | 23.3% | 76.7% |
| Minimum Split (s) | 9.5 | 24 | 24.5 | 24 |
| Yellow Time (s) | 3 | 4 | 4.5 | 4 |
| All-Red Time (s) | 1 | 2 | 2 | 2 |
| Minimum Initial (s) | 5 | 15 | 10 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 7 | 7 | 7 |
| Flash Don't Walk (s) | | 11 | 11 | 11 |
| Dual Entry | No | Yes | Yes | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 34 | 46 | 6 | 34 |
| End Time (s) | 46 | 6 | 34 | 6 |
| Yield/Force Off (s) | 42 | 0 | 27.5 | 0 |
| Yield/Force Off 170(s) | 42 | 109 | 16.5 | 109 |
| Local Start Time (s) | 34 | 46 | 6 | 34 |
| Local Yield (s) | 42 | 0 | 27.5 | 0 |
| Local Yield 170(s) | 42 | 109 | 16.5 | 109 |

| Intersection Summary | | |
|---|---|---|
| Cycle Length | 120 | |
| Control Type | Actuated-Coordinated | |
| Natural Cycle | 70 | |
| Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBTL, Start of Yellow | | |

Splits and Phases: 16: Ellsworth Road & Technology Avenue



| Intersection | |
|---|---|
| Int Delay, s/veh | 0.1 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 0 | 28 | 0 | 2291 | 1651 | 124 |
| Future Vol, veh/h | 0 | 28 | 0 | 2291 | 1651 | 124 |
| 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 | 30 | 0 | 2490 | 1795 | 135 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | - | 965 | - | 0 | - | 0 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | 7.14 | - | - | - | - |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | 3.92 | - | - | - | - |
| Pot Cap-1 Maneuver | 0 | *658 | 0 | - | - | - |
| Stage 1 | 0 | - | 0 | - | - | - |
| Stage 2 | 0 | - | 0 | - | - | - |
| Platoon blocked, % | | 0 | | - | - | - |
| Mov Cap-1 Maneuver | - | *658 | - | - | - | - |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 10.74 | 0 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|
| Capacity (veh/h) | - | 658 | - | - |
| HCM Lane V/C Ratio | - | 0.046 | - | - |
| HCM Control Delay (s/veh) | - | 10.7 | - | - |
| HCM Lane LOS | - | B | - | - |
| HCM 95th %tile Q(veh) | - | 0.1 | - | - |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 12 | 0 | 874 | 35 | 3 | 958 |
| Future Volume (veh/h) | 12 | 0 | 874 | 35 | 3 | 958 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 13 | 0 | 950 | 38 | 3 | 1041 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 29 | 26 | 4257 | 1322 | 595 | 4257 |
| Arrive On Green | 0.02 | 0.00 | 1.00 | 1.00 | 0.83 | 0.83 |
| Sat Flow, veh/h | 1781 | 1585 | 5274 | 1585 | 570 | 5274 |
| Grp Volume(v), veh/h | 13 | 0 | 950 | 38 | 3 | 1041 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1585 | 1702 | 1585 | 570 | 1702 |
| Q Serve(g_s), s | 0.4 | 0.0 | 0.0 | 0.0 | 0.1 | 2.6 |
| Cycle Q Clear(g_c), s | 0.4 | 0.0 | 0.0 | 0.0 | 0.1 | 2.6 |
| Prop In Lane | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Lane Grp Cap(c), veh/h | 29 | 26 | 4257 | 1322 | 595 | 4257 |
| V/C Ratio(X) | 0.45 | 0.00 | 0.22 | 0.03 | 0.01 | 0.24 |
| Avail Cap(c_a), veh/h | 579 | 515 | 4257 | 1322 | 595 | 4257 |
| HCM Platoon Ratio | 1.00 | 1.00 | 2.00 | 2.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 0.92 | 0.92 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 29.2 | 0.0 | 0.0 | 0.0 | 0.8 | 1.0 |
| Incr Delay (d2), s/veh | 10.5 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 0.5 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 39.8 | 0.0 | 0.1 | 0.0 | 0.8 | 1.2 |
| LnGrp LOS | D | | A | A | A | A |
| Approach Vol, veh/h | 13 | | 988 | | | 1044 |
| Approach Delay, s/veh | 39.8 | | 0.1 | | | 1.2 |
| Approach LOS | D | | A | | | A |

| Timer - Assigned Phs | 2 | | | 6 | 8 |
|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 54.5 | | | 54.5 | 5.5 |
| Change Period (Y+Rc), s | 4.5 | | | 4.5 | 4.5 |
| Max Green Setting (Gmax), s | 31.5 | | | 31.5 | 19.5 |
| Max Q Clear Time (g_c+I1), s | 2.0 | | | 4.6 | 2.4 |
| Green Ext Time (p_c), s | 7.9 | | | 8.5 | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 0.9 |
| HCM 7th LOS | A |

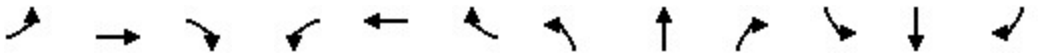
**Notes**

User approved pedestrian interval to be less than phase max green.

| Phase Number | 2 | 6 | 8 |
|---|---|---|---|
| Movement | NBT | SBTL | WBL |
| Lead/Lag | | | |
| Lead-Lag Optimize | | | |
| Recall Mode | C-Max | C-Max | None |
| Maximum Split (s) | 36 | 36 | 24 |
| Maximum Split (%) | 60.0% | 60.0% | 40.0% |
| Minimum Split (s) | 22.5 | 22.5 | 22.5 |
| Yellow Time (s) | 3.5 | 3.5 | 3.5 |
| All-Red Time (s) | 1 | 1 | 1 |
| Minimum Initial (s) | 5 | 5 | 5 |
| Vehicle Extension (s) | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 |
| Walk Time (s) | 7 | 7 | 7 |
| Flash Don't Walk (s) | 11 | 11 | 11 |
| Dual Entry | Yes | Yes | Yes |
| Inhibit Max | Yes | Yes | Yes |
| Start Time (s) | 28.5 | 28.5 | 4.5 |
| End Time (s) | 4.5 | 4.5 | 28.5 |
| Yield/Force Off (s) | 0 | 0 | 24 |
| Yield/Force Off 170(s) | 49 | 49 | 13 |
| Local Start Time (s) | 28.5 | 28.5 | 4.5 |
| Local Yield (s) | 0 | 0 | 24 |
| Local Yield 170(s) | 49 | 49 | 13 |

| Intersection Summary | |
|---|---|
| Cycle Length | 60 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 45 |
| Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Yellow | |

Splits and Phases: 1: Ellsworth Road & Serenity Avenue



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 322 | 227 | 238 | 307 | 99 | 99 | 173 | 488 | 373 | 194 | 590 | 191 |
| Future Volume (veh/h) | 322 | 227 | 238 | 307 | 99 | 99 | 173 | 488 | 373 | 194 | 590 | 191 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 350 | 247 | 259 | 334 | 108 | 108 | 188 | 530 | 405 | 211 | 641 | 208 |
| 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 | 806 | 1458 | 453 | 410 | 872 | 271 | 432 | 1298 | 591 | 490 | 1425 | 812 |
| Arrive On Green | 0.23 | 0.29 | 0.29 | 0.12 | 0.17 | 0.17 | 0.13 | 0.25 | 0.25 | 0.05 | 0.09 | 0.09 |
| Sat Flow, veh/h | 3456 | 5106 | 1585 | 3456 | 5106 | 1585 | 3456 | 5106 | 1585 | 3456 | 5106 | 1585 |
| Grp Volume(v), veh/h | 350 | 247 | 259 | 334 | 108 | 108 | 188 | 530 | 405 | 211 | 641 | 208 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1702 | 1585 | 1728 | 1702 | 1585 | 1728 | 1702 | 1585 | 1728 | 1702 | 1585 |
| Q Serve(g_s), s | 10.4 | 4.4 | 16.7 | 11.3 | 2.2 | 7.3 | 6.0 | 10.4 | 25.8 | 7.1 | 14.3 | 10.1 |
| Cycle Q Clear(g_c), s | 10.4 | 4.4 | 16.7 | 11.3 | 2.2 | 7.3 | 6.0 | 10.4 | 25.8 | 7.1 | 14.3 | 10.1 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 806 | 1458 | 453 | 410 | 872 | 271 | 432 | 1298 | 591 | 490 | 1425 | 812 |
| V/C Ratio(X) | 0.43 | 0.17 | 0.57 | 0.81 | 0.12 | 0.40 | 0.44 | 0.41 | 0.69 | 0.43 | 0.45 | 0.26 |
| Avail Cap(c_a), veh/h | 806 | 1458 | 453 | 720 | 872 | 271 | 432 | 1298 | 591 | 490 | 1425 | 812 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.33 | 0.33 | 0.33 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.66 | 0.66 | 0.66 | 0.99 | 0.99 | 0.99 |
| Uniform Delay (d), s/veh | 39.2 | 32.2 | 36.6 | 51.6 | 42.1 | 44.3 | 48.6 | 37.2 | 31.7 | 52.5 | 45.7 | 21.1 |
| Incr Delay (d2), s/veh | 1.7 | 0.3 | 5.2 | 4.0 | 0.3 | 4.3 | 2.1 | 0.6 | 4.3 | 2.7 | 1.0 | 0.8 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 8.1 | 3.3 | 11.5 | 8.8 | 1.7 | 5.7 | 4.9 | 7.2 | 14.8 | 6.2 | 10.9 | 7.8 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 40.9 | 32.4 | 41.8 | 55.6 | 42.4 | 48.6 | 50.7 | 37.9 | 36.0 | 55.2 | 46.8 | 21.8 |
| LnGrp LOS | D | C | D | E | D | D | D | D | D | E | D | C |
| Approach Vol, veh/h | | 856 | | | 550 | | | 1123 | | | 1060 | |
| Approach Delay, s/veh | | 38.7 | | | 51.6 | | | 39.3 | | | 43.5 | |
| Approach LOS | | D | | | D | | | D | | | D | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 33.0 | 27.0 | 19.0 | 41.0 | 19.2 | 40.8 | 22.0 | 38.0 |
| Change Period (Y+Rc), s | 5.0 | 6.5 | 4.0 | 7.5 | 5.0 | 6.5 | 5.0 | 7.5 |
| Max Green Setting (Gmax), s | 28.0 | 20.5 | 15.0 | 33.5 | 25.0 | 23.5 | 17.0 | 30.5 |
| Max Q Clear Time (g_c+I1), s | 12.4 | 9.3 | 8.0 | 16.3 | 13.3 | 18.7 | 9.1 | 27.8 |
| Green Ext Time (p_c), s | 1.1 | 0.7 | 0.3 | 4.8 | 0.9 | 1.1 | 0.4 | 1.4 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 42.3 |
| HCM 7th LOS | D |

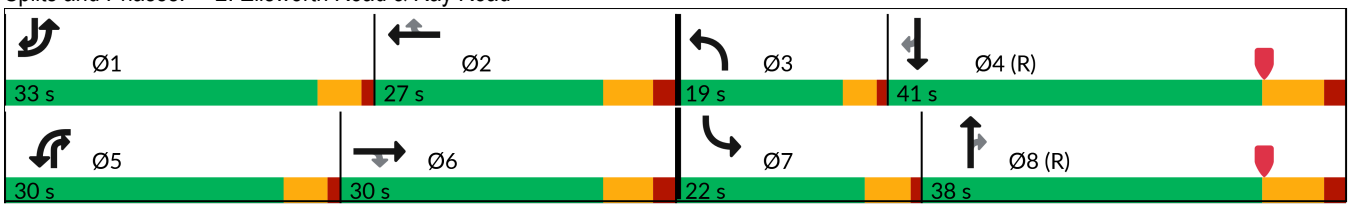
**Notes**

User approved pedestrian interval to be less than phase max green.

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | EBL | WBT | NBL | SBT | WBL | EBT | SBL | NBT |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | Max | Max | Max | C-Max | None | Max | Max | C-Max |
| Maximum Split (s) | 33 | 27 | 19 | 41 | 30 | 30 | 22 | 38 |
| Maximum Split (%) | 27.5% | 22.5% | 15.8% | 34.2% | 25.0% | 25.0% | 18.3% | 31.7% |
| Minimum Split (s) | 10 | 34.5 | 12 | 37.5 | 10 | 35.5 | 12 | 37.5 |
| Yellow Time (s) | 4 | 4.5 | 3 | 5.5 | 4 | 4.5 | 4 | 5.5 |
| All-Red Time (s) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| Minimum Initial (s) | 5 | 10 | 5 | 15 | 5 | 10 | 5 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 4 | | 4 | | 4 | | 4 |
| Flash Don't Walk (s) | | 22 | | 26 | | 23 | | 26 |
| Dual Entry | No | Yes | No | Yes | No | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 101.4 | 14.4 | 41.4 | 60.4 | 101.4 | 11.4 | 41.4 | 63.4 |
| End Time (s) | 14.4 | 41.4 | 60.4 | 101.4 | 11.4 | 41.4 | 63.4 | 101.4 |
| Yield/Force Off (s) | 9.4 | 34.9 | 56.4 | 93.9 | 6.4 | 34.9 | 58.4 | 93.9 |
| Yield/Force Off 170(s) | 9.4 | 12.9 | 56.4 | 67.9 | 6.4 | 11.9 | 58.4 | 67.9 |
| Local Start Time (s) | 7.5 | 40.5 | 67.5 | 86.5 | 7.5 | 37.5 | 67.5 | 89.5 |
| Local Yield (s) | 35.5 | 61 | 82.5 | 0 | 32.5 | 61 | 84.5 | 0 |
| Local Yield 170(s) | 35.5 | 39 | 82.5 | 94 | 32.5 | 38 | 84.5 | 94 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 95 |
| Offset: 93.9 (78%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow | |

Splits and Phases: 2: Ellsworth Road & Ray Road



| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 260 | 139 | 903 | 289 | 164 | 965 |
| Future Volume (veh/h) | 260 | 139 | 903 | 289 | 164 | 965 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 283 | 151 | 982 | 314 | 178 | 1049 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 1037 | 476 | 2435 | 756 | 239 | 3000 |
| Arrive On Green | 0.30 | 0.30 | 0.32 | 0.32 | 0.09 | 0.78 |
| Sat Flow, veh/h | 3456 | 1585 | 5274 | 1585 | 3456 | 5274 |
| Grp Volume(v), veh/h | 283 | 151 | 982 | 314 | 178 | 1049 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1585 | 1702 | 1585 | 1728 | 1702 |
| Q Serve(g_s), s | 7.5 | 8.8 | 18.0 | 18.7 | 6.0 | 7.4 |
| Cycle Q Clear(g_c), s | 7.5 | 8.8 | 18.0 | 18.7 | 6.0 | 7.4 |
| Prop In Lane | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Lane Grp Cap(c), veh/h | 1037 | 476 | 2435 | 756 | 239 | 3000 |
| V/C Ratio(X) | 0.27 | 0.32 | 0.40 | 0.42 | 0.75 | 0.35 |
| Avail Cap(c_a), veh/h | 1037 | 476 | 2435 | 756 | 1008 | 3000 |
| HCM Platoon Ratio | 1.00 | 1.00 | 0.67 | 0.67 | 1.33 | 1.33 |
| Upstream Filter(I) | 1.00 | 1.00 | 0.95 | 0.95 | 0.85 | 0.85 |
| Uniform Delay (d), s/veh | 32.0 | 32.5 | 27.5 | 27.7 | 53.5 | 6.2 |
| Incr Delay (d2), s/veh | 0.7 | 1.8 | 0.0 | 0.1 | 1.5 | 0.3 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 5.8 | 6.6 | 12.3 | 11.9 | 4.6 | 3.9 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 32.7 | 34.2 | 27.5 | 27.8 | 55.0 | 6.5 |
| LnGrp LOS | C | C | C | C | D | A |
| Approach Vol, veh/h | 434 | | 1296 | | | 1227 |
| Approach Delay, s/veh | 33.2 | | 27.6 | | | 13.5 |
| Approach LOS | C | | C | | | B |

| Timer - Assigned Phs | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 42.0 | 78.0 | 13.3 | 64.7 |
| Change Period (Y+Rc), s | 6.0 | 7.5 | 5.0 | 7.5 |
| Max Green Setting (Gmax), s | 36.0 | 70.5 | 35.0 | 30.5 |
| Max Q Clear Time (g_c+I1), s | 10.8 | 9.4 | 8.0 | 20.7 |
| Green Ext Time (p_c), s | 0.8 | 1.2 | 0.3 | 1.3 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 22.6 |
| HCM 7th LOS | C |

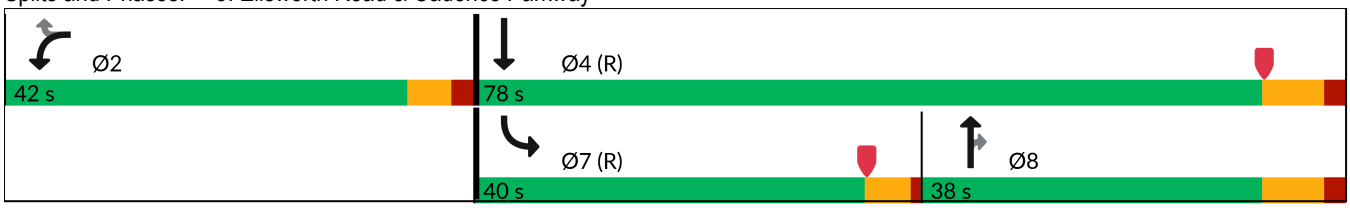
**Notes**

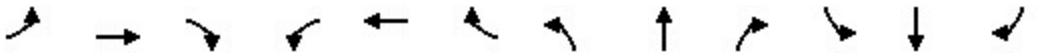
User approved pedestrian interval to be less than phase max green.

| Phase Number | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Movement | WBL | SBT | SBL | NBT |
| Lead/Lag | | | Lead | Lag |
| Lead-Lag Optimize | | | Yes | Yes |
| Recall Mode | Max | C-Max | C-Max | None |
| Maximum Split (s) | 42 | 78 | 40 | 38 |
| Maximum Split (%) | 35.0% | 65.0% | 33.3% | 31.7% |
| Minimum Split (s) | 35.5 | 25.5 | 13 | 32.5 |
| Yellow Time (s) | 4 | 5.5 | 4 | 5.5 |
| All-Red Time (s) | 2 | 2 | 1 | 2 |
| Minimum Initial (s) | 10 | 15 | 5 | 15 |
| Vehicle Extension (s) | 2 | 0.2 | 2 | 0.2 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | 4 | | | 7 |
| Flash Don't Walk (s) | 25 | | | 18 |
| Dual Entry | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 43 | 85 | 85 | 5 |
| End Time (s) | 85 | 43 | 5 | 43 |
| Yield/Force Off (s) | 79 | 35.5 | 0 | 35.5 |
| Yield/Force Off 170(s) | 54 | 35.5 | 0 | 17.5 |
| Local Start Time (s) | 43 | 85 | 85 | 5 |
| Local Yield (s) | 79 | 35.5 | 0 | 35.5 |
| Local Yield 170(s) | 54 | 35.5 | 0 | 17.5 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 85 |
| Offset: 0 (0%), Referenced to phase 4:SBT and 7:SBL, Start of Yellow | |

Splits and Phases: 3: Ellsworth Road & Cadence Parkway





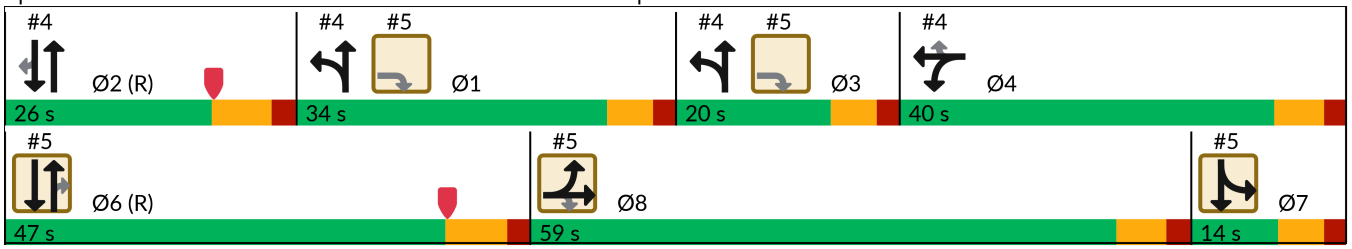
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 0 | 0 | 0 | 11 | 0 | 93 | 1260 | 1111 | 0 | 0 | 685 | 523 |
| Future Volume (vph) | 0 | 0 | 0 | 11 | 0 | 93 | 1260 | 1111 | 0 | 0 | 685 | 523 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | | 0 | 350 | | 350 | 525 | | 0 | 290 | | 285 |
| Storage Lanes | 0 | | 0 | 1 | | 1 | 0 | | 0 | 0 | | 2 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 0.91 | 0.86 | 0.91 | 0.97 | 0.91 | 1.00 | 1.00 | 0.86 | 0.88 |
| Frt | | | | | 0.853 | 0.850 | | | | | | 0.850 |
| Flt Protected | | | | 0.950 | 0.999 | | 0.950 | | | | | |
| Satd. Flow (prot) | 0 | 0 | 0 | 1610 | 2730 | 1441 | 3433 | 5085 | 0 | 0 | 6408 | 2787 |
| Flt Permitted | | | | 0.950 | 0.999 | | 0.950 | | | | | |
| Satd. Flow (perm) | 0 | 0 | 0 | 1610 | 2730 | 1441 | 3433 | 5085 | 0 | 0 | 6408 | 2787 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | | | 218 | 218 | | | | | | 568 |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 841 | | | 605 | | | 688 | | | 624 | |
| Travel Time (s) | | 19.1 | | | 13.8 | | | 15.6 | | | 14.2 | |
| 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 |
| Adj. Flow (vph) | 0 | 0 | 0 | 12 | 0 | 101 | 1370 | 1208 | 0 | 0 | 745 | 568 |
| Shared Lane Traffic (%) | | | | 10% | | 50% | | | | | | |
| Lane Group Flow (vph) | 0 | 0 | 0 | 11 | 52 | 50 | 1370 | 1208 | 0 | 0 | 745 | 568 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 24 | | | 24 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | | | | 1 | 2 | 1 | 1 | 2 | | | 2 | 1 |
| Detector Template | | | | Left | Thru | Right | Left | Thru | | | Thru | Right |
| Leading Detector (ft) | | | | 20 | 100 | 20 | 20 | 100 | | | 100 | 20 |
| Trailing Detector (ft) | | | | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 |
| Detector 1 Position(ft) | | | | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 |
| Detector 1 Size(ft) | | | | 20 | 6 | 20 | 20 | 6 | | | 6 | 20 |
| Detector 1 Type | | | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | | Cl+Ex | Cl+Ex |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Detector 1 Queue (s) | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Detector 1 Delay (s) | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Detector 2 Position(ft) | | | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | | | | Split | NA | Perm | Prot | NA | | | NA | Perm |
| Protected Phases | | | | 4 | 4 | | 1 3 | 1 2 3 | | | 2 | |
| Permitted Phases | | | | | | 4 | | | | | | 2 |

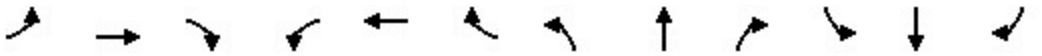
| Lane Group | Ø1 | Ø3 | Ø6 | Ø7 | Ø8 |
|---|---|---|---|---|---|
| Lane Configurations | | | | | |
| Traffic Volume (vph) | | | | | |
| Future Volume (vph) | | | | | |
| Ideal Flow (vphpl) | | | | | |
| Storage Length (ft) | | | | | |
| Storage Lanes | | | | | |
| Taper Length (ft) | | | | | |
| Lane Util. Factor | | | | | |
| Frt | | | | | |
| Flt Protected | | | | | |
| Satd. Flow (prot) | | | | | |
| Flt Permitted | | | | | |
| Satd. Flow (perm) | | | | | |
| Right Turn on Red | | | | | |
| Satd. Flow (RTOR) | | | | | |
| Link Speed (mph) | | | | | |
| Link Distance (ft) | | | | | |
| Travel Time (s) | | | | | |
| Peak Hour Factor | | | | | |
| Adj. Flow (vph) | | | | | |
| Shared Lane Traffic (%) | | | | | |
| Lane Group Flow (vph) | | | | | |
| Enter Blocked Intersection | | | | | |
| Lane Alignment | | | | | |
| Median Width(ft) | | | | | |
| Link Offset(ft) | | | | | |
| Crosswalk Width(ft) | | | | | |
| Two way Left Turn Lane | | | | | |
| Headway Factor | | | | | |
| Turning Speed (mph) | | | | | |
| Number of Detectors | | | | | |
| Detector Template | | | | | |
| Leading Detector (ft) | | | | | |
| Trailing Detector (ft) | | | | | |
| Detector 1 Position(ft) | | | | | |
| Detector 1 Size(ft) | | | | | |
| Detector 1 Type | | | | | |
| Detector 1 Channel | | | | | |
| Detector 1 Extend (s) | | | | | |
| Detector 1 Queue (s) | | | | | |
| Detector 1 Delay (s) | | | | | |
| Detector 2 Position(ft) | | | | | |
| Detector 2 Size(ft) | | | | | |
| Detector 2 Type | | | | | |
| Detector 2 Channel | | | | | |
| Detector 2 Extend (s) | | | | | |
| Turn Type | | | | | |
| Protected Phases | 1 | 3 | 6 | 7 | 8 |
| Permitted Phases | | | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | | | | 4 | 4 | 4 | 1 3 | 1 2 3 | | | 2 | 2 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | | | | 10.0 | 10.0 | 10.0 | | | | | 15.0 | 15.0 |
| Minimum Split (s) | | | | 48.5 | 48.5 | 48.5 | | | | | 25.5 | 25.5 |
| Total Split (s) | | | | 40.0 | 40.0 | 40.0 | | | | | 26.0 | 26.0 |
| Total Split (%) | | | | 33.3% | 33.3% | 33.3% | | | | | 21.7% | 21.7% |
| Maximum Green (s) | | | | 33.5 | 33.5 | 33.5 | | | | | 18.5 | 18.5 |
| Yellow Time (s) | | | | 4.5 | 4.5 | 4.5 | | | | | 5.5 | 5.5 |
| All-Red Time (s) | | | | 2.0 | 2.0 | 2.0 | | | | | 2.0 | 2.0 |
| Lost Time Adjust (s) | | | | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 |
| Total Lost Time (s) | | | | 6.5 | 6.5 | 6.5 | | | | | 7.5 | 7.5 |
| Lead/Lag | | | | Lag | Lag | Lag | | | | | Lead | Lead |
| Lead-Lag Optimize? | | | | Yes | Yes | Yes | | | | | Yes | Yes |
| Vehicle Extension (s) | | | | 4.0 | 4.0 | 4.0 | | | | | 2.0 | 2.0 |
| Recall Mode | | | | None | None | None | | | | | C-Max | C-Max |
| Walk Time (s) | | | | 4.0 | 4.0 | 4.0 | | | | | 4.0 | 4.0 |
| Flash Don't Walk (s) | | | | 38.0 | 38.0 | 38.0 | | | | | 13.0 | 13.0 |
| Pedestrian Calls (#/hr) | | | | 0 | 0 | 0 | | | | | 0 | 0 |
| Act Effct Green (s) | | | | 28.8 | 28.8 | 28.8 | 56.0 | 83.2 | | | 18.5 | 18.5 |
| Actuated g/C Ratio | | | | 0.24 | 0.24 | 0.24 | 0.47 | 0.69 | | | 0.15 | 0.15 |
| v/c Ratio | | | | 0.03 | 0.06 | 0.10 | 0.86 | 0.34 | | | 0.75 | 0.62 |
| Control Delay (s/veh) | | | | 31.8 | 0.1 | 0.4 | 24.7 | 3.4 | | | 42.4 | 6.7 |
| Queue Delay | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Total Delay (s/veh) | | | | 31.8 | 0.1 | 0.4 | 24.7 | 3.4 | | | 42.4 | 6.7 |
| LOS | | | | C | A | A | C | A | | | D | A |
| Approach Delay (s/veh) | | | | | 3.3 | | | 14.7 | | | 27.0 | |
| Approach LOS | | | | | A | | | B | | | C | |

| Intersection Summary | |
|---|---|
| Area Type: | Other |
| Cycle Length: 120 | |
| Actuated Cycle Length: 120 | |
| Offset: 0 (0%), Referenced to phase 2:NBSB and 6:, Start of Yellow | |
| Natural Cycle: 150 | |
| Control Type: Actuated-Coordinated | |
| Maximum v/c Ratio: 1.13 | |
| Intersection Signal Delay (s/veh): 18.4 | Intersection LOS: B |
| Intersection Capacity Utilization 92.0% | ICU Level of Service F |
| Analysis Period (min) 15 | |

Splits and Phases: 4: Ellsworth Road & SR24 Westbound Ramps





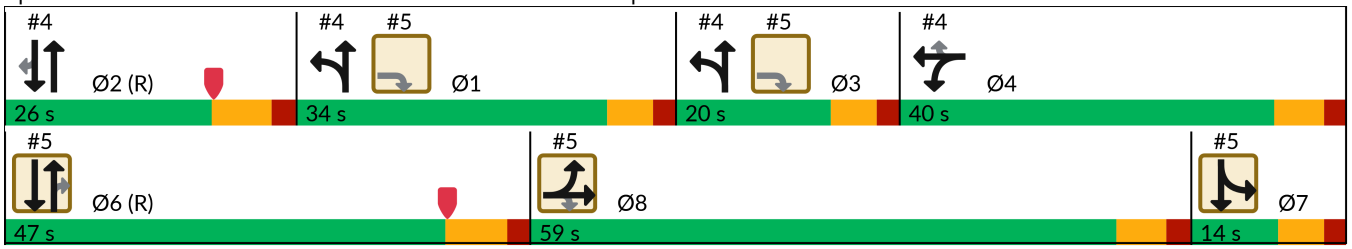
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 550 | 2 | 1952 | 0 | 0 | 0 | 0 | 1862 | 4 | 105 | 609 | 0 |
| Future Volume (vph) | 550 | 2 | 1952 | 0 | 0 | 0 | 0 | 1862 | 4 | 105 | 609 | 0 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 350 | | 350 | 0 | | 0 | 300 | | 300 | 550 | | 0 |
| Storage Lanes | 1 | | 2 | 0 | | 0 | 2 | | 1 | 0 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 0.95 | 0.95 | 0.88 | 1.00 | 1.00 | 1.00 | 1.00 | 0.81 | 1.00 | 0.97 | 0.91 | 1.00 |
| Frt | | | 0.850 | | | | | | 0.850 | | | |
| Flt Protected | 0.950 | 0.953 | | | | | | | | 0.950 | | |
| Satd. Flow (prot) | 1681 | 1686 | 2787 | 0 | 0 | 0 | 0 | 7544 | 1583 | 3433 | 5085 | 0 |
| Flt Permitted | 0.950 | 0.953 | | | | | | | | 0.950 | | |
| Satd. Flow (perm) | 1681 | 1686 | 2787 | 0 | 0 | 0 | 0 | 7544 | 1583 | 3433 | 5085 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 272 | | | | | | 200 | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 651 | | | 441 | | | 838 | | | 688 | |
| Travel Time (s) | | 14.8 | | | 10.0 | | | 19.0 | | | 15.6 | |
| 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 |
| Adj. Flow (vph) | 598 | 2 | 2122 | 0 | 0 | 0 | 0 | 2024 | 4 | 114 | 662 | 0 |
| Shared Lane Traffic (%) | 50% | | | | | | | | | | | |
| Lane Group Flow (vph) | 299 | 301 | 2122 | 0 | 0 | 0 | 0 | 2024 | 4 | 114 | 662 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 24 | | | 24 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | 1 | | | | | 2 | 1 | 1 | 2 | |
| Detector Template | Left | Thru | Right | | | | | Thru | Right | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | 20 | | | | | 100 | 20 | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | 0 | | | | | 0 | 0 | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | 0 | | | | | 0 | 0 | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | 20 | | | | | 6 | 20 | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | | | | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | | | | 0.0 | | | 0.0 | |
| Turn Type | Split | NA | custom | | | | | NA | Perm | Prot | NA | |
| Protected Phases | 8 | 8 | | | | | | 6 | | 7 | 6 7 | |
| Permitted Phases | | | 1 3 8 | | | | | | 6 | | | |

| Lane Group | Ø1 | Ø2 | Ø3 | Ø4 |
|---|---|---|---|---|
| Lane Configurations | | | | |
| Traffic Volume (vph) | | | | |
| Future Volume (vph) | | | | |
| Ideal Flow (vphpl) | | | | |
| Storage Length (ft) | | | | |
| Storage Lanes | | | | |
| Taper Length (ft) | | | | |
| Lane Util. Factor | | | | |
| Frt | | | | |
| Flt Protected | | | | |
| Satd. Flow (prot) | | | | |
| Flt Permitted | | | | |
| Satd. Flow (perm) | | | | |
| Right Turn on Red | | | | |
| Satd. Flow (RTOR) | | | | |
| Link Speed (mph) | | | | |
| Link Distance (ft) | | | | |
| Travel Time (s) | | | | |
| Peak Hour Factor | | | | |
| Adj. Flow (vph) | | | | |
| Shared Lane Traffic (%) | | | | |
| Lane Group Flow (vph) | | | | |
| Enter Blocked Intersection | | | | |
| Lane Alignment | | | | |
| Median Width(ft) | | | | |
| Link Offset(ft) | | | | |
| Crosswalk Width(ft) | | | | |
| Two way Left Turn Lane | | | | |
| Headway Factor | | | | |
| Turning Speed (mph) | | | | |
| Number of Detectors | | | | |
| Detector Template | | | | |
| Leading Detector (ft) | | | | |
| Trailing Detector (ft) | | | | |
| Detector 1 Position(ft) | | | | |
| Detector 1 Size(ft) | | | | |
| Detector 1 Type | | | | |
| Detector 1 Channel | | | | |
| Detector 1 Extend (s) | | | | |
| Detector 1 Queue (s) | | | | |
| Detector 1 Delay (s) | | | | |
| Detector 2 Position(ft) | | | | |
| Detector 2 Size(ft) | | | | |
| Detector 2 Type | | | | |
| Detector 2 Channel | | | | |
| Detector 2 Extend (s) | | | | |
| Turn Type | | | | |
| Protected Phases | 1 | 2 | 3 | 4 |
| Permitted Phases | | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | 8 | 8 | 1 3 8 | | | | | 6 | 6 | 7 | 6 7 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | | | | | 15.0 | 15.0 | 5.0 | | |
| Minimum Split (s) | 46.5 | 46.5 | | | | | | 26.5 | 26.5 | 11.0 | | |
| Total Split (s) | 59.0 | 59.0 | | | | | | 47.0 | 47.0 | 14.0 | | |
| Total Split (%) | 49.2% | 49.2% | | | | | | 39.2% | 39.2% | 11.7% | | |
| Maximum Green (s) | 52.5 | 52.5 | | | | | | 39.5 | 39.5 | 8.0 | | |
| Yellow Time (s) | 4.5 | 4.5 | | | | | | 5.5 | 5.5 | 4.0 | | |
| All-Red Time (s) | 2.0 | 2.0 | | | | | | 2.0 | 2.0 | 2.0 | | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | | | | | 0.0 | 0.0 | 0.0 | | |
| Total Lost Time (s) | 6.5 | 6.5 | | | | | | 7.5 | 7.5 | 6.0 | | |
| Lead/Lag | Lead | Lead | | | | | | | | Lag | | |
| Lead-Lag Optimize? | Yes | Yes | | | | | | | | Yes | | |
| Vehicle Extension (s) | 4.0 | 4.0 | | | | | | 2.0 | 2.0 | 3.0 | | |
| Recall Mode | None | None | | | | | | C-Max | C-Max | None | | |
| Walk Time (s) | 4.0 | 4.0 | | | | | | 4.0 | 4.0 | | | |
| Flash Don't Walk (s) | 36.0 | 36.0 | | | | | | 15.0 | 15.0 | | | |
| Pedestrian Calls (#/hr) | 0 | 0 | | | | | | 0 | 0 | | | |
| Act Effct Green (s) | 52.5 | 52.5 | 76.8 | | | | | 39.5 | 39.5 | 8.0 | 53.5 | |
| Actuated g/C Ratio | 0.44 | 0.44 | 0.64 | | | | | 0.33 | 0.33 | 0.07 | 0.45 | |
| v/c Ratio | 0.41 | 0.41 | 1.13 | | | | | 0.82 | 0.01 | 0.50 | 0.29 | |
| Control Delay (s/veh) | 25.2 | 25.2 | 86.1 | | | | | 20.5 | 0.0 | 89.1 | 1.4 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Delay (s/veh) | 25.2 | 25.2 | 86.1 | | | | | 20.5 | 0.0 | 89.1 | 1.4 | |
| LOS | C | C | F | | | | | C | A | F | A | |
| Approach Delay (s/veh) | | 72.7 | | | | | | 20.4 | | | 14.3 | |
| Approach LOS | | E | | | | | | C | | | B | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 120 | | | |
| Actuated Cycle Length: 120 | | | |
| Offset: 0 (0%), Referenced to phase 2:NBSB and 6:, Start of Yellow | | | |
| Natural Cycle: 150 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 1.13 | | | |
| Intersection Signal Delay (s/veh): 45.3 | | Intersection LOS: D | |
| Intersection Capacity Utilization 92.0% | | ICU Level of Service F | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 5: Ellsworth Road & SR24 Eastbound Ramps



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 94 | 56 | 26 | 79 | 39 | 64 | 17 | 1545 | 64 | 409 | 2205 | 51 |
| Future Volume (veh/h) | 94 | 56 | 26 | 79 | 39 | 64 | 17 | 1545 | 64 | 409 | 2205 | 51 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 102 | 61 | 28 | 86 | 42 | 70 | 18 | 1679 | 70 | 445 | 2397 | 55 |
| 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 | 153 | 468 | 209 | 144 | 459 | 434 | 65 | 2461 | 764 | 499 | 3143 | 72 |
| Arrive On Green | 0.04 | 0.13 | 0.13 | 0.04 | 0.13 | 0.13 | 0.01 | 0.16 | 0.16 | 0.29 | 1.00 | 1.00 |
| Sat Flow, veh/h | 3456 | 3554 | 1585 | 3456 | 3554 | 1585 | 3456 | 5106 | 1585 | 3456 | 5136 | 117 |
| Grp Volume(v), veh/h | 102 | 61 | 28 | 86 | 42 | 70 | 18 | 1679 | 70 | 445 | 1586 | 866 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1777 | 1585 | 1728 | 1777 | 1585 | 1728 | 1702 | 1585 | 1728 | 1702 | 1849 |
| Q Serve(g_s), s | 3.5 | 1.8 | 1.9 | 2.9 | 1.2 | 4.0 | 0.6 | 37.2 | 4.5 | 14.8 | 0.0 | 0.0 |
| Cycle Q Clear(g_c), s | 3.5 | 1.8 | 1.9 | 2.9 | 1.2 | 4.0 | 0.6 | 37.2 | 4.5 | 14.8 | 0.0 | 0.0 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.06 |
| Lane Grp Cap(c), veh/h | 153 | 468 | 209 | 144 | 459 | 434 | 65 | 2461 | 764 | 499 | 2083 | 1132 |
| V/C Ratio(X) | 0.67 | 0.13 | 0.13 | 0.60 | 0.09 | 0.16 | 0.28 | 0.68 | 0.09 | 0.89 | 0.76 | 0.77 |
| Avail Cap(c_a), veh/h | 202 | 468 | 209 | 202 | 459 | 434 | 216 | 2461 | 764 | 662 | 2083 | 1132 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.33 | 0.33 | 0.33 | 2.00 | 2.00 | 2.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 0.99 | 0.99 | 0.99 | 0.79 | 0.79 | 0.79 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 56.5 | 46.0 | 46.0 | 56.5 | 46.0 | 33.1 | 58.8 | 41.8 | 28.0 | 41.8 | 0.0 | 0.0 |
| Incr Delay (d2), s/veh | 2.1 | 0.0 | 0.1 | 1.5 | 0.4 | 0.8 | 0.7 | 1.2 | 0.2 | 9.8 | 2.7 | 5.0 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 2.8 | 1.5 | 1.3 | 2.4 | 1.0 | 3.0 | 0.5 | 23.3 | 3.2 | 10.1 | 1.4 | 2.8 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 58.6 | 46.1 | 46.1 | 58.0 | 46.4 | 33.9 | 59.5 | 43.0 | 28.2 | 51.5 | 2.7 | 5.0 |
| LnGrp LOS | E | D | D | E | D | C | E | D | C | D | A | A |
| Approach Vol, veh/h | | 191 | | | 198 | | | 1767 | | | 2897 | |
| Approach Delay, s/veh | | 52.8 | | | 47.0 | | | 42.6 | | | 10.9 | |
| Approach LOS | | D | | | D | | | D | | | B | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 10.3 | 22.0 | 6.8 | 80.9 | 10.0 | 22.3 | 22.3 | 65.3 |
| Change Period (Y+Rc), s | 5.0 | 6.5 | 4.5 | 7.5 | 5.0 | 6.5 | 5.0 | 7.5 |
| Max Green Setting (Gmax), s | 7.0 | 15.5 | 7.5 | 66.5 | 7.0 | 15.5 | 23.0 | 50.5 |
| Max Q Clear Time (g_c+I1), s | 5.5 | 6.0 | 2.6 | 2.0 | 4.9 | 3.9 | 16.8 | 39.2 |
| Green Ext Time (p_c), s | 0.0 | 0.1 | 0.0 | 24.9 | 0.0 | 0.2 | 0.5 | 6.7 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 25.0 |
| HCM 7th LOS | C |

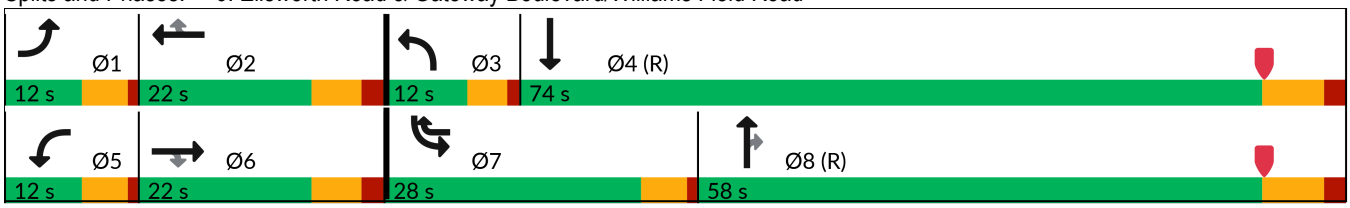
**Notes**

User approved pedestrian interval to be less than phase max green.

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | EBL | WBT | NBL | SBT | WBL | EBT | SBL | NBT |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | None | Max | None | C-Max | None | None | None | C-Max |
| Maximum Split (s) | 12 | 22 | 12 | 74 | 12 | 22 | 28 | 58 |
| Maximum Split (%) | 10.0% | 18.3% | 10.0% | 61.7% | 10.0% | 18.3% | 23.3% | 48.3% |
| Minimum Split (s) | 11 | 36.5 | 10.5 | 35.5 | 24 | 37.5 | 11 | 37.5 |
| Yellow Time (s) | 4 | 4.5 | 3.5 | 5.5 | 4 | 4.5 | 4 | 5.5 |
| All-Red Time (s) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| Minimum Initial (s) | 5 | 15 | 5 | 15 | 5 | 15 | 5 | 15 |
| Vehicle Extension (s) | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 2 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 4 | | 7 | | 4 | | 7 |
| Flash Don't Walk (s) | | 26 | | 21 | | 27 | | 23 |
| Dual Entry | No | Yes | No | Yes | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 64 | 76 | 98 | 110 | 64 | 76 | 98 | 6 |
| End Time (s) | 76 | 98 | 110 | 64 | 76 | 98 | 6 | 64 |
| Yield/Force Off (s) | 71 | 91.5 | 105.5 | 56.5 | 71 | 91.5 | 1 | 56.5 |
| Yield/Force Off 170(s) | 71 | 65.5 | 105.5 | 35.5 | 71 | 64.5 | 1 | 33.5 |
| Local Start Time (s) | 7.5 | 19.5 | 41.5 | 53.5 | 7.5 | 19.5 | 41.5 | 69.5 |
| Local Yield (s) | 14.5 | 35 | 49 | 0 | 14.5 | 35 | 64.5 | 0 |
| Local Yield 170(s) | 14.5 | 9 | 49 | 99 | 14.5 | 8 | 64.5 | 97 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 150 |
| Offset: 56.5 (47%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow | |

Splits and Phases: 6: Ellsworth Road & Gateway Boulevard/Williams Field Road



| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 46 | 19 | 1620 | 262 | 30 | 2296 |
| Future Volume (veh/h) | 46 | 19 | 1620 | 262 | 30 | 2296 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 50 | 21 | 1761 | 285 | 33 | 2496 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 861 | 383 | 2943 | 914 | 96 | 3298 |
| Arrive On Green | 0.24 | 0.24 | 1.00 | 1.00 | 0.06 | 1.00 |
| Sat Flow, veh/h | 3563 | 1585 | 5274 | 1585 | 3456 | 5274 |
| Grp Volume(v), veh/h | 50 | 21 | 1761 | 285 | 33 | 2496 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1585 | 1702 | 1585 | 1728 | 1702 |
| Q Serve(g_s), s | 1.3 | 1.2 | 0.0 | 0.0 | 1.1 | 0.0 |
| Cycle Q Clear(g_c), s | 1.3 | 1.2 | 0.0 | 0.0 | 1.1 | 0.0 |
| Prop In Lane | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Lane Grp Cap(c), veh/h | 861 | 383 | 2943 | 914 | 96 | 3298 |
| V/C Ratio(X) | 0.06 | 0.05 | 0.60 | 0.31 | 0.34 | 0.76 |
| Avail Cap(c_a), veh/h | 861 | 383 | 2943 | 914 | 173 | 3298 |
| HCM Platoon Ratio | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 0.66 | 0.66 | 0.56 | 0.56 |
| Uniform Delay (d), s/veh | 35.0 | 35.0 | 0.0 | 0.0 | 55.6 | 0.0 |
| Incr Delay (d2), s/veh | 0.1 | 0.3 | 0.6 | 0.6 | 1.2 | 0.9 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 1.0 | 0.9 | 0.3 | 0.3 | 0.9 | 0.5 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 35.1 | 35.2 | 0.6 | 0.6 | 56.8 | 0.9 |
| LnGrp LOS | D | D | A | A | E | A |
| Approach Vol, veh/h | 71 | | 2046 | | | 2529 |
| Approach Delay, s/veh | 35.2 | | 0.6 | | | 1.7 |
| Approach LOS | D | | A | | | A |

| Timer - Assigned Phs | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 35.0 | 85.0 | 8.3 | 76.7 |
| Change Period (Y+Rc), s | 6.0 | 7.5 | 5.0 | 7.5 |
| Max Green Setting (Gmax), s | 29.0 | 77.5 | 6.0 | 66.5 |
| Max Q Clear Time (g_c+I1), s | 3.3 | 2.0 | 3.1 | 2.0 |
| Green Ext Time (p_c), s | 0.2 | 41.5 | 0.0 | 22.3 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 1.7 |
| HCM 7th LOS | A |

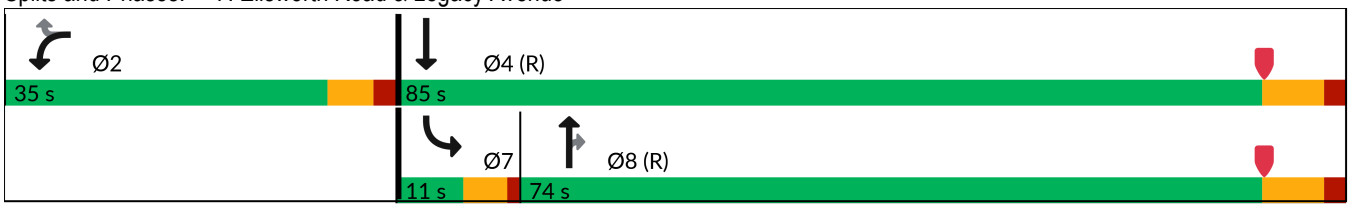
**Notes**

User approved volume balancing among the lanes for turning movement.

| Phase Number | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Movement | WBL | SBT | SBL | NBT |
| Lead/Lag | | | Lead | Lag |
| Lead-Lag Optimize | | | Yes | Yes |
| Recall Mode | Max | C-Max | None | C-Max |
| Maximum Split (s) | 35 | 85 | 11 | 74 |
| Maximum Split (%) | 29.2% | 70.8% | 9.2% | 61.7% |
| Minimum Split (s) | 35 | 39.5 | 10 | 26.5 |
| Yellow Time (s) | 4 | 5.5 | 4 | 5.5 |
| All-Red Time (s) | 2 | 2 | 1 | 2 |
| Minimum Initial (s) | 10 | 15 | 5 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | 4 | 4 | | 7 |
| Flash Don't Walk (s) | 25 | 28 | | 12 |
| Dual Entry | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 7.5 | 42.5 | 42.5 | 53.5 |
| End Time (s) | 42.5 | 7.5 | 53.5 | 7.5 |
| Yield/Force Off (s) | 36.5 | 0 | 48.5 | 0 |
| Yield/Force Off 170(s) | 11.5 | 92 | 48.5 | 108 |
| Local Start Time (s) | 7.5 | 42.5 | 42.5 | 53.5 |
| Local Yield (s) | 36.5 | 0 | 48.5 | 0 |
| Local Yield 170(s) | 11.5 | 92 | 48.5 | 108 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 90 |
| Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow | |

Splits and Phases: 7: Ellsworth Road & Legacy Avenue



| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 61 | 97 | 1810 | 58 | 250 | 2102 |
| Future Volume (veh/h) | 61 | 97 | 1810 | 58 | 250 | 2102 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 66 | 105 | 1967 | 63 | 272 | 2285 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 275 | 244 | 3030 | 941 | 306 | 3723 |
| Arrive On Green | 0.15 | 0.15 | 0.59 | 0.59 | 0.10 | 0.73 |
| Sat Flow, veh/h | 1781 | 1585 | 5274 | 1585 | 1781 | 5274 |
| Grp Volume(v), veh/h | 66 | 105 | 1967 | 63 | 272 | 2285 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1585 | 1702 | 1585 | 1781 | 1702 |
| Q Serve(g_s), s | 3.9 | 7.2 | 30.6 | 2.0 | 9.1 | 26.3 |
| Cycle Q Clear(g_c), s | 3.9 | 7.2 | 30.6 | 2.0 | 9.1 | 26.3 |
| Prop In Lane | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Lane Grp Cap(c), veh/h | 275 | 244 | 3030 | 941 | 306 | 3723 |
| V/C Ratio(X) | 0.24 | 0.43 | 0.65 | 0.07 | 0.89 | 0.61 |
| Avail Cap(c_a), veh/h | 275 | 244 | 3030 | 941 | 509 | 3723 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 0.59 | 0.59 |
| Uniform Delay (d), s/veh | 44.6 | 46.0 | 16.1 | 10.3 | 28.6 | 8.0 |
| Incr Delay (d2), s/veh | 2.1 | 5.4 | 1.1 | 0.1 | 6.7 | 0.5 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 3.4 | 5.8 | 17.3 | 1.3 | 12.2 | 12.3 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 46.6 | 51.4 | 17.2 | 10.5 | 35.3 | 8.4 |
| LnGrp LOS | D | D | B | B | D | A |
| Approach Vol, veh/h | 171 | | 2030 | | | 2557 |
| Approach Delay, s/veh | 49.6 | | 17.0 | | | 11.3 |
| Approach LOS | D | | B | | | B |

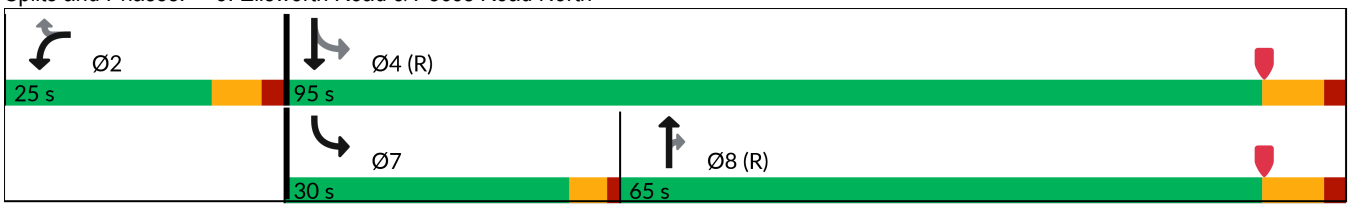
| Timer - Assigned Phs | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 25.0 | 95.0 | 16.3 | 78.7 |
| Change Period (Y+Rc), s | 6.5 | 7.5 | 4.5 | 7.5 |
| Max Green Setting (Gmax), s | 18.5 | 87.5 | 25.5 | 57.5 |
| Max Q Clear Time (g_c+I1), s | 9.2 | 28.3 | 11.1 | 32.6 |
| Green Ext Time (p_c), s | 0.3 | 36.5 | 0.7 | 17.4 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 15.1 |
| HCM 7th LOS | B |

| Phase Number | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Movement | WBL | SBTL | SBL | NBT |
| Lead/Lag | | | Lead | Lag |
| Lead-Lag Optimize | | | Yes | Yes |
| Recall Mode | Max | C-Max | None | C-Max |
| Maximum Split (s) | 25 | 95 | 30 | 65 |
| Maximum Split (%) | 20.8% | 79.2% | 25.0% | 54.2% |
| Minimum Split (s) | 24.5 | 25.5 | 9.5 | 25.5 |
| Yellow Time (s) | 4.5 | 5.5 | 3.5 | 5.5 |
| All-Red Time (s) | 2 | 2 | 1 | 2 |
| Minimum Initial (s) | 5 | 15 | 5 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | 0 | 0 | | 0 |
| Flash Don't Walk (s) | 0 | 0 | | 0 |
| Dual Entry | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 7.5 | 32.5 | 32.5 | 62.5 |
| End Time (s) | 32.5 | 7.5 | 62.5 | 7.5 |
| Yield/Force Off (s) | 26 | 0 | 58 | 0 |
| Yield/Force Off 170(s) | 26 | 0 | 58 | 0 |
| Local Start Time (s) | 7.5 | 32.5 | 32.5 | 62.5 |
| Local Yield (s) | 26 | 0 | 58 | 0 |
| Local Yield 170(s) | 26 | 0 | 58 | 0 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 80 |
| Offset: 0 (0%), Referenced to phase 4:SBTL and 8:NBT, Start of Yellow | |

Splits and Phases: 8: Ellsworth Road & Pecos Road North



| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 417 | 96 | 135 | 139 | 48 | 14 |
| Future Volume (veh/h) | 417 | 96 | 135 | 139 | 48 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 453 | 104 | 147 | 151 | 52 | 15 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 1350 | 1144 | 793 | 1536 | 133 | 118 |
| Arrive On Green | 1.00 | 1.00 | 0.13 | 1.00 | 0.07 | 0.07 |
| Sat Flow, veh/h | 1870 | 1585 | 1781 | 1870 | 1781 | 1585 |
| Grp Volume(v), veh/h | 453 | 104 | 147 | 151 | 52 | 15 |
| Grp Sat Flow(s),veh/h/ln | 1870 | 1585 | 1781 | 1870 | 1781 | 1585 |
| Q Serve(g_s), s | 0.0 | 0.0 | 2.2 | 0.0 | 3.3 | 1.1 |
| Cycle Q Clear(g_c), s | 0.0 | 0.0 | 2.2 | 0.0 | 3.3 | 1.1 |
| Prop In Lane | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Lane Grp Cap(c), veh/h | 1350 | 1144 | 793 | 1536 | 133 | 118 |
| V/C Ratio(X) | 0.34 | 0.09 | 0.19 | 0.10 | 0.39 | 0.13 |
| Avail Cap(c_a), veh/h | 1350 | 1144 | 898 | 1536 | 327 | 291 |
| HCM Platoon Ratio | 2.00 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.72 | 0.72 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 0.0 | 0.0 | 2.3 | 0.0 | 52.9 | 51.9 |
| Incr Delay (d2), s/veh | 0.5 | 0.1 | 0.1 | 0.1 | 1.9 | 0.5 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 0.3 | 0.1 | 0.8 | 0.1 | 2.8 | 0.8 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 0.5 | 0.1 | 2.5 | 0.1 | 54.8 | 52.4 |
| LnGrp LOS | A | A | A | A | D | D |
| Approach Vol, veh/h | 557 | | | 298 | 67 | |
| Approach Delay, s/veh | 0.4 | | | 1.3 | 54.3 | |
| Approach LOS | A | | | A | D | |

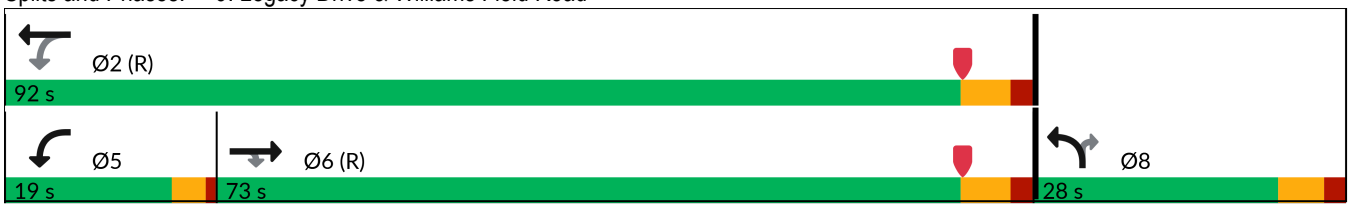
| Timer - Assigned Phs | 2 | | | 5 | 6 | 8 |
|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 105.1 | | | 11.9 | 93.1 | 14.9 |
| Change Period (Y+Rc), s | 6.5 | | | 4.0 | 6.5 | 6.0 |
| Max Green Setting (Gmax), s | 85.5 | | | 15.0 | 66.5 | 22.0 |
| Max Q Clear Time (g_c+I1), s | 2.0 | | | 4.2 | 2.0 | 5.3 |
| Green Ext Time (p_c), s | 0.8 | | | 0.2 | 3.1 | 0.1 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 4.6 |
| HCM 7th LOS | A |

| Phase Number | 2 | 5 | 6 | 8 |
|---|---|---|---|---|
| Movement | WBTL | WBL | EBT | NBL |
| Lead/Lag | | Lead | Lag | |
| Lead-Lag Optimize | | Yes | Yes | |
| Recall Mode | C-Max | None | C-Max | None |
| Maximum Split (s) | 92 | 19 | 73 | 28 |
| Maximum Split (%) | 76.7% | 15.8% | 60.8% | 23.3% |
| Minimum Split (s) | 24.5 | 12.5 | 24.5 | 24 |
| Yellow Time (s) | 4.5 | 3 | 4.5 | 4 |
| All-Red Time (s) | 2 | 1 | 2 | 2 |
| Minimum Initial (s) | 15 | 8 | 15 | 10 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | | | 7 | |
| Flash Don't Walk (s) | | | 11 | |
| Dual Entry | Yes | No | Yes | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 34.5 | 34.5 | 53.5 | 6.5 |
| End Time (s) | 6.5 | 53.5 | 6.5 | 34.5 |
| Yield/Force Off (s) | 0 | 49.5 | 0 | 28.5 |
| Yield/Force Off 170(s) | 0 | 49.5 | 109 | 28.5 |
| Local Start Time (s) | 34.5 | 34.5 | 53.5 | 6.5 |
| Local Yield (s) | 0 | 49.5 | 0 | 28.5 |
| Local Yield 170(s) | 0 | 49.5 | 109 | 28.5 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 65 |
| Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBT, Start of Yellow | |

Splits and Phases: 9: Legacy Drive & Williams Field Road



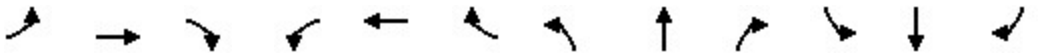
| Intersection | |
|---|---|
| Int Delay, s/veh | 2.6 |

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | ↑ | ↱ | | ↑ | | ↱ |
| Traffic Vol, veh/h | 245 | 180 | 150 | 279 | 0 | 119 |
| Future Vol, veh/h | 245 | 180 | 150 | 279 | 0 | 119 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 150 | - | - | - | - |
| 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 | 266 | 196 | 163 | 303 | 0 | 129 |

| Major/Minor | Major1 | | Major2 | | Minor1 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 0 | 0 | 462 | 0 | - | 266 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | - | 4.12 | - | - | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | 2.218 | - | - | 3.318 |
| Pot Cap-1 Maneuver | - | - | 1091 | - | 0 | 843 |
| Stage 1 | - | - | - | - | 0 | - |
| Stage 2 | - | - | - | - | 0 | - |
| Platoon blocked, % | - | - | 0 | - | | 0 |
| Mov Cap-1 Maneuver | - | - | 1091 | - | - | 843 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | WB | NB |
|---|---|---|---|
| HCM Control Delay, s/v | 0 | 3.1 | 10.05 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT |
|---|---|---|---|---|---|
| Capacity (veh/h) | 843 | - | - | 1091 | - |
| HCM Lane V/C Ratio | 0.154 | - | - | 0.149 | - |
| HCM Control Delay (s/veh) | 10 | - | - | 8.9 | - |
| HCM Lane LOS | B | - | - | A | - |
| HCM 95th %tile Q(veh) | 0.5 | - | - | 0.5 | - |



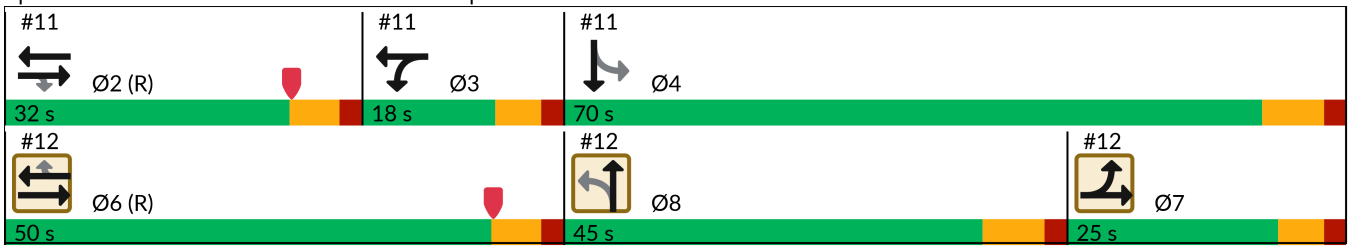
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 0 | 234 | 120 | 57 | 266 | 0 | 0 | 0 | 0 | 280 | 0 | 170 |
| Future Volume (vph) | 0 | 234 | 120 | 57 | 266 | 0 | 0 | 0 | 0 | 280 | 0 | 170 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 360 | | 285 | 290 | | 0 | 0 | | 0 | 400 | | 400 |
| Storage Lanes | 2 | | 1 | 0 | | 0 | 0 | | 0 | 2 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 1.00 | 0.86 | 1.00 | 0.97 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 0.91 | 0.91 | 0.95 |
| Frt | | | 0.850 | | | | | | | | 0.913 | |
| Flt Protected | | | | 0.950 | | | | | | 0.950 | 0.979 | |
| Satd. Flow (prot) | 0 | 6408 | 1583 | 3433 | 3539 | 0 | 0 | 0 | 0 | 1610 | 3030 | 0 |
| Flt Permitted | | | | 0.950 | | | | | | 0.950 | 0.979 | |
| Satd. Flow (perm) | 0 | 6408 | 1583 | 3433 | 3539 | 0 | 0 | 0 | 0 | 1610 | 3030 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 168 | | | | | | | | 185 | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 971 | | | 481 | | | 999 | | | 970 | |
| Travel Time (s) | | 22.1 | | | 10.9 | | | 22.7 | | | 22.0 | |
| 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 |
| Adj. Flow (vph) | 0 | 254 | 130 | 62 | 289 | 0 | 0 | 0 | 0 | 304 | 0 | 185 |
| Shared Lane Traffic (%) | | | | | | | | | | 44% | | |
| Lane Group Flow (vph) | 0 | 254 | 130 | 62 | 289 | 0 | 0 | 0 | 0 | 170 | 319 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 24 | | | 24 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | | 2 | 1 | 1 | 2 | | | | | 1 | 2 | |
| Detector Template | | Thru | Right | Left | Thru | | | | | Left | Thru | |
| Leading Detector (ft) | | 100 | 20 | 20 | 100 | | | | | 20 | 100 | |
| Trailing Detector (ft) | | 0 | 0 | 0 | 0 | | | | | 0 | 0 | |
| Detector 1 Position(ft) | | 0 | 0 | 0 | 0 | | | | | 0 | 0 | |
| Detector 1 Size(ft) | | 6 | 20 | 20 | 6 | | | | | 20 | 6 | |
| Detector 1 Type | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | | | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | | | | 0.0 | |
| Turn Type | | NA | Perm | Prot | NA | | | | | Perm | NA | |
| Protected Phases | | 2 | | 3 | 2 3 | | | | | | 4 | |
| Permitted Phases | | | 2 | | | | | | | 4 | | |

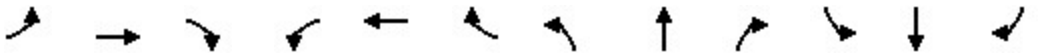
| Lane Group | Ø6 | Ø7 | Ø8 |
|---|---|---|---|
| Lane Configurations | | | |
| Traffic Volume (vph) | | | |
| Future Volume (vph) | | | |
| Ideal Flow (vphpl) | | | |
| Storage Length (ft) | | | |
| Storage Lanes | | | |
| Taper Length (ft) | | | |
| Lane Util. Factor | | | |
| Frt | | | |
| Flt Protected | | | |
| Satd. Flow (prot) | | | |
| Flt Permitted | | | |
| Satd. Flow (perm) | | | |
| Right Turn on Red | | | |
| Satd. Flow (RTOR) | | | |
| Link Speed (mph) | | | |
| Link Distance (ft) | | | |
| Travel Time (s) | | | |
| Peak Hour Factor | | | |
| Adj. Flow (vph) | | | |
| Shared Lane Traffic (%) | | | |
| Lane Group Flow (vph) | | | |
| Enter Blocked Intersection | | | |
| Lane Alignment | | | |
| Median Width(ft) | | | |
| Link Offset(ft) | | | |
| Crosswalk Width(ft) | | | |
| Two way Left Turn Lane | | | |
| Headway Factor | | | |
| Turning Speed (mph) | | | |
| Number of Detectors | | | |
| Detector Template | | | |
| Leading Detector (ft) | | | |
| Trailing Detector (ft) | | | |
| Detector 1 Position(ft) | | | |
| Detector 1 Size(ft) | | | |
| Detector 1 Type | | | |
| Detector 1 Channel | | | |
| Detector 1 Extend (s) | | | |
| Detector 1 Queue (s) | | | |
| Detector 1 Delay (s) | | | |
| Detector 2 Position(ft) | | | |
| Detector 2 Size(ft) | | | |
| Detector 2 Type | | | |
| Detector 2 Channel | | | |
| Detector 2 Extend (s) | | | |
| Turn Type | | | |
| Protected Phases | 6 | 7 | 8 |
| Permitted Phases | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | | 2 | 2 | 3 | 2 3 | | | | | 4 | 4 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | | 15.0 | 15.0 | 5.0 | | | | | | 10.0 | 10.0 | |
| Minimum Split (s) | | 25.5 | 25.5 | 11.0 | | | | | | 46.5 | 46.5 | |
| Total Split (s) | | 32.0 | 32.0 | 18.0 | | | | | | 70.0 | 70.0 | |
| Total Split (%) | | 26.7% | 26.7% | 15.0% | | | | | | 58.3% | 58.3% | |
| Maximum Green (s) | | 25.5 | 25.5 | 12.0 | | | | | | 62.5 | 62.5 | |
| Yellow Time (s) | | 4.5 | 4.5 | 4.0 | | | | | | 5.5 | 5.5 | |
| All-Red Time (s) | | 2.0 | 2.0 | 2.0 | | | | | | 2.0 | 2.0 | |
| Lost Time Adjust (s) | | 0.0 | 0.0 | 0.0 | | | | | | 0.0 | 0.0 | |
| Total Lost Time (s) | | 6.5 | 6.5 | 6.0 | | | | | | 7.5 | 7.5 | |
| Lead/Lag | | | | Lead | | | | | | Lag | Lag | |
| Lead-Lag Optimize? | | | | Yes | | | | | | Yes | Yes | |
| Vehicle Extension (s) | | 3.0 | 3.0 | 3.0 | | | | | | 3.0 | 3.0 | |
| Recall Mode | | C-Max | C-Max | None | | | | | | None | None | |
| Walk Time (s) | | 4.0 | 4.0 | | | | | | | 4.0 | 4.0 | |
| Flash Don't Walk (s) | | 15.0 | 15.0 | | | | | | | 35.0 | 35.0 | |
| Pedestrian Calls (#/hr) | | 0 | 0 | | | | | | | 0 | 0 | |
| Act Effct Green (s) | | 25.5 | 25.5 | 7.8 | 39.3 | | | | | 66.7 | 66.7 | |
| Actuated g/C Ratio | | 0.21 | 0.21 | 0.07 | 0.33 | | | | | 0.56 | 0.56 | |
| v/c Ratio | | 0.19 | 0.28 | 0.28 | 0.25 | | | | | 0.19 | 0.18 | |
| Control Delay (s/veh) | | 24.0 | 2.7 | 39.9 | 18.7 | | | | | 14.3 | 5.8 | |
| Queue Delay | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | |
| Total Delay (s/veh) | | 24.0 | 2.7 | 39.9 | 18.7 | | | | | 14.3 | 5.8 | |
| LOS | | C | A | D | B | | | | | B | A | |
| Approach Delay (s/veh) | | 16.8 | | | 22.4 | | | | | | 8.7 | |
| Approach LOS | | B | | | C | | | | | | A | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 120 | | | |
| Actuated Cycle Length: 120 | | | |
| Offset: 0 (0%), Referenced to phase 2:EBWB and 6:, Start of Yellow | | | |
| Natural Cycle: 85 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.52 | | | |
| Intersection Signal Delay (s/veh): 15.2 | | Intersection LOS: B | |
| Intersection Capacity Utilization 54.9% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 11: SR24 Eastbound Ramps & Williams Field Road





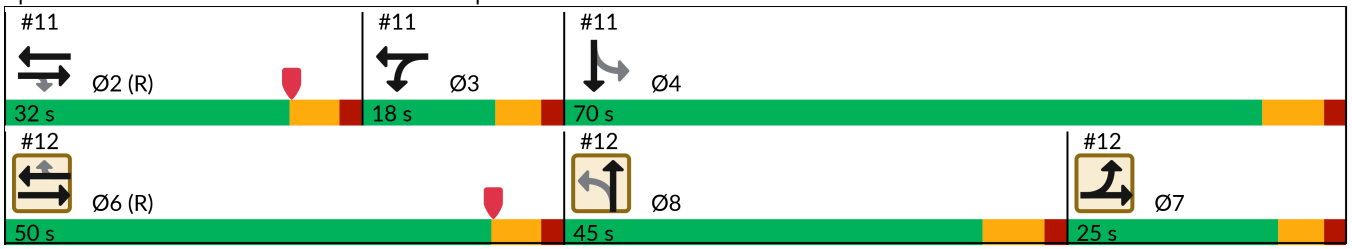
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 131 | 384 | 0 | 0 | 247 | 415 | 74 | 0 | 13 | 0 | 0 | 0 |
| Future Volume (vph) | 131 | 384 | 0 | 0 | 247 | 415 | 74 | 0 | 13 | 0 | 0 | 0 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 290 | | 0 | 365 | | 300 | 375 | | 375 | 0 | | 0 |
| Storage Lanes | 0 | | 0 | 2 | | 1 | 1 | | 1 | 0 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 0.97 | 0.95 | 1.00 | 1.00 | 0.86 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 |
| Frt | | | | | | 0.850 | | 0.850 | | | | |
| Flt Protected | 0.950 | | | | | | 0.950 | | | | | |
| Satd. Flow (prot) | 3433 | 3539 | 0 | 0 | 6408 | 1583 | 1770 | 3008 | 0 | 0 | 0 | 0 |
| Flt Permitted | 0.950 | | | | | | 0.950 | | | | | |
| Satd. Flow (perm) | 3433 | 3539 | 0 | 0 | 6408 | 1583 | 1770 | 3008 | 0 | 0 | 0 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | | | | 451 | | 425 | | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 481 | | | 1418 | | | 897 | | | 1176 | |
| Travel Time (s) | | 10.9 | | | 32.2 | | | 20.4 | | | 26.7 | |
| 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 |
| Adj. Flow (vph) | 142 | 417 | 0 | 0 | 268 | 451 | 80 | 0 | 14 | 0 | 0 | 0 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 142 | 417 | 0 | 0 | 268 | 451 | 80 | 14 | 0 | 0 | 0 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 24 | | | 24 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | | 2 | 1 | 1 | 2 | | | | |
| Detector Template | Left | Thru | | | Thru | Right | Left | Thru | | | | |
| Leading Detector (ft) | 20 | 100 | | | 100 | 20 | 20 | 100 | | | | |
| Trailing Detector (ft) | 0 | 0 | | | 0 | 0 | 0 | 0 | | | | |
| Detector 1 Position(ft) | 0 | 0 | | | 0 | 0 | 0 | 0 | | | | |
| Detector 1 Size(ft) | 20 | 6 | | | 6 | 20 | 20 | 6 | | | | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | | | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | | |
| Turn Type | Prot | NA | | | NA | Perm | Perm | NA | | | | |
| Protected Phases | 7 | 6 7 | | | 6 | | | 8 | | | | |
| Permitted Phases | | | | | | 6 | 8 | | | | | |

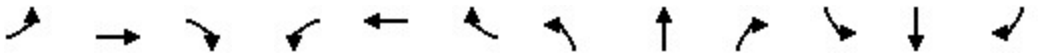
| Lane Group | Ø2 | Ø3 | Ø4 |
|---|---|---|---|
| Lane Configurations | | | |
| Traffic Volume (vph) | | | |
| Future Volume (vph) | | | |
| Ideal Flow (vphpl) | | | |
| Storage Length (ft) | | | |
| Storage Lanes | | | |
| Taper Length (ft) | | | |
| Lane Util. Factor | | | |
| Frt | | | |
| Flt Protected | | | |
| Satd. Flow (prot) | | | |
| Flt Permitted | | | |
| Satd. Flow (perm) | | | |
| Right Turn on Red | | | |
| Satd. Flow (RTOR) | | | |
| Link Speed (mph) | | | |
| Link Distance (ft) | | | |
| Travel Time (s) | | | |
| Peak Hour Factor | | | |
| Adj. Flow (vph) | | | |
| Shared Lane Traffic (%) | | | |
| Lane Group Flow (vph) | | | |
| Enter Blocked Intersection | | | |
| Lane Alignment | | | |
| Median Width(ft) | | | |
| Link Offset(ft) | | | |
| Crosswalk Width(ft) | | | |
| Two way Left Turn Lane | | | |
| Headway Factor | | | |
| Turning Speed (mph) | | | |
| Number of Detectors | | | |
| Detector Template | | | |
| Leading Detector (ft) | | | |
| Trailing Detector (ft) | | | |
| Detector 1 Position(ft) | | | |
| Detector 1 Size(ft) | | | |
| Detector 1 Type | | | |
| Detector 1 Channel | | | |
| Detector 1 Extend (s) | | | |
| Detector 1 Queue (s) | | | |
| Detector 1 Delay (s) | | | |
| Detector 2 Position(ft) | | | |
| Detector 2 Size(ft) | | | |
| Detector 2 Type | | | |
| Detector 2 Channel | | | |
| Detector 2 Extend (s) | | | |
| Turn Type | | | |
| Protected Phases | 2 | 3 | 4 |
| Permitted Phases | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | 7 | 6 7 | | | 6 | 6 | 8 | 8 | | | | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | | | | 15.0 | 15.0 | 10.0 | 10.0 | | | | |
| Minimum Split (s) | 11.0 | | | | 26.5 | 26.5 | 45.5 | 45.5 | | | | |
| Total Split (s) | 25.0 | | | | 50.0 | 50.0 | 45.0 | 45.0 | | | | |
| Total Split (%) | 20.8% | | | | 41.7% | 41.7% | 37.5% | 37.5% | | | | |
| Maximum Green (s) | 19.0 | | | | 43.5 | 43.5 | 37.5 | 37.5 | | | | |
| Yellow Time (s) | 4.0 | | | | 4.5 | 4.5 | 5.5 | 5.5 | | | | |
| All-Red Time (s) | 2.0 | | | | 2.0 | 2.0 | 2.0 | 2.0 | | | | |
| Lost Time Adjust (s) | 0.0 | | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Total Lost Time (s) | 6.0 | | | | 6.5 | 6.5 | 7.5 | 7.5 | | | | |
| Lead/Lag | Lag | | | | | | Lead | Lead | | | | |
| Lead-Lag Optimize? | Yes | | | | | | Yes | Yes | | | | |
| Vehicle Extension (s) | 3.0 | | | | 3.0 | 3.0 | 3.0 | 3.0 | | | | |
| Recall Mode | Max | | | | C-Max | C-Max | None | None | | | | |
| Walk Time (s) | | | | | 4.0 | 4.0 | 4.0 | 4.0 | | | | |
| Flash Don't Walk (s) | | | | | 16.0 | 16.0 | 34.0 | 34.0 | | | | |
| Pedestrian Calls (#/hr) | | | | | 0 | 0 | 0 | 0 | | | | |
| Act Effct Green (s) | 48.3 | 99.1 | | | 43.5 | 43.5 | 11.7 | 11.7 | | | | |
| Actuated g/C Ratio | 0.40 | 0.83 | | | 0.36 | 0.36 | 0.10 | 0.10 | | | | |
| v/c Ratio | 0.10 | 0.14 | | | 0.12 | 0.52 | 0.47 | 0.02 | | | | |
| Control Delay (s/veh) | 32.3 | 2.8 | | | 29.7 | 8.9 | 59.7 | 0.1 | | | | |
| Queue Delay | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Total Delay (s/veh) | 32.3 | 2.8 | | | 29.7 | 8.9 | 59.7 | 0.1 | | | | |
| LOS | C | A | | | C | A | E | A | | | | |
| Approach Delay (s/veh) | | 10.3 | | | 16.7 | | | 50.8 | | | | |
| Approach LOS | | B | | | B | | | D | | | | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 120 | | | |
| Actuated Cycle Length: 120 | | | |
| Offset: 0 (0%), Referenced to phase 2:EBWB and 6:, Start of Yellow | | | |
| Natural Cycle: 85 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.52 | | | |
| Intersection Signal Delay (s/veh): 16.4 | | Intersection LOS: B | |
| Intersection Capacity Utilization 54.9% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 12: SR24 Westbound Ramps & Williams Field Road





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 165 | 204 | 0 | 0 | 257 | 33 | 165 | 0 | 0 | 36 | 0 | 241 |
| Future Volume (veh/h) | 165 | 204 | 0 | 0 | 257 | 33 | 165 | 0 | 0 | 36 | 0 | 241 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 179 | 222 | 0 | 0 | 279 | 36 | 179 | 0 | 0 | 39 | 0 | 262 |
| 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 | 1708 | 762 | 486 | 1303 | 581 | 540 | 1170 | 522 | 559 | 1034 | 461 |
| Arrive On Green | 0.16 | 0.96 | 0.00 | 0.00 | 0.37 | 0.37 | 0.09 | 0.00 | 0.00 | 0.05 | 0.00 | 0.29 |
| Sat Flow, veh/h | 1781 | 3554 | 1585 | 1781 | 3554 | 1585 | 1781 | 3554 | 1585 | 1781 | 3554 | 1585 |
| Grp Volume(v), veh/h | 179 | 222 | 0 | 0 | 279 | 36 | 179 | 0 | 0 | 39 | 0 | 262 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1777 | 1585 | 1781 | 1777 | 1585 | 1781 | 1777 | 1585 | 1781 | 1777 | 1585 |
| Q Serve(g_s), s | 7.4 | 0.3 | 0.0 | 0.0 | 6.5 | 1.8 | 8.1 | 0.0 | 0.0 | 1.8 | 0.0 | 16.8 |
| Cycle Q Clear(g_c), s | 7.4 | 0.3 | 0.0 | 0.0 | 6.5 | 1.8 | 8.1 | 0.0 | 0.0 | 1.8 | 0.0 | 16.8 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 537 | 1708 | 762 | 486 | 1303 | 581 | 540 | 1170 | 522 | 559 | 1034 | 461 |
| V/C Ratio(X) | 0.33 | 0.13 | 0.00 | 0.00 | 0.21 | 0.06 | 0.33 | 0.00 | 0.00 | 0.07 | 0.00 | 0.57 |
| Avail Cap(c_a), veh/h | 675 | 1708 | 762 | 611 | 1303 | 581 | 667 | 1170 | 522 | 599 | 1034 | 461 |
| HCM Platoon Ratio | 2.00 | 2.00 | 2.00 | 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 | 0.00 | 0.00 | 0.99 | 0.99 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 17.9 | 1.2 | 0.0 | 0.0 | 26.1 | 24.6 | 24.5 | 0.0 | 0.0 | 26.8 | 0.0 | 36.1 |
| Incr Delay (d2), s/veh | 0.4 | 0.2 | 0.0 | 0.0 | 0.4 | 0.2 | 0.4 | 0.0 | 0.0 | 0.1 | 0.0 | 5.0 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 4.9 | 0.3 | 0.0 | 0.0 | 5.1 | 1.3 | 6.3 | 0.0 | 0.0 | 1.4 | 0.0 | 11.5 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 18.2 | 1.4 | 0.0 | 0.0 | 26.5 | 24.8 | 24.8 | 0.0 | 0.0 | 26.8 | 0.0 | 41.1 |
| LnGrp LOS | B | A | | | C | C | C | | | C | | D |
| Approach Vol, veh/h | | 401 | | | 315 | | | 179 | | | 301 | |
| Approach Delay, s/veh | | 8.9 | | | 26.3 | | | 24.8 | | | 39.3 | |
| Approach LOS | | A | | | C | | | C | | | D | |

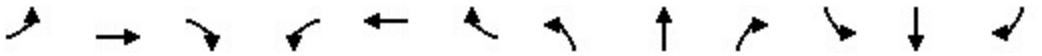
| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 13.7 | 50.5 | 14.4 | 41.4 | 0.0 | 64.2 | 9.8 | 46.0 |
| Change Period (Y+Rc), s | 4.0 | 6.5 | 4.0 | 6.5 | 4.0 | 6.5 | 4.0 | 6.5 |
| Max Green Setting (Gmax), s | 19.0 | 32.0 | 19.0 | 29.0 | 8.5 | 42.5 | 8.5 | 39.5 |
| Max Q Clear Time (g_c+I1), s | 9.4 | 8.5 | 10.1 | 18.8 | 0.0 | 2.3 | 3.8 | 0.0 |
| Green Ext Time (p_c), s | 0.3 | 1.9 | 0.3 | 0.6 | 0.0 | 1.5 | 0.0 | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 23.5 |
| HCM 7th LOS | C |

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | EBL | WBTL | NBL | SBTL | WBL | EBTL | SBL | NBTL |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | None | C-Max | None | Max | None | C-Max | None | Max |
| Maximum Split (s) | 23 | 38.5 | 23 | 35.5 | 12.5 | 49 | 12.5 | 46 |
| Maximum Split (%) | 19.2% | 32.1% | 19.2% | 29.6% | 10.4% | 40.8% | 10.4% | 38.3% |
| Minimum Split (s) | 12.5 | 38.5 | 12.5 | 35.5 | 12.5 | 40.5 | 12.5 | 36.5 |
| Yellow Time (s) | 3 | 4.5 | 3 | 4.5 | 3 | 4.5 | 3 | 4.5 |
| All-Red Time (s) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| Minimum Initial (s) | 8 | 15 | 8 | 15 | 8 | 15 | 8 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 7 | | 7 | | 7 | | 7 |
| Flash Don't Walk (s) | | 25 | | 22 | | 27 | | 23 |
| Dual Entry | No | Yes | No | Yes | No | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 65 | 88 | 6.5 | 29.5 | 65 | 77.5 | 6.5 | 19 |
| End Time (s) | 88 | 6.5 | 29.5 | 65 | 77.5 | 6.5 | 19 | 65 |
| Yield/Force Off (s) | 84 | 0 | 25.5 | 58.5 | 73.5 | 0 | 15 | 58.5 |
| Yield/Force Off 170(s) | 84 | 95 | 25.5 | 36.5 | 73.5 | 93 | 15 | 35.5 |
| Local Start Time (s) | 65 | 88 | 6.5 | 29.5 | 65 | 77.5 | 6.5 | 19 |
| Local Yield (s) | 84 | 0 | 25.5 | 58.5 | 73.5 | 0 | 15 | 58.5 |
| Local Yield 170(s) | 84 | 95 | 25.5 | 36.5 | 73.5 | 93 | 15 | 35.5 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 105 |
| Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow | |

Splits and Phases: 13: Williams Field Road & Crismon Road



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 114 | 106 | 23 | 4 | 116 | 26 | 17 | 291 | 4 | 28 | 445 | 145 |
| Future Volume (veh/h) | 114 | 106 | 23 | 4 | 116 | 26 | 17 | 291 | 4 | 28 | 445 | 145 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 124 | 115 | 25 | 4 | 126 | 28 | 18 | 316 | 4 | 30 | 484 | 158 |
| 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 | 686 | 1744 | 778 | 616 | 1540 | 687 | 259 | 1020 | 13 | 363 | 1051 | 469 |
| Arrive On Green | 0.07 | 0.49 | 0.49 | 0.01 | 0.43 | 0.43 | 0.03 | 0.28 | 0.28 | 0.04 | 0.30 | 0.30 |
| Sat Flow, veh/h | 1781 | 3554 | 1585 | 1781 | 3554 | 1585 | 1781 | 3594 | 45 | 1781 | 3554 | 1585 |
| Grp Volume(v), veh/h | 124 | 115 | 25 | 4 | 126 | 28 | 18 | 156 | 164 | 30 | 484 | 158 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1777 | 1585 | 1781 | 1777 | 1585 | 1781 | 1777 | 1862 | 1781 | 1777 | 1585 |
| Q Serve(g_s), s | 4.3 | 2.0 | 1.0 | 0.2 | 2.5 | 1.2 | 0.8 | 8.3 | 8.3 | 1.4 | 13.3 | 9.4 |
| Cycle Q Clear(g_c), s | 4.3 | 2.0 | 1.0 | 0.2 | 2.5 | 1.2 | 0.8 | 8.3 | 8.3 | 1.4 | 13.3 | 9.4 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.02 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 686 | 1744 | 778 | 616 | 1540 | 687 | 259 | 504 | 528 | 363 | 1051 | 469 |
| V/C Ratio(X) | 0.18 | 0.07 | 0.03 | 0.01 | 0.08 | 0.04 | 0.07 | 0.31 | 0.31 | 0.08 | 0.46 | 0.34 |
| Avail Cap(c_a), veh/h | 851 | 1744 | 778 | 720 | 1540 | 687 | 324 | 504 | 528 | 436 | 1051 | 469 |
| 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 | 15.2 | 16.1 | 15.8 | 18.7 | 20.0 | 19.6 | 29.1 | 33.7 | 33.7 | 28.0 | 34.4 | 33.0 |
| Incr Delay (d2), s/veh | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.3 | 0.3 | 0.1 | 1.5 | 1.9 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 3.2 | 1.5 | 0.7 | 0.1 | 1.9 | 0.9 | 0.7 | 6.5 | 6.9 | 1.1 | 10.0 | 7.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 15.3 | 16.2 | 15.9 | 18.7 | 20.1 | 19.7 | 29.2 | 34.1 | 34.1 | 28.1 | 35.9 | 35.0 |
| LnGrp LOS | B | B | B | B | C | B | C | C | C | C | D | C |
| Approach Vol, veh/h | | 264 | | | 158 | | | 338 | | | 672 | |
| Approach Delay, s/veh | | 15.7 | | | 20.0 | | | 33.8 | | | 35.3 | |
| Approach LOS | | B | | | B | | | C | | | D | |

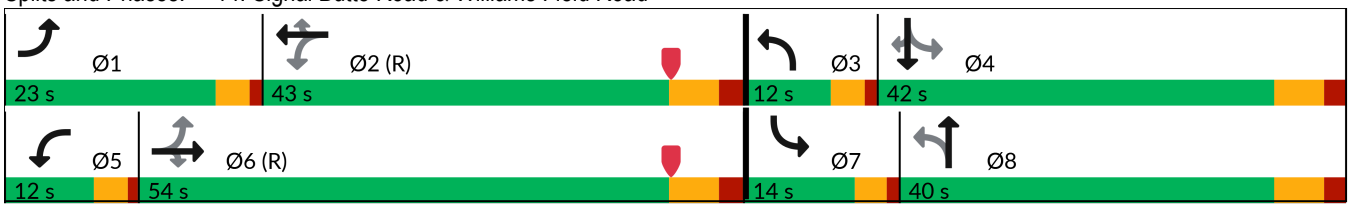
| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 11.9 | 58.5 | 7.6 | 42.0 | 5.0 | 65.4 | 9.1 | 40.6 |
| Change Period (Y+Rc), s | 4.0 | 6.5 | 4.0 | 6.5 | 4.0 | 6.5 | 4.0 | 6.5 |
| Max Green Setting (Gmax), s | 19.0 | 36.5 | 8.0 | 35.5 | 8.0 | 47.5 | 10.0 | 33.5 |
| Max Q Clear Time (g_c+I1), s | 6.3 | 4.5 | 2.8 | 15.3 | 2.2 | 4.0 | 3.4 | 10.3 |
| Green Ext Time (p_c), s | 0.2 | 0.9 | 0.0 | 3.7 | 0.0 | 0.8 | 0.0 | 1.8 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 29.7 |
| HCM 7th LOS | C |

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | EBL | WBTL | NBL | SBTL | WBL | EBTL | SBL | NBTL |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | None | C-Max | None | Max | None | C-Max | None | None |
| Maximum Split (s) | 23 | 43 | 12 | 42 | 12 | 54 | 14 | 40 |
| Maximum Split (%) | 19.2% | 35.8% | 10.0% | 35.0% | 10.0% | 45.0% | 11.7% | 33.3% |
| Minimum Split (s) | 12 | 38.5 | 12 | 35.5 | 12 | 40.5 | 12 | 36.5 |
| Yellow Time (s) | 3 | 4.5 | 3 | 4.5 | 3 | 4.5 | 3 | 4.5 |
| All-Red Time (s) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| Minimum Initial (s) | 8 | 15 | 8 | 15 | 8 | 15 | 8 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 7 | | 7 | | 7 | | 7 |
| Flash Don't Walk (s) | | 25 | | 22 | | 27 | | 23 |
| Dual Entry | No | Yes | No | Yes | No | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 97 | 0 | 43 | 55 | 97 | 109 | 43 | 57 |
| End Time (s) | 0 | 43 | 55 | 97 | 109 | 43 | 57 | 97 |
| Yield/Force Off (s) | 116 | 36.5 | 51 | 90.5 | 105 | 36.5 | 53 | 90.5 |
| Yield/Force Off 170(s) | 116 | 11.5 | 51 | 68.5 | 105 | 9.5 | 53 | 67.5 |
| Local Start Time (s) | 60.5 | 83.5 | 6.5 | 18.5 | 60.5 | 72.5 | 6.5 | 20.5 |
| Local Yield (s) | 79.5 | 0 | 14.5 | 54 | 68.5 | 0 | 16.5 | 54 |
| Local Yield 170(s) | 79.5 | 95 | 14.5 | 32 | 68.5 | 93 | 16.5 | 31 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 105 |
| Offset: 36.5 (30%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow | |

Splits and Phases: 14: Signal Butte Road & Williams Field Road



| Intersection | |
|---|---|
| Int Delay, s/veh | 0 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 0 | 0 | 0 | 1677 | 2565 | 0 |
| Future Vol, veh/h | 0 | 0 | 0 | 1677 | 2565 | 0 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 0 | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 0 | 0 | 1823 | 2788 | 0 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | - | 1394 | - | 0 | - | 0 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | 7.14 | - | - | - | - |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | 3.92 | - | - | - | - |
| Pot Cap-1 Maneuver | 0 | *492 | 0 | - | - | - |
| Stage 1 | 0 | - | 0 | - | - | - |
| Stage 2 | 0 | - | 0 | - | - | - |
| Platoon blocked, % | | 0 | | - | - | - |
| Mov Cap-1 Maneuver | - | *492 | - | - | - | - |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 0 | 0 | 0 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|
| Capacity (veh/h) | - | - | - | - |
| HCM Lane V/C Ratio | - | - | - | - |
| HCM Control Delay (s/veh) | - | 0 | - | - |
| HCM Lane LOS | - | A | - | - |
| HCM 95th %tile Q(veh) | - | - | - | - |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 207 | 79 | 25 | 1677 | 2506 | 59 |
| Future Volume (veh/h) | 207 | 79 | 25 | 1677 | 2506 | 59 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | 1.00 | | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 225 | 86 | 27 | 1823 | 2724 | 64 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 379 | 337 | 118 | 3489 | 3210 | 75 |
| Arrive On Green | 0.21 | 0.21 | 0.05 | 1.00 | 0.42 | 0.42 |
| Sat Flow, veh/h | 1781 | 1585 | 1781 | 5274 | 5301 | 120 |
| Grp Volume(v), veh/h | 225 | 86 | 27 | 1823 | 1801 | 987 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1585 | 1781 | 1702 | 1702 | 1849 |
| Q Serve(g_s), s | 13.7 | 5.4 | 0.6 | 0.0 | 57.1 | 58.0 |
| Cycle Q Clear(g_c), s | 13.7 | 5.4 | 0.6 | 0.0 | 57.1 | 58.0 |
| Prop In Lane | 1.00 | 1.00 | 1.00 | | | 0.06 |
| Lane Grp Cap(c), veh/h | 379 | 337 | 118 | 3489 | 2128 | 1156 |
| V/C Ratio(X) | 0.59 | 0.26 | 0.23 | 0.52 | 0.85 | 0.85 |
| Avail Cap(c_a), veh/h | 379 | 337 | 237 | 3489 | 2128 | 1156 |
| HCM Platoon Ratio | 1.00 | 1.00 | 2.00 | 2.00 | 0.67 | 0.67 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 42.6 | 39.3 | 26.3 | 0.0 | 29.7 | 29.9 |
| Incr Delay (d2), s/veh | 6.7 | 1.8 | 1.0 | 0.6 | 4.4 | 8.1 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 11.0 | 4.1 | 0.9 | 0.3 | 33.9 | 38.3 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 49.3 | 41.2 | 27.3 | 0.6 | 34.0 | 38.0 |
| LnGrp LOS | D | D | C | A | C | D |
| Approach Vol, veh/h | 311 | | | 1850 | 2788 | |
| Approach Delay, s/veh | 47.1 | | | 1.0 | 35.4 | |
| Approach LOS | D | | | A | D | |

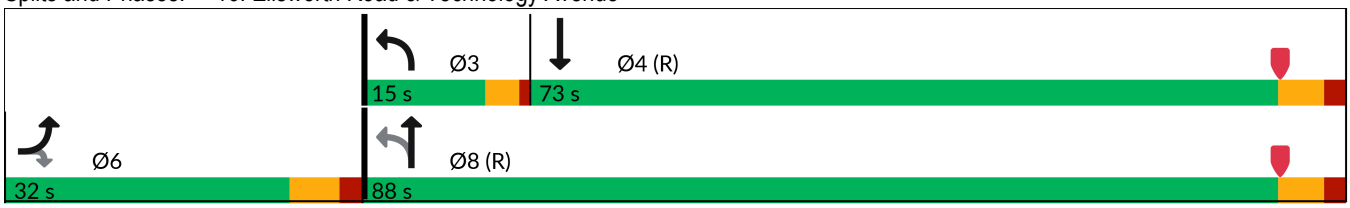
| Timer - Assigned Phs | | 3 | 4 | | 6 | 8 |
|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 7.0 | 81.0 | | 32.0 | 88.0 |
| Change Period (Y+Rc), s | | 4.0 | 6.0 | | 6.5 | 6.0 |
| Max Green Setting (Gmax), s | | 11.0 | 67.0 | | 25.5 | 82.0 |
| Max Q Clear Time (g_c+I1), s | | 2.6 | 60.0 | | 15.7 | 2.0 |
| Green Ext Time (p_c), s | | 0.0 | 6.7 | | 0.7 | 27.0 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 23.3 |
| HCM 7th LOS | C |

| Phase Number | 3 | 4 | 6 | 8 |
|---|---|---|---|---|
| Movement | NBL | SBT | EBL | NBTL |
| Lead/Lag | Lead | Lag | | |
| Lead-Lag Optimize | Yes | Yes | | |
| Recall Mode | None | C-Max | Max | C-Max |
| Maximum Split (s) | 15 | 73 | 32 | 88 |
| Maximum Split (%) | 12.5% | 60.8% | 26.7% | 73.3% |
| Minimum Split (s) | 9.5 | 24 | 24.5 | 24 |
| Yellow Time (s) | 3 | 4 | 4.5 | 4 |
| All-Red Time (s) | 1 | 2 | 2 | 2 |
| Minimum Initial (s) | 5 | 15 | 10 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 7 | 7 | 7 |
| Flash Don't Walk (s) | | 11 | 11 | 11 |
| Dual Entry | No | Yes | Yes | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 38 | 53 | 6 | 38 |
| End Time (s) | 53 | 6 | 38 | 6 |
| Yield/Force Off (s) | 49 | 0 | 31.5 | 0 |
| Yield/Force Off 170(s) | 49 | 109 | 20.5 | 109 |
| Local Start Time (s) | 38 | 53 | 6 | 38 |
| Local Yield (s) | 49 | 0 | 31.5 | 0 |
| Local Yield 170(s) | 49 | 109 | 20.5 | 109 |

| Intersection Summary | | |
|---|---|---|
| Cycle Length | 120 | |
| Control Type | Actuated-Coordinated | |
| Natural Cycle | 90 | |
| Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBTL, Start of Yellow | | |

Splits and Phases: 16: Ellsworth Road & Technology Avenue



| Intersection | |
|---|---|
| Int Delay, s/veh | 0.2 |

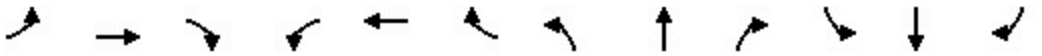
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 0 | 75 | 0 | 1694 | 2531 | 54 |
| Future Vol, veh/h | 0 | 75 | 0 | 1694 | 2531 | 54 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | 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 | 82 | 0 | 1841 | 2751 | 59 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | - | 1405 | - | 0 | - | 0 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | 7.14 | - | - | - | - |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | 3.92 | - | - | - | - |
| Pot Cap-1 Maneuver | 0 | *507 | 0 | - | - | - |
| Stage 1 | 0 | - | 0 | - | - | - |
| Stage 2 | 0 | - | 0 | - | - | - |
| Platoon blocked, % | | 0 | | - | - | - |
| Mov Cap-1 Maneuver | - | *507 | - | - | - | - |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 13.45 | 0 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|
| Capacity (veh/h) | - | 507 | - | - |
| HCM Lane V/C Ratio | - | 0.161 | - | - |
| HCM Control Delay (s/veh) | - | 13.4 | - | - |
| HCM Lane LOS | - | B | - | - |
| HCM 95th %tile Q(veh) | - | 0.6 | - | - |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |



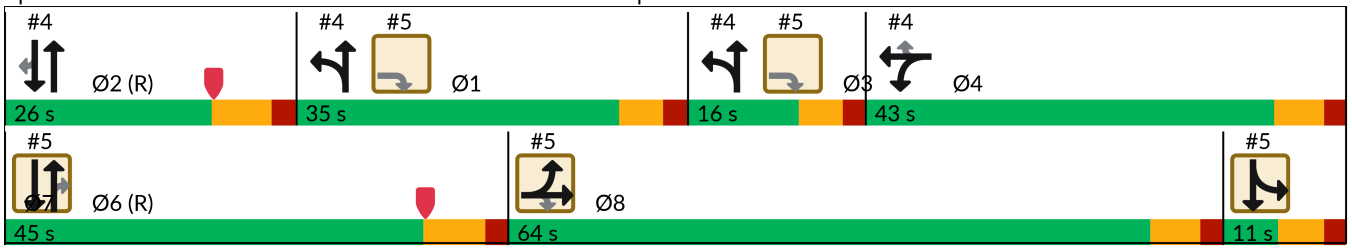
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 0 | 0 | 0 | 24 | 0 | 194 | 1212 | 1124 | 0 | 0 | 662 | 537 |
| Future Volume (vph) | 0 | 0 | 0 | 24 | 0 | 194 | 1212 | 1124 | 0 | 0 | 662 | 537 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | | 0 | 350 | | 350 | 525 | | 0 | 290 | | 285 |
| Storage Lanes | 0 | | 0 | 1 | | 1 | 0 | | 0 | 0 | | 2 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 0.91 | 0.86 | 0.91 | 0.97 | 0.91 | 1.00 | 1.00 | 0.86 | 0.88 |
| Frt | | | | | 0.854 | 0.850 | | | | | | 0.850 |
| Flt Protected | | | | 0.950 | 0.999 | | 0.950 | | | | | |
| Satd. Flow (prot) | 0 | 0 | 0 | 1610 | 2733 | 1441 | 3433 | 5085 | 0 | 0 | 6408 | 2787 |
| Flt Permitted | | | | 0.950 | 0.999 | | 0.950 | | | | | |
| Satd. Flow (perm) | 0 | 0 | 0 | 1610 | 2733 | 1441 | 3433 | 5085 | 0 | 0 | 6408 | 2787 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | | | 218 | 218 | | | | | | 584 |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 841 | | | 605 | | | 688 | | | 312 | |
| Travel Time (s) | | 19.1 | | | 13.8 | | | 15.6 | | | 7.1 | |
| 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 |
| Adj. Flow (vph) | 0 | 0 | 0 | 26 | 0 | 211 | 1317 | 1222 | 0 | 0 | 720 | 584 |
| Shared Lane Traffic (%) | | | | 10% | | 50% | | | | | | |
| Lane Group Flow (vph) | 0 | 0 | 0 | 23 | 109 | 105 | 1317 | 1222 | 0 | 0 | 720 | 584 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 24 | | | 24 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | | | | 1 | 2 | 1 | 1 | 2 | | | 2 | 1 |
| Detector Template | | | | Left | Thru | Right | Left | Thru | | | Thru | Right |
| Leading Detector (ft) | | | | 20 | 100 | 20 | 20 | 100 | | | 100 | 20 |
| Trailing Detector (ft) | | | | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 |
| Detector 1 Position(ft) | | | | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 |
| Detector 1 Size(ft) | | | | 20 | 6 | 20 | 20 | 6 | | | 6 | 20 |
| Detector 1 Type | | | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | | Cl+Ex | Cl+Ex |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Detector 1 Queue (s) | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Detector 1 Delay (s) | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Detector 2 Position(ft) | | | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | | | | Split | NA | Perm | Prot | NA | | | NA | Perm |
| Protected Phases | | | | 4 | 4 | | 1 3 | 1 2 3 | | | 2 | |
| Permitted Phases | | | | | | 4 | | | | | | 2 |

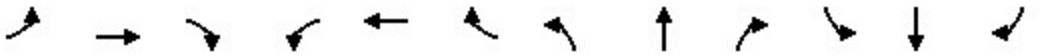
| Lane Group | Ø1 | Ø3 | Ø6 | Ø7 | Ø8 |
|---|---|---|---|---|---|
| Lane Configurations | | | | | |
| Traffic Volume (vph) | | | | | |
| Future Volume (vph) | | | | | |
| Ideal Flow (vphpl) | | | | | |
| Storage Length (ft) | | | | | |
| Storage Lanes | | | | | |
| Taper Length (ft) | | | | | |
| Lane Util. Factor | | | | | |
| Frt | | | | | |
| Flt Protected | | | | | |
| Satd. Flow (prot) | | | | | |
| Flt Permitted | | | | | |
| Satd. Flow (perm) | | | | | |
| Right Turn on Red | | | | | |
| Satd. Flow (RTOR) | | | | | |
| Link Speed (mph) | | | | | |
| Link Distance (ft) | | | | | |
| Travel Time (s) | | | | | |
| Peak Hour Factor | | | | | |
| Adj. Flow (vph) | | | | | |
| Shared Lane Traffic (%) | | | | | |
| Lane Group Flow (vph) | | | | | |
| Enter Blocked Intersection | | | | | |
| Lane Alignment | | | | | |
| Median Width(ft) | | | | | |
| Link Offset(ft) | | | | | |
| Crosswalk Width(ft) | | | | | |
| Two way Left Turn Lane | | | | | |
| Headway Factor | | | | | |
| Turning Speed (mph) | | | | | |
| Number of Detectors | | | | | |
| Detector Template | | | | | |
| Leading Detector (ft) | | | | | |
| Trailing Detector (ft) | | | | | |
| Detector 1 Position(ft) | | | | | |
| Detector 1 Size(ft) | | | | | |
| Detector 1 Type | | | | | |
| Detector 1 Channel | | | | | |
| Detector 1 Extend (s) | | | | | |
| Detector 1 Queue (s) | | | | | |
| Detector 1 Delay (s) | | | | | |
| Detector 2 Position(ft) | | | | | |
| Detector 2 Size(ft) | | | | | |
| Detector 2 Type | | | | | |
| Detector 2 Channel | | | | | |
| Detector 2 Extend (s) | | | | | |
| Turn Type | | | | | |
| Protected Phases | 1 | 3 | 6 | 7 | 8 |
| Permitted Phases | | | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | | | | 4 | 4 | 4 | 1 3 | 1 2 3 | | | 2 | 2 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | | | | 10.0 | 10.0 | 10.0 | | | | | 15.0 | 15.0 |
| Minimum Split (s) | | | | 48.5 | 48.5 | 48.5 | | | | | 25.5 | 25.5 |
| Total Split (s) | | | | 43.0 | 43.0 | 43.0 | | | | | 26.0 | 26.0 |
| Total Split (%) | | | | 35.8% | 35.8% | 35.8% | | | | | 21.7% | 21.7% |
| Maximum Green (s) | | | | 36.5 | 36.5 | 36.5 | | | | | 18.5 | 18.5 |
| Yellow Time (s) | | | | 4.5 | 4.5 | 4.5 | | | | | 5.5 | 5.5 |
| All-Red Time (s) | | | | 2.0 | 2.0 | 2.0 | | | | | 2.0 | 2.0 |
| Lost Time Adjust (s) | | | | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 |
| Total Lost Time (s) | | | | 6.5 | 6.5 | 6.5 | | | | | 7.5 | 7.5 |
| Lead/Lag | | | | Lag | Lag | Lag | | | | | Lead | Lead |
| Lead-Lag Optimize? | | | | Yes | Yes | Yes | | | | | Yes | Yes |
| Vehicle Extension (s) | | | | 4.0 | 4.0 | 4.0 | | | | | 2.0 | 2.0 |
| Recall Mode | | | | None | None | None | | | | | C-Max | C-Max |
| Walk Time (s) | | | | 4.0 | 4.0 | 4.0 | | | | | 4.0 | 4.0 |
| Flash Don't Walk (s) | | | | 38.0 | 38.0 | 38.0 | | | | | 13.0 | 13.0 |
| Pedestrian Calls (#/hr) | | | | 0 | 0 | 0 | | | | | 0 | 0 |
| Act Effct Green (s) | | | | 36.5 | 36.5 | 36.5 | 45.0 | 71.0 | | | 18.5 | 18.5 |
| Actuated g/C Ratio | | | | 0.30 | 0.30 | 0.30 | 0.38 | 0.59 | | | 0.15 | 0.15 |
| v/c Ratio | | | | 0.05 | 0.11 | 0.18 | 1.02 | 0.41 | | | 0.73 | 0.63 |
| Control Delay (s/veh) | | | | 30.0 | 0.2 | 0.7 | 49.1 | 4.3 | | | 53.3 | 7.0 |
| Queue Delay | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Total Delay (s/veh) | | | | 30.0 | 0.2 | 0.7 | 49.1 | 4.3 | | | 53.3 | 7.0 |
| LOS | | | | C | A | A | D | A | | | D | A |
| Approach Delay (s/veh) | | | | | 3.3 | | | 27.5 | | | 32.6 | |
| Approach LOS | | | | | A | | | C | | | C | |

| Intersection Summary | |
|---|---|
| Area Type: | Other |
| Cycle Length: 120 | |
| Actuated Cycle Length: 120 | |
| Offset: 0 (0%), Referenced to phase 2:NBSB and 6:, Start of Yellow | |
| Natural Cycle: 120 | |
| Control Type: Actuated-Coordinated | |
| Maximum v/c Ratio: 1.02 | |
| Intersection Signal Delay (s/veh): 27.7 | Intersection LOS: C |
| Intersection Capacity Utilization 82.5% | ICU Level of Service E |
| Analysis Period (min) 15 | |

Splits and Phases: 4: Ellsworth Road & SR24 Westbound Ramps





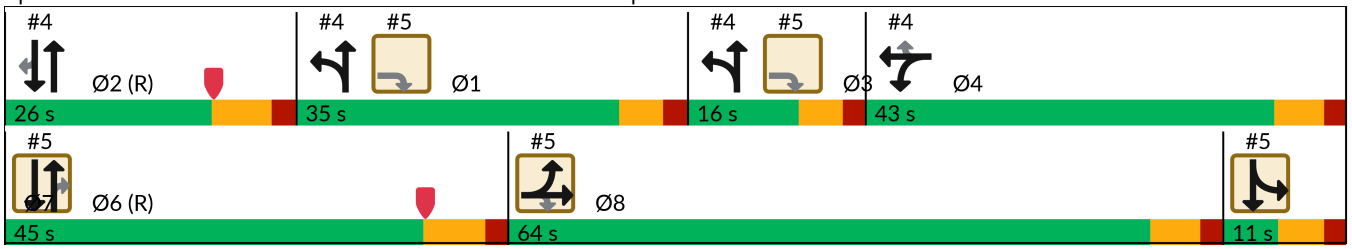
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 549 | 9 | 1679 | 0 | 0 | 0 | 0 | 1789 | 16 | 62 | 636 | 0 |
| Future Volume (vph) | 549 | 9 | 1679 | 0 | 0 | 0 | 0 | 1789 | 16 | 62 | 636 | 0 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 350 | | 350 | 0 | | 0 | 300 | | 300 | 550 | | 0 |
| Storage Lanes | 1 | | 2 | 0 | | 0 | 2 | | 1 | 0 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 0.95 | 0.95 | 0.88 | 1.00 | 1.00 | 1.00 | 1.00 | 0.81 | 1.00 | 0.97 | 0.91 | 1.00 |
| Frt | | | 0.850 | | | | | | 0.850 | | | |
| Flt Protected | 0.950 | 0.954 | | | | | | | | 0.950 | | |
| Satd. Flow (prot) | 1681 | 1688 | 2787 | 0 | 0 | 0 | 0 | 7544 | 1583 | 3433 | 5085 | 0 |
| Flt Permitted | 0.950 | 0.954 | | | | | | | | 0.950 | | |
| Satd. Flow (perm) | 1681 | 1688 | 2787 | 0 | 0 | 0 | 0 | 7544 | 1583 | 3433 | 5085 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 200 | | | | | | 200 | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 651 | | | 441 | | | 838 | | | 688 | |
| Travel Time (s) | | 14.8 | | | 10.0 | | | 19.0 | | | 15.6 | |
| 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 |
| Adj. Flow (vph) | 597 | 10 | 1825 | 0 | 0 | 0 | 0 | 1945 | 17 | 67 | 691 | 0 |
| Shared Lane Traffic (%) | 49% | | | | | | | | | | | |
| Lane Group Flow (vph) | 304 | 303 | 1825 | 0 | 0 | 0 | 0 | 1945 | 17 | 67 | 691 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 24 | | | 24 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | 1 | | | | | 2 | 1 | 1 | 2 | |
| Detector Template | Left | Thru | Right | | | | | Thru | Right | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | 20 | | | | | 100 | 20 | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | 0 | | | | | 0 | 0 | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | 0 | | | | | 0 | 0 | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | 20 | | | | | 6 | 20 | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | | | | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | | | | 0.0 | | | 0.0 | |
| Turn Type | Split | NA | custom | | | | | NA | Perm | Prot | NA | |
| Protected Phases | 8 | 8 | | | | | | 6 | | 7 | 6 7 | |
| Permitted Phases | | | 1 3 8 | | | | | | 6 | | | |

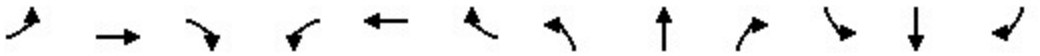
| Lane Group | Ø1 | Ø2 | Ø3 | Ø4 |
|---|---|---|---|---|
| Lane Configurations | | | | |
| Traffic Volume (vph) | | | | |
| Future Volume (vph) | | | | |
| Ideal Flow (vphpl) | | | | |
| Storage Length (ft) | | | | |
| Storage Lanes | | | | |
| Taper Length (ft) | | | | |
| Lane Util. Factor | | | | |
| Frt | | | | |
| Flt Protected | | | | |
| Satd. Flow (prot) | | | | |
| Flt Permitted | | | | |
| Satd. Flow (perm) | | | | |
| Right Turn on Red | | | | |
| Satd. Flow (RTOR) | | | | |
| Link Speed (mph) | | | | |
| Link Distance (ft) | | | | |
| Travel Time (s) | | | | |
| Peak Hour Factor | | | | |
| Adj. Flow (vph) | | | | |
| Shared Lane Traffic (%) | | | | |
| Lane Group Flow (vph) | | | | |
| Enter Blocked Intersection | | | | |
| Lane Alignment | | | | |
| Median Width(ft) | | | | |
| Link Offset(ft) | | | | |
| Crosswalk Width(ft) | | | | |
| Two way Left Turn Lane | | | | |
| Headway Factor | | | | |
| Turning Speed (mph) | | | | |
| Number of Detectors | | | | |
| Detector Template | | | | |
| Leading Detector (ft) | | | | |
| Trailing Detector (ft) | | | | |
| Detector 1 Position(ft) | | | | |
| Detector 1 Size(ft) | | | | |
| Detector 1 Type | | | | |
| Detector 1 Channel | | | | |
| Detector 1 Extend (s) | | | | |
| Detector 1 Queue (s) | | | | |
| Detector 1 Delay (s) | | | | |
| Detector 2 Position(ft) | | | | |
| Detector 2 Size(ft) | | | | |
| Detector 2 Type | | | | |
| Detector 2 Channel | | | | |
| Detector 2 Extend (s) | | | | |
| Turn Type | | | | |
| Protected Phases | 1 | 2 | 3 | 4 |
| Permitted Phases | | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | 8 | 8 | 1 3 8 | | | | | 6 | 6 | 7 | 6 7 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | | | | | 15.0 | 15.0 | 5.0 | | |
| Minimum Split (s) | 46.5 | 46.5 | | | | | | 26.5 | 26.5 | 11.0 | | |
| Total Split (s) | 64.0 | 64.0 | | | | | | 45.0 | 45.0 | 11.0 | | |
| Total Split (%) | 53.3% | 53.3% | | | | | | 37.5% | 37.5% | 9.2% | | |
| Maximum Green (s) | 57.5 | 57.5 | | | | | | 37.5 | 37.5 | 5.0 | | |
| Yellow Time (s) | 4.5 | 4.5 | | | | | | 5.5 | 5.5 | 4.0 | | |
| All-Red Time (s) | 2.0 | 2.0 | | | | | | 2.0 | 2.0 | 2.0 | | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | | | | | 0.0 | 0.0 | 0.0 | | |
| Total Lost Time (s) | 6.5 | 6.5 | | | | | | 7.5 | 7.5 | 6.0 | | |
| Lead/Lag | Lead | Lead | | | | | | | | Lag | | |
| Lead-Lag Optimize? | Yes | Yes | | | | | | | | Yes | | |
| Vehicle Extension (s) | 4.0 | 4.0 | | | | | | 2.0 | 2.0 | 2.0 | | |
| Recall Mode | None | None | | | | | | C-Max | C-Max | None | | |
| Walk Time (s) | 4.0 | 4.0 | | | | | | 4.0 | 4.0 | | | |
| Flash Don't Walk (s) | 36.0 | 36.0 | | | | | | 15.0 | 15.0 | | | |
| Pedestrian Calls (#/hr) | 0 | 0 | | | | | | 0 | 0 | | | |
| Act Effct Green (s) | 57.5 | 57.5 | 77.0 | | | | | 37.5 | 37.5 | 5.0 | 48.5 | |
| Actuated g/C Ratio | 0.48 | 0.48 | 0.64 | | | | | 0.31 | 0.31 | 0.04 | 0.40 | |
| v/c Ratio | 0.38 | 0.38 | 0.98 | | | | | 0.83 | 0.03 | 0.47 | 0.34 | |
| Control Delay (s/veh) | 21.6 | 21.6 | 36.1 | | | | | 40.2 | 0.1 | 93.3 | 2.1 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Delay (s/veh) | 21.6 | 21.6 | 36.1 | | | | | 40.2 | 0.1 | 93.3 | 2.1 | |
| LOS | C | C | D | | | | | D | A | F | A | |
| Approach Delay (s/veh) | | 32.5 | | | | | | 39.8 | | | 10.2 | |
| Approach LOS | | C | | | | | | D | | | B | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 120 | | | |
| Actuated Cycle Length: 120 | | | |
| Offset: 0 (0%), Referenced to phase 2:NBSB and 6:, Start of Yellow | | | |
| Natural Cycle: 120 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 1.02 | | | |
| Intersection Signal Delay (s/veh): 32.0 | | Intersection LOS: C | |
| Intersection Capacity Utilization 82.5% | | ICU Level of Service E | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 5: Ellsworth Road & SR24 Eastbound Ramps





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 99 | 57 | 29 | 171 | 39 | 397 | 23 | 1172 | 85 | 712 | 1757 | 59 |
| Future Volume (veh/h) | 99 | 57 | 29 | 171 | 39 | 397 | 23 | 1172 | 85 | 712 | 1757 | 59 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 108 | 62 | 32 | 186 | 42 | 432 | 25 | 1274 | 92 | 774 | 1910 | 64 |
| 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 | 160 | 760 | 339 | 241 | 844 | 748 | 81 | 1439 | 447 | 811 | 2521 | 84 |
| Arrive On Green | 0.05 | 0.21 | 0.21 | 0.07 | 0.24 | 0.24 | 0.05 | 0.56 | 0.56 | 0.47 | 0.99 | 0.99 |
| Sat Flow, veh/h | 3456 | 3554 | 1585 | 3456 | 3554 | 1585 | 3456 | 5106 | 1585 | 3456 | 5074 | 170 |
| Grp Volume(v), veh/h | 108 | 62 | 32 | 186 | 42 | 432 | 25 | 1274 | 92 | 774 | 1281 | 693 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1777 | 1585 | 1728 | 1777 | 1585 | 1728 | 1702 | 1585 | 1728 | 1702 | 1840 |
| Q Serve(g_s), s | 3.7 | 1.7 | 1.9 | 6.3 | 1.1 | 23.7 | 0.8 | 26.1 | 3.4 | 25.8 | 1.1 | 1.1 |
| Cycle Q Clear(g_c), s | 3.7 | 1.7 | 1.9 | 6.3 | 1.1 | 23.7 | 0.8 | 26.1 | 3.4 | 25.8 | 1.1 | 1.1 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.09 |
| Lane Grp Cap(c), veh/h | 160 | 760 | 339 | 241 | 844 | 748 | 81 | 1439 | 447 | 811 | 1691 | 914 |
| V/C Ratio(X) | 0.68 | 0.08 | 0.09 | 0.77 | 0.05 | 0.58 | 0.31 | 0.89 | 0.21 | 0.95 | 0.76 | 0.76 |
| Avail Cap(c_a), veh/h | 202 | 760 | 339 | 288 | 844 | 748 | 590 | 1439 | 447 | 835 | 1691 | 914 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 0.75 | 0.75 | 0.75 | 0.87 | 0.87 | 0.87 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 56.3 | 37.7 | 37.8 | 54.9 | 35.3 | 23.0 | 56.2 | 24.5 | 19.6 | 31.2 | 0.2 | 0.2 |
| Incr Delay (d2), s/veh | 3.4 | 0.0 | 0.0 | 6.2 | 0.1 | 2.4 | 0.7 | 7.4 | 0.9 | 20.3 | 3.2 | 5.9 |
| 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 | 1.7 | 0.7 | 0.8 | 3.0 | 0.5 | 9.2 | 0.4 | 8.4 | 1.3 | 10.6 | 0.9 | 1.6 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 59.7 | 37.8 | 37.9 | 61.1 | 35.4 | 25.4 | 56.9 | 31.9 | 20.5 | 51.6 | 3.4 | 6.1 |
| LnGrp LOS | E | D | D | E | D | C | E | C | C | D | A | A |
| Approach Vol, veh/h | | 202 | | | 660 | | | 1391 | | | 2748 | |
| Approach Delay, s/veh | | 49.5 | | | 36.1 | | | 31.6 | | | 17.6 | |
| Approach LOS | | D | | | D | | | C | | | B | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 10.5 | 35.0 | 7.3 | 67.1 | 13.4 | 32.2 | 33.1 | 41.3 |
| Change Period (Y+Rc), s | 5.0 | 6.5 | 4.5 | 7.5 | 5.0 | 6.5 | 5.0 | 7.5 |
| Max Green Setting (Gmax), s | 7.0 | 28.5 | 20.5 | 40.5 | 10.0 | 25.5 | 29.0 | 31.5 |
| Max Q Clear Time (g_c+I1), s | 5.7 | 25.7 | 2.8 | 3.1 | 8.3 | 3.9 | 27.8 | 28.1 |
| Green Ext Time (p_c), s | 0.0 | 0.3 | 0.0 | 13.9 | 0.0 | 0.2 | 0.3 | 2.1 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 25.2 |
| HCM 7th LOS | C |

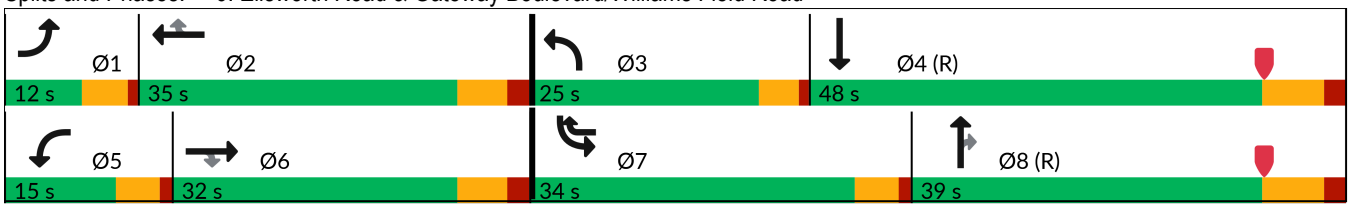
**Notes**

User approved pedestrian interval to be less than phase max green.

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | EBL | WBT | NBL | SBT | WBL | EBT | SBL | NBT |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | None | Max | None | C-Max | None | None | None | C-Max |
| Maximum Split (s) | 12 | 35 | 25 | 48 | 15 | 32 | 34 | 39 |
| Maximum Split (%) | 10.0% | 29.2% | 20.8% | 40.0% | 12.5% | 26.7% | 28.3% | 32.5% |
| Minimum Split (s) | 11 | 36.5 | 10.5 | 35.5 | 9 | 37.5 | 11 | 37.5 |
| Yellow Time (s) | 4 | 4.5 | 3.5 | 5.5 | 4 | 4.5 | 4 | 5.5 |
| All-Red Time (s) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| Minimum Initial (s) | 5 | 15 | 5 | 15 | 4 | 15 | 5 | 15 |
| Vehicle Extension (s) | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 2 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 4 | | 7 | | 4 | | 7 |
| Flash Don't Walk (s) | | 26 | | 21 | | 27 | | 23 |
| Dual Entry | No | Yes | No | Yes | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 7.5 | 19.5 | 54.5 | 79.5 | 7.5 | 22.5 | 54.5 | 88.5 |
| End Time (s) | 19.5 | 54.5 | 79.5 | 7.5 | 22.5 | 54.5 | 88.5 | 7.5 |
| Yield/Force Off (s) | 14.5 | 48 | 75 | 0 | 17.5 | 48 | 83.5 | 0 |
| Yield/Force Off 170(s) | 14.5 | 22 | 75 | 99 | 17.5 | 21 | 83.5 | 97 |
| Local Start Time (s) | 7.5 | 19.5 | 54.5 | 79.5 | 7.5 | 22.5 | 54.5 | 88.5 |
| Local Yield (s) | 14.5 | 48 | 75 | 0 | 17.5 | 48 | 83.5 | 0 |
| Local Yield 170(s) | 14.5 | 22 | 75 | 99 | 17.5 | 21 | 83.5 | 97 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 120 |
| Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow | |

Splits and Phases: 6: Ellsworth Road & Gateway Boulevard/Williams Field Road



| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 161 | 227 | 1030 | 194 | 339 | 1593 |
| Future Volume (veh/h) | 161 | 227 | 1030 | 194 | 339 | 1593 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 141 | 284 | 1120 | 211 | 368 | 1732 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 475 | 845 | 2304 | 715 | 442 | 3170 |
| Arrive On Green | 0.27 | 0.27 | 0.45 | 0.45 | 0.13 | 0.62 |
| Sat Flow, veh/h | 1781 | 3170 | 5274 | 1585 | 3456 | 5274 |
| Grp Volume(v), veh/h | 141 | 284 | 1120 | 211 | 368 | 1732 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1585 | 1702 | 1585 | 1728 | 1702 |
| Q Serve(g_s), s | 7.6 | 8.7 | 18.5 | 10.1 | 12.5 | 23.4 |
| Cycle Q Clear(g_c), s | 7.6 | 8.7 | 18.5 | 10.1 | 12.5 | 23.4 |
| Prop In Lane | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Lane Grp Cap(c), veh/h | 475 | 845 | 2304 | 715 | 442 | 3170 |
| V/C Ratio(X) | 0.30 | 0.34 | 0.49 | 0.29 | 0.83 | 0.55 |
| Avail Cap(c_a), veh/h | 475 | 845 | 2304 | 715 | 691 | 3170 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 0.59 | 0.59 |
| Uniform Delay (d), s/veh | 35.0 | 35.4 | 23.1 | 20.8 | 51.1 | 13.1 |
| Incr Delay (d2), s/veh | 1.6 | 1.1 | 0.7 | 1.0 | 3.1 | 0.4 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 3.5 | 3.5 | 7.1 | 3.7 | 5.4 | 7.8 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 36.6 | 36.5 | 23.9 | 21.9 | 54.1 | 13.5 |
| LnGrp LOS | D | D | C | C | D | B |
| Approach Vol, veh/h | 425 | | 1331 | | | 2100 |
| Approach Delay, s/veh | 36.6 | | 23.6 | | | 20.6 |
| Approach LOS | D | | C | | | C |

| Timer - Assigned Phs | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 38.0 | 82.0 | 20.3 | 61.7 |
| Change Period (Y+Rc), s | 6.0 | 7.5 | 5.0 | 7.5 |
| Max Green Setting (Gmax), s | 32.0 | 74.5 | 24.0 | 45.5 |
| Max Q Clear Time (g_c+I1), s | 10.7 | 25.4 | 14.5 | 20.5 |
| Green Ext Time (p_c), s | 1.5 | 17.7 | 0.9 | 8.6 |

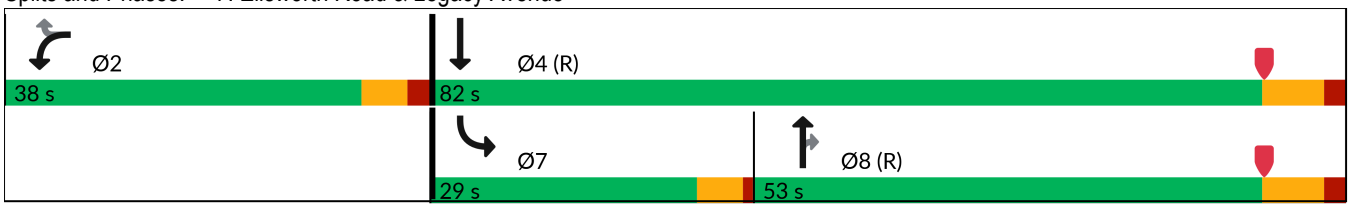
| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 23.4 |
| HCM 7th LOS | C |

| Notes |
|---|
| User approved volume balancing among the lanes for turning movement. |

| Phase Number | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Movement | WBL | SBT | SBL | NBT |
| Lead/Lag | | | Lead | Lag |
| Lead-Lag Optimize | | | Yes | Yes |
| Recall Mode | Max | C-Max | None | C-Max |
| Maximum Split (s) | 38 | 82 | 29 | 53 |
| Maximum Split (%) | 31.7% | 68.3% | 24.2% | 44.2% |
| Minimum Split (s) | 35 | 39.5 | 10 | 26.5 |
| Yellow Time (s) | 4 | 5.5 | 4 | 5.5 |
| All-Red Time (s) | 2 | 2 | 1 | 2 |
| Minimum Initial (s) | 10 | 15 | 5 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | 4 | 4 | | 7 |
| Flash Don't Walk (s) | 25 | 28 | | 12 |
| Dual Entry | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 7.5 | 45.5 | 45.5 | 74.5 |
| End Time (s) | 45.5 | 7.5 | 74.5 | 7.5 |
| Yield/Force Off (s) | 39.5 | 0 | 69.5 | 0 |
| Yield/Force Off 170(s) | 14.5 | 92 | 69.5 | 108 |
| Local Start Time (s) | 7.5 | 45.5 | 45.5 | 74.5 |
| Local Yield (s) | 39.5 | 0 | 69.5 | 0 |
| Local Yield 170(s) | 14.5 | 92 | 69.5 | 108 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 75 |
| Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow | |

Splits and Phases: 7: Ellsworth Road & Legacy Avenue



| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 643 | 174 | 150 | 196 | 391 | 115 |
| Future Volume (veh/h) | 643 | 174 | 150 | 196 | 391 | 115 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 731 | 198 | 170 | 223 | 444 | 131 |
| Peak Hour Factor | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 978 | 829 | 286 | 1165 | 486 | 433 |
| Arrive On Green | 0.35 | 0.35 | 0.13 | 1.00 | 0.27 | 0.27 |
| Sat Flow, veh/h | 1870 | 1585 | 1781 | 1870 | 1781 | 1585 |
| Grp Volume(v), veh/h | 731 | 198 | 170 | 223 | 444 | 131 |
| Grp Sat Flow(s),veh/h/ln | 1870 | 1585 | 1781 | 1870 | 1781 | 1585 |
| Q Serve(g_s), s | 41.3 | 10.6 | 5.2 | 0.0 | 29.0 | 7.9 |
| Cycle Q Clear(g_c), s | 41.3 | 10.6 | 5.2 | 0.0 | 29.0 | 7.9 |
| Prop In Lane | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Lane Grp Cap(c), veh/h | 978 | 829 | 286 | 1165 | 486 | 433 |
| V/C Ratio(X) | 0.75 | 0.24 | 0.59 | 0.19 | 0.91 | 0.30 |
| Avail Cap(c_a), veh/h | 978 | 829 | 331 | 1165 | 742 | 660 |
| HCM Platoon Ratio | 0.67 | 0.67 | 2.00 | 2.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.47 | 0.47 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 32.0 | 22.0 | 19.4 | 0.0 | 42.2 | 34.6 |
| Incr Delay (d2), s/veh | 2.5 | 0.3 | 2.2 | 0.4 | 11.2 | 0.4 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 19.8 | 4.1 | 2.0 | 0.1 | 14.1 | 3.1 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 34.5 | 22.4 | 21.6 | 0.4 | 53.4 | 34.9 |
| LnGrp LOS | C | C | C | A | D | C |
| Approach Vol, veh/h | 929 | | | 393 | 575 | |
| Approach Delay, s/veh | 31.9 | | | 9.5 | 49.2 | |
| Approach LOS | C | | | A | D | |

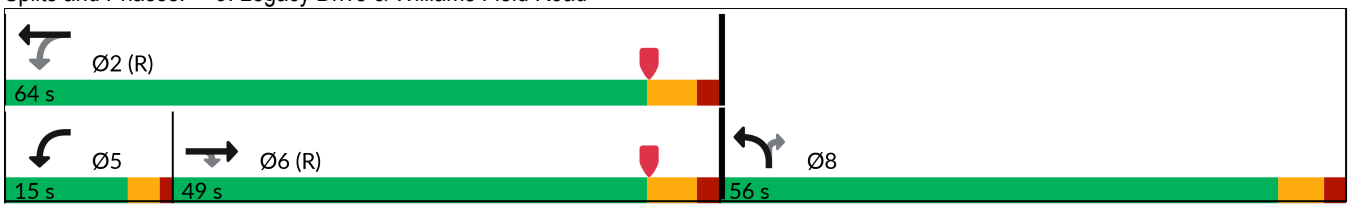
| Timer - Assigned Phs | 2 | | | 5 | 6 | 8 |
|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 81.2 | | | 12.0 | 69.3 | 38.8 |
| Change Period (Y+Rc), s | 6.5 | | | 4.0 | 6.5 | 6.0 |
| Max Green Setting (Gmax), s | 57.5 | | | 11.0 | 42.5 | 50.0 |
| Max Q Clear Time (g_c+I1), s | 2.0 | | | 7.2 | 43.3 | 31.0 |
| Green Ext Time (p_c), s | 1.2 | | | 0.1 | 0.0 | 1.8 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 32.5 |
| HCM 7th LOS | C |

| Phase Number | 2 | 5 | 6 | 8 |
|---|---|---|---|---|
| Movement | WBTL | WBL | EBT | NBL |
| Lead/Lag | | Lead | Lag | |
| Lead-Lag Optimize | | Yes | Yes | |
| Recall Mode | C-Max | None | C-Max | None |
| Maximum Split (s) | 64 | 15 | 49 | 56 |
| Maximum Split (%) | 53.3% | 12.5% | 40.8% | 46.7% |
| Minimum Split (s) | 24.5 | 12.5 | 24.5 | 24 |
| Yellow Time (s) | 4.5 | 3 | 4.5 | 4 |
| All-Red Time (s) | 2 | 1 | 2 | 2 |
| Minimum Initial (s) | 15 | 8 | 15 | 10 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | | | 7 | |
| Flash Don't Walk (s) | | | 11 | |
| Dual Entry | Yes | No | Yes | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 62.5 | 62.5 | 77.5 | 6.5 |
| End Time (s) | 6.5 | 77.5 | 6.5 | 62.5 |
| Yield/Force Off (s) | 0 | 73.5 | 0 | 56.5 |
| Yield/Force Off 170(s) | 0 | 73.5 | 109 | 56.5 |
| Local Start Time (s) | 62.5 | 62.5 | 77.5 | 6.5 |
| Local Yield (s) | 0 | 73.5 | 0 | 56.5 |
| Local Yield 170(s) | 0 | 73.5 | 109 | 56.5 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 90 |
| Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBT, Start of Yellow | |

Splits and Phases: 9: Legacy Drive & Williams Field Road



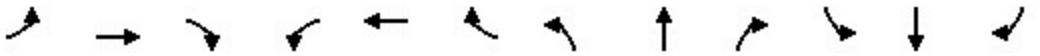
| Intersection | |
|---|---|
| Int Delay, s/veh | 5.7 |

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | ↑ | ↱ | | ↑ | | ↱ |
| Traffic Vol, veh/h | 604 | 235 | 77 | 335 | 26 | 318 |
| Future Vol, veh/h | 604 | 235 | 77 | 335 | 26 | 318 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 150 | - | - | - | - |
| 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 | 657 | 255 | 84 | 364 | 28 | 346 |

| Major/Minor | Major1 | | Major2 | | Minor1 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 0 | 0 | 912 | 0 | 1188 | 657 |
| Stage 1 | - | - | - | - | 657 | - |
| Stage 2 | - | - | - | - | 532 | - |
| Critical Hdwy | - | - | 4.12 | - | 6.42 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | - | - | 2.218 | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | - | - | 646 | - | 169 | 528 |
| Stage 1 | - | - | - | - | 532 | - |
| Stage 2 | - | - | - | - | 602 | - |
| Platoon blocked, % | - | - | 0 | - | 0 | 0 |
| Mov Cap-1 Maneuver | - | - | 646 | - | 141 | 528 |
| Mov Cap-2 Maneuver | - | - | - | - | 141 | - |
| Stage 1 | - | - | - | - | 532 | - |
| Stage 2 | - | - | - | - | 504 | - |

| Approach | EB | WB | NB |
|---|---|---|---|
| HCM Control Delay, s/v | 0 | 2.13 | 23.81 |
| HCM LOS | | | C |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT |
|---|---|---|---|---|---|
| Capacity (veh/h) | 528 | - | - | 646 | - |
| HCM Lane V/C Ratio | 0.655 | - | - | 0.13 | - |
| HCM Control Delay (s/veh) | 23.8 | - | - | 11.4 | - |
| HCM Lane LOS | C | - | - | B | - |
| HCM 95th %tile Q(veh) | 4.7 | - | - | 0.4 | - |



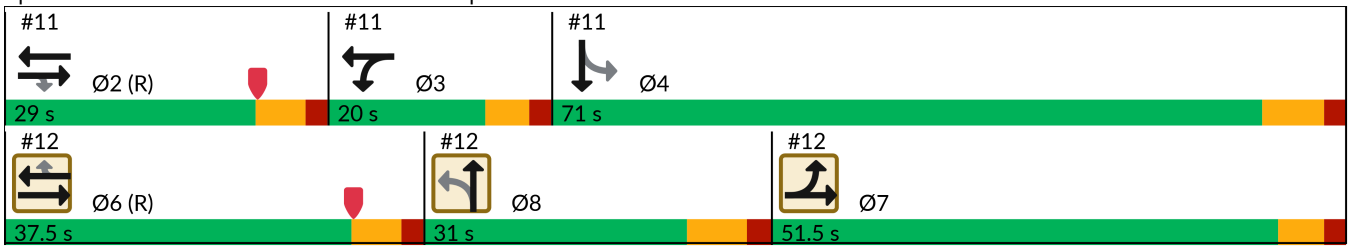
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 0 | 759 | 190 | 63 | 202 | 0 | 0 | 0 | 0 | 303 | 0 | 214 |
| Future Volume (vph) | 0 | 759 | 190 | 63 | 202 | 0 | 0 | 0 | 0 | 303 | 0 | 214 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 360 | | 285 | 290 | | 0 | 0 | | 0 | 400 | | 400 |
| Storage Lanes | 2 | | 1 | 0 | | 0 | 0 | | 0 | 2 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 1.00 | 0.86 | 1.00 | 0.97 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 0.91 | 0.91 | 0.95 |
| Frt | | | 0.850 | | | | | | | | 0.904 | |
| Flt Protected | | | | 0.950 | | | | | | 0.950 | 0.982 | |
| Satd. Flow (prot) | 0 | 6408 | 1583 | 3433 | 3539 | 0 | 0 | 0 | 0 | 1610 | 3010 | 0 |
| Flt Permitted | | | | 0.950 | | | | | | 0.950 | 0.982 | |
| Satd. Flow (perm) | 0 | 6408 | 1583 | 3433 | 3539 | 0 | 0 | 0 | 0 | 1610 | 3010 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 223 | | | | | | | | 233 | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 971 | | | 481 | | | 999 | | | 970 | |
| Travel Time (s) | | 22.1 | | | 10.9 | | | 22.7 | | | 22.0 | |
| 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 |
| Adj. Flow (vph) | 0 | 825 | 207 | 68 | 220 | 0 | 0 | 0 | 0 | 329 | 0 | 233 |
| Shared Lane Traffic (%) | | | | | | | | | | 40% | | |
| Lane Group Flow (vph) | 0 | 825 | 207 | 68 | 220 | 0 | 0 | 0 | 0 | 197 | 365 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 24 | | | 24 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | | 2 | 1 | 1 | 2 | | | | | 1 | 2 | |
| Detector Template | | Thru | Right | Left | Thru | | | | | Left | Thru | |
| Leading Detector (ft) | | 100 | 20 | 20 | 100 | | | | | 20 | 100 | |
| Trailing Detector (ft) | | 0 | 0 | 0 | 0 | | | | | 0 | 0 | |
| Detector 1 Position(ft) | | 0 | 0 | 0 | 0 | | | | | 0 | 0 | |
| Detector 1 Size(ft) | | 6 | 20 | 20 | 6 | | | | | 20 | 6 | |
| Detector 1 Type | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | | | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | | | | 0.0 | |
| Turn Type | | NA | Perm | Prot | NA | | | | | Perm | NA | |
| Protected Phases | | 2 | | 3 | 2 3 | | | | | | 4 | |
| Permitted Phases | | | 2 | | | | | | | 4 | | |

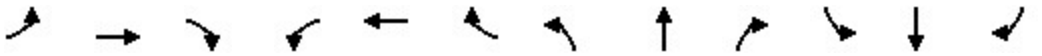
| Lane Group | Ø6 | Ø7 | Ø8 |
|---|---|---|---|
| Lane Configurations | | | |
| Traffic Volume (vph) | | | |
| Future Volume (vph) | | | |
| Ideal Flow (vphpl) | | | |
| Storage Length (ft) | | | |
| Storage Lanes | | | |
| Taper Length (ft) | | | |
| Lane Util. Factor | | | |
| Frt | | | |
| Flt Protected | | | |
| Satd. Flow (prot) | | | |
| Flt Permitted | | | |
| Satd. Flow (perm) | | | |
| Right Turn on Red | | | |
| Satd. Flow (RTOR) | | | |
| Link Speed (mph) | | | |
| Link Distance (ft) | | | |
| Travel Time (s) | | | |
| Peak Hour Factor | | | |
| Adj. Flow (vph) | | | |
| Shared Lane Traffic (%) | | | |
| Lane Group Flow (vph) | | | |
| Enter Blocked Intersection | | | |
| Lane Alignment | | | |
| Median Width(ft) | | | |
| Link Offset(ft) | | | |
| Crosswalk Width(ft) | | | |
| Two way Left Turn Lane | | | |
| Headway Factor | | | |
| Turning Speed (mph) | | | |
| Number of Detectors | | | |
| Detector Template | | | |
| Leading Detector (ft) | | | |
| Trailing Detector (ft) | | | |
| Detector 1 Position(ft) | | | |
| Detector 1 Size(ft) | | | |
| Detector 1 Type | | | |
| Detector 1 Channel | | | |
| Detector 1 Extend (s) | | | |
| Detector 1 Queue (s) | | | |
| Detector 1 Delay (s) | | | |
| Detector 2 Position(ft) | | | |
| Detector 2 Size(ft) | | | |
| Detector 2 Type | | | |
| Detector 2 Channel | | | |
| Detector 2 Extend (s) | | | |
| Turn Type | | | |
| Protected Phases | 6 | 7 | 8 |
| Permitted Phases | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | | 2 | 2 | 3 | 2 3 | | | | | 4 | 4 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | | 15.0 | 15.0 | 5.0 | | | | | | 10.0 | 10.0 | |
| Minimum Split (s) | | 25.5 | 25.5 | 11.0 | | | | | | 46.5 | 46.5 | |
| Total Split (s) | | 29.0 | 29.0 | 20.0 | | | | | | 71.0 | 71.0 | |
| Total Split (%) | | 24.2% | 24.2% | 16.7% | | | | | | 59.2% | 59.2% | |
| Maximum Green (s) | | 22.5 | 22.5 | 14.0 | | | | | | 63.5 | 63.5 | |
| Yellow Time (s) | | 4.5 | 4.5 | 4.0 | | | | | | 5.5 | 5.5 | |
| All-Red Time (s) | | 2.0 | 2.0 | 2.0 | | | | | | 2.0 | 2.0 | |
| Lost Time Adjust (s) | | 0.0 | 0.0 | 0.0 | | | | | | 0.0 | 0.0 | |
| Total Lost Time (s) | | 6.5 | 6.5 | 6.0 | | | | | | 7.5 | 7.5 | |
| Lead/Lag | | | | Lead | | | | | | Lag | Lag | |
| Lead-Lag Optimize? | | | | Yes | | | | | | Yes | Yes | |
| Vehicle Extension (s) | | 3.0 | 3.0 | 3.0 | | | | | | 3.0 | 3.0 | |
| Recall Mode | | C-Max | C-Max | None | | | | | | None | None | |
| Walk Time (s) | | 4.0 | 4.0 | | | | | | | 4.0 | 4.0 | |
| Flash Don't Walk (s) | | 15.0 | 15.0 | | | | | | | 35.0 | 35.0 | |
| Pedestrian Calls (#/hr) | | 0 | 0 | | | | | | | 0 | 0 | |
| Act Effct Green (s) | | 44.2 | 44.2 | 7.8 | 58.0 | | | | | 48.0 | 48.0 | |
| Actuated g/C Ratio | | 0.37 | 0.37 | 0.07 | 0.48 | | | | | 0.40 | 0.40 | |
| v/c Ratio | | 0.35 | 0.29 | 0.30 | 0.13 | | | | | 0.31 | 0.27 | |
| Control Delay (s/veh) | | 29.5 | 6.7 | 56.8 | 19.2 | | | | | 24.6 | 7.8 | |
| Queue Delay | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | |
| Total Delay (s/veh) | | 29.5 | 6.7 | 56.8 | 19.2 | | | | | 24.6 | 7.8 | |
| LOS | | C | A | E | B | | | | | C | A | |
| Approach Delay (s/veh) | | 24.9 | | | 28.1 | | | | | | 13.7 | |
| Approach LOS | | C | | | C | | | | | | B | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 120 | | | |
| Actuated Cycle Length: 120 | | | |
| Offset: 36.9 (31%), Referenced to phase 2:EBWB and 6:, Start of Yellow | | | |
| Natural Cycle: 95 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.68 | | | |
| Intersection Signal Delay (s/veh): 22.0 | | Intersection LOS: C | |
| Intersection Capacity Utilization 71.2% | | ICU Level of Service C | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 11: SR24 Eastbound Ramps & Williams Field Road





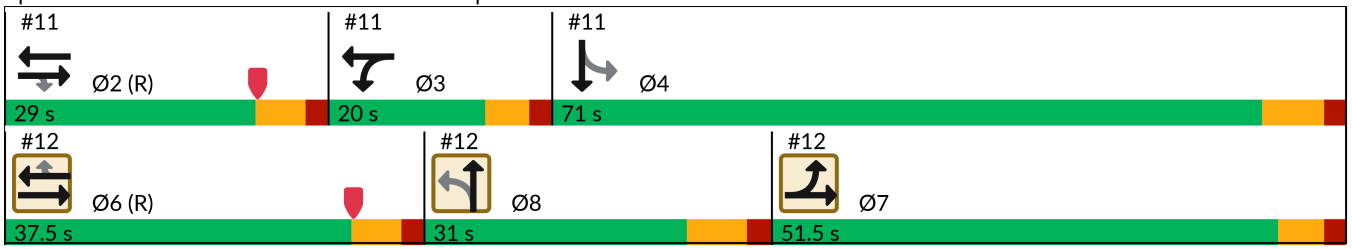
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 628 | 451 | 0 | 0 | 173 | 480 | 88 | 0 | 13 | 0 | 0 | 0 |
| Future Volume (vph) | 628 | 451 | 0 | 0 | 173 | 480 | 88 | 0 | 13 | 0 | 0 | 0 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 290 | | 0 | 365 | | 300 | 375 | | 375 | 0 | | 0 |
| Storage Lanes | 0 | | 0 | 2 | | 1 | 1 | | 1 | 0 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 0.97 | 0.95 | 1.00 | 1.00 | 0.86 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 |
| Frt | | | | | | 0.850 | | 0.850 | | | | |
| Flt Protected | 0.950 | | | | | | 0.950 | | | | | |
| Satd. Flow (prot) | 3433 | 3539 | 0 | 0 | 6408 | 1583 | 1770 | 3008 | 0 | 0 | 0 | 0 |
| Flt Permitted | 0.950 | | | | | | 0.950 | | | | | |
| Satd. Flow (perm) | 3433 | 3539 | 0 | 0 | 6408 | 1583 | 1770 | 3008 | 0 | 0 | 0 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | | | | 382 | | 435 | | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 481 | | | 694 | | | 897 | | | 1176 | |
| Travel Time (s) | | 10.9 | | | 15.8 | | | 20.4 | | | 26.7 | |
| 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 |
| Adj. Flow (vph) | 683 | 490 | 0 | 0 | 188 | 522 | 96 | 0 | 14 | 0 | 0 | 0 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 683 | 490 | 0 | 0 | 188 | 522 | 96 | 14 | 0 | 0 | 0 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 24 | | | 24 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | | 2 | 1 | 1 | 2 | | | | |
| Detector Template | Left | Thru | | | Thru | Right | Left | Thru | | | | |
| Leading Detector (ft) | 20 | 100 | | | 100 | 20 | 20 | 100 | | | | |
| Trailing Detector (ft) | 0 | 0 | | | 0 | 0 | 0 | 0 | | | | |
| Detector 1 Position(ft) | 0 | 0 | | | 0 | 0 | 0 | 0 | | | | |
| Detector 1 Size(ft) | 20 | 6 | | | 6 | 20 | 20 | 6 | | | | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | | | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | | |
| Turn Type | Prot | NA | | | NA | Perm | Perm | NA | | | | |
| Protected Phases | 7 | 6 7 | | | 6 | | | 8 | | | | |
| Permitted Phases | | | | | | 6 | 8 | | | | | |

| Lane Group | Ø2 | Ø3 | Ø4 |
|---|---|---|---|
| Lane Configurations | | | |
| Traffic Volume (vph) | | | |
| Future Volume (vph) | | | |
| Ideal Flow (vphpl) | | | |
| Storage Length (ft) | | | |
| Storage Lanes | | | |
| Taper Length (ft) | | | |
| Lane Util. Factor | | | |
| Frt | | | |
| Flt Protected | | | |
| Satd. Flow (prot) | | | |
| Flt Permitted | | | |
| Satd. Flow (perm) | | | |
| Right Turn on Red | | | |
| Satd. Flow (RTOR) | | | |
| Link Speed (mph) | | | |
| Link Distance (ft) | | | |
| Travel Time (s) | | | |
| Peak Hour Factor | | | |
| Adj. Flow (vph) | | | |
| Shared Lane Traffic (%) | | | |
| Lane Group Flow (vph) | | | |
| Enter Blocked Intersection | | | |
| Lane Alignment | | | |
| Median Width(ft) | | | |
| Link Offset(ft) | | | |
| Crosswalk Width(ft) | | | |
| Two way Left Turn Lane | | | |
| Headway Factor | | | |
| Turning Speed (mph) | | | |
| Number of Detectors | | | |
| Detector Template | | | |
| Leading Detector (ft) | | | |
| Trailing Detector (ft) | | | |
| Detector 1 Position(ft) | | | |
| Detector 1 Size(ft) | | | |
| Detector 1 Type | | | |
| Detector 1 Channel | | | |
| Detector 1 Extend (s) | | | |
| Detector 1 Queue (s) | | | |
| Detector 1 Delay (s) | | | |
| Detector 2 Position(ft) | | | |
| Detector 2 Size(ft) | | | |
| Detector 2 Type | | | |
| Detector 2 Channel | | | |
| Detector 2 Extend (s) | | | |
| Turn Type | | | |
| Protected Phases | 2 | 3 | 4 |
| Permitted Phases | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | 7 | 6 7 | | | 6 | 6 | 8 | 8 | | | | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | | | | 15.0 | 15.0 | 10.0 | 10.0 | | | | |
| Minimum Split (s) | 11.0 | | | | 26.5 | 26.5 | 45.5 | 45.5 | | | | |
| Total Split (s) | 51.5 | | | | 37.5 | 37.5 | 31.0 | 31.0 | | | | |
| Total Split (%) | 42.9% | | | | 31.3% | 31.3% | 25.8% | 25.8% | | | | |
| Maximum Green (s) | 45.5 | | | | 31.0 | 31.0 | 23.5 | 23.5 | | | | |
| Yellow Time (s) | 4.0 | | | | 4.5 | 4.5 | 5.5 | 5.5 | | | | |
| All-Red Time (s) | 2.0 | | | | 2.0 | 2.0 | 2.0 | 2.0 | | | | |
| Lost Time Adjust (s) | 0.0 | | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Total Lost Time (s) | 6.0 | | | | 6.5 | 6.5 | 7.5 | 7.5 | | | | |
| Lead/Lag | Lag | | | | | | Lead | Lead | | | | |
| Lead-Lag Optimize? | Yes | | | | | | Yes | Yes | | | | |
| Vehicle Extension (s) | 3.0 | | | | 3.0 | 3.0 | 3.0 | 3.0 | | | | |
| Recall Mode | None | | | | C-Max | C-Max | None | None | | | | |
| Walk Time (s) | | | | | 4.0 | 4.0 | 4.0 | 4.0 | | | | |
| Flash Don't Walk (s) | | | | | 16.0 | 16.0 | 34.0 | 34.0 | | | | |
| Pedestrian Calls (#/hr) | | | | | 0 | 0 | 0 | 0 | | | | |
| Act Effct Green (s) | 34.9 | 93.6 | | | 52.7 | 52.7 | 12.4 | 12.4 | | | | |
| Actuated g/C Ratio | 0.29 | 0.78 | | | 0.44 | 0.44 | 0.10 | 0.10 | | | | |
| v/c Ratio | 0.68 | 0.18 | | | 0.07 | 0.57 | 0.53 | 0.02 | | | | |
| Control Delay (s/veh) | 54.9 | 1.3 | | | 21.7 | 10.5 | 61.1 | 0.1 | | | | |
| Queue Delay | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Total Delay (s/veh) | 54.9 | 1.3 | | | 21.7 | 10.5 | 61.1 | 0.1 | | | | |
| LOS | D | A | | | C | B | E | A | | | | |
| Approach Delay (s/veh) | | 32.5 | | | 13.4 | | | 53.4 | | | | |
| Approach LOS | | C | | | B | | | D | | | | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 120 | | | |
| Actuated Cycle Length: 120 | | | |
| Offset: 36.9 (31%), Referenced to phase 2:EBWB and 6:, Start of Yellow | | | |
| Natural Cycle: 95 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.68 | | | |
| Intersection Signal Delay (s/veh): 26.9 | | Intersection LOS: C | |
| Intersection Capacity Utilization 71.2% | | ICU Level of Service C | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 12: SR24 Westbound Ramps & Williams Field Road



| Intersection | |
|---|---|
| Int Delay, s/veh | 0 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 0 | 0 | 0 | 1641 | 2320 | 0 |
| Future Vol, veh/h | 0 | 0 | 0 | 1641 | 2320 | 0 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 0 | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 0 | 0 | 1784 | 2522 | 0 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | - | 1261 | - | 0 | - | 0 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | 7.14 | - | - | - | - |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | 3.92 | - | - | - | - |
| Pot Cap-1 Maneuver | 0 | *537 | 0 | - | - | - |
| Stage 1 | 0 | - | 0 | - | - | - |
| Stage 2 | 0 | - | 0 | - | - | - |
| Platoon blocked, % | | 0 | | - | - | - |
| Mov Cap-1 Maneuver | - | *537 | - | - | - | - |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 0 | 0 | 0 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|
| Capacity (veh/h) | - | - | - | - |
| HCM Lane V/C Ratio | - | - | - | - |
| HCM Control Delay (s/veh) | - | 0 | - | - |
| HCM Lane LOS | - | A | - | - |
| HCM 95th %tile Q(veh) | - | - | - | - |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 207 | 79 | 25 | 1641 | 2261 | 59 |
| Future Volume (veh/h) | 207 | 79 | 25 | 1641 | 2261 | 59 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | 1.00 | | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 225 | 86 | 27 | 1784 | 2458 | 64 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 349 | 310 | 128 | 3574 | 3285 | 85 |
| Arrive On Green | 0.20 | 0.20 | 0.02 | 0.47 | 0.21 | 0.21 |
| Sat Flow, veh/h | 1781 | 1585 | 1781 | 5274 | 5286 | 133 |
| Grp Volume(v), veh/h | 225 | 86 | 27 | 1784 | 1631 | 891 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1585 | 1781 | 1702 | 1702 | 1846 |
| Q Serve(g_s), s | 14.0 | 5.5 | 0.6 | 29.1 | 53.8 | 54.3 |
| Cycle Q Clear(g_c), s | 14.0 | 5.5 | 0.6 | 29.1 | 53.8 | 54.3 |
| Prop In Lane | 1.00 | 1.00 | 1.00 | | | 0.07 |
| Lane Grp Cap(c), veh/h | 349 | 310 | 128 | 3574 | 2185 | 1185 |
| V/C Ratio(X) | 0.65 | 0.28 | 0.21 | 0.50 | 0.75 | 0.75 |
| Avail Cap(c_a), veh/h | 349 | 310 | 167 | 3574 | 2185 | 1185 |
| HCM Platoon Ratio | 1.00 | 1.00 | 0.67 | 0.67 | 0.33 | 0.33 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 44.4 | 41.0 | 23.0 | 17.3 | 38.1 | 38.3 |
| Incr Delay (d2), s/veh | 8.9 | 2.2 | 0.8 | 0.5 | 2.4 | 4.4 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 7.0 | 2.4 | 0.5 | 12.4 | 25.3 | 28.3 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 53.3 | 43.2 | 23.8 | 17.8 | 40.5 | 42.7 |
| LnGrp LOS | D | D | C | B | D | D |
| Approach Vol, veh/h | 311 | | | 1811 | 2522 | |
| Approach Delay, s/veh | 50.5 | | | 17.9 | 41.3 | |
| Approach LOS | D | | | B | D | |

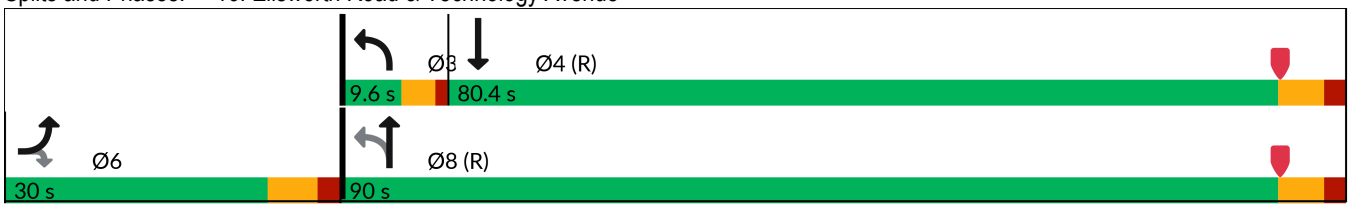
| Timer - Assigned Phs | | 3 | 4 | | 6 | 8 |
|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 7.0 | 83.0 | | 30.0 | 90.0 |
| Change Period (Y+Rc), s | | 4.0 | 6.0 | | 6.5 | 6.0 |
| Max Green Setting (Gmax), s | | 5.6 | 74.4 | | 23.5 | 84.0 |
| Max Q Clear Time (g_c+I1), s | | 2.6 | 56.3 | | 16.0 | 31.1 |
| Green Ext Time (p_c), s | | 0.0 | 15.7 | | 0.6 | 22.9 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 32.8 |
| HCM 7th LOS | C |

| Phase Number | 3 | 4 | 6 | 8 |
|---|---|---|---|---|
| Movement | NBL | SBT | EBL | NBTL |
| Lead/Lag | Lead | Lag | | |
| Lead-Lag Optimize | Yes | Yes | | |
| Recall Mode | None | C-Max | Max | C-Max |
| Maximum Split (s) | 9.6 | 80.4 | 30 | 90 |
| Maximum Split (%) | 8.0% | 67.0% | 25.0% | 75.0% |
| Minimum Split (s) | 9.5 | 24 | 24.5 | 24 |
| Yellow Time (s) | 3 | 4 | 4.5 | 4 |
| All-Red Time (s) | 1 | 2 | 2 | 2 |
| Minimum Initial (s) | 5 | 15 | 10 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 7 | 7 | 7 |
| Flash Don't Walk (s) | | 11 | 11 | 11 |
| Dual Entry | No | Yes | Yes | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 36 | 45.6 | 6 | 36 |
| End Time (s) | 45.6 | 6 | 36 | 6 |
| Yield/Force Off (s) | 41.6 | 0 | 29.5 | 0 |
| Yield/Force Off 170(s) | 41.6 | 109 | 18.5 | 109 |
| Local Start Time (s) | 36 | 45.6 | 6 | 36 |
| Local Yield (s) | 41.6 | 0 | 29.5 | 0 |
| Local Yield 170(s) | 41.6 | 109 | 18.5 | 109 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 80 |
| Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBTL, Start of Yellow | |

Splits and Phases: 16: Ellsworth Road & Technology Avenue



| Intersection | |
|---|---|
| Int Delay, s/veh | 0.2 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 0 | 75 | 0 | 1658 | 2286 | 54 |
| Future Vol, veh/h | 0 | 75 | 0 | 1658 | 2286 | 54 |
| 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 | 82 | 0 | 1802 | 2485 | 59 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | - | 1272 | - | 0 | - | 0 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | 7.14 | - | - | - | - |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | 3.92 | - | - | - | - |
| Pot Cap-1 Maneuver | 0 | *553 | 0 | - | - | - |
| Stage 1 | 0 | - | 0 | - | - | - |
| Stage 2 | 0 | - | 0 | - | - | - |
| Platoon blocked, % | | 0 | | - | - | - |
| Mov Cap-1 Maneuver | - | *553 | - | - | - | - |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 12.64 | 0 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|
| Capacity (veh/h) | - | 553 | - | - |
| HCM Lane V/C Ratio | - | 0.148 | - | - |
| HCM Control Delay (s/veh) | - | 12.6 | - | - |
| HCM Lane LOS | - | B | - | - |
| HCM 95th %tile Q(veh) | - | 0.5 | - | - |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

# Appendix K – Year 2029 Build Capacity Analysis

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 163 | 8 | 1179 | 48 | 1 | 853 |
| Future Volume (veh/h) | 163 | 8 | 1179 | 48 | 1 | 853 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 177 | 9 | 1282 | 52 | 1 | 927 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 284 | 252 | 3102 | 963 | 369 | 3102 |
| Arrive On Green | 0.16 | 0.16 | 1.00 | 1.00 | 0.61 | 0.61 |
| Sat Flow, veh/h | 1781 | 1585 | 5274 | 1585 | 410 | 5274 |
| Grp Volume(v), veh/h | 177 | 9 | 1282 | 52 | 1 | 927 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1585 | 1702 | 1585 | 410 | 1702 |
| Q Serve(g_s), s | 5.6 | 0.3 | 0.0 | 0.0 | 0.1 | 5.2 |
| Cycle Q Clear(g_c), s | 5.6 | 0.3 | 0.0 | 0.0 | 0.1 | 5.2 |
| Prop In Lane | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Lane Grp Cap(c), veh/h | 284 | 252 | 3102 | 963 | 369 | 3102 |
| V/C Ratio(X) | 0.62 | 0.04 | 0.41 | 0.05 | 0.00 | 0.30 |
| Avail Cap(c_a), veh/h | 505 | 449 | 3102 | 963 | 369 | 3102 |
| HCM Platoon Ratio | 1.00 | 1.00 | 2.00 | 2.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 0.88 | 0.88 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 23.6 | 21.3 | 0.0 | 0.0 | 4.6 | 5.6 |
| Incr Delay (d2), s/veh | 2.2 | 0.1 | 0.4 | 0.1 | 0.0 | 0.2 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 4.3 | 0.2 | 0.2 | 0.0 | 0.0 | 2.6 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 25.8 | 21.4 | 0.4 | 0.1 | 4.6 | 5.9 |
| LnGrp LOS | C | C | A | A | A | A |
| Approach Vol, veh/h | 186 | | 1334 | | | 928 |
| Approach Delay, s/veh | 25.6 | | 0.3 | | | 5.9 |
| Approach LOS | C | | A | | | A |

| Timer - Assigned Phs | 2 | 4 | 8 |
|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 16.0 | 44.0 | 44.0 |
| Change Period (Y+Rc), s | 6.5 | 7.5 | 7.5 |
| Max Green Setting (Gmax), s | 17.0 | 29.0 | 29.0 |
| Max Q Clear Time (g_c+I1), s | 7.6 | 7.2 | 2.0 |
| Green Ext Time (p_c), s | 0.3 | 6.9 | 11.2 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 4.4 |
| HCM 7th LOS | A |

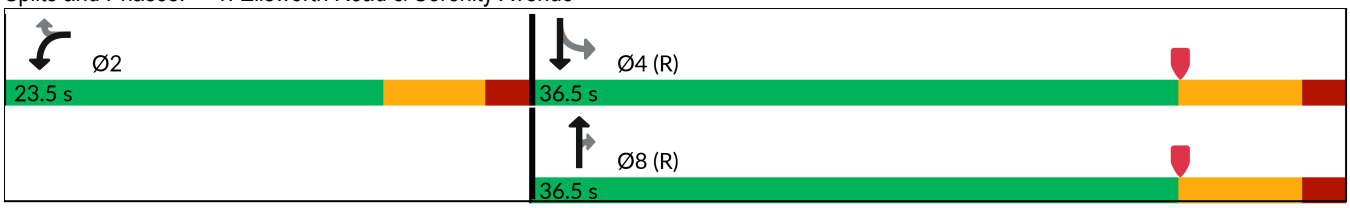
**Notes**

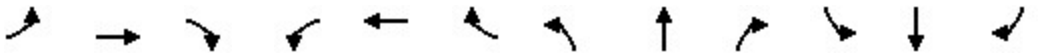
User approved pedestrian interval to be less than phase max green.

| Phase Number | 2 | 4 | 8 |
|---|---|---|---|
| Movement | WBL | SBTL | NBT |
| Lead/Lag | | | |
| Lead-Lag Optimize | | | |
| Recall Mode | None | C-Max | C-Max |
| Maximum Split (s) | 23.5 | 36.5 | 36.5 |
| Maximum Split (%) | 39.2% | 60.8% | 60.8% |
| Minimum Split (s) | 34.5 | 34.5 | 40.5 |
| Yellow Time (s) | 4.5 | 5.5 | 5.5 |
| All-Red Time (s) | 2 | 2 | 2 |
| Minimum Initial (s) | 10 | 15 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 |
| Walk Time (s) | 4 | 4 | 4 |
| Flash Don't Walk (s) | 22 | 23 | 26 |
| Dual Entry | Yes | Yes | Yes |
| Inhibit Max | Yes | Yes | Yes |
| Start Time (s) | 7.5 | 31 | 31 |
| End Time (s) | 31 | 7.5 | 7.5 |
| Yield/Force Off (s) | 24.5 | 0 | 0 |
| Yield/Force Off 170(s) | 2.5 | 37 | 34 |
| Local Start Time (s) | 7.5 | 31 | 31 |
| Local Yield (s) | 24.5 | 0 | 0 |
| Local Yield 170(s) | 2.5 | 37 | 34 |

| Intersection Summary | |
|---|---|
| Cycle Length | 60 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 75 |
| Offset: 0 (0%), Referenced to phase 4:SBTL and 8:NBT, Start of Yellow | |

Splits and Phases: 1: Ellsworth Road & Serenity Avenue





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 153 | 63 | 104 | 354 | 165 | 165 | 515 | 903 | 194 | 68 | 462 | 486 |
| Future Volume (veh/h) | 153 | 63 | 104 | 354 | 165 | 165 | 515 | 903 | 194 | 68 | 462 | 486 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 166 | 68 | 113 | 385 | 179 | 179 | 560 | 982 | 211 | 74 | 502 | 528 |
| 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 | 547 | 1124 | 349 | 463 | 1000 | 310 | 626 | 1936 | 814 | 288 | 1437 | 697 |
| Arrive On Green | 0.16 | 0.22 | 0.22 | 0.13 | 0.20 | 0.20 | 0.36 | 0.76 | 0.76 | 0.14 | 0.47 | 0.47 |
| Sat Flow, veh/h | 3456 | 5106 | 1585 | 3456 | 5106 | 1585 | 3456 | 5106 | 1585 | 3456 | 5106 | 1585 |
| Grp Volume(v), veh/h | 166 | 68 | 113 | 385 | 179 | 179 | 560 | 982 | 211 | 74 | 502 | 528 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1702 | 1585 | 1728 | 1702 | 1585 | 1728 | 1702 | 1585 | 1728 | 1702 | 1585 |
| Q Serve(g_s), s | 5.1 | 1.3 | 7.2 | 13.0 | 3.5 | 12.3 | 18.4 | 9.1 | 4.1 | 2.3 | 7.5 | 33.8 |
| Cycle Q Clear(g_c), s | 5.1 | 1.3 | 7.2 | 13.0 | 3.5 | 12.3 | 18.4 | 9.1 | 4.1 | 2.3 | 7.5 | 33.8 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 547 | 1124 | 349 | 463 | 1000 | 310 | 626 | 1936 | 814 | 288 | 1437 | 697 |
| V/C Ratio(X) | 0.30 | 0.06 | 0.32 | 0.83 | 0.18 | 0.58 | 0.90 | 0.51 | 0.26 | 0.26 | 0.35 | 0.76 |
| Avail Cap(c_a), veh/h | 547 | 1124 | 349 | 749 | 1000 | 310 | 806 | 1936 | 814 | 288 | 1437 | 697 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 | 1.67 | 1.67 | 1.67 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.72 | 0.72 | 0.72 | 0.96 | 0.96 | 0.96 |
| Uniform Delay (d), s/veh | 44.6 | 37.0 | 39.3 | 50.6 | 40.2 | 43.7 | 37.2 | 10.1 | 5.9 | 48.3 | 24.8 | 21.6 |
| Incr Delay (d2), s/veh | 1.4 | 0.0 | 0.5 | 4.3 | 0.4 | 7.6 | 7.9 | 0.7 | 0.6 | 2.1 | 0.6 | 7.3 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 4.1 | 1.0 | 5.1 | 9.9 | 2.7 | 9.3 | 10.8 | 4.6 | 2.3 | 1.9 | 5.2 | 17.6 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 46.1 | 37.0 | 39.8 | 54.9 | 40.6 | 51.3 | 45.1 | 10.8 | 6.5 | 50.4 | 25.5 | 28.8 |
| LnGrp LOS | D | D | D | D | D | D | D | B | A | D | C | C |
| Approach Vol, veh/h | | 347 | | | 743 | | | 1753 | | | 1104 | |
| Approach Delay, s/veh | | 42.3 | | | 50.6 | | | 21.2 | | | 28.7 | |
| Approach LOS | | D | | | D | | | C | | | C | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 23.0 | 30.0 | 25.7 | 41.3 | 20.1 | 32.9 | 14.0 | 53.0 |
| Change Period (Y+Rc), s | 4.0 | 6.5 | 4.0 | 7.5 | 4.0 | 6.5 | 4.0 | 7.5 |
| Max Green Setting (Gmax), s | 19.0 | 23.5 | 28.0 | 27.5 | 26.0 | 16.5 | 10.0 | 45.5 |
| Max Q Clear Time (g_c+I1), s | 7.1 | 14.3 | 20.4 | 35.8 | 15.0 | 9.2 | 4.3 | 11.1 |
| Green Ext Time (p_c), s | 0.4 | 1.2 | 1.4 | 0.0 | 1.1 | 0.4 | 0.1 | 9.5 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 30.7 |
| HCM 7th LOS | C |

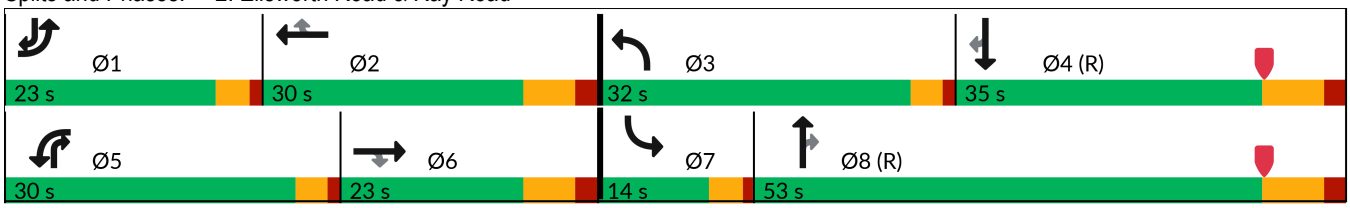
**Notes**

User approved pedestrian interval to be less than phase max green.

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | EBL | WBT | NBL | SBT | WBL | EBT | SBL | NBT |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | Max | Max | None | C-Max | None | None | Max | C-Max |
| Maximum Split (s) | 23 | 30 | 32 | 35 | 30 | 23 | 14 | 53 |
| Maximum Split (%) | 19.2% | 25.0% | 26.7% | 29.2% | 25.0% | 19.2% | 11.7% | 44.2% |
| Minimum Split (s) | 9 | 32.5 | 9 | 37.5 | 9 | 33.5 | 9 | 37.5 |
| Yellow Time (s) | 3 | 4.5 | 3 | 5.5 | 3 | 4.5 | 3 | 5.5 |
| All-Red Time (s) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| Minimum Initial (s) | 5 | 10 | 5 | 15 | 5 | 10 | 5 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 4 | | 4 | | 4 | | 4 |
| Flash Don't Walk (s) | | 22 | | 26 | | 23 | | 26 |
| Dual Entry | No | Yes | No | Yes | No | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 4.5 | 27.5 | 57.5 | 89.5 | 4.5 | 34.5 | 57.5 | 71.5 |
| End Time (s) | 27.5 | 57.5 | 89.5 | 4.5 | 34.5 | 57.5 | 71.5 | 4.5 |
| Yield/Force Off (s) | 23.5 | 51 | 85.5 | 117 | 30.5 | 51 | 67.5 | 117 |
| Yield/Force Off 170(s) | 23.5 | 29 | 85.5 | 91 | 30.5 | 28 | 67.5 | 91 |
| Local Start Time (s) | 7.5 | 30.5 | 60.5 | 92.5 | 7.5 | 37.5 | 60.5 | 74.5 |
| Local Yield (s) | 26.5 | 54 | 88.5 | 0 | 33.5 | 54 | 70.5 | 0 |
| Local Yield 170(s) | 26.5 | 32 | 88.5 | 94 | 33.5 | 31 | 70.5 | 94 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 100 |
| Offset: 117 (98%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow | |

Splits and Phases: 2: Ellsworth Road & Ray Road



| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 251 | 229 | 1372 | 191 | 110 | 809 |
| Future Volume (veh/h) | 251 | 229 | 1372 | 191 | 110 | 809 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 273 | 249 | 1491 | 208 | 120 | 879 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 979 | 449 | 2191 | 680 | 461 | 3085 |
| Arrive On Green | 0.28 | 0.28 | 0.86 | 0.86 | 0.27 | 1.00 |
| Sat Flow, veh/h | 3456 | 1585 | 5274 | 1585 | 3456 | 5274 |
| Grp Volume(v), veh/h | 273 | 249 | 1491 | 208 | 120 | 879 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1585 | 1702 | 1585 | 1728 | 1702 |
| Q Serve(g_s), s | 7.4 | 16.0 | 11.9 | 3.0 | 3.3 | 0.0 |
| Cycle Q Clear(g_c), s | 7.4 | 16.0 | 11.9 | 3.0 | 3.3 | 0.0 |
| Prop In Lane | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Lane Grp Cap(c), veh/h | 979 | 449 | 2191 | 680 | 461 | 3085 |
| V/C Ratio(X) | 0.28 | 0.55 | 0.68 | 0.31 | 0.26 | 0.28 |
| Avail Cap(c_a), veh/h | 979 | 449 | 2191 | 680 | 461 | 3085 |
| HCM Platoon Ratio | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 0.90 | 0.90 | 0.86 | 0.86 |
| Uniform Delay (d), s/veh | 33.5 | 36.6 | 5.7 | 5.1 | 39.3 | 0.0 |
| Incr Delay (d2), s/veh | 0.7 | 4.9 | 1.6 | 1.0 | 1.2 | 0.2 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 5.8 | 11.1 | 4.4 | 1.9 | 2.5 | 0.1 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 34.2 | 41.4 | 7.3 | 6.1 | 40.5 | 0.2 |
| LnGrp LOS | C | D | A | A | D | A |
| Approach Vol, veh/h | 522 | | 1699 | | | 999 |
| Approach Delay, s/veh | 37.6 | | 7.1 | | | 5.0 |
| Approach LOS | D | | A | | | A |

| Timer - Assigned Phs | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 40.0 | 80.0 | 21.0 | 59.0 |
| Change Period (Y+Rc), s | 6.0 | 7.5 | 5.0 | 7.5 |
| Max Green Setting (Gmax), s | 34.0 | 72.5 | 16.0 | 51.5 |
| Max Q Clear Time (g_c+I1), s | 18.0 | 2.0 | 5.3 | 13.9 |
| Green Ext Time (p_c), s | 1.7 | 6.4 | 0.2 | 16.6 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 11.4 |
| HCM 7th LOS | B |

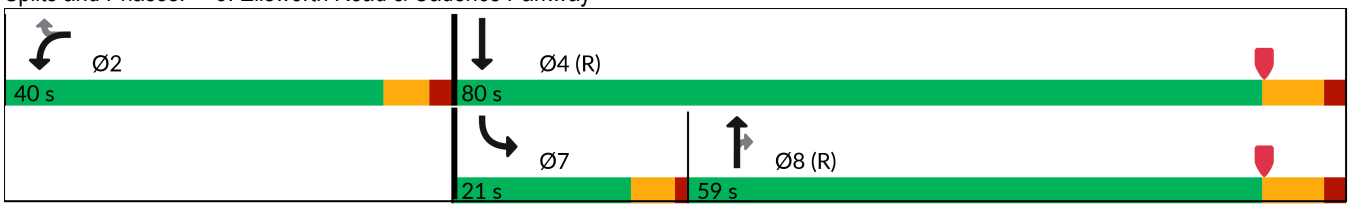
**Notes**

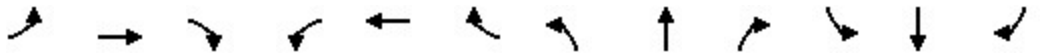
User approved pedestrian interval to be less than phase max green.

| Phase Number | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Movement | WBL | SBT | SBL | NBT |
| Lead/Lag | | | Lead | Lag |
| Lead-Lag Optimize | | | Yes | Yes |
| Recall Mode | Max | C-Max | Max | C-Max |
| Maximum Split (s) | 40 | 80 | 21 | 59 |
| Maximum Split (%) | 33.3% | 66.7% | 17.5% | 49.2% |
| Minimum Split (s) | 35.5 | 22.5 | 10 | 32.5 |
| Yellow Time (s) | 4 | 5.5 | 4 | 5.5 |
| All-Red Time (s) | 2 | 2 | 1 | 2 |
| Minimum Initial (s) | 10 | 15 | 5 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | 4 | | | 7 |
| Flash Don't Walk (s) | 25 | | | 18 |
| Dual Entry | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 47.5 | 87.5 | 87.5 | 108.5 |
| End Time (s) | 87.5 | 47.5 | 108.5 | 47.5 |
| Yield/Force Off (s) | 81.5 | 40 | 103.5 | 40 |
| Yield/Force Off 170(s) | 56.5 | 40 | 103.5 | 22 |
| Local Start Time (s) | 7.5 | 47.5 | 47.5 | 68.5 |
| Local Yield (s) | 41.5 | 0 | 63.5 | 0 |
| Local Yield 170(s) | 16.5 | 0 | 63.5 | 102 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 80 |
| Offset: 40 (33%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow | |

Splits and Phases: 3: Ellsworth Road & Cadence Parkway





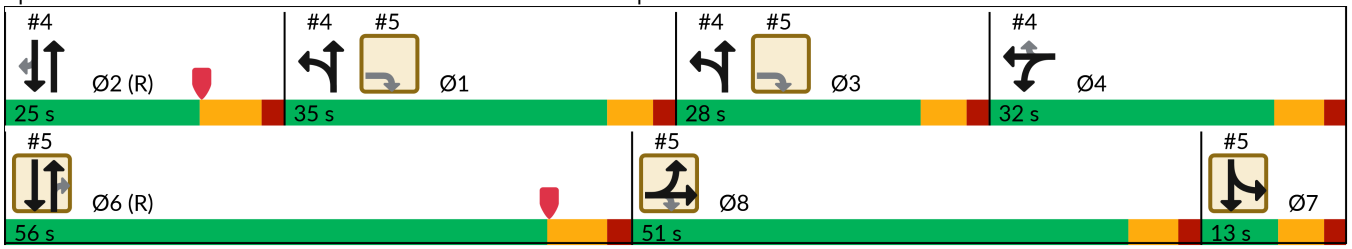
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 0 | 0 | 0 | 33 | 0 | 129 | 1454 | 1429 | 0 | 0 | 593 | 464 |
| Future Volume (vph) | 0 | 0 | 0 | 33 | 0 | 129 | 1454 | 1429 | 0 | 0 | 593 | 464 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | | 0 | 350 | | 350 | 525 | | 0 | 290 | | 285 |
| Storage Lanes | 0 | | 0 | 1 | | 1 | 0 | | 0 | 0 | | 2 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 0.91 | 0.86 | 0.91 | 0.97 | 0.91 | 1.00 | 1.00 | 0.86 | 0.88 |
| Frt | | | | | 0.858 | 0.850 | | | | | | 0.850 |
| Flt Protected | | | | 0.950 | 0.997 | | 0.950 | | | | | |
| Satd. Flow (prot) | 0 | 0 | 0 | 1610 | 2741 | 1441 | 3433 | 5085 | 0 | 0 | 6408 | 2787 |
| Flt Permitted | | | | 0.950 | 0.997 | | 0.950 | | | | | |
| Satd. Flow (perm) | 0 | 0 | 0 | 1610 | 2741 | 1441 | 3433 | 5085 | 0 | 0 | 6408 | 2787 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | | | 164 | 164 | | | | | | 504 |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 841 | | | 605 | | | 688 | | | 624 | |
| Travel Time (s) | | 19.1 | | | 13.8 | | | 15.6 | | | 14.2 | |
| 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 |
| Adj. Flow (vph) | 0 | 0 | 0 | 36 | 0 | 140 | 1580 | 1553 | 0 | 0 | 645 | 504 |
| Shared Lane Traffic (%) | | | | 10% | | 50% | | | | | | |
| Lane Group Flow (vph) | 0 | 0 | 0 | 32 | 74 | 70 | 1580 | 1553 | 0 | 0 | 645 | 504 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 24 | | | 24 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | | | | 1 | 2 | 1 | 1 | 2 | | | 2 | 1 |
| Detector Template | | | | Left | Thru | Right | Left | Thru | | | Thru | Right |
| Leading Detector (ft) | | | | 20 | 100 | 20 | 20 | 100 | | | 100 | 20 |
| Trailing Detector (ft) | | | | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 |
| Detector 1 Position(ft) | | | | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 |
| Detector 1 Size(ft) | | | | 20 | 6 | 20 | 20 | 6 | | | 6 | 20 |
| Detector 1 Type | | | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | | Cl+Ex | Cl+Ex |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Detector 1 Queue (s) | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Detector 1 Delay (s) | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Detector 2 Position(ft) | | | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | | | | Split | NA | Perm | Prot | NA | | | NA | Perm |
| Protected Phases | | | | 4 | 4 | | 1 3 | 1 2 3 | | | 2 | |
| Permitted Phases | | | | | | 4 | | | | | | 2 |

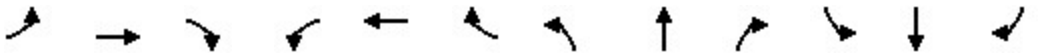
| Lane Group | Ø1 | Ø3 | Ø6 | Ø7 | Ø8 |
|---|---|---|---|---|---|
| Lane Configurations | | | | | |
| Traffic Volume (vph) | | | | | |
| Future Volume (vph) | | | | | |
| Ideal Flow (vphpl) | | | | | |
| Storage Length (ft) | | | | | |
| Storage Lanes | | | | | |
| Taper Length (ft) | | | | | |
| Lane Util. Factor | | | | | |
| Frt | | | | | |
| Flt Protected | | | | | |
| Satd. Flow (prot) | | | | | |
| Flt Permitted | | | | | |
| Satd. Flow (perm) | | | | | |
| Right Turn on Red | | | | | |
| Satd. Flow (RTOR) | | | | | |
| Link Speed (mph) | | | | | |
| Link Distance (ft) | | | | | |
| Travel Time (s) | | | | | |
| Peak Hour Factor | | | | | |
| Adj. Flow (vph) | | | | | |
| Shared Lane Traffic (%) | | | | | |
| Lane Group Flow (vph) | | | | | |
| Enter Blocked Intersection | | | | | |
| Lane Alignment | | | | | |
| Median Width(ft) | | | | | |
| Link Offset(ft) | | | | | |
| Crosswalk Width(ft) | | | | | |
| Two way Left Turn Lane | | | | | |
| Headway Factor | | | | | |
| Turning Speed (mph) | | | | | |
| Number of Detectors | | | | | |
| Detector Template | | | | | |
| Leading Detector (ft) | | | | | |
| Trailing Detector (ft) | | | | | |
| Detector 1 Position(ft) | | | | | |
| Detector 1 Size(ft) | | | | | |
| Detector 1 Type | | | | | |
| Detector 1 Channel | | | | | |
| Detector 1 Extend (s) | | | | | |
| Detector 1 Queue (s) | | | | | |
| Detector 1 Delay (s) | | | | | |
| Detector 2 Position(ft) | | | | | |
| Detector 2 Size(ft) | | | | | |
| Detector 2 Type | | | | | |
| Detector 2 Channel | | | | | |
| Detector 2 Extend (s) | | | | | |
| Turn Type | | | | | |
| Protected Phases | 1 | 3 | 6 | 7 | 8 |
| Permitted Phases | | | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | | | | 4 | 4 | 4 | 1 3 | 1 2 3 | | | 2 | 2 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | | | | 10.0 | 10.0 | 10.0 | | | | | 15.0 | 15.0 |
| Minimum Split (s) | | | | 48.5 | 48.5 | 48.5 | | | | | 25.5 | 25.5 |
| Total Split (s) | | | | 32.0 | 32.0 | 32.0 | | | | | 25.0 | 25.0 |
| Total Split (%) | | | | 26.7% | 26.7% | 26.7% | | | | | 20.8% | 20.8% |
| Maximum Green (s) | | | | 25.5 | 25.5 | 25.5 | | | | | 17.5 | 17.5 |
| Yellow Time (s) | | | | 4.5 | 4.5 | 4.5 | | | | | 5.5 | 5.5 |
| All-Red Time (s) | | | | 2.0 | 2.0 | 2.0 | | | | | 2.0 | 2.0 |
| Lost Time Adjust (s) | | | | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 |
| Total Lost Time (s) | | | | 6.5 | 6.5 | 6.5 | | | | | 7.5 | 7.5 |
| Lead/Lag | | | | Lag | Lag | Lag | | | | | Lead | Lead |
| Lead-Lag Optimize? | | | | Yes | Yes | Yes | | | | | Yes | Yes |
| Vehicle Extension (s) | | | | 3.0 | 3.0 | 3.0 | | | | | 3.0 | 3.0 |
| Recall Mode | | | | None | None | None | | | | | C-Max | C-Max |
| Walk Time (s) | | | | 4.0 | 4.0 | 4.0 | | | | | 4.0 | 4.0 |
| Flash Don't Walk (s) | | | | 38.0 | 38.0 | 38.0 | | | | | 13.0 | 13.0 |
| Pedestrian Calls (#/hr) | | | | 0 | 0 | 0 | | | | | 0 | 0 |
| Act Effct Green (s) | | | | 25.0 | 25.0 | 25.0 | 57.0 | 82.5 | | | 18.0 | 18.0 |
| Actuated g/C Ratio | | | | 0.21 | 0.21 | 0.21 | 0.48 | 0.69 | | | 0.15 | 0.15 |
| v/c Ratio | | | | 0.10 | 0.11 | 0.16 | 0.97 | 0.44 | | | 0.67 | 0.60 |
| Control Delay (s/veh) | | | | 39.0 | 0.3 | 0.8 | 25.8 | 1.0 | | | 48.8 | 11.1 |
| Queue Delay | | | | 0.0 | 0.0 | 0.0 | 27.2 | 0.0 | | | 0.0 | 0.0 |
| Total Delay (s/veh) | | | | 39.0 | 0.3 | 0.8 | 53.0 | 1.0 | | | 48.8 | 11.1 |
| LOS | | | | D | A | A | D | A | | | D | B |
| Approach Delay (s/veh) | | | | | 7.6 | | | 27.2 | | | 32.3 | |
| Approach LOS | | | | | A | | | C | | | C | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 120 | | | |
| Actuated Cycle Length: 120 | | | |
| Offset: 12 (10%), Referenced to phase 2:NBSB and 6:, Start of Yellow | | | |
| Natural Cycle: 140 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.97 | | | |
| Intersection Signal Delay (s/veh): 27.8 | | Intersection LOS: C | |
| Intersection Capacity Utilization 82.7% | | ICU Level of Service E | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 4: Ellsworth Road & SR24 Westbound Ramps





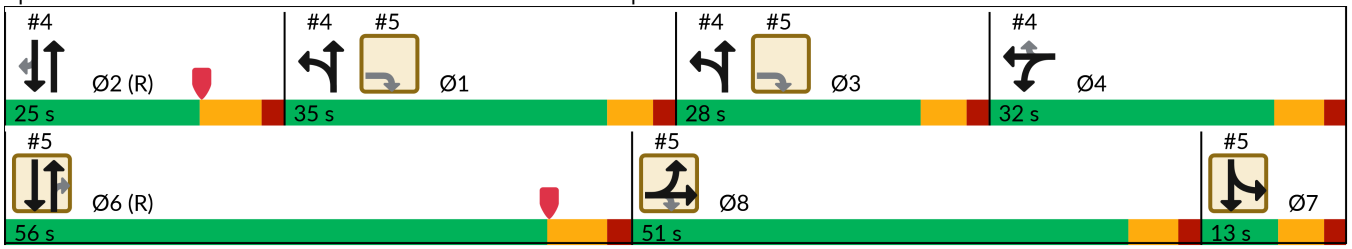
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 297 | 3 | 1555 | 0 | 0 | 0 | 0 | 2570 | 2 | 50 | 603 | 0 |
| Future Volume (vph) | 297 | 3 | 1555 | 0 | 0 | 0 | 0 | 2570 | 2 | 50 | 603 | 0 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 350 | | 350 | 0 | | 0 | 300 | | 300 | 550 | | 0 |
| Storage Lanes | 1 | | 2 | 0 | | 0 | 2 | | 1 | 0 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 0.95 | 0.95 | 0.88 | 1.00 | 1.00 | 1.00 | 1.00 | 0.81 | 1.00 | 0.97 | 0.91 | 1.00 |
| Frt | | | 0.850 | | | | | | 0.850 | | | |
| Flt Protected | 0.950 | 0.953 | | | | | | | | 0.950 | | |
| Satd. Flow (prot) | 1681 | 1686 | 2787 | 0 | 0 | 0 | 0 | 7544 | 1583 | 3433 | 5085 | 0 |
| Flt Permitted | 0.950 | 0.953 | | | | | | | | 0.950 | | |
| Satd. Flow (perm) | 1681 | 1686 | 2787 | 0 | 0 | 0 | 0 | 7544 | 1583 | 3433 | 5085 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 361 | | | | | | 145 | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 651 | | | 441 | | | 838 | | | 688 | |
| Travel Time (s) | | 14.8 | | | 10.0 | | | 19.0 | | | 15.6 | |
| 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 |
| Adj. Flow (vph) | 323 | 3 | 1690 | 0 | 0 | 0 | 0 | 2793 | 2 | 54 | 655 | 0 |
| Shared Lane Traffic (%) | 50% | | | | | | | | | | | |
| Lane Group Flow (vph) | 161 | 165 | 1690 | 0 | 0 | 0 | 0 | 2793 | 2 | 54 | 655 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 24 | | | 24 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | 1 | | | | | 2 | 1 | 1 | 2 | |
| Detector Template | Left | Thru | Right | | | | | Thru | Right | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | 20 | | | | | 100 | 20 | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | 0 | | | | | 0 | 0 | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | 0 | | | | | 0 | 0 | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | 20 | | | | | 6 | 20 | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | | | | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | | | | 0.0 | | | 0.0 | |
| Turn Type | Split | NA | custom | | | | | NA | Perm | Prot | NA | |
| Protected Phases | 8 | 8 | | | | | | 6 | | 7 | 6 7 | |
| Permitted Phases | | | 1 3 8 | | | | | | 6 | | | |

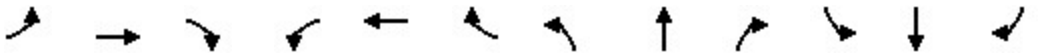
| Lane Group | Ø1 | Ø2 | Ø3 | Ø4 |
|---|---|---|---|---|
| Lane Configurations | | | | |
| Traffic Volume (vph) | | | | |
| Future Volume (vph) | | | | |
| Ideal Flow (vphpl) | | | | |
| Storage Length (ft) | | | | |
| Storage Lanes | | | | |
| Taper Length (ft) | | | | |
| Lane Util. Factor | | | | |
| Frt | | | | |
| Flt Protected | | | | |
| Satd. Flow (prot) | | | | |
| Flt Permitted | | | | |
| Satd. Flow (perm) | | | | |
| Right Turn on Red | | | | |
| Satd. Flow (RTOR) | | | | |
| Link Speed (mph) | | | | |
| Link Distance (ft) | | | | |
| Travel Time (s) | | | | |
| Peak Hour Factor | | | | |
| Adj. Flow (vph) | | | | |
| Shared Lane Traffic (%) | | | | |
| Lane Group Flow (vph) | | | | |
| Enter Blocked Intersection | | | | |
| Lane Alignment | | | | |
| Median Width(ft) | | | | |
| Link Offset(ft) | | | | |
| Crosswalk Width(ft) | | | | |
| Two way Left Turn Lane | | | | |
| Headway Factor | | | | |
| Turning Speed (mph) | | | | |
| Number of Detectors | | | | |
| Detector Template | | | | |
| Leading Detector (ft) | | | | |
| Trailing Detector (ft) | | | | |
| Detector 1 Position(ft) | | | | |
| Detector 1 Size(ft) | | | | |
| Detector 1 Type | | | | |
| Detector 1 Channel | | | | |
| Detector 1 Extend (s) | | | | |
| Detector 1 Queue (s) | | | | |
| Detector 1 Delay (s) | | | | |
| Detector 2 Position(ft) | | | | |
| Detector 2 Size(ft) | | | | |
| Detector 2 Type | | | | |
| Detector 2 Channel | | | | |
| Detector 2 Extend (s) | | | | |
| Turn Type | | | | |
| Protected Phases | 1 | 2 | 3 | 4 |
| Permitted Phases | | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | 8 | 8 | 1 3 8 | | | | | 6 | 6 | 7 | 6 7 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | | | | | 15.0 | 15.0 | 5.0 | | |
| Minimum Split (s) | 46.5 | 46.5 | | | | | | 26.5 | 26.5 | 11.0 | | |
| Total Split (s) | 51.0 | 51.0 | | | | | | 56.0 | 56.0 | 13.0 | | |
| Total Split (%) | 42.5% | 42.5% | | | | | | 46.7% | 46.7% | 10.8% | | |
| Maximum Green (s) | 44.5 | 44.5 | | | | | | 48.5 | 48.5 | 7.0 | | |
| Yellow Time (s) | 4.5 | 4.5 | | | | | | 5.5 | 5.5 | 4.0 | | |
| All-Red Time (s) | 2.0 | 2.0 | | | | | | 2.0 | 2.0 | 2.0 | | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | | | | | 0.0 | 0.0 | 0.0 | | |
| Total Lost Time (s) | 6.5 | 6.5 | | | | | | 7.5 | 7.5 | 6.0 | | |
| Lead/Lag | Lead | Lead | | | | | | | | Lag | | |
| Lead-Lag Optimize? | Yes | Yes | | | | | | | | Yes | | |
| Vehicle Extension (s) | 3.0 | 3.0 | | | | | | 3.0 | 3.0 | 3.0 | | |
| Recall Mode | None | None | | | | | | C-Max | C-Max | None | | |
| Walk Time (s) | 4.0 | 4.0 | | | | | | 4.0 | 4.0 | | | |
| Flash Don't Walk (s) | 36.0 | 36.0 | | | | | | 15.0 | 15.0 | | | |
| Pedestrian Calls (#/hr) | 0 | 0 | | | | | | 0 | 0 | | | |
| Act Effct Green (s) | 43.1 | 43.1 | 72.6 | | | | | 49.0 | 49.0 | 7.9 | 62.9 | |
| Actuated g/C Ratio | 0.36 | 0.36 | 0.61 | | | | | 0.41 | 0.41 | 0.07 | 0.52 | |
| v/c Ratio | 0.27 | 0.27 | 0.92 | | | | | 0.91 | 0.00 | 0.24 | 0.25 | |
| Control Delay (s/veh) | 28.2 | 28.3 | 25.5 | | | | | 37.3 | 0.0 | 84.4 | 1.9 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | | | | | 1.7 | 0.0 | 0.0 | 0.0 | |
| Total Delay (s/veh) | 28.2 | 28.3 | 25.5 | | | | | 39.0 | 0.0 | 84.4 | 1.9 | |
| LOS | C | C | C | | | | | D | A | F | A | |
| Approach Delay (s/veh) | | 26.0 | | | | | | 39.0 | | | 8.2 | |
| Approach LOS | | C | | | | | | D | | | A | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 120 | | | |
| Actuated Cycle Length: 120 | | | |
| Offset: 12 (10%), Referenced to phase 2:NBSB and 6:, Start of Yellow | | | |
| Natural Cycle: 140 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.97 | | | |
| Intersection Signal Delay (s/veh): 30.3 | | Intersection LOS: C | |
| Intersection Capacity Utilization 82.7% | | ICU Level of Service E | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 5: Ellsworth Road & SR24 Eastbound Ramps





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 40 | 49 | 17 | 181 | 114 | 129 | 28 | 2262 | 124 | 216 | 1490 | 117 |
| Future Volume (veh/h) | 40 | 49 | 17 | 181 | 114 | 129 | 28 | 2262 | 124 | 216 | 1490 | 117 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 43 | 53 | 18 | 197 | 124 | 140 | 30 | 2459 | 135 | 235 | 1620 | 127 |
| 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 | 259 | 207 | 92 | 490 | 444 | 409 | 216 | 2383 | 740 | 461 | 2615 | 205 |
| Arrive On Green | 0.08 | 0.06 | 0.06 | 0.05 | 0.04 | 0.04 | 0.13 | 0.93 | 0.93 | 0.09 | 0.36 | 0.36 |
| Sat Flow, veh/h | 3456 | 3554 | 1585 | 3456 | 3554 | 1585 | 3456 | 5106 | 1585 | 3456 | 4828 | 378 |
| Grp Volume(v), veh/h | 43 | 53 | 18 | 197 | 124 | 140 | 30 | 2459 | 135 | 235 | 1142 | 605 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1777 | 1585 | 1728 | 1777 | 1585 | 1728 | 1702 | 1585 | 1728 | 1702 | 1802 |
| Q Serve(g_s), s | 1.4 | 1.7 | 1.3 | 6.6 | 4.1 | 8.9 | 0.9 | 56.0 | 0.8 | 7.8 | 33.1 | 33.1 |
| Cycle Q Clear(g_c), s | 1.4 | 1.7 | 1.3 | 6.6 | 4.1 | 8.9 | 0.9 | 56.0 | 0.8 | 7.8 | 33.1 | 33.1 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.21 |
| Lane Grp Cap(c), veh/h | 259 | 207 | 92 | 490 | 444 | 409 | 216 | 2383 | 740 | 461 | 1844 | 976 |
| V/C Ratio(X) | 0.17 | 0.26 | 0.19 | 0.40 | 0.28 | 0.34 | 0.14 | 1.03 | 0.18 | 0.51 | 0.62 | 0.62 |
| Avail Cap(c_a), veh/h | 259 | 252 | 112 | 490 | 489 | 429 | 216 | 2383 | 740 | 461 | 1844 | 976 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 0.33 | 0.33 | 0.33 | 2.00 | 2.00 | 2.00 | 0.67 | 0.67 | 0.67 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.44 | 0.44 | 0.44 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 52.0 | 54.0 | 53.8 | 52.3 | 52.3 | 39.8 | 49.6 | 4.0 | 2.2 | 50.9 | 28.1 | 28.1 |
| Incr Delay (d2), s/veh | 1.4 | 0.6 | 1.0 | 2.5 | 0.3 | 0.5 | 0.6 | 21.5 | 0.2 | 4.0 | 1.6 | 3.0 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 1.2 | 1.4 | 1.0 | 5.7 | 3.4 | 6.8 | 0.8 | 9.3 | 0.5 | 6.7 | 20.9 | 22.4 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 53.4 | 54.7 | 54.8 | 54.7 | 52.6 | 40.3 | 50.2 | 25.5 | 2.4 | 54.9 | 29.6 | 31.0 |
| LnGrp LOS | D | D | D | D | D | D | D | F | A | D | C | C |
| Approach Vol, veh/h | | 114 | | | 461 | | | 2624 | | | 1982 | |
| Approach Delay, s/veh | | 54.2 | | | 49.8 | | | 24.6 | | | 33.1 | |
| Approach LOS | | D | | | D | | | C | | | C | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 14.0 | 21.5 | 12.0 | 72.5 | 22.0 | 13.5 | 21.0 | 63.5 |
| Change Period (Y+Rc), s | 5.0 | 6.5 | 4.5 | 7.5 | 5.0 | 6.5 | 5.0 | 7.5 |
| Max Green Setting (Gmax), s | 9.0 | 16.5 | 7.5 | 63.5 | 17.0 | 8.5 | 16.0 | 54.5 |
| Max Q Clear Time (g_c+I1), s | 3.4 | 10.9 | 2.9 | 35.1 | 8.6 | 3.7 | 9.8 | 58.0 |
| Green Ext Time (p_c), s | 0.0 | 0.6 | 0.0 | 15.7 | 0.4 | 0.1 | 0.4 | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 30.7 |
| HCM 7th LOS | C |

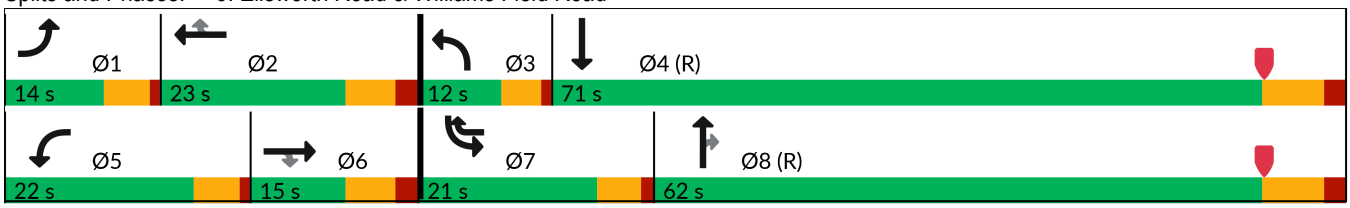
**Notes**

User approved pedestrian interval to be less than phase max green.

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | EBL | WBT | NBL | SBT | WBL | EBT | SBL | NBT |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | Max | None | Max | C-Max | Max | None | Max | C-Max |
| Maximum Split (s) | 14 | 23 | 12 | 71 | 22 | 15 | 21 | 62 |
| Maximum Split (%) | 11.7% | 19.2% | 10.0% | 59.2% | 18.3% | 12.5% | 17.5% | 51.7% |
| Minimum Split (s) | 11 | 36.5 | 10.5 | 35.5 | 24 | 37.5 | 11 | 37.5 |
| Yellow Time (s) | 4 | 4.5 | 3.5 | 5.5 | 4 | 4.5 | 4 | 5.5 |
| All-Red Time (s) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| Minimum Initial (s) | 5 | 15 | 5 | 15 | 5 | 5 | 5 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 4 | | 7 | | 4 | | 7 |
| Flash Don't Walk (s) | | 26 | | 21 | | 27 | | 23 |
| Dual Entry | No | Yes | No | Yes | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 32.5 | 46.5 | 69.5 | 81.5 | 32.5 | 54.5 | 69.5 | 90.5 |
| End Time (s) | 46.5 | 69.5 | 81.5 | 32.5 | 54.5 | 69.5 | 90.5 | 32.5 |
| Yield/Force Off (s) | 41.5 | 63 | 77 | 25 | 49.5 | 63 | 85.5 | 25 |
| Yield/Force Off 170(s) | 41.5 | 37 | 77 | 4 | 49.5 | 36 | 85.5 | 2 |
| Local Start Time (s) | 7.5 | 21.5 | 44.5 | 56.5 | 7.5 | 29.5 | 44.5 | 65.5 |
| Local Yield (s) | 16.5 | 38 | 52 | 0 | 24.5 | 38 | 60.5 | 0 |
| Local Yield 170(s) | 16.5 | 12 | 52 | 99 | 24.5 | 11 | 60.5 | 97 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 150 |
| Offset: 25 (21%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow | |

Splits and Phases: 6: Ellsworth Road & Williams Field Road



| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 0 | 1 | 2458 | 16 | 10 | 1664 |
| Future Volume (veh/h) | 0 | 1 | 2458 | 16 | 10 | 1664 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 0 | 1 | 2672 | 17 | 11 | 1809 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 430 | 766 | 3020 | 937 | 44 | 3298 |
| Arrive On Green | 0.00 | 0.24 | 1.00 | 1.00 | 0.01 | 0.43 |
| Sat Flow, veh/h | 1781 | 3170 | 5274 | 1585 | 3456 | 5274 |
| Grp Volume(v), veh/h | 0 | 1 | 2672 | 17 | 11 | 1809 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1585 | 1702 | 1585 | 1728 | 1702 |
| Q Serve(g_s), s | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 31.6 |
| Cycle Q Clear(g_c), s | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 31.6 |
| Prop In Lane | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Lane Grp Cap(c), veh/h | 430 | 766 | 3020 | 937 | 44 | 3298 |
| V/C Ratio(X) | 0.00 | 0.00 | 0.88 | 0.02 | 0.25 | 0.55 |
| Avail Cap(c_a), veh/h | 430 | 766 | 3020 | 937 | 144 | 3298 |
| HCM Platoon Ratio | 1.00 | 1.00 | 2.00 | 2.00 | 0.67 | 0.67 |
| Upstream Filter(I) | 0.00 | 1.00 | 0.37 | 0.37 | 0.75 | 0.75 |
| Uniform Delay (d), s/veh | 0.0 | 34.5 | 0.0 | 0.0 | 58.9 | 21.0 |
| Incr Delay (d2), s/veh | 0.0 | 0.0 | 1.6 | 0.0 | 2.2 | 0.5 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 0.0 | 0.0 | 0.8 | 0.0 | 0.3 | 18.2 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 0.0 | 34.5 | 1.6 | 0.0 | 61.1 | 21.5 |
| LnGrp LOS | | C | A | A | E | C |
| Approach Vol, veh/h | 1 | | 2689 | | | 1820 |
| Approach Delay, s/veh | 34.5 | | 1.6 | | | 21.8 |
| Approach LOS | C | | A | | | C |

| Timer - Assigned Phs | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 35.0 | 85.0 | 6.5 | 78.5 |
| Change Period (Y+Rc), s | 6.0 | 7.5 | 5.0 | 7.5 |
| Max Green Setting (Gmax), s | 29.0 | 77.5 | 5.0 | 67.5 |
| Max Q Clear Time (g_c+I1), s | 2.0 | 33.6 | 2.4 | 2.0 |
| Green Ext Time (p_c), s | 0.0 | 18.3 | 0.0 | 43.5 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 9.8 |
| HCM 7th LOS | A |

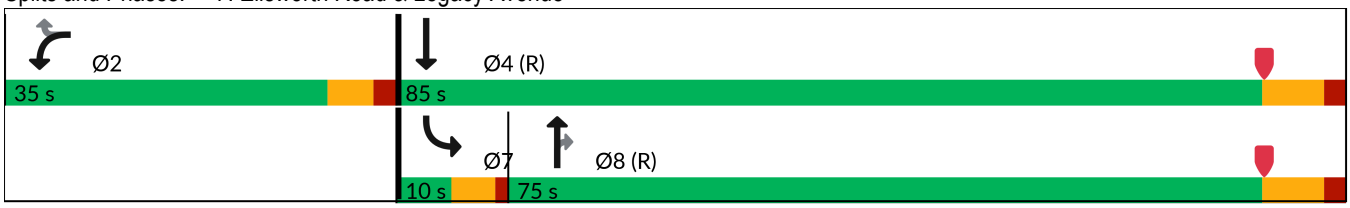
**Notes**

User approved volume balancing among the lanes for turning movement.

| Phase Number | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Movement | WBL | SBT | SBL | NBT |
| Lead/Lag | | | Lead | Lag |
| Lead-Lag Optimize | | | Yes | Yes |
| Recall Mode | Max | C-Max | None | C-Max |
| Maximum Split (s) | 35 | 85 | 10 | 75 |
| Maximum Split (%) | 29.2% | 70.8% | 8.3% | 62.5% |
| Minimum Split (s) | 35 | 39.5 | 10 | 26.5 |
| Yellow Time (s) | 4 | 5.5 | 4 | 5.5 |
| All-Red Time (s) | 2 | 2 | 1 | 2 |
| Minimum Initial (s) | 10 | 15 | 5 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | 4 | 4 | | 7 |
| Flash Don't Walk (s) | 25 | 28 | | 12 |
| Dual Entry | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 7.5 | 42.5 | 42.5 | 52.5 |
| End Time (s) | 42.5 | 7.5 | 52.5 | 7.5 |
| Yield/Force Off (s) | 36.5 | 0 | 47.5 | 0 |
| Yield/Force Off 170(s) | 11.5 | 92 | 47.5 | 108 |
| Local Start Time (s) | 7.5 | 42.5 | 42.5 | 52.5 |
| Local Yield (s) | 36.5 | 0 | 47.5 | 0 |
| Local Yield 170(s) | 11.5 | 92 | 47.5 | 108 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 110 |
| Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow | |

Splits and Phases: 7: Ellsworth Road & Legacy Avenue



| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 101 | 185 | 2313 | 64 | 85 | 1561 |
| Future Volume (veh/h) | 101 | 185 | 2313 | 64 | 85 | 1561 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 110 | 201 | 2514 | 70 | 92 | 1697 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 423 | 376 | 2903 | 901 | 149 | 3298 |
| Arrive On Green | 0.24 | 0.24 | 0.57 | 0.57 | 0.04 | 0.65 |
| Sat Flow, veh/h | 1781 | 1585 | 5274 | 1585 | 1781 | 5274 |
| Grp Volume(v), veh/h | 110 | 201 | 2514 | 70 | 92 | 1697 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1585 | 1702 | 1585 | 1781 | 1702 |
| Q Serve(g_s), s | 6.0 | 13.3 | 50.2 | 2.4 | 2.5 | 21.2 |
| Cycle Q Clear(g_c), s | 6.0 | 13.3 | 50.2 | 2.4 | 2.5 | 21.2 |
| Prop In Lane | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Lane Grp Cap(c), veh/h | 423 | 376 | 2903 | 901 | 149 | 3298 |
| V/C Ratio(X) | 0.26 | 0.53 | 0.87 | 0.08 | 0.62 | 0.51 |
| Avail Cap(c_a), veh/h | 423 | 376 | 2903 | 901 | 308 | 3298 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 0.82 | 0.82 |
| Uniform Delay (d), s/veh | 37.2 | 40.0 | 22.0 | 11.7 | 27.7 | 11.3 |
| Incr Delay (d2), s/veh | 1.5 | 5.3 | 3.8 | 0.2 | 3.4 | 0.5 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 5.1 | 9.7 | 27.3 | 1.6 | 3.0 | 11.8 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 38.7 | 45.3 | 25.8 | 11.8 | 31.1 | 11.7 |
| LnGrp LOS | D | D | C | B | C | B |
| Approach Vol, veh/h | 311 | | 2584 | | | 1789 |
| Approach Delay, s/veh | 42.9 | | 25.4 | | | 12.7 |
| Approach LOS | D | | C | | | B |

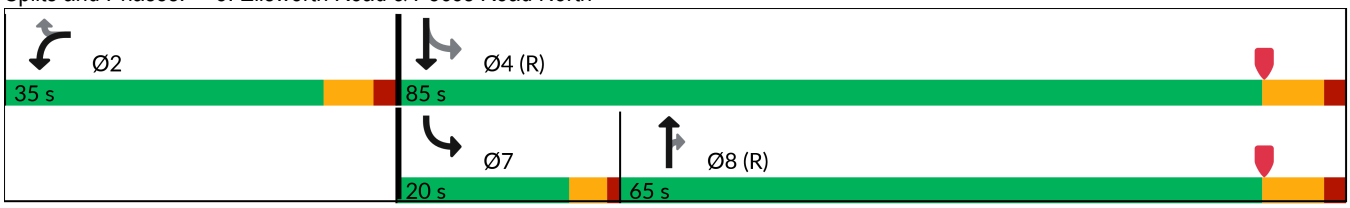
| Timer - Assigned Phs | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 35.0 | 85.0 | 9.3 | 75.7 |
| Change Period (Y+Rc), s | 6.5 | 7.5 | 4.5 | 7.5 |
| Max Green Setting (Gmax), s | 28.5 | 77.5 | 15.5 | 57.5 |
| Max Q Clear Time (g_c+I1), s | 15.3 | 23.2 | 4.5 | 52.2 |
| Green Ext Time (p_c), s | 0.8 | 21.3 | 0.1 | 5.0 |

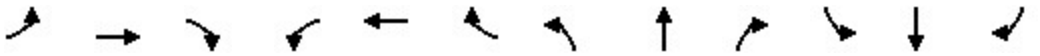
| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 21.7 |
| HCM 7th LOS | C |

| Phase Number | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Movement | WBL | SBTL | SBL | NBT |
| Lead/Lag | | | Lead | Lag |
| Lead-Lag Optimize | | | Yes | Yes |
| Recall Mode | Max | C-Max | None | C-Max |
| Maximum Split (s) | 35 | 85 | 20 | 65 |
| Maximum Split (%) | 29.2% | 70.8% | 16.7% | 54.2% |
| Minimum Split (s) | 24.5 | 25.5 | 9.5 | 25.5 |
| Yellow Time (s) | 4.5 | 5.5 | 3.5 | 5.5 |
| All-Red Time (s) | 2 | 2 | 1 | 2 |
| Minimum Initial (s) | 5 | 15 | 5 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | | | | |
| Flash Don't Walk (s) | | | | |
| Dual Entry | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 7.5 | 42.5 | 42.5 | 62.5 |
| End Time (s) | 42.5 | 7.5 | 62.5 | 7.5 |
| Yield/Force Off (s) | 36 | 0 | 58 | 0 |
| Yield/Force Off 170(s) | 36 | 0 | 58 | 0 |
| Local Start Time (s) | 7.5 | 42.5 | 42.5 | 62.5 |
| Local Yield (s) | 36 | 0 | 58 | 0 |
| Local Yield 170(s) | 36 | 0 | 58 | 0 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 90 |
| Offset: 0 (0%), Referenced to phase 4:SBTL and 8:NBT, Start of Yellow | |

Splits and Phases: 8: Ellsworth Road & Pecos Road North





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 54 | 311 | 18 | 26 | 409 | 17 | 3 | 0 | 2 | 73 | 0 | 22 |
| Future Volume (veh/h) | 54 | 311 | 18 | 26 | 409 | 17 | 3 | 0 | 2 | 73 | 0 | 22 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 59 | 338 | 20 | 28 | 445 | 18 | 3 | 0 | 2 | 79 | 0 | 24 |
| 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 | 759 | 3543 | 1100 | 87 | 3489 | 1083 | 14 | 0 | 82 | 228 | 0 | 161 |
| Arrive On Green | 0.07 | 1.00 | 1.00 | 0.05 | 1.00 | 1.00 | 0.00 | 0.00 | 0.05 | 0.05 | 0.00 | 0.10 |
| Sat Flow, veh/h | 1781 | 5106 | 1585 | 3456 | 5106 | 1585 | 3456 | 0 | 1585 | 1781 | 0 | 1585 |
| Grp Volume(v), veh/h | 59 | 338 | 20 | 28 | 445 | 18 | 3 | 0 | 2 | 79 | 0 | 24 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1702 | 1585 | 1728 | 1702 | 1585 | 1728 | 0 | 1585 | 1781 | 0 | 1585 |
| Q Serve(g_s), s | 1.2 | 0.0 | 0.0 | 0.9 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 4.9 | 0.0 | 1.7 |
| Cycle Q Clear(g_c), s | 1.2 | 0.0 | 0.0 | 0.9 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 4.9 | 0.0 | 1.7 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 759 | 3543 | 1100 | 87 | 3489 | 1083 | 14 | 0 | 82 | 228 | 0 | 161 |
| V/C Ratio(X) | 0.08 | 0.10 | 0.02 | 0.32 | 0.13 | 0.02 | 0.22 | 0.00 | 0.02 | 0.35 | 0.00 | 0.15 |
| Avail Cap(c_a), veh/h | 947 | 3543 | 1100 | 403 | 3489 | 1083 | 274 | 0 | 277 | 406 | 0 | 396 |
| HCM Platoon Ratio | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 4.7 | 0.0 | 0.0 | 56.0 | 0.0 | 0.0 | 59.6 | 0.0 | 54.0 | 48.4 | 0.0 | 49.1 |
| Incr Delay (d2), s/veh | 0.0 | 0.1 | 0.0 | 2.1 | 0.1 | 0.0 | 7.8 | 0.0 | 0.1 | 0.9 | 0.0 | 0.4 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 0.6 | 0.0 | 0.0 | 0.8 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 4.0 | 0.0 | 1.2 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 4.8 | 0.1 | 0.0 | 58.1 | 0.1 | 0.0 | 67.4 | 0.0 | 54.2 | 49.3 | 0.0 | 49.6 |
| LnGrp LOS | A | A | A | E | A | A | E | | D | D | | D |
| Approach Vol, veh/h | | 417 | | | 491 | | | 5 | | | 103 | |
| Approach Delay, s/veh | | 0.7 | | | 3.4 | | | 62.1 | | | 49.3 | |
| Approach LOS | | A | | | A | | | E | | | D | |

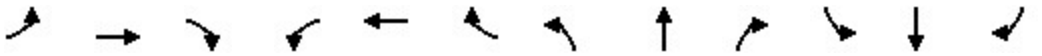
| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 8.3 | 88.5 | 5.0 | 18.2 | 7.0 | 89.8 | 11.0 | 12.2 |
| Change Period (Y+Rc), s | 4.0 | 6.5 | 4.5 | 6.0 | 4.0 | 6.5 | 4.5 | 6.0 |
| Max Green Setting (Gmax), s | 17.0 | 42.5 | 9.5 | 30.0 | 14.0 | 45.5 | 18.5 | 21.0 |
| Max Q Clear Time (g_c+I1), s | 3.2 | 2.0 | 2.1 | 3.7 | 2.9 | 2.0 | 6.9 | 2.1 |
| Green Ext Time (p_c), s | 0.1 | 3.0 | 0.0 | 0.1 | 0.0 | 2.3 | 0.1 | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 7.2 |
| HCM 7th LOS | A |

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | EBL | WBT | NBL | SBTL | WBL | EBTL | SBL | NBT |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | None | C-Max | None | None | None | C-Max | None | None |
| Maximum Split (s) | 21 | 49 | 14 | 36 | 18 | 52 | 23 | 27 |
| Maximum Split (%) | 17.5% | 40.8% | 11.7% | 30.0% | 15.0% | 43.3% | 19.2% | 22.5% |
| Minimum Split (s) | 9.5 | 24.5 | 9.5 | 24 | 12.5 | 24.5 | 9.5 | 24 |
| Yellow Time (s) | 3 | 4.5 | 3.5 | 4 | 3 | 4.5 | 3.5 | 4 |
| All-Red Time (s) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| Minimum Initial (s) | 5 | 15 | 5 | 10 | 5 | 15 | 5 | 10 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | | | | | 7 | | |
| Flash Don't Walk (s) | | | | | | 11 | | |
| Dual Entry | No | Yes | No | Yes | No | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 56.5 | 77.5 | 6.5 | 20.5 | 56.5 | 74.5 | 6.5 | 29.5 |
| End Time (s) | 77.5 | 6.5 | 20.5 | 56.5 | 74.5 | 6.5 | 29.5 | 56.5 |
| Yield/Force Off (s) | 73.5 | 0 | 16 | 50.5 | 70.5 | 0 | 25 | 50.5 |
| Yield/Force Off 170(s) | 73.5 | 0 | 16 | 50.5 | 70.5 | 109 | 25 | 50.5 |
| Local Start Time (s) | 56.5 | 77.5 | 6.5 | 20.5 | 56.5 | 74.5 | 6.5 | 29.5 |
| Local Yield (s) | 73.5 | 0 | 16 | 50.5 | 70.5 | 0 | 25 | 50.5 |
| Local Yield 170(s) | 73.5 | 0 | 16 | 50.5 | 70.5 | 109 | 25 | 50.5 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 75 |
| Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBTL, Start of Yellow | |

Splits and Phases: 9: Legacy Drive/Driveway G & Williams Field Road



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 12 | 229 | 56 | 240 | 337 | 129 | 156 | 0 | 128 | 86 | 0 | 13 |
| Future Volume (veh/h) | 12 | 229 | 56 | 240 | 337 | 129 | 156 | 0 | 128 | 86 | 0 | 13 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 13 | 249 | 61 | 261 | 366 | 0 | 170 | 0 | 139 | 93 | 0 | 14 |
| 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 | 51 | 2760 | 857 | 332 | 3176 | | 352 | 0 | 611 | 317 | 0 | 132 |
| Arrive On Green | 0.03 | 1.00 | 1.00 | 0.16 | 1.00 | 0.00 | 0.11 | 0.00 | 0.10 | 0.09 | 0.00 | 0.08 |
| Sat Flow, veh/h | 3456 | 5106 | 1585 | 3456 | 5106 | 1585 | 1781 | 0 | 3170 | 3456 | 0 | 1585 |
| Grp Volume(v), veh/h | 13 | 249 | 61 | 261 | 366 | 0 | 170 | 0 | 139 | 93 | 0 | 14 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1702 | 1585 | 1728 | 1702 | 1585 | 1781 | 0 | 1585 | 1728 | 0 | 1585 |
| Q Serve(g_s), s | 0.4 | 0.0 | 0.0 | 8.7 | 0.0 | 0.0 | 10.3 | 0.0 | 4.4 | 3.0 | 0.0 | 1.0 |
| Cycle Q Clear(g_c), s | 0.4 | 0.0 | 0.0 | 8.7 | 0.0 | 0.0 | 10.3 | 0.0 | 4.4 | 3.0 | 0.0 | 1.0 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 51 | 2760 | 857 | 332 | 3176 | | 352 | 0 | 611 | 317 | 0 | 132 |
| V/C Ratio(X) | 0.26 | 0.09 | 0.07 | 0.79 | 0.12 | | 0.48 | 0.00 | 0.23 | 0.29 | 0.00 | 0.11 |
| Avail Cap(c_a), veh/h | 230 | 2760 | 857 | 864 | 3176 | | 566 | 0 | 1163 | 317 | 0 | 218 |
| HCM Platoon Ratio | 2.00 | 2.00 | 2.00 | 1.67 | 1.67 | 1.67 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 0.81 | 0.81 | 0.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 57.6 | 0.0 | 0.0 | 49.2 | 0.0 | 0.0 | 43.7 | 0.0 | 40.9 | 50.9 | 0.0 | 50.9 |
| Incr Delay (d2), s/veh | 2.6 | 0.1 | 0.2 | 3.4 | 0.1 | 0.0 | 1.0 | 0.0 | 0.2 | 2.3 | 0.0 | 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(95%),veh/ln | 0.4 | 0.0 | 0.1 | 6.5 | 0.0 | 0.0 | 8.2 | 0.0 | 3.2 | 2.5 | 0.0 | 0.7 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 60.2 | 0.1 | 0.2 | 52.5 | 0.1 | 0.0 | 44.7 | 0.0 | 41.1 | 53.2 | 0.0 | 51.2 |
| LnGrp LOS | E | A | A | D | A | | D | | D | D | | D |
| Approach Vol, veh/h | | 323 | | | 627 | | | 309 | | | 107 | |
| Approach Delay, s/veh | | 2.5 | | | 21.9 | | | 43.1 | | | 53.0 | |
| Approach LOS | | A | | | C | | | D | | | D | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 15.0 | 18.1 | 15.5 | 71.4 | 16.6 | 16.5 | 5.8 | 81.1 |
| Change Period (Y+Rc), s | 4.0 | 6.5 | 4.0 | 6.5 | 4.0 | 6.5 | 4.0 | 6.5 |
| Max Green Setting (Gmax), s | 11.0 | 32.5 | 30.0 | 25.5 | 27.0 | 16.5 | 8.0 | 47.5 |
| Max Q Clear Time (g_c+I1), s | 5.0 | 6.4 | 10.7 | 2.0 | 12.3 | 3.0 | 2.4 | 2.0 |
| Green Ext Time (p_c), s | 0.1 | 0.5 | 0.8 | 1.8 | 0.4 | 0.0 | 0.0 | 2.8 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 24.5 |
| HCM 7th LOS | C |

**Notes**

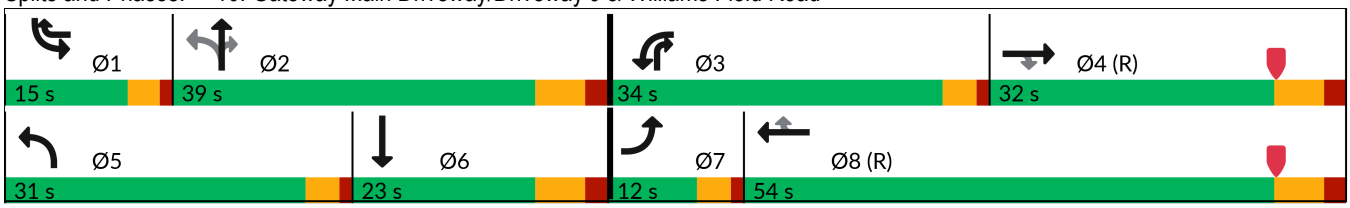
User approved pedestrian interval to be less than phase max green.

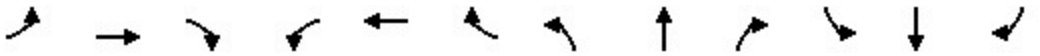
User approved volume balancing among the lanes for turning movement.

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | SBL | NBTL | WBL | EBT | NBL | SBT | EBL | WBT |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | Max | None | None | C-Max | None | None | None | C-Max |
| Maximum Split (s) | 15 | 39 | 34 | 32 | 31 | 23 | 12 | 54 |
| Maximum Split (%) | 12.5% | 32.5% | 28.3% | 26.7% | 25.8% | 19.2% | 10.0% | 45.0% |
| Minimum Split (s) | 9.5 | 24.5 | 9.5 | 24.5 | 9.5 | 24.5 | 9.5 | 24.5 |
| Yellow Time (s) | 3 | 4.5 | 3 | 4.5 | 3 | 4.5 | 3 | 4.5 |
| All-Red Time (s) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| Minimum Initial (s) | 5 | 10 | 5 | 15 | 5 | 10 | 5 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 7 | | 7 | | 7 | | 7 |
| Flash Don't Walk (s) | | 11 | | 11 | | 11 | | 11 |
| Dual Entry | No | Yes | No | Yes | No | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 4.5 | 19.5 | 58.5 | 92.5 | 4.5 | 35.5 | 58.5 | 70.5 |
| End Time (s) | 19.5 | 58.5 | 92.5 | 4.5 | 35.5 | 58.5 | 70.5 | 4.5 |
| Yield/Force Off (s) | 15.5 | 52 | 88.5 | 118 | 31.5 | 52 | 66.5 | 118 |
| Yield/Force Off 170(s) | 15.5 | 41 | 88.5 | 107 | 31.5 | 41 | 66.5 | 107 |
| Local Start Time (s) | 6.5 | 21.5 | 60.5 | 94.5 | 6.5 | 37.5 | 60.5 | 72.5 |
| Local Yield (s) | 17.5 | 54 | 90.5 | 0 | 33.5 | 54 | 68.5 | 0 |
| Local Yield 170(s) | 17.5 | 43 | 90.5 | 109 | 33.5 | 43 | 68.5 | 109 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 70 |
| Offset: 118 (98%), Referenced to phase 4:EBT and 8:WBT, Start of Yellow | |

Splits and Phases: 10: Gateway Main Driveway/Driveway J & Williams Field Road





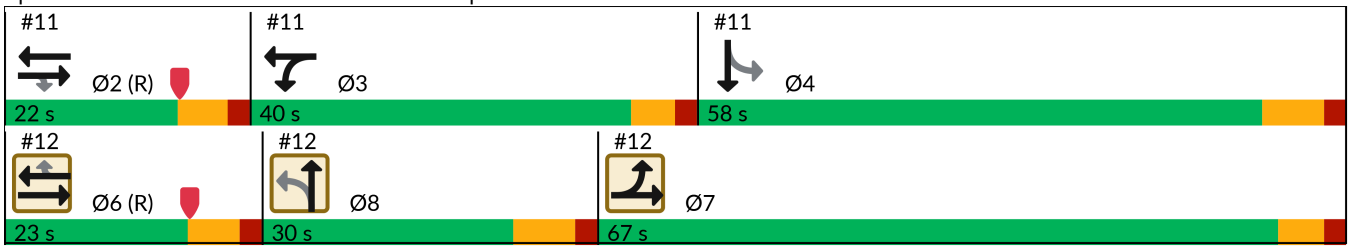
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 0 | 312 | 120 | 51 | 468 | 0 | 0 | 0 | 0 | 248 | 0 | 221 |
| Future Volume (vph) | 0 | 312 | 120 | 51 | 468 | 0 | 0 | 0 | 0 | 248 | 0 | 221 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 360 | | 285 | 290 | | 0 | 0 | | 0 | 400 | | 400 |
| Storage Lanes | 2 | | 0 | 0 | | 0 | 0 | | 0 | 2 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 1.00 | 0.86 | 1.00 | 0.97 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 0.91 | 0.91 | 0.95 |
| Frt | | | 0.850 | | | | | | | | 0.891 | |
| Flt Protected | | | | 0.950 | | | | | | 0.950 | 0.987 | |
| Satd. Flow (prot) | 0 | 6408 | 1583 | 3433 | 3539 | 0 | 0 | 0 | 0 | 1610 | 2981 | 0 |
| Flt Permitted | | | | 0.950 | | | | | | 0.950 | 0.987 | |
| Satd. Flow (perm) | 0 | 6408 | 1583 | 3433 | 3539 | 0 | 0 | 0 | 0 | 1610 | 2981 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 164 | | | | | | | | 240 | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 971 | | | 481 | | | 999 | | | 970 | |
| Travel Time (s) | | 22.1 | | | 10.9 | | | 22.7 | | | 22.0 | |
| 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 |
| Adj. Flow (vph) | 0 | 339 | 130 | 55 | 509 | 0 | 0 | 0 | 0 | 270 | 0 | 240 |
| Shared Lane Traffic (%) | | | | | | | | | | 33% | | |
| Lane Group Flow (vph) | 0 | 339 | 130 | 55 | 509 | 0 | 0 | 0 | 0 | 181 | 329 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 24 | | | 24 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | | 2 | 1 | 1 | 2 | | | | | 1 | 2 | |
| Detector Template | | Thru | Right | Left | Thru | | | | | Left | Thru | |
| Leading Detector (ft) | | 100 | 20 | 20 | 100 | | | | | 20 | 100 | |
| Trailing Detector (ft) | | 0 | 0 | 0 | 0 | | | | | 0 | 0 | |
| Detector 1 Position(ft) | | 0 | 0 | 0 | 0 | | | | | 0 | 0 | |
| Detector 1 Size(ft) | | 6 | 20 | 20 | 6 | | | | | 20 | 6 | |
| Detector 1 Type | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | | | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | | | | 0.0 | |
| Turn Type | | NA | Perm | Prot | NA | | | | | Perm | NA | |
| Protected Phases | | 2 | | 3 | 2 3 | | | | | | 4 | |
| Permitted Phases | | | 2 | | | | | | | 4 | | |

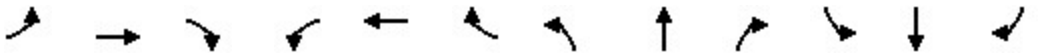
| Lane Group | Ø6 | Ø7 | Ø8 |
|---|---|---|---|
| Lane Configurations | | | |
| Traffic Volume (vph) | | | |
| Future Volume (vph) | | | |
| Ideal Flow (vphpl) | | | |
| Storage Length (ft) | | | |
| Storage Lanes | | | |
| Taper Length (ft) | | | |
| Lane Util. Factor | | | |
| Frt | | | |
| Flt Protected | | | |
| Satd. Flow (prot) | | | |
| Flt Permitted | | | |
| Satd. Flow (perm) | | | |
| Right Turn on Red | | | |
| Satd. Flow (RTOR) | | | |
| Link Speed (mph) | | | |
| Link Distance (ft) | | | |
| Travel Time (s) | | | |
| Peak Hour Factor | | | |
| Adj. Flow (vph) | | | |
| Shared Lane Traffic (%) | | | |
| Lane Group Flow (vph) | | | |
| Enter Blocked Intersection | | | |
| Lane Alignment | | | |
| Median Width(ft) | | | |
| Link Offset(ft) | | | |
| Crosswalk Width(ft) | | | |
| Two way Left Turn Lane | | | |
| Headway Factor | | | |
| Turning Speed (mph) | | | |
| Number of Detectors | | | |
| Detector Template | | | |
| Leading Detector (ft) | | | |
| Trailing Detector (ft) | | | |
| Detector 1 Position(ft) | | | |
| Detector 1 Size(ft) | | | |
| Detector 1 Type | | | |
| Detector 1 Channel | | | |
| Detector 1 Extend (s) | | | |
| Detector 1 Queue (s) | | | |
| Detector 1 Delay (s) | | | |
| Detector 2 Position(ft) | | | |
| Detector 2 Size(ft) | | | |
| Detector 2 Type | | | |
| Detector 2 Channel | | | |
| Detector 2 Extend (s) | | | |
| Turn Type | | | |
| Protected Phases | 6 | 7 | 8 |
| Permitted Phases | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | | 2 | 2 | 3 | 2 3 | | | | | 4 | 4 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | | 15.0 | 15.0 | 5.0 | | | | | | 10.0 | 10.0 | |
| Minimum Split (s) | | 25.5 | 25.5 | 11.0 | | | | | | 46.5 | 46.5 | |
| Total Split (s) | | 22.0 | 22.0 | 40.0 | | | | | | 58.0 | 58.0 | |
| Total Split (%) | | 18.3% | 18.3% | 33.3% | | | | | | 48.3% | 48.3% | |
| Maximum Green (s) | | 15.5 | 15.5 | 34.0 | | | | | | 50.5 | 50.5 | |
| Yellow Time (s) | | 4.5 | 4.5 | 4.0 | | | | | | 5.5 | 5.5 | |
| All-Red Time (s) | | 2.0 | 2.0 | 2.0 | | | | | | 2.0 | 2.0 | |
| Lost Time Adjust (s) | | 0.0 | 0.0 | 0.0 | | | | | | 0.0 | 0.0 | |
| Total Lost Time (s) | | 6.5 | 6.5 | 6.0 | | | | | | 7.5 | 7.5 | |
| Lead/Lag | | | | Lead | | | | | | Lag | Lag | |
| Lead-Lag Optimize? | | | | Yes | | | | | | Yes | Yes | |
| Vehicle Extension (s) | | 3.0 | 3.0 | 3.0 | | | | | | 3.0 | 3.0 | |
| Recall Mode | | C-Max | C-Max | None | | | | | | None | None | |
| Walk Time (s) | | 4.0 | 4.0 | | | | | | | 4.0 | 4.0 | |
| Flash Don't Walk (s) | | 15.0 | 15.0 | | | | | | | 35.0 | 35.0 | |
| Pedestrian Calls (#/hr) | | 0 | 0 | | | | | | | 0 | 0 | |
| Act Effct Green (s) | | 15.5 | 15.5 | 9.6 | 31.1 | | | | | 74.9 | 74.9 | |
| Actuated g/C Ratio | | 0.13 | 0.13 | 0.08 | 0.26 | | | | | 0.62 | 0.62 | |
| v/c Ratio | | 0.41 | 0.37 | 0.20 | 0.56 | | | | | 0.18 | 0.17 | |
| Control Delay (s/veh) | | 55.0 | 19.7 | 41.2 | 31.7 | | | | | 10.7 | 3.1 | |
| Queue Delay | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | |
| Total Delay (s/veh) | | 55.0 | 19.7 | 41.2 | 31.7 | | | | | 10.7 | 3.1 | |
| LOS | | D | B | D | C | | | | | B | A | |
| Approach Delay (s/veh) | | 45.2 | | | 32.6 | | | | | | 5.8 | |
| Approach LOS | | D | | | C | | | | | | A | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 120 | | | |
| Actuated Cycle Length: 120 | | | |
| Offset: 60 (50%), Referenced to phase 2:EBWB and 6:, Start of Yellow | | | |
| Natural Cycle: 85 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.84 | | | |
| Intersection Signal Delay (s/veh): 27.6 | | Intersection LOS: C | |
| Intersection Capacity Utilization 68.8% | | ICU Level of Service C | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 11: SR24 Eastbound Ramps & Williams Field Road





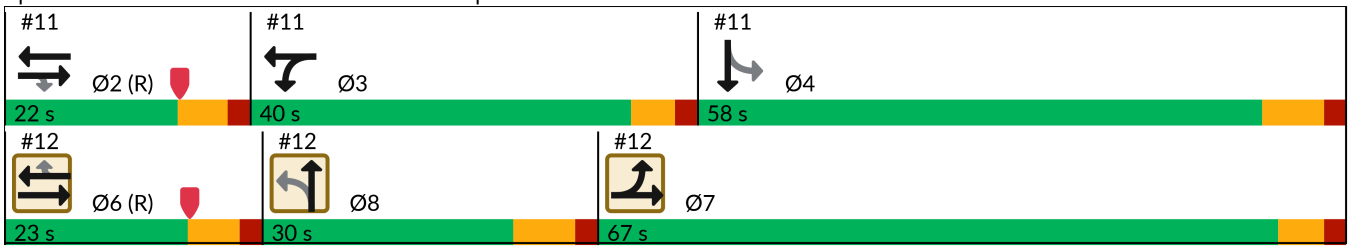
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 144 | 418 | 0 | 0 | 331 | 608 | 186 | 0 | 53 | 0 | 0 | 0 |
| Future Volume (vph) | 144 | 418 | 0 | 0 | 331 | 608 | 186 | 0 | 53 | 0 | 0 | 0 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 290 | | 0 | 365 | | 300 | 375 | | 375 | 0 | | 0 |
| Storage Lanes | 0 | | 0 | 2 | | 1 | 1 | | 1 | 0 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 0.97 | 0.95 | 1.00 | 1.00 | 0.86 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 |
| Frt | | | | | | 0.850 | | 0.850 | | | | |
| Flt Protected | 0.950 | | | | | | 0.950 | | | | | |
| Satd. Flow (prot) | 3433 | 3539 | 0 | 0 | 6408 | 1583 | 1770 | 3008 | 0 | 0 | 0 | 0 |
| Flt Permitted | 0.950 | | | | | | 0.950 | | | | | |
| Satd. Flow (perm) | 3433 | 3539 | 0 | 0 | 6408 | 1583 | 1770 | 3008 | 0 | 0 | 0 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | | | | 661 | | 471 | | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 481 | | | 1418 | | | 897 | | | 1176 | |
| Travel Time (s) | | 10.9 | | | 32.2 | | | 20.4 | | | 26.7 | |
| 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 |
| Adj. Flow (vph) | 157 | 454 | 0 | 0 | 360 | 661 | 202 | 0 | 58 | 0 | 0 | 0 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 157 | 454 | 0 | 0 | 360 | 661 | 202 | 58 | 0 | 0 | 0 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 24 | | | 24 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | | 2 | 1 | 1 | 2 | | | | |
| Detector Template | Left | Thru | | | Thru | Right | Left | Thru | | | | |
| Leading Detector (ft) | 20 | 100 | | | 100 | 20 | 20 | 100 | | | | |
| Trailing Detector (ft) | 0 | 0 | | | 0 | 0 | 0 | 0 | | | | |
| Detector 1 Position(ft) | 0 | 0 | | | 0 | 0 | 0 | 0 | | | | |
| Detector 1 Size(ft) | 20 | 6 | | | 6 | 20 | 20 | 6 | | | | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | | | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | | |
| Turn Type | Prot | NA | | | NA | Perm | Perm | NA | | | | |
| Protected Phases | 7 | 6 7 | | | 6 | | | 8 | | | | |
| Permitted Phases | | | | | | 6 | 8 | | | | | |

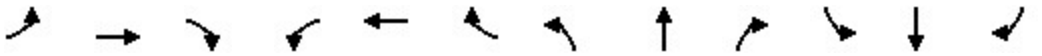
| Lane Group | Ø2 | Ø3 | Ø4 |
|---|---|---|---|
| Lane Configurations | | | |
| Traffic Volume (vph) | | | |
| Future Volume (vph) | | | |
| Ideal Flow (vphpl) | | | |
| Storage Length (ft) | | | |
| Storage Lanes | | | |
| Taper Length (ft) | | | |
| Lane Util. Factor | | | |
| Frt | | | |
| Flt Protected | | | |
| Satd. Flow (prot) | | | |
| Flt Permitted | | | |
| Satd. Flow (perm) | | | |
| Right Turn on Red | | | |
| Satd. Flow (RTOR) | | | |
| Link Speed (mph) | | | |
| Link Distance (ft) | | | |
| Travel Time (s) | | | |
| Peak Hour Factor | | | |
| Adj. Flow (vph) | | | |
| Shared Lane Traffic (%) | | | |
| Lane Group Flow (vph) | | | |
| Enter Blocked Intersection | | | |
| Lane Alignment | | | |
| Median Width(ft) | | | |
| Link Offset(ft) | | | |
| Crosswalk Width(ft) | | | |
| Two way Left Turn Lane | | | |
| Headway Factor | | | |
| Turning Speed (mph) | | | |
| Number of Detectors | | | |
| Detector Template | | | |
| Leading Detector (ft) | | | |
| Trailing Detector (ft) | | | |
| Detector 1 Position(ft) | | | |
| Detector 1 Size(ft) | | | |
| Detector 1 Type | | | |
| Detector 1 Channel | | | |
| Detector 1 Extend (s) | | | |
| Detector 1 Queue (s) | | | |
| Detector 1 Delay (s) | | | |
| Detector 2 Position(ft) | | | |
| Detector 2 Size(ft) | | | |
| Detector 2 Type | | | |
| Detector 2 Channel | | | |
| Detector 2 Extend (s) | | | |
| Turn Type | | | |
| Protected Phases | 2 | 3 | 4 |
| Permitted Phases | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | 7 | 6 7 | | | 6 | 6 | 8 | 8 | | | | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | | | | 15.0 | 15.0 | 10.0 | 10.0 | | | | |
| Minimum Split (s) | 11.0 | | | | 26.5 | 26.5 | 45.5 | 45.5 | | | | |
| Total Split (s) | 67.0 | | | | 23.0 | 23.0 | 30.0 | 30.0 | | | | |
| Total Split (%) | 55.8% | | | | 19.2% | 19.2% | 25.0% | 25.0% | | | | |
| Maximum Green (s) | 61.0 | | | | 16.5 | 16.5 | 22.5 | 22.5 | | | | |
| Yellow Time (s) | 4.0 | | | | 4.5 | 4.5 | 5.5 | 5.5 | | | | |
| All-Red Time (s) | 2.0 | | | | 2.0 | 2.0 | 2.0 | 2.0 | | | | |
| Lost Time Adjust (s) | 0.0 | | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Total Lost Time (s) | 6.0 | | | | 6.5 | 6.5 | 7.5 | 7.5 | | | | |
| Lead/Lag | Lag | | | | | | Lead | Lead | | | | |
| Lead-Lag Optimize? | Yes | | | | | | Yes | Yes | | | | |
| Vehicle Extension (s) | 3.0 | | | | 3.0 | 3.0 | 3.0 | 3.0 | | | | |
| Recall Mode | Max | | | | C-Max | C-Max | Max | Max | | | | |
| Walk Time (s) | | | | | 4.0 | 4.0 | 4.0 | 4.0 | | | | |
| Flash Don't Walk (s) | | | | | 16.0 | 16.0 | 34.0 | 34.0 | | | | |
| Pedestrian Calls (#/hr) | | | | | 0 | 0 | 0 | 0 | | | | |
| Act Effct Green (s) | 61.0 | 83.5 | | | 16.5 | 16.5 | 22.5 | 22.5 | | | | |
| Actuated g/C Ratio | 0.51 | 0.70 | | | 0.14 | 0.14 | 0.19 | 0.19 | | | | |
| v/c Ratio | 0.09 | 0.18 | | | 0.41 | 0.84 | 0.61 | 0.06 | | | | |
| Control Delay (s/veh) | 26.3 | 10.1 | | | 41.7 | 27.9 | 53.6 | 0.1 | | | | |
| Queue Delay | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Total Delay (s/veh) | 26.3 | 10.1 | | | 41.7 | 27.9 | 53.6 | 0.1 | | | | |
| LOS | C | B | | | D | C | D | A | | | | |
| Approach Delay (s/veh) | | 14.3 | | | 32.8 | | | 41.7 | | | | |
| Approach LOS | | B | | | C | | | D | | | | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 120 | | | |
| Actuated Cycle Length: 120 | | | |
| Offset: 60 (50%), Referenced to phase 2:EBWB and 6:, Start of Yellow | | | |
| Natural Cycle: 85 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.84 | | | |
| Intersection Signal Delay (s/veh): 28.0 | | Intersection LOS: C | |
| Intersection Capacity Utilization 68.8% | | ICU Level of Service C | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 12: SR24 Westbound Ramps & Williams Field Road





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 98 | 187 | 18 | 0 | 443 | 59 | 150 | 0 | 0 | 51 | 0 | 342 |
| Future Volume (veh/h) | 98 | 187 | 18 | 0 | 443 | 59 | 150 | 0 | 0 | 51 | 0 | 342 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 107 | 203 | 20 | 0 | 482 | 64 | 163 | 0 | 0 | 55 | 0 | 372 |
| 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 | 423 | 1715 | 765 | 507 | 1367 | 610 | 501 | 1136 | 507 | 579 | 1051 | 469 |
| Arrive On Green | 0.13 | 0.97 | 0.97 | 0.00 | 0.38 | 0.38 | 0.08 | 0.00 | 0.00 | 0.06 | 0.00 | 0.30 |
| Sat Flow, veh/h | 1781 | 3554 | 1585 | 1781 | 3554 | 1585 | 1781 | 3554 | 1585 | 1781 | 3554 | 1585 |
| Grp Volume(v), veh/h | 107 | 203 | 20 | 0 | 482 | 64 | 163 | 0 | 0 | 55 | 0 | 372 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1777 | 1585 | 1781 | 1777 | 1585 | 1781 | 1777 | 1585 | 1781 | 1777 | 1585 |
| Q Serve(g_s), s | 4.1 | 0.3 | 0.1 | 0.0 | 11.6 | 3.1 | 7.5 | 0.0 | 0.0 | 2.5 | 0.0 | 25.9 |
| Cycle Q Clear(g_c), s | 4.1 | 0.3 | 0.1 | 0.0 | 11.6 | 3.1 | 7.5 | 0.0 | 0.0 | 2.5 | 0.0 | 25.9 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 423 | 1715 | 765 | 507 | 1367 | 610 | 501 | 1136 | 507 | 579 | 1051 | 469 |
| V/C Ratio(X) | 0.25 | 0.12 | 0.03 | 0.00 | 0.35 | 0.10 | 0.33 | 0.00 | 0.00 | 0.09 | 0.00 | 0.79 |
| Avail Cap(c_a), veh/h | 516 | 1715 | 765 | 631 | 1367 | 610 | 567 | 1170 | 522 | 628 | 1051 | 469 |
| HCM Platoon Ratio | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.99 | 0.99 | 0.99 | 0.00 | 0.96 | 0.96 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 17.7 | 1.1 | 1.1 | 0.0 | 26.3 | 23.7 | 25.2 | 0.0 | 0.0 | 26.0 | 0.0 | 38.9 |
| Incr Delay (d2), s/veh | 0.3 | 0.1 | 0.1 | 0.0 | 0.7 | 0.3 | 0.4 | 0.0 | 0.0 | 0.1 | 0.0 | 12.9 |
| 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(95%),veh/ln | 2.9 | 0.2 | 0.1 | 0.0 | 8.7 | 2.2 | 5.8 | 0.0 | 0.0 | 1.9 | 0.0 | 17.3 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 18.1 | 1.2 | 1.1 | 0.0 | 27.0 | 24.0 | 25.5 | 0.0 | 0.0 | 26.1 | 0.0 | 51.8 |
| LnGrp LOS | B | A | A | | C | C | C | | | C | | D |
| Approach Vol, veh/h | | 330 | | | 546 | | | 163 | | | 427 | |
| Approach Delay, s/veh | | 6.7 | | | 26.6 | | | 25.5 | | | 48.5 | |
| Approach LOS | | A | | | C | | | C | | | D | |

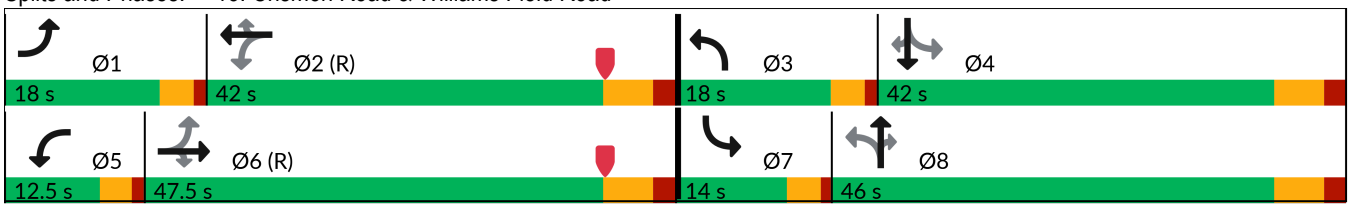
| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 11.8 | 52.6 | 13.6 | 42.0 | 0.0 | 64.4 | 10.7 | 44.9 |
| Change Period (Y+Rc), s | 4.0 | 6.5 | 4.0 | 6.5 | 4.0 | 6.5 | 4.0 | 6.5 |
| Max Green Setting (Gmax), s | 14.0 | 35.5 | 14.0 | 35.5 | 8.5 | 41.0 | 10.0 | 39.5 |
| Max Q Clear Time (g_c+I1), s | 6.1 | 13.6 | 9.5 | 27.9 | 0.0 | 2.3 | 4.5 | 0.0 |
| Green Ext Time (p_c), s | 0.1 | 3.4 | 0.2 | 0.8 | 0.0 | 1.4 | 0.0 | 0.0 |

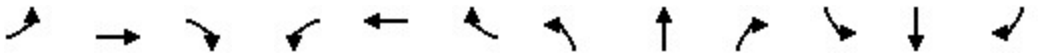
| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 28.4 |
| HCM 7th LOS | C |

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | EBL | WBTL | NBL | SBTL | WBL | EBTL | SBL | NBTL |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | None | C-Max | None | Max | None | C-Max | None | None |
| Maximum Split (s) | 18 | 42 | 18 | 42 | 12.5 | 47.5 | 14 | 46 |
| Maximum Split (%) | 15.0% | 35.0% | 15.0% | 35.0% | 10.4% | 39.6% | 11.7% | 38.3% |
| Minimum Split (s) | 12.5 | 38.5 | 12.5 | 35.5 | 12.5 | 40.5 | 12.5 | 36.5 |
| Yellow Time (s) | 3 | 4.5 | 3 | 4.5 | 3 | 4.5 | 3 | 4.5 |
| All-Red Time (s) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| Minimum Initial (s) | 8 | 15 | 8 | 15 | 8 | 15 | 8 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 7 | | 7 | | 7 | | 7 |
| Flash Don't Walk (s) | | 25 | | 22 | | 27 | | 23 |
| Dual Entry | No | Yes | No | Yes | No | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 66.5 | 84.5 | 6.5 | 24.5 | 66.5 | 79 | 6.5 | 20.5 |
| End Time (s) | 84.5 | 6.5 | 24.5 | 66.5 | 79 | 6.5 | 20.5 | 66.5 |
| Yield/Force Off (s) | 80.5 | 0 | 20.5 | 60 | 75 | 0 | 16.5 | 60 |
| Yield/Force Off 170(s) | 80.5 | 95 | 20.5 | 38 | 75 | 93 | 16.5 | 37 |
| Local Start Time (s) | 66.5 | 84.5 | 6.5 | 24.5 | 66.5 | 79 | 6.5 | 20.5 |
| Local Yield (s) | 80.5 | 0 | 20.5 | 60 | 75 | 0 | 16.5 | 60 |
| Local Yield 170(s) | 80.5 | 95 | 20.5 | 38 | 75 | 93 | 16.5 | 37 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 105 |
| Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow | |

Splits and Phases: 13: Crismon Road & Williams Field Road





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 88 | 90 | 52 | 7 | 184 | 47 | 63 | 549 | 8 | 25 | 311 | 240 |
| Future Volume (veh/h) | 88 | 90 | 52 | 7 | 184 | 47 | 63 | 549 | 8 | 25 | 311 | 240 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 96 | 98 | 57 | 8 | 200 | 51 | 68 | 597 | 9 | 27 | 338 | 261 |
| 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 | 707 | 1957 | 873 | 707 | 1785 | 796 | 260 | 785 | 12 | 182 | 707 | 315 |
| Arrive On Green | 0.06 | 0.55 | 0.55 | 0.02 | 0.50 | 0.50 | 0.06 | 0.22 | 0.22 | 0.04 | 0.20 | 0.20 |
| Sat Flow, veh/h | 1781 | 3554 | 1585 | 1781 | 3554 | 1585 | 1781 | 3583 | 54 | 1781 | 3554 | 1585 |
| Grp Volume(v), veh/h | 96 | 98 | 57 | 8 | 200 | 51 | 68 | 296 | 310 | 27 | 338 | 261 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1777 | 1585 | 1781 | 1777 | 1585 | 1781 | 1777 | 1861 | 1781 | 1777 | 1585 |
| Q Serve(g_s), s | 2.9 | 1.5 | 2.0 | 0.3 | 3.6 | 2.0 | 3.5 | 18.7 | 18.7 | 1.4 | 10.1 | 18.9 |
| Cycle Q Clear(g_c), s | 2.9 | 1.5 | 2.0 | 0.3 | 3.6 | 2.0 | 3.5 | 18.7 | 18.7 | 1.4 | 10.1 | 18.9 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.03 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 707 | 1957 | 873 | 707 | 1785 | 796 | 260 | 389 | 408 | 182 | 707 | 315 |
| V/C Ratio(X) | 0.14 | 0.05 | 0.07 | 0.01 | 0.11 | 0.06 | 0.26 | 0.76 | 0.76 | 0.15 | 0.48 | 0.83 |
| Avail Cap(c_a), veh/h | 786 | 1957 | 873 | 798 | 1785 | 796 | 302 | 570 | 597 | 260 | 1140 | 509 |
| 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 | 11.2 | 12.5 | 12.6 | 14.0 | 15.7 | 15.4 | 34.5 | 43.9 | 43.9 | 36.5 | 42.5 | 46.1 |
| Incr Delay (d2), s/veh | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.2 | 0.5 | 3.5 | 3.4 | 0.4 | 0.5 | 6.0 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 2.0 | 1.1 | 1.3 | 0.2 | 2.7 | 1.4 | 2.8 | 13.4 | 13.9 | 1.1 | 8.0 | 12.6 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 11.3 | 12.5 | 12.7 | 14.0 | 15.9 | 15.5 | 35.0 | 47.4 | 47.3 | 36.8 | 43.1 | 52.1 |
| LnGrp LOS | B | B | B | B | B | B | C | D | D | D | D | D |
| Approach Vol, veh/h | | 251 | | | 259 | | | 674 | | | 626 | |
| Approach Delay, s/veh | | 12.1 | | | 15.7 | | | 46.1 | | | 46.6 | |
| Approach LOS | | B | | | B | | | D | | | D | |

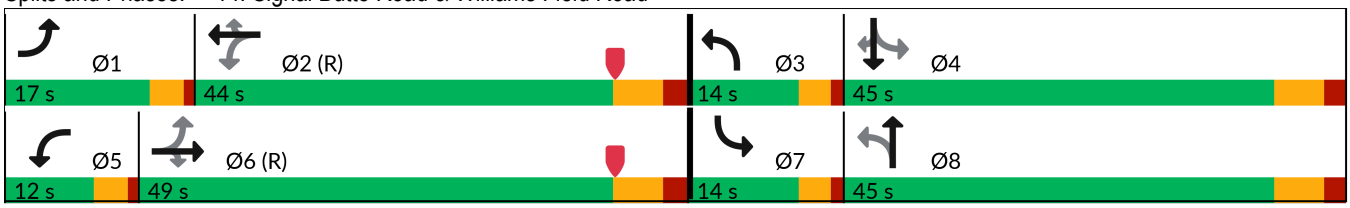
| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 11.7 | 66.8 | 11.2 | 30.4 | 5.9 | 72.6 | 8.7 | 32.8 |
| Change Period (Y+Rc), s | 4.0 | 6.5 | 4.0 | 6.5 | 4.0 | 6.5 | 4.0 | 6.5 |
| Max Green Setting (Gmax), s | 13.0 | 37.5 | 10.0 | 38.5 | 8.0 | 42.5 | 10.0 | 38.5 |
| Max Q Clear Time (g_c+I1), s | 4.9 | 5.6 | 5.5 | 20.9 | 2.3 | 4.0 | 3.4 | 20.7 |
| Green Ext Time (p_c), s | 0.1 | 1.5 | 0.0 | 2.9 | 0.0 | 0.8 | 0.0 | 3.5 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 37.2 |
| HCM 7th LOS | D |

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | EBL | WBTL | NBL | SBTL | WBL | EBTL | SBL | NBTL |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | None | C-Max | None | None | None | C-Max | None | None |
| Maximum Split (s) | 17 | 44 | 14 | 45 | 12 | 49 | 14 | 45 |
| Maximum Split (%) | 14.2% | 36.7% | 11.7% | 37.5% | 10.0% | 40.8% | 11.7% | 37.5% |
| Minimum Split (s) | 12 | 38.5 | 12 | 35.5 | 12 | 40.5 | 12 | 36.5 |
| Yellow Time (s) | 3 | 4.5 | 3 | 4.5 | 3 | 4.5 | 3 | 4.5 |
| All-Red Time (s) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| Minimum Initial (s) | 8 | 15 | 8 | 15 | 8 | 15 | 8 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 7 | | 7 | | 7 | | 7 |
| Flash Don't Walk (s) | | 25 | | 22 | | 27 | | 23 |
| Dual Entry | No | Yes | No | Yes | No | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 65.5 | 82.5 | 6.5 | 20.5 | 65.5 | 77.5 | 6.5 | 20.5 |
| End Time (s) | 82.5 | 6.5 | 20.5 | 65.5 | 77.5 | 6.5 | 20.5 | 65.5 |
| Yield/Force Off (s) | 78.5 | 0 | 16.5 | 59 | 73.5 | 0 | 16.5 | 59 |
| Yield/Force Off 170(s) | 78.5 | 95 | 16.5 | 37 | 73.5 | 93 | 16.5 | 36 |
| Local Start Time (s) | 65.5 | 82.5 | 6.5 | 20.5 | 65.5 | 77.5 | 6.5 | 20.5 |
| Local Yield (s) | 78.5 | 0 | 16.5 | 59 | 73.5 | 0 | 16.5 | 59 |
| Local Yield 170(s) | 78.5 | 95 | 16.5 | 37 | 73.5 | 93 | 16.5 | 36 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 105 |
| Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow | |

Splits and Phases: 14: Signal Butte Road & Williams Field Road



| Intersection | |
|---|---|
| Int Delay, s/veh | 0 |

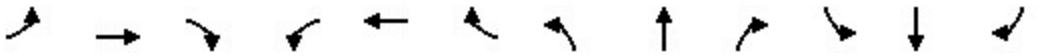
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 2443 | 2 | 0 | 2163 | 0 |
| Future Vol, veh/h | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 2443 | 2 | 0 | 2163 | 0 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | 0 | - | - | 0 | - | - | 200 | - | - | - |
| 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 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 2655 | 2 | 0 | 2351 | 0 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | - | - | 1176 | - | - | 1328 | - | 0 | 0 | - | - | 0 |
| Stage 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - | - | - | - | - | - | - |
| Critical Hdwy | - | - | 7.14 | - | - | 7.14 | - | - | - | - | - | - |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | 3.92 | - | - | 3.92 | - | - | - | - | - | - |
| Pot Cap-1 Maneuver | 0 | 0 | *568 | 0 | 0 | *522 | 0 | - | - | 0 | - | - |
| Stage 1 | 0 | 0 | - | 0 | 0 | - | 0 | - | - | 0 | - | - |
| Stage 2 | 0 | 0 | - | 0 | 0 | - | 0 | - | - | 0 | - | - |
| Platoon blocked, % | | | 0 | | | 0 | | - | - | | - | - |
| Mov Cap-1 Maneuver | - | - | *568 | - | - | *522 | - | - | - | - | - | - |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s/v | 0 | 11.93 | 0 | 0 |
| HCM LOS | A | B | | |

| Minor Lane/Major Mvmt | NBT | NBR | EBLn1 | WBLn1 | SBT | SBR |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | - | 522 | - | - |
| HCM Lane V/C Ratio | - | - | - | 0.006 | - | - |
| HCM Control Delay (s/veh) | - | - | 0 | 11.9 | - | - |
| HCM Lane LOS | - | - | A | B | - | - |
| HCM 95th %tile Q(veh) | - | - | - | 0 | - | - |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 77 | 0 | 29 | 1 | 0 | 30 | 49 | 2415 | 14 | 100 | 1922 | 140 |
| Future Volume (veh/h) | 77 | 0 | 29 | 1 | 0 | 30 | 49 | 2415 | 14 | 100 | 1922 | 140 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 84 | 0 | 32 | 1 | 0 | 33 | 53 | 2625 | 15 | 109 | 2089 | 152 |
| 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 | 258 | 237 | 201 | 164 | 0 | 235 | 174 | 3308 | 1027 | 164 | 3178 | 230 |
| Arrive On Green | 0.05 | 0.00 | 0.13 | 0.00 | 0.00 | 0.07 | 0.03 | 0.65 | 0.65 | 0.03 | 0.44 | 0.44 |
| Sat Flow, veh/h | 1781 | 1870 | 1585 | 1781 | 0 | 3170 | 1781 | 5106 | 1585 | 1781 | 4860 | 351 |
| Grp Volume(v), veh/h | 84 | 0 | 32 | 1 | 0 | 33 | 53 | 2625 | 15 | 109 | 1459 | 782 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1870 | 1585 | 1781 | 0 | 1585 | 1781 | 1702 | 1585 | 1781 | 1702 | 1807 |
| Q Serve(g_s), s | 5.1 | 0.0 | 2.2 | 0.1 | 0.0 | 1.2 | 1.2 | 44.7 | 0.4 | 2.4 | 40.5 | 41.1 |
| Cycle Q Clear(g_c), s | 5.1 | 0.0 | 2.2 | 0.1 | 0.0 | 1.2 | 1.2 | 44.7 | 0.4 | 2.4 | 40.5 | 41.1 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.19 |
| Lane Grp Cap(c), veh/h | 258 | 237 | 201 | 164 | 0 | 235 | 174 | 3308 | 1027 | 164 | 2226 | 1182 |
| V/C Ratio(X) | 0.33 | 0.00 | 0.16 | 0.01 | 0.00 | 0.14 | 0.30 | 0.79 | 0.01 | 0.67 | 0.66 | 0.66 |
| Avail Cap(c_a), veh/h | 258 | 288 | 244 | 259 | 0 | 489 | 232 | 3308 | 1027 | 552 | 2226 | 1182 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.67 | 0.67 | 0.67 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 46.1 | 0.0 | 46.7 | 51.3 | 0.0 | 52.0 | 16.1 | 15.3 | 7.5 | 27.1 | 23.1 | 23.2 |
| Incr Delay (d2), s/veh | 0.7 | 0.0 | 0.4 | 0.0 | 0.0 | 0.3 | 1.0 | 2.0 | 0.0 | 4.6 | 1.5 | 2.9 |
| 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(95%),veh/ln | 4.2 | 0.0 | 1.6 | 0.1 | 0.0 | 0.9 | 1.2 | 23.2 | 0.3 | 4.1 | 24.6 | 26.7 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 46.8 | 0.0 | 47.0 | 51.3 | 0.0 | 52.2 | 17.1 | 17.4 | 7.5 | 31.7 | 24.6 | 26.1 |
| LnGrp LOS | D | | D | D | | D | B | B | A | C | C | C |
| Approach Vol, veh/h | | 116 | | | 34 | | | 2693 | | | 2350 | |
| Approach Delay, s/veh | | 46.9 | | | 52.2 | | | 17.3 | | | 25.4 | |
| Approach LOS | | D | | | D | | | B | | | C | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 12.0 | 15.4 | 8.1 | 84.5 | 5.7 | 21.7 | 8.9 | 83.7 |
| Change Period (Y+Rc), s | 5.5 | 6.5 | 4.0 | 6.0 | 5.5 | 6.5 | 4.0 | 6.0 |
| Max Green Setting (Gmax), s | 6.5 | 18.5 | 8.0 | 65.0 | 6.5 | 18.5 | 31.0 | 42.0 |
| Max Q Clear Time (g_c+I1), s | 7.1 | 3.2 | 3.2 | 43.1 | 2.1 | 4.2 | 4.4 | 46.7 |
| Green Ext Time (p_c), s | 0.0 | 0.1 | 0.0 | 17.0 | 0.0 | 0.0 | 0.3 | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 21.9 |
| HCM 7th LOS | C |

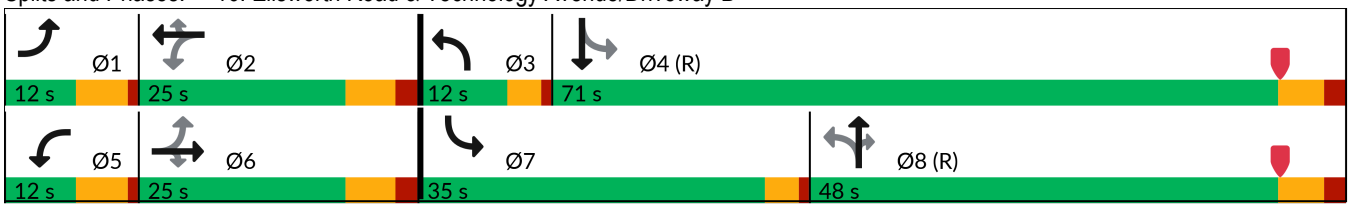
**Notes**

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | EBL | WBTL | NBL | SBTL | WBL | EBTL | SBL | NBTL |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | None | None | None | C-Max | None | None | None | C-Max |
| Maximum Split (s) | 12 | 25 | 12 | 71 | 12 | 25 | 35 | 48 |
| Maximum Split (%) | 10.0% | 20.8% | 10.0% | 59.2% | 10.0% | 20.8% | 29.2% | 40.0% |
| Minimum Split (s) | 10.5 | 24.5 | 10.5 | 24 | 10.5 | 24.5 | 9.5 | 24 |
| Yellow Time (s) | 4.5 | 4.5 | 3 | 4 | 4.5 | 4.5 | 3 | 4 |
| All-Red Time (s) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| Minimum Initial (s) | 5 | 10 | 5 | 15 | 5 | 10 | 5 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 7 | | 7 | | 7 | | 7 |
| Flash Don't Walk (s) | | 11 | | 11 | | 11 | | 11 |
| Dual Entry | No | Yes | No | Yes | No | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 4.5 | 16.5 | 41.5 | 53.5 | 4.5 | 16.5 | 41.5 | 76.5 |
| End Time (s) | 16.5 | 41.5 | 53.5 | 4.5 | 16.5 | 41.5 | 76.5 | 4.5 |
| Yield/Force Off (s) | 11 | 35 | 49.5 | 118.5 | 11 | 35 | 72.5 | 118.5 |
| Yield/Force Off 170(s) | 11 | 24 | 49.5 | 107.5 | 11 | 24 | 72.5 | 107.5 |
| Local Start Time (s) | 6 | 18 | 43 | 55 | 6 | 18 | 43 | 78 |
| Local Yield (s) | 12.5 | 36.5 | 51 | 0 | 12.5 | 36.5 | 74 | 0 |
| Local Yield 170(s) | 12.5 | 25.5 | 51 | 109 | 12.5 | 25.5 | 74 | 109 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 100 |
| Offset: 118.5 (99%), Referenced to phase 4:SBTL and 8:NBTL, Start of Yellow | |

Splits and Phases: 16: Ellsworth Road & Technology Avenue/Driveway B



| Intersection | |
|---|---|
| Int Delay, s/veh | 0.1 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 0 | 19 | 2459 | 6 | 0 | 1953 |
| Future Vol, veh/h | 0 | 19 | 2459 | 6 | 0 | 1953 |
| 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 | - | 100 | - | - |
| 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 | 21 | 2673 | 7 | 0 | 2123 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | - | 1336 | 0 | 0 | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | 7.14 | - | - | - | - |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | 3.92 | - | - | - | - |
| Pot Cap-1 Maneuver | 0 | *522 | - | - | 0 | - |
| Stage 1 | 0 | - | - | - | 0 | - |
| Stage 2 | 0 | - | - | - | 0 | - |
| Platoon blocked, % | | 0 | - | - | | - |
| Mov Cap-1 Maneuver | - | *522 | - | - | - | - |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 12.17 | 0 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | SBT |
|---|---|---|---|---|
| Capacity (veh/h) | - | - | 522 | - |
| HCM Lane V/C Ratio | - | - | 0.04 | - |
| HCM Control Delay (s/veh) | - | - | 12.2 | - |
| HCM Lane LOS | - | - | B | - |
| HCM 95th %tile Q(veh) | - | - | 0.1 | - |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.2 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 0 | 14 | 2452 | 2 | 24 | 1928 |
| Future Vol, veh/h | 0 | 14 | 2452 | 2 | 24 | 1928 |
| 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 | 200 | - | 200 | 200 | - |
| 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 | 15 | 2665 | 2 | 26 | 2096 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 3556 | 1333 | 0 | 0 | 2667 | 0 |
| Stage 1 | 2665 | - | - | - | - | - |
| Stage 2 | 890 | - | - | - | - | - |
| Critical Hdwy | 5.74 | 7.14 | - | - | 5.34 | - |
| Critical Hdwy Stg 1 | 6.64 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.04 | - | - | - | - | - |
| Follow-up Hdwy | 3.82 | 3.92 | - | - | 3.12 | - |
| Pot Cap-1 Maneuver | *38 | *522 | - | - | 163 | - |
| Stage 1 | *93 | - | - | - | - | - |
| Stage 2 | *629 | - | - | - | - | - |
| Platoon blocked, % | 1 | 0 | - | - | 0 | - |
| Mov Cap-1 Maneuver | *32 | *522 | - | - | 163 | - |
| Mov Cap-2 Maneuver | *32 | - | - | - | - | - |
| Stage 1 | *93 | - | - | - | - | - |
| Stage 2 | *528 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 12.1 | 0 | 0.38 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | WBLn2 | SBL | SBT |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | - | 522 | 163 | - |
| HCM Lane V/C Ratio | - | - | - | 0.029 | 0.16 | - |
| HCM Control Delay (s/veh) | - | - | 0 | 12.1 | 31.2 | - |
| HCM Lane LOS | - | - | A | B | D | - |
| HCM 95th %tile Q(veh) | - | - | - | 0.1 | 0.6 | - |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.4 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 0 | 0 | 28 | 0 | 0 | 51 | 0 | 2397 | 28 | 26 | 1778 | 124 |
| Future Vol, veh/h | 0 | 0 | 28 | 0 | 0 | 51 | 0 | 2397 | 28 | 26 | 1778 | 124 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | 0 | - | - | 0 | - | - | 200 | 150 | - | - |
| 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 | 0 | 0 | 30 | 0 | 0 | 55 | 0 | 2605 | 30 | 28 | 1933 | 135 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | - | - | 1034 | - | - | 1303 | - | 0 | 0 | 2636 | 0 | 0 |
| Stage 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - | - | - | - | - | - | - |
| Critical Hdwy | - | - | 7.14 | - | - | 7.14 | - | - | - | 5.34 | - | - |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | 3.92 | - | - | 3.92 | - | - | - | 3.12 | - | - |
| Pot Cap-1 Maneuver | 0 | 0 | *628 | 0 | 0 | *522 | 0 | - | - | 174 | - | - |
| Stage 1 | 0 | 0 | - | 0 | 0 | - | 0 | - | - | - | - | - |
| Stage 2 | 0 | 0 | - | 0 | 0 | - | 0 | - | - | - | - | - |
| Platoon blocked, % | | | 0 | | | 0 | | - | - | 0 | - | - |
| Mov Cap-1 Maneuver | - | - | *628 | - | - | *522 | - | - | - | 174 | - | - |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s/v | 11.03 | 12.71 | 0 | 0.4 |
| HCM LOS | B | B | | |

| Minor Lane/Major Mvmt | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 628 | 522 | 174 | - | - |
| HCM Lane V/C Ratio | - | - | 0.048 | 0.106 | 0.163 | - | - |
| HCM Control Delay (s/veh) | - | - | 11 | 12.7 | 29.7 | - | - |
| HCM Lane LOS | - | - | B | B | D | - | - |
| HCM 95th %tile Q(veh) | - | - | 0.2 | 0.4 | 0.6 | - | - |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.1 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | ↑↑↑ | ↑↑↑ | ↱ | | ↱ |
| Traffic Vol, veh/h | 0 | 362 | 422 | 9 | 0 | 7 |
| Future Vol, veh/h | 0 | 362 | 422 | 9 | 0 | 7 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | 200 | - | 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 | 393 | 459 | 10 | 0 | 8 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | - | 0 | - | 0 | - | 229 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | - | - | - | - | 7.14 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | - | - | - | 3.92 |
| Pot Cap-1 Maneuver | 0 | - | - | - | 0 | *854 |
| Stage 1 | 0 | - | - | - | 0 | - |
| Stage 2 | 0 | - | - | - | 0 | - |
| Platoon blocked, % | | - | - | - | | 0 |
| Mov Cap-1 Maneuver | - | - | - | - | - | *854 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 0 | 0 | 9.25 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|
| Capacity (veh/h) | - | - | - | 854 |
| HCM Lane V/C Ratio | - | - | - | 0.009 |
| HCM Control Delay (s/veh) | - | - | - | 9.3 |
| HCM Lane LOS | - | - | - | A |
| HCM 95th %tile Q(veh) | - | - | - | 0 |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.1 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | ↑↑↑ | ↑↑↑ | ↱ | | ↱ |
| Traffic Vol, veh/h | 0 | 362 | 425 | 9 | 0 | 6 |
| Future Vol, veh/h | 0 | 362 | 425 | 9 | 0 | 6 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | 200 | - | 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 | 393 | 462 | 10 | 0 | 7 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | - | 0 | - | 0 | - | 231 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | - | - | - | - | 7.14 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | - | - | - | 3.92 |
| Pot Cap-1 Maneuver | 0 | - | - | - | 0 | *854 |
| Stage 1 | 0 | - | - | - | 0 | - |
| Stage 2 | 0 | - | - | - | 0 | - |
| Platoon blocked, % | | - | - | - | | 0 |
| Mov Cap-1 Maneuver | - | - | - | - | - | *854 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 0 | 0 | 9.25 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|
| Capacity (veh/h) | - | - | - | 854 |
| HCM Lane V/C Ratio | - | - | - | 0.008 |
| HCM Control Delay (s/veh) | - | - | - | 9.2 |
| HCM Lane LOS | - | - | - | A |
| HCM 95th %tile Q(veh) | - | - | - | 0 |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.5 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 31 | 354 | 440 | 21 | 0 | 13 |
| Future Vol, veh/h | 31 | 354 | 440 | 21 | 0 | 13 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 100 | - | - | 200 | - | 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 | 34 | 385 | 478 | 23 | 0 | 14 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 501 | 0 | - | 0 | - | 239 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | 5.34 | - | - | - | - | 7.14 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | 3.12 | - | - | - | - | 3.92 |
| Pot Cap-1 Maneuver | 860 | - | - | - | 0 | *856 |
| Stage 1 | - | - | - | - | 0 | - |
| Stage 2 | - | - | - | - | 0 | - |
| Platoon blocked, % | 0 | - | - | - | | 0 |
| Mov Cap-1 Maneuver | 860 | - | - | - | - | *856 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 0.75 | 0 | 9.27 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 860 | - | - | - | 856 |
| HCM Lane V/C Ratio | 0.039 | - | - | - | 0.016 |
| HCM Control Delay (s/veh) | 9.4 | - | - | - | 9.3 |
| HCM Lane LOS | A | - | - | - | A |
| HCM 95th %tile Q(veh) | 0.1 | - | - | - | 0.1 |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.1 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | ↑↑↑ | ↑↑↑ | ↱ | | ↱ |
| Traffic Vol, veh/h | 0 | 354 | 449 | 32 | 0 | 11 |
| Future Vol, veh/h | 0 | 354 | 449 | 32 | 0 | 11 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | 0 | - | 0 |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 385 | 488 | 35 | 0 | 12 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | - | 0 | - | 0 | - | 244 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | - | - | - | - | 7.14 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | - | - | - | 3.92 |
| Pot Cap-1 Maneuver | 0 | - | - | - | 0 | *856 |
| Stage 1 | 0 | - | - | - | 0 | - |
| Stage 2 | 0 | - | - | - | 0 | - |
| Platoon blocked, % | | - | - | - | | 0 |
| Mov Cap-1 Maneuver | - | - | - | - | - | *856 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 0 | 0 | 9.26 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|
| Capacity (veh/h) | - | - | - | 856 |
| HCM Lane V/C Ratio | - | - | - | 0.014 |
| HCM Control Delay (s/veh) | - | - | - | 9.3 |
| HCM Lane LOS | - | - | - | A |
| HCM 95th %tile Q(veh) | - | - | - | 0 |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.4 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 19 | 336 | 462 | 40 | 0 | 19 |
| Future Vol, veh/h | 19 | 336 | 462 | 40 | 0 | 19 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 200 | - | - | 200 | - | 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 | 21 | 365 | 502 | 43 | 0 | 21 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 546 | 0 | - | 0 | - | 251 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | 5.34 | - | - | - | - | 7.14 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | 3.12 | - | - | - | - | 3.92 |
| Pot Cap-1 Maneuver | 807 | - | - | - | 0 | *860 |
| Stage 1 | - | - | - | - | 0 | - |
| Stage 2 | - | - | - | - | 0 | - |
| Platoon blocked, % | 0 | - | - | - | | 0 |
| Mov Cap-1 Maneuver | 807 | - | - | - | - | *860 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 0.51 | 0 | 9.29 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 807 | - | - | - | 860 |
| HCM Lane V/C Ratio | 0.026 | - | - | - | 0.024 |
| HCM Control Delay (s/veh) | 9.6 | - | - | - | 9.3 |
| HCM Lane LOS | A | - | - | - | A |
| HCM 95th %tile Q(veh) | 0.1 | - | - | - | 0.1 |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.6 |

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | ↑↑↑ | ↱ | | ↑↑↑ | | ↱ |
| Traffic Vol, veh/h | 233 | 102 | 0 | 502 | 0 | 54 |
| Future Vol, veh/h | 233 | 102 | 0 | 502 | 0 | 54 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 0 | - | - | - | 0 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 253 | 111 | 0 | 546 | 0 | 59 |

| Major/Minor | Major1 | | Major2 | | Minor1 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 0 | 0 | - | - | - | 127 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | - | - | - | - | 7.14 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | - | - | - | 3.92 |
| Pot Cap-1 Maneuver | - | - | 0 | - | 0 | *884 |
| Stage 1 | - | - | 0 | - | 0 | - |
| Stage 2 | - | - | 0 | - | 0 | - |
| Platoon blocked, % | - | - | | - | | 0 |
| Mov Cap-1 Maneuver | - | - | - | - | - | *884 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | WB | NB |
|---|---|---|---|
| HCM Control Delay, s/v | 0 | 0 | 9.36 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBT |
|---|---|---|---|---|
| Capacity (veh/h) | 884 | - | - | - |
| HCM Lane V/C Ratio | 0.066 | - | - | - |
| HCM Control Delay (s/veh) | 9.4 | - | - | - |
| HCM Lane LOS | A | - | - | - |
| HCM 95th %tile Q(veh) | 0.2 | - | - | - |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 12 | 0 | 989 | 35 | 3 | 1060 |
| Future Volume (veh/h) | 12 | 0 | 989 | 35 | 3 | 1060 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 13 | 0 | 1075 | 38 | 3 | 1152 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 58 | 51 | 3749 | 1164 | 492 | 3749 |
| Arrive On Green | 0.03 | 0.00 | 1.00 | 1.00 | 0.73 | 0.73 |
| Sat Flow, veh/h | 1781 | 1585 | 5274 | 1585 | 506 | 5274 |
| Grp Volume(v), veh/h | 13 | 0 | 1075 | 38 | 3 | 1152 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1585 | 1702 | 1585 | 506 | 1702 |
| Q Serve(g_s), s | 0.4 | 0.0 | 0.0 | 0.0 | 0.1 | 4.6 |
| Cycle Q Clear(g_c), s | 0.4 | 0.0 | 0.0 | 0.0 | 0.1 | 4.6 |
| Prop In Lane | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Lane Grp Cap(c), veh/h | 58 | 51 | 3749 | 1164 | 492 | 3749 |
| V/C Ratio(X) | 0.22 | 0.00 | 0.29 | 0.03 | 0.01 | 0.31 |
| Avail Cap(c_a), veh/h | 564 | 502 | 3749 | 1164 | 492 | 3749 |
| HCM Platoon Ratio | 1.00 | 1.00 | 2.00 | 2.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 0.92 | 0.92 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 28.3 | 0.0 | 0.0 | 0.0 | 2.1 | 2.7 |
| Incr Delay (d2), s/veh | 1.9 | 0.0 | 0.2 | 0.0 | 0.0 | 0.2 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 0.4 | 0.0 | 0.1 | 0.0 | 0.0 | 1.5 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 30.2 | 0.0 | 0.2 | 0.0 | 2.2 | 2.9 |
| LnGrp LOS | C | | A | A | A | A |
| Approach Vol, veh/h | 13 | | 1113 | | | 1155 |
| Approach Delay, s/veh | 30.2 | | 0.2 | | | 2.9 |
| Approach LOS | C | | A | | | A |

| Timer - Assigned Phs | 2 | 4 | 8 |
|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 8.4 | 51.6 | 51.6 |
| Change Period (Y+Rc), s | 6.5 | 7.5 | 7.5 |
| Max Green Setting (Gmax), s | 19.0 | 27.0 | 27.0 |
| Max Q Clear Time (g_c+I1), s | 2.4 | 6.6 | 2.0 |
| Green Ext Time (p_c), s | 0.0 | 8.5 | 8.7 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 1.7 |
| HCM 7th LOS | A |

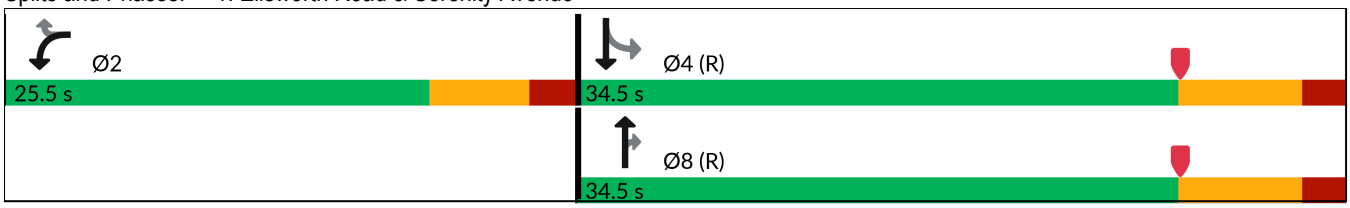
**Notes**

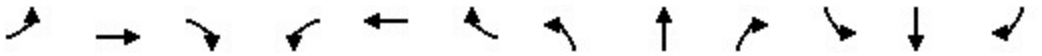
User approved pedestrian interval to be less than phase max green.

| Phase Number | 2 | 4 | 8 |
|---|---|---|---|
| Movement | WBL | SBTL | NBT |
| Lead/Lag | | | |
| Lead-Lag Optimize | | | |
| Recall Mode | None | C-Max | C-Max |
| Maximum Split (s) | 25.5 | 34.5 | 34.5 |
| Maximum Split (%) | 42.5% | 57.5% | 57.5% |
| Minimum Split (s) | 32.5 | 34.5 | 37.5 |
| Yellow Time (s) | 4.5 | 5.5 | 5.5 |
| All-Red Time (s) | 2 | 2 | 2 |
| Minimum Initial (s) | 10 | 15 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 |
| Walk Time (s) | 4 | 4 | 4 |
| Flash Don't Walk (s) | 22 | 23 | 26 |
| Dual Entry | Yes | Yes | Yes |
| Inhibit Max | Yes | Yes | Yes |
| Start Time (s) | 7.5 | 33 | 33 |
| End Time (s) | 33 | 7.5 | 7.5 |
| Yield/Force Off (s) | 26.5 | 0 | 0 |
| Yield/Force Off 170(s) | 4.5 | 37 | 34 |
| Local Start Time (s) | 7.5 | 33 | 33 |
| Local Yield (s) | 26.5 | 0 | 0 |
| Local Yield 170(s) | 4.5 | 37 | 34 |

| Intersection Summary | |
|---|---|
| Cycle Length | 60 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 70 |
| Offset: 0 (0%), Referenced to phase 4:SBTL and 8:NBT, Start of Yellow | |

Splits and Phases: 1: Ellsworth Road & Serenity Avenue





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 322 | 227 | 254 | 323 | 99 | 99 | 191 | 603 | 391 | 194 | 692 | 191 |
| Future Volume (veh/h) | 322 | 227 | 254 | 323 | 99 | 99 | 191 | 603 | 391 | 194 | 692 | 191 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 350 | 247 | 276 | 351 | 108 | 108 | 208 | 655 | 425 | 211 | 752 | 208 |
| 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 | 576 | 960 | 422 | 547 | 917 | 285 | 270 | 1918 | 846 | 270 | 1961 | 873 |
| Arrive On Green | 0.17 | 0.19 | 0.19 | 0.16 | 0.18 | 0.18 | 0.16 | 0.75 | 0.75 | 0.16 | 0.77 | 0.77 |
| Sat Flow, veh/h | 3456 | 5106 | 1585 | 3456 | 5106 | 1585 | 3456 | 5106 | 1585 | 3456 | 5106 | 1585 |
| Grp Volume(v), veh/h | 350 | 247 | 276 | 351 | 108 | 108 | 208 | 655 | 425 | 211 | 752 | 208 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1702 | 1585 | 1728 | 1702 | 1585 | 1728 | 1702 | 1585 | 1728 | 1702 | 1585 |
| Q Serve(g_s), s | 11.3 | 5.0 | 18.6 | 11.4 | 2.1 | 7.2 | 6.9 | 5.2 | 12.9 | 7.0 | 5.8 | 3.6 |
| Cycle Q Clear(g_c), s | 11.3 | 5.0 | 18.6 | 11.4 | 2.1 | 7.2 | 6.9 | 5.2 | 12.9 | 7.0 | 5.8 | 3.6 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 576 | 960 | 422 | 547 | 917 | 285 | 270 | 1918 | 846 | 270 | 1961 | 873 |
| V/C Ratio(X) | 0.61 | 0.26 | 0.65 | 0.64 | 0.12 | 0.38 | 0.77 | 0.34 | 0.50 | 0.78 | 0.38 | 0.24 |
| Avail Cap(c_a), veh/h | 576 | 1340 | 540 | 547 | 1298 | 403 | 518 | 1918 | 846 | 432 | 1961 | 873 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.89 | 0.89 | 0.89 | 0.98 | 0.98 | 0.98 |
| Uniform Delay (d), s/veh | 46.4 | 41.6 | 39.1 | 47.3 | 41.3 | 43.3 | 49.6 | 10.0 | 6.4 | 49.6 | 9.2 | 4.9 |
| Incr Delay (d2), s/veh | 4.7 | 0.1 | 1.9 | 5.7 | 0.1 | 0.8 | 4.2 | 0.4 | 1.9 | 4.8 | 0.6 | 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(95%),veh/ln | 9.0 | 3.8 | 11.9 | 9.1 | 1.6 | 5.2 | 5.3 | 3.1 | 5.1 | 5.5 | 3.4 | 2.1 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 51.1 | 41.7 | 41.0 | 53.0 | 41.3 | 44.2 | 53.8 | 10.4 | 8.3 | 54.5 | 9.8 | 5.5 |
| LnGrp LOS | D | D | D | D | D | D | D | B | A | D | A | A |
| Approach Vol, veh/h | | 873 | | | 567 | | | 1288 | | | 1171 | |
| Approach Delay, s/veh | | 45.2 | | | 49.1 | | | 16.7 | | | 17.1 | |
| Approach LOS | | D | | | D | | | B | | | B | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 25.0 | 28.1 | 13.4 | 53.6 | 24.0 | 29.1 | 14.4 | 52.6 |
| Change Period (Y+Rc), s | 5.0 | 6.5 | 4.0 | 7.5 | 5.0 | 6.5 | 5.0 | 7.5 |
| Max Green Setting (Gmax), s | 20.0 | 30.5 | 18.0 | 28.5 | 19.0 | 31.5 | 15.0 | 30.5 |
| Max Q Clear Time (g_c+I1), s | 13.3 | 9.2 | 8.9 | 7.8 | 13.4 | 20.6 | 9.0 | 14.9 |
| Green Ext Time (p_c), s | 0.7 | 1.0 | 0.4 | 6.1 | 0.6 | 2.0 | 0.3 | 5.6 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 27.9 |
| HCM 7th LOS | C |

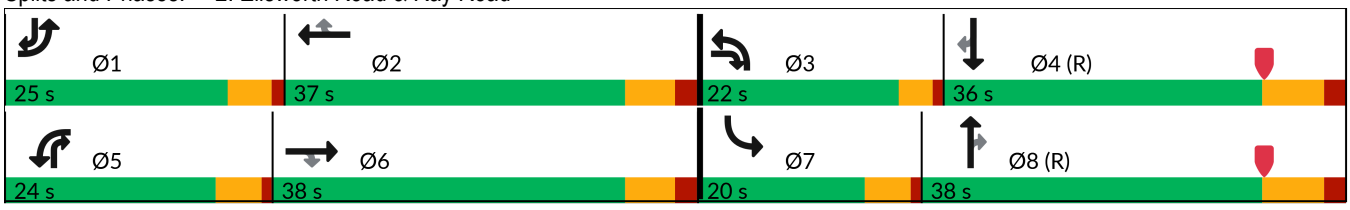
**Notes**

User approved pedestrian interval to be less than phase max green.

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | EBL | WBT | NBL | SBT | WBL | EBT | SBL | NBT |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | Max | None | None | C-Max | Max | None | None | C-Max |
| Maximum Split (s) | 25 | 37 | 22 | 36 | 24 | 38 | 20 | 38 |
| Maximum Split (%) | 20.8% | 30.8% | 18.3% | 30.0% | 20.0% | 31.7% | 16.7% | 31.7% |
| Minimum Split (s) | 10 | 34.5 | 12 | 37.5 | 10 | 35.5 | 12 | 37.5 |
| Yellow Time (s) | 4 | 4.5 | 3 | 5.5 | 4 | 4.5 | 4 | 5.5 |
| All-Red Time (s) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| Minimum Initial (s) | 5 | 10 | 8 | 15 | 5 | 10 | 5 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 4 | | 4 | | 4 | | 4 |
| Flash Don't Walk (s) | | 22 | | 26 | | 23 | | 26 |
| Dual Entry | No | Yes | No | Yes | No | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 101.4 | 6.4 | 43.4 | 65.4 | 101.4 | 5.4 | 43.4 | 63.4 |
| End Time (s) | 6.4 | 43.4 | 65.4 | 101.4 | 5.4 | 43.4 | 63.4 | 101.4 |
| Yield/Force Off (s) | 1.4 | 36.9 | 61.4 | 93.9 | 0.4 | 36.9 | 58.4 | 93.9 |
| Yield/Force Off 170(s) | 1.4 | 14.9 | 61.4 | 67.9 | 0.4 | 13.9 | 58.4 | 67.9 |
| Local Start Time (s) | 7.5 | 32.5 | 69.5 | 91.5 | 7.5 | 31.5 | 69.5 | 89.5 |
| Local Yield (s) | 27.5 | 63 | 87.5 | 0 | 26.5 | 63 | 84.5 | 0 |
| Local Yield 170(s) | 27.5 | 41 | 87.5 | 94 | 26.5 | 40 | 84.5 | 94 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 95 |
| Offset: 93.9 (78%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow | |

Splits and Phases: 2: Ellsworth Road & Ray Road



| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 260 | 139 | 1054 | 289 | 164 | 1099 |
| Future Volume (veh/h) | 260 | 139 | 1054 | 289 | 164 | 1099 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 283 | 151 | 1146 | 314 | 178 | 1195 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 979 | 449 | 2519 | 782 | 239 | 3085 |
| Arrive On Green | 0.28 | 0.28 | 0.99 | 0.99 | 0.14 | 1.00 |
| Sat Flow, veh/h | 3456 | 1585 | 5274 | 1585 | 3456 | 5274 |
| Grp Volume(v), veh/h | 283 | 151 | 1146 | 314 | 178 | 1195 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1585 | 1702 | 1585 | 1728 | 1702 |
| Q Serve(g_s), s | 7.7 | 9.1 | 0.7 | 0.5 | 5.9 | 0.0 |
| Cycle Q Clear(g_c), s | 7.7 | 9.1 | 0.7 | 0.5 | 5.9 | 0.0 |
| Prop In Lane | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Lane Grp Cap(c), veh/h | 979 | 449 | 2519 | 782 | 239 | 3085 |
| V/C Ratio(X) | 0.29 | 0.34 | 0.46 | 0.40 | 0.74 | 0.39 |
| Avail Cap(c_a), veh/h | 979 | 449 | 2519 | 782 | 576 | 3085 |
| HCM Platoon Ratio | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 0.94 | 0.94 | 0.88 | 0.88 |
| Uniform Delay (d), s/veh | 33.6 | 34.1 | 0.4 | 0.4 | 50.7 | 0.0 |
| Incr Delay (d2), s/veh | 0.7 | 2.0 | 0.6 | 1.4 | 4.0 | 0.3 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 6.0 | 6.8 | 0.5 | 0.8 | 4.5 | 0.2 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 34.3 | 36.1 | 1.0 | 1.9 | 54.7 | 0.3 |
| LnGrp LOS | C | D | A | A | D | A |
| Approach Vol, veh/h | 434 | | 1460 | | | 1373 |
| Approach Delay, s/veh | 34.9 | | 1.2 | | | 7.4 |
| Approach LOS | C | | A | | | A |

| Timer - Assigned Phs | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 40.0 | 80.0 | 13.3 | 66.7 |
| Change Period (Y+Rc), s | 6.0 | 7.5 | 5.0 | 7.5 |
| Max Green Setting (Gmax), s | 34.0 | 72.5 | 20.0 | 47.5 |
| Max Q Clear Time (g_c+I1), s | 11.1 | 2.0 | 7.9 | 2.7 |
| Green Ext Time (p_c), s | 1.5 | 10.0 | 0.4 | 13.0 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 8.3 |
| HCM 7th LOS | A |

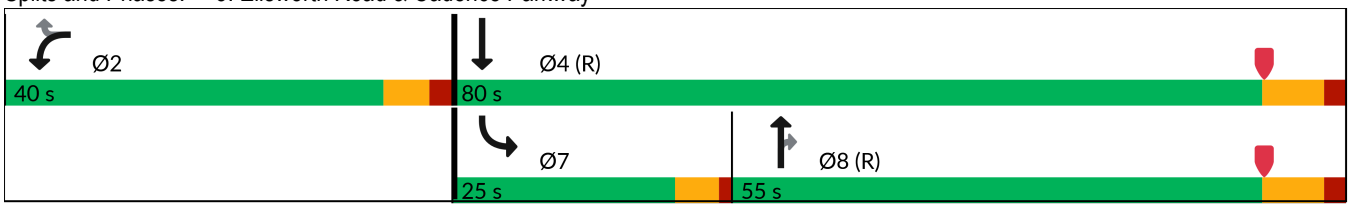
**Notes**

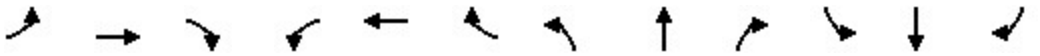
User approved pedestrian interval to be less than phase max green.

| Phase Number | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Movement | WBL | SBT | SBL | NBT |
| Lead/Lag | | | Lead | Lag |
| Lead-Lag Optimize | | | Yes | Yes |
| Recall Mode | Max | C-Max | None | C-Max |
| Maximum Split (s) | 40 | 80 | 25 | 55 |
| Maximum Split (%) | 33.3% | 66.7% | 20.8% | 45.8% |
| Minimum Split (s) | 35.5 | 25.5 | 13 | 32.5 |
| Yellow Time (s) | 4 | 5.5 | 4 | 5.5 |
| All-Red Time (s) | 2 | 2 | 1 | 2 |
| Minimum Initial (s) | 10 | 15 | 5 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | 4 | | | 7 |
| Flash Don't Walk (s) | 25 | | | 18 |
| Dual Entry | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 7.5 | 47.5 | 47.5 | 72.5 |
| End Time (s) | 47.5 | 7.5 | 72.5 | 7.5 |
| Yield/Force Off (s) | 41.5 | 0 | 67.5 | 0 |
| Yield/Force Off 170(s) | 16.5 | 0 | 67.5 | 102 |
| Local Start Time (s) | 7.5 | 47.5 | 47.5 | 72.5 |
| Local Yield (s) | 41.5 | 0 | 67.5 | 0 |
| Local Yield 170(s) | 16.5 | 0 | 67.5 | 102 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 85 |
| Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow | |

Splits and Phases: 3: Ellsworth Road & Cadence Parkway





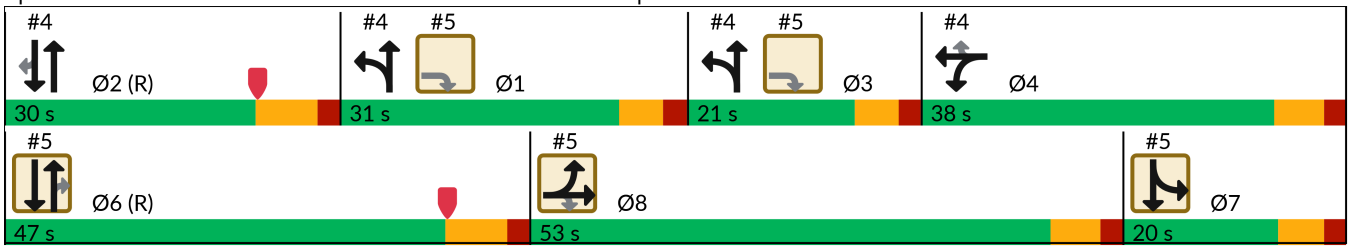
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 0 | 0 | 0 | 12 | 0 | 93 | 1472 | 1262 | 0 | 0 | 819 | 523 |
| Future Volume (vph) | 0 | 0 | 0 | 12 | 0 | 93 | 1472 | 1262 | 0 | 0 | 819 | 523 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | | 0 | 350 | | 350 | 525 | | 0 | 290 | | 285 |
| Storage Lanes | 0 | | 0 | 1 | | 1 | 0 | | 0 | 0 | | 2 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 0.91 | 0.86 | 0.91 | 0.97 | 0.91 | 1.00 | 1.00 | 0.86 | 0.88 |
| Frt | | | | | 0.853 | 0.850 | | | | | | 0.850 |
| Flt Protected | | | | 0.950 | 0.999 | | 0.950 | | | | | |
| Satd. Flow (prot) | 0 | 0 | 0 | 1610 | 2730 | 1441 | 3433 | 5085 | 0 | 0 | 6408 | 2787 |
| Flt Permitted | | | | 0.950 | 0.999 | | 0.950 | | | | | |
| Satd. Flow (perm) | 0 | 0 | 0 | 1610 | 2730 | 1441 | 3433 | 5085 | 0 | 0 | 6408 | 2787 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | | | 218 | 218 | | | | | | 568 |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 841 | | | 605 | | | 688 | | | 624 | |
| Travel Time (s) | | 19.1 | | | 13.8 | | | 15.6 | | | 14.2 | |
| 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 |
| Adj. Flow (vph) | 0 | 0 | 0 | 13 | 0 | 101 | 1600 | 1372 | 0 | 0 | 890 | 568 |
| Shared Lane Traffic (%) | | | | 10% | | 50% | | | | | | |
| Lane Group Flow (vph) | 0 | 0 | 0 | 12 | 52 | 50 | 1600 | 1372 | 0 | 0 | 890 | 568 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 24 | | | 24 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | | | | 1 | 2 | 1 | 1 | 2 | | | 2 | 1 |
| Detector Template | | | | Left | Thru | Right | Left | Thru | | | Thru | Right |
| Leading Detector (ft) | | | | 20 | 100 | 20 | 20 | 100 | | | 100 | 20 |
| Trailing Detector (ft) | | | | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 |
| Detector 1 Position(ft) | | | | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 |
| Detector 1 Size(ft) | | | | 20 | 6 | 20 | 20 | 6 | | | 6 | 20 |
| Detector 1 Type | | | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | | Cl+Ex | Cl+Ex |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Detector 1 Queue (s) | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Detector 1 Delay (s) | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Detector 2 Position(ft) | | | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | | | | Split | NA | Perm | Prot | NA | | | NA | Perm |
| Protected Phases | | | | 4 | 4 | | 1 3 | 1 2 3 | | | 2 | |
| Permitted Phases | | | | | | 4 | | | | | | 2 |

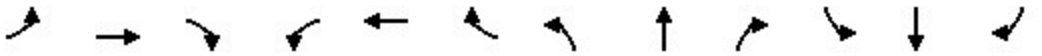
| Lane Group | Ø1 | Ø3 | Ø6 | Ø7 | Ø8 |
|---|---|---|---|---|---|
| Lane Configurations | | | | | |
| Traffic Volume (vph) | | | | | |
| Future Volume (vph) | | | | | |
| Ideal Flow (vphpl) | | | | | |
| Storage Length (ft) | | | | | |
| Storage Lanes | | | | | |
| Taper Length (ft) | | | | | |
| Lane Util. Factor | | | | | |
| Frt | | | | | |
| Flt Protected | | | | | |
| Satd. Flow (prot) | | | | | |
| Flt Permitted | | | | | |
| Satd. Flow (perm) | | | | | |
| Right Turn on Red | | | | | |
| Satd. Flow (RTOR) | | | | | |
| Link Speed (mph) | | | | | |
| Link Distance (ft) | | | | | |
| Travel Time (s) | | | | | |
| Peak Hour Factor | | | | | |
| Adj. Flow (vph) | | | | | |
| Shared Lane Traffic (%) | | | | | |
| Lane Group Flow (vph) | | | | | |
| Enter Blocked Intersection | | | | | |
| Lane Alignment | | | | | |
| Median Width(ft) | | | | | |
| Link Offset(ft) | | | | | |
| Crosswalk Width(ft) | | | | | |
| Two way Left Turn Lane | | | | | |
| Headway Factor | | | | | |
| Turning Speed (mph) | | | | | |
| Number of Detectors | | | | | |
| Detector Template | | | | | |
| Leading Detector (ft) | | | | | |
| Trailing Detector (ft) | | | | | |
| Detector 1 Position(ft) | | | | | |
| Detector 1 Size(ft) | | | | | |
| Detector 1 Type | | | | | |
| Detector 1 Channel | | | | | |
| Detector 1 Extend (s) | | | | | |
| Detector 1 Queue (s) | | | | | |
| Detector 1 Delay (s) | | | | | |
| Detector 2 Position(ft) | | | | | |
| Detector 2 Size(ft) | | | | | |
| Detector 2 Type | | | | | |
| Detector 2 Channel | | | | | |
| Detector 2 Extend (s) | | | | | |
| Turn Type | | | | | |
| Protected Phases | 1 | 3 | 6 | 7 | 8 |
| Permitted Phases | | | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | | | | 4 | 4 | 4 | 1 3 | 1 2 3 | | | 2 | 2 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | | | | 10.0 | 10.0 | 10.0 | | | | | 15.0 | 15.0 |
| Minimum Split (s) | | | | 48.5 | 48.5 | 48.5 | | | | | 25.5 | 25.5 |
| Total Split (s) | | | | 38.0 | 38.0 | 38.0 | | | | | 30.0 | 30.0 |
| Total Split (%) | | | | 31.7% | 31.7% | 31.7% | | | | | 25.0% | 25.0% |
| Maximum Green (s) | | | | 31.5 | 31.5 | 31.5 | | | | | 22.5 | 22.5 |
| Yellow Time (s) | | | | 4.5 | 4.5 | 4.5 | | | | | 5.5 | 5.5 |
| All-Red Time (s) | | | | 2.0 | 2.0 | 2.0 | | | | | 2.0 | 2.0 |
| Lost Time Adjust (s) | | | | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 |
| Total Lost Time (s) | | | | 6.5 | 6.5 | 6.5 | | | | | 7.5 | 7.5 |
| Lead/Lag | | | | Lag | Lag | Lag | | | | | Lead | Lead |
| Lead-Lag Optimize? | | | | Yes | Yes | Yes | | | | | Yes | Yes |
| Vehicle Extension (s) | | | | 3.0 | 3.0 | 3.0 | | | | | 3.0 | 3.0 |
| Recall Mode | | | | None | None | None | | | | | C-Max | C-Max |
| Walk Time (s) | | | | 4.0 | 4.0 | 4.0 | | | | | 4.0 | 4.0 |
| Flash Don't Walk (s) | | | | 38.0 | 38.0 | 38.0 | | | | | 13.0 | 13.0 |
| Pedestrian Calls (#/hr) | | | | 0 | 0 | 0 | | | | | 0 | 0 |
| Act Effct Green (s) | | | | 27.2 | 27.2 | 27.2 | 53.6 | 84.8 | | | 22.5 | 22.5 |
| Actuated g/C Ratio | | | | 0.23 | 0.23 | 0.23 | 0.45 | 0.71 | | | 0.19 | 0.19 |
| v/c Ratio | | | | 0.03 | 0.07 | 0.10 | 1.04 | 0.38 | | | 0.74 | 0.58 |
| Control Delay (s/veh) | | | | 33.4 | 0.2 | 0.4 | 53.2 | 2.5 | | | 53.6 | 14.5 |
| Queue Delay | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Total Delay (s/veh) | | | | 33.4 | 0.2 | 0.4 | 53.2 | 2.5 | | | 53.6 | 14.5 |
| LOS | | | | C | A | A | D | A | | | D | B |
| Approach Delay (s/veh) | | | | | 3.8 | | | 29.8 | | | 38.3 | |
| Approach LOS | | | | | A | | | C | | | D | |

| Intersection Summary | |
|---|---|
| Area Type: | Other |
| Cycle Length: 120 | |
| Actuated Cycle Length: 120 | |
| Offset: 0 (0%), Referenced to phase 2:NBSB and 6:, Start of Yellow | |
| Natural Cycle: 150 | |
| Control Type: Actuated-Coordinated | |
| Maximum v/c Ratio: 1.31 | |
| Intersection Signal Delay (s/veh): 31.9 | Intersection LOS: C |
| Intersection Capacity Utilization 96.1% | ICU Level of Service F |
| Analysis Period (min) 15 | |

Splits and Phases: 4: Ellsworth Road & SR24 Westbound Ramps





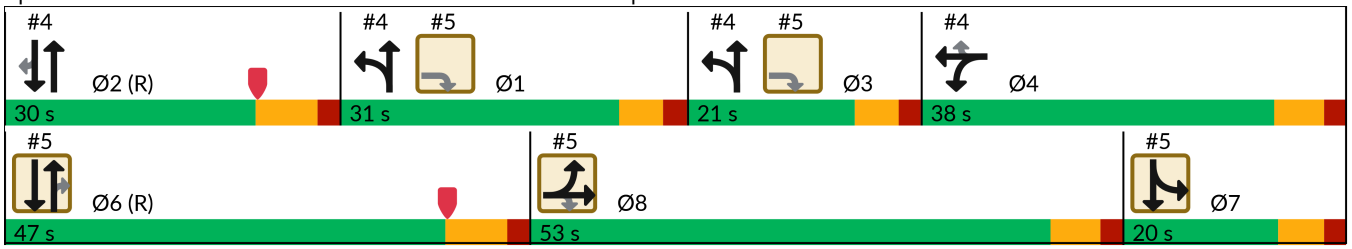
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 550 | 2 | 2014 | 0 | 0 | 0 | 0 | 2225 | 10 | 105 | 744 | 0 |
| Future Volume (vph) | 550 | 2 | 2014 | 0 | 0 | 0 | 0 | 2225 | 10 | 105 | 744 | 0 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 350 | | 350 | 0 | | 0 | 300 | | 300 | 550 | | 0 |
| Storage Lanes | 1 | | 2 | 0 | | 0 | 2 | | 1 | 0 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 0.95 | 0.95 | 0.88 | 1.00 | 1.00 | 1.00 | 1.00 | 0.81 | 1.00 | 0.97 | 0.91 | 1.00 |
| Frt | | | 0.850 | | | | | | 0.850 | | | |
| Flt Protected | 0.950 | 0.953 | | | | | | | | 0.950 | | |
| Satd. Flow (prot) | 1681 | 1686 | 2787 | 0 | 0 | 0 | 0 | 7544 | 1583 | 3433 | 5085 | 0 |
| Flt Permitted | 0.950 | 0.953 | | | | | | | | 0.950 | | |
| Satd. Flow (perm) | 1681 | 1686 | 2787 | 0 | 0 | 0 | 0 | 7544 | 1583 | 3433 | 5085 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 223 | | | | | | 200 | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 651 | | | 441 | | | 838 | | | 688 | |
| Travel Time (s) | | 14.8 | | | 10.0 | | | 19.0 | | | 15.6 | |
| 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 |
| Adj. Flow (vph) | 598 | 2 | 2189 | 0 | 0 | 0 | 0 | 2418 | 11 | 114 | 809 | 0 |
| Shared Lane Traffic (%) | 50% | | | | | | | | | | | |
| Lane Group Flow (vph) | 299 | 301 | 2189 | 0 | 0 | 0 | 0 | 2418 | 11 | 114 | 809 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 24 | | | 24 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | 1 | | | | | 2 | 1 | 1 | 2 | |
| Detector Template | Left | Thru | Right | | | | | Thru | Right | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | 20 | | | | | 100 | 20 | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | 0 | | | | | 0 | 0 | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | 0 | | | | | 0 | 0 | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | 20 | | | | | 6 | 20 | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | | | | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | | | | 0.0 | | | 0.0 | |
| Turn Type | Split | NA | custom | | | | | NA | Perm | Prot | NA | |
| Protected Phases | 8 | 8 | | | | | | 6 | | 7 | 6 7 | |
| Permitted Phases | | | 1 3 8 | | | | | | 6 | | | |

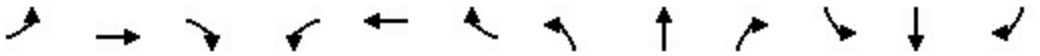
| Lane Group | Ø1 | Ø2 | Ø3 | Ø4 |
|---|---|---|---|---|
| Lane Configurations | | | | |
| Traffic Volume (vph) | | | | |
| Future Volume (vph) | | | | |
| Ideal Flow (vphpl) | | | | |
| Storage Length (ft) | | | | |
| Storage Lanes | | | | |
| Taper Length (ft) | | | | |
| Lane Util. Factor | | | | |
| Frt | | | | |
| Flt Protected | | | | |
| Satd. Flow (prot) | | | | |
| Flt Permitted | | | | |
| Satd. Flow (perm) | | | | |
| Right Turn on Red | | | | |
| Satd. Flow (RTOR) | | | | |
| Link Speed (mph) | | | | |
| Link Distance (ft) | | | | |
| Travel Time (s) | | | | |
| Peak Hour Factor | | | | |
| Adj. Flow (vph) | | | | |
| Shared Lane Traffic (%) | | | | |
| Lane Group Flow (vph) | | | | |
| Enter Blocked Intersection | | | | |
| Lane Alignment | | | | |
| Median Width(ft) | | | | |
| Link Offset(ft) | | | | |
| Crosswalk Width(ft) | | | | |
| Two way Left Turn Lane | | | | |
| Headway Factor | | | | |
| Turning Speed (mph) | | | | |
| Number of Detectors | | | | |
| Detector Template | | | | |
| Leading Detector (ft) | | | | |
| Trailing Detector (ft) | | | | |
| Detector 1 Position(ft) | | | | |
| Detector 1 Size(ft) | | | | |
| Detector 1 Type | | | | |
| Detector 1 Channel | | | | |
| Detector 1 Extend (s) | | | | |
| Detector 1 Queue (s) | | | | |
| Detector 1 Delay (s) | | | | |
| Detector 2 Position(ft) | | | | |
| Detector 2 Size(ft) | | | | |
| Detector 2 Type | | | | |
| Detector 2 Channel | | | | |
| Detector 2 Extend (s) | | | | |
| Turn Type | | | | |
| Protected Phases | 1 | 2 | 3 | 4 |
| Permitted Phases | | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | 8 | 8 | 1 3 8 | | | | | 6 | 6 | 7 | 6 7 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | | | | | 15.0 | 15.0 | 5.0 | | |
| Minimum Split (s) | 46.5 | 46.5 | | | | | | 26.5 | 26.5 | 11.0 | | |
| Total Split (s) | 53.0 | 53.0 | | | | | | 47.0 | 47.0 | 20.0 | | |
| Total Split (%) | 44.2% | 44.2% | | | | | | 39.2% | 39.2% | 16.7% | | |
| Maximum Green (s) | 46.5 | 46.5 | | | | | | 39.5 | 39.5 | 14.0 | | |
| Yellow Time (s) | 4.5 | 4.5 | | | | | | 5.5 | 5.5 | 4.0 | | |
| All-Red Time (s) | 2.0 | 2.0 | | | | | | 2.0 | 2.0 | 2.0 | | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | | | | | 0.0 | 0.0 | 0.0 | | |
| Total Lost Time (s) | 6.5 | 6.5 | | | | | | 7.5 | 7.5 | 6.0 | | |
| Lead/Lag | Lead | Lead | | | | | | | | Lag | | |
| Lead-Lag Optimize? | Yes | Yes | | | | | | | | Yes | | |
| Vehicle Extension (s) | 3.0 | 3.0 | | | | | | 3.0 | 3.0 | 3.0 | | |
| Recall Mode | None | None | | | | | | C-Max | C-Max | None | | |
| Walk Time (s) | 4.0 | 4.0 | | | | | | 4.0 | 4.0 | | | |
| Flash Don't Walk (s) | 36.0 | 36.0 | | | | | | 15.0 | 15.0 | | | |
| Pedestrian Calls (#/hr) | 0 | 0 | | | | | | 0 | 0 | | | |
| Act Effct Green (s) | 46.5 | 46.5 | 68.0 | | | | | 39.5 | 39.5 | 14.0 | 59.5 | |
| Actuated g/C Ratio | 0.39 | 0.39 | 0.57 | | | | | 0.33 | 0.33 | 0.12 | 0.50 | |
| v/c Ratio | 0.46 | 0.46 | 1.31 | | | | | 0.97 | 0.02 | 0.28 | 0.32 | |
| Control Delay (s/veh) | 30.2 | 30.3 | 166.2 | | | | | 32.8 | 0.0 | 77.9 | 1.6 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Delay (s/veh) | 30.2 | 30.3 | 166.2 | | | | | 32.8 | 0.0 | 77.9 | 1.6 | |
| LOS | C | C | F | | | | | C | A | E | A | |
| Approach Delay (s/veh) | | 137.0 | | | | | | 32.6 | | | 11.0 | |
| Approach LOS | | F | | | | | | C | | | B | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 120 | | | |
| Actuated Cycle Length: 120 | | | |
| Offset: 0 (0%), Referenced to phase 2:NBSB and 6:, Start of Yellow | | | |
| Natural Cycle: 150 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 1.31 | | | |
| Intersection Signal Delay (s/veh): 76.8 | | Intersection LOS: E | |
| Intersection Capacity Utilization 96.1% | | ICU Level of Service F | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 5: Ellsworth Road & SR24 Eastbound Ramps





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 97 | 89 | 26 | 228 | 75 | 214 | 17 | 1574 | 182 | 484 | 2216 | 53 |
| Future Volume (veh/h) | 97 | 89 | 26 | 228 | 75 | 214 | 17 | 1574 | 182 | 484 | 2216 | 53 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 105 | 97 | 28 | 248 | 82 | 233 | 18 | 1711 | 198 | 526 | 2409 | 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 | 202 | 444 | 198 | 432 | 681 | 570 | 65 | 1950 | 605 | 581 | 2746 | 66 |
| Arrive On Green | 0.06 | 0.13 | 0.13 | 0.13 | 0.19 | 0.19 | 0.01 | 0.13 | 0.13 | 0.34 | 1.00 | 1.00 |
| Sat Flow, veh/h | 3456 | 3554 | 1585 | 3456 | 3554 | 1585 | 3456 | 5106 | 1585 | 3456 | 5129 | 123 |
| Grp Volume(v), veh/h | 105 | 97 | 28 | 248 | 82 | 233 | 18 | 1711 | 198 | 526 | 1596 | 871 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1777 | 1585 | 1728 | 1777 | 1585 | 1728 | 1702 | 1585 | 1728 | 1702 | 1848 |
| Q Serve(g_s), s | 3.5 | 2.9 | 1.9 | 8.1 | 2.3 | 13.2 | 0.6 | 39.5 | 13.7 | 17.4 | 0.0 | 0.0 |
| Cycle Q Clear(g_c), s | 3.5 | 2.9 | 1.9 | 8.1 | 2.3 | 13.2 | 0.6 | 39.5 | 13.7 | 17.4 | 0.0 | 0.0 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.07 |
| Lane Grp Cap(c), veh/h | 202 | 444 | 198 | 432 | 681 | 570 | 65 | 1950 | 605 | 581 | 1822 | 989 |
| V/C Ratio(X) | 0.52 | 0.22 | 0.14 | 0.57 | 0.12 | 0.41 | 0.28 | 0.88 | 0.33 | 0.91 | 0.88 | 0.88 |
| Avail Cap(c_a), veh/h | 202 | 459 | 205 | 432 | 696 | 577 | 792 | 1950 | 605 | 662 | 1822 | 989 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.33 | 0.33 | 0.33 | 2.00 | 2.00 | 2.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.87 | 0.87 | 0.87 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 54.9 | 47.2 | 46.8 | 49.5 | 40.1 | 28.8 | 58.8 | 49.7 | 38.4 | 38.9 | 0.0 | 0.0 |
| Incr Delay (d2), s/veh | 9.3 | 0.2 | 0.3 | 5.5 | 0.1 | 0.5 | 2.0 | 5.3 | 1.3 | 14.9 | 6.3 | 11.1 |
| 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(95%),veh/ln | 3.2 | 2.4 | 1.4 | 6.9 | 1.8 | 8.8 | 0.5 | 25.7 | 9.8 | 11.8 | 2.8 | 5.5 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 64.2 | 47.5 | 47.1 | 55.0 | 40.2 | 29.3 | 60.8 | 54.9 | 39.6 | 53.8 | 6.3 | 11.1 |
| LnGrp LOS | E | D | D | D | D | C | E | D | D | D | A | B |
| Approach Vol, veh/h | | 230 | | | 563 | | | 1927 | | | 2993 | |
| Approach Delay, s/veh | | 55.1 | | | 42.2 | | | 53.4 | | | 16.0 | |
| Approach LOS | | E | | | D | | | D | | | B | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 12.0 | 29.5 | 6.8 | 71.7 | 20.0 | 21.5 | 25.2 | 53.3 |
| Change Period (Y+Rc), s | 5.0 | 6.5 | 4.5 | 7.5 | 5.0 | 6.5 | 5.0 | 7.5 |
| Max Green Setting (Gmax), s | 7.0 | 23.5 | 27.5 | 38.5 | 15.0 | 15.5 | 23.0 | 42.5 |
| Max Q Clear Time (g_c+I1), s | 5.5 | 15.2 | 2.6 | 2.0 | 10.1 | 4.9 | 19.4 | 41.5 |
| Green Ext Time (p_c), s | 0.0 | 0.8 | 0.0 | 27.7 | 0.4 | 0.4 | 0.7 | 0.9 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 32.8 |
| HCM 7th LOS | C |

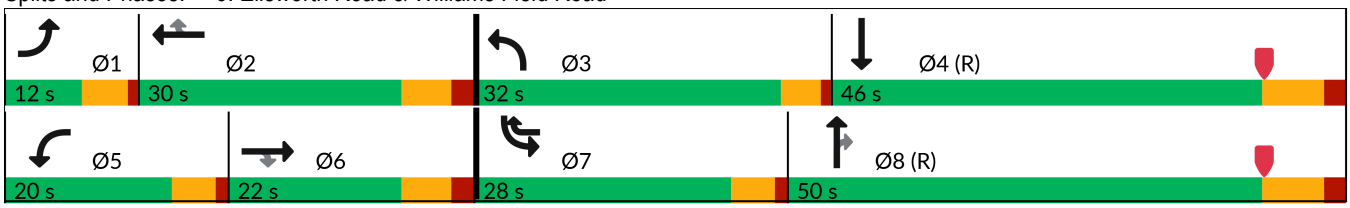
**Notes**

User approved pedestrian interval to be less than phase max green.

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | EBL | WBT | NBL | SBT | WBL | EBT | SBL | NBT |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | Max | None | None | C-Max | Max | None | None | C-Max |
| Maximum Split (s) | 12 | 30 | 32 | 46 | 20 | 22 | 28 | 50 |
| Maximum Split (%) | 10.0% | 25.0% | 26.7% | 38.3% | 16.7% | 18.3% | 23.3% | 41.7% |
| Minimum Split (s) | 11 | 36.5 | 22.5 | 35.5 | 24 | 37.5 | 11 | 37.5 |
| Yellow Time (s) | 4 | 4.5 | 3.5 | 5.5 | 4 | 4.5 | 4 | 5.5 |
| All-Red Time (s) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| Minimum Initial (s) | 5 | 15 | 5 | 15 | 5 | 15 | 5 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 4 | 7 | 7 | | 4 | | 7 |
| Flash Don't Walk (s) | | 26 | 11 | 21 | | 27 | | 23 |
| Dual Entry | No | Yes | No | Yes | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 64 | 76 | 106 | 18 | 64 | 84 | 106 | 14 |
| End Time (s) | 76 | 106 | 18 | 64 | 84 | 106 | 14 | 64 |
| Yield/Force Off (s) | 71 | 99.5 | 13.5 | 56.5 | 79 | 99.5 | 9 | 56.5 |
| Yield/Force Off 170(s) | 71 | 73.5 | 2.5 | 35.5 | 79 | 72.5 | 9 | 33.5 |
| Local Start Time (s) | 7.5 | 19.5 | 49.5 | 81.5 | 7.5 | 27.5 | 49.5 | 77.5 |
| Local Yield (s) | 14.5 | 43 | 77 | 0 | 22.5 | 43 | 72.5 | 0 |
| Local Yield 170(s) | 14.5 | 17 | 66 | 99 | 22.5 | 16 | 72.5 | 97 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 150 |
| Offset: 56.5 (47%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow | |

Splits and Phases: 6: Ellsworth Road & Williams Field Road



| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 46 | 19 | 1767 | 262 | 30 | 2456 |
| Future Volume (veh/h) | 46 | 19 | 1767 | 262 | 30 | 2456 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 50 | 21 | 1921 | 285 | 33 | 2670 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 269 | 120 | 3791 | 1177 | 96 | 4146 |
| Arrive On Green | 0.08 | 0.08 | 1.00 | 1.00 | 0.06 | 1.00 |
| Sat Flow, veh/h | 3563 | 1585 | 5274 | 1585 | 3456 | 5274 |
| Grp Volume(v), veh/h | 50 | 21 | 1921 | 285 | 33 | 2670 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1585 | 1702 | 1585 | 1728 | 1702 |
| Q Serve(g_s), s | 1.6 | 1.5 | 0.0 | 0.0 | 1.1 | 0.0 |
| Cycle Q Clear(g_c), s | 1.6 | 1.5 | 0.0 | 0.0 | 1.1 | 0.0 |
| Prop In Lane | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Lane Grp Cap(c), veh/h | 269 | 120 | 3791 | 1177 | 96 | 4146 |
| V/C Ratio(X) | 0.19 | 0.18 | 0.51 | 0.24 | 0.34 | 0.64 |
| Avail Cap(c_a), veh/h | 861 | 383 | 3791 | 1177 | 202 | 4146 |
| HCM Platoon Ratio | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 0.47 | 0.47 | 0.42 | 0.42 |
| Uniform Delay (d), s/veh | 52.0 | 52.0 | 0.0 | 0.0 | 55.6 | 0.0 |
| Incr Delay (d2), s/veh | 0.3 | 0.7 | 0.2 | 0.2 | 0.9 | 0.3 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 1.3 | 1.1 | 0.1 | 0.1 | 0.9 | 0.2 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 52.3 | 52.7 | 0.2 | 0.2 | 56.5 | 0.3 |
| LnGrp LOS | D | D | A | A | E | A |
| Approach Vol, veh/h | 71 | | 2206 | | | 2703 |
| Approach Delay, s/veh | 52.4 | | 0.2 | | | 1.0 |
| Approach LOS | D | | A | | | A |

| Timer - Assigned Phs | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 15.1 | 104.9 | 8.3 | 96.6 |
| Change Period (Y+Rc), s | 6.0 | 7.5 | 5.0 | 7.5 |
| Max Green Setting (Gmax), s | 29.0 | 77.5 | 7.0 | 65.5 |
| Max Q Clear Time (g_c+I1), s | 3.6 | 2.0 | 3.1 | 2.0 |
| Green Ext Time (p_c), s | 0.2 | 47.3 | 0.0 | 26.0 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 1.4 |
| HCM 7th LOS | A |

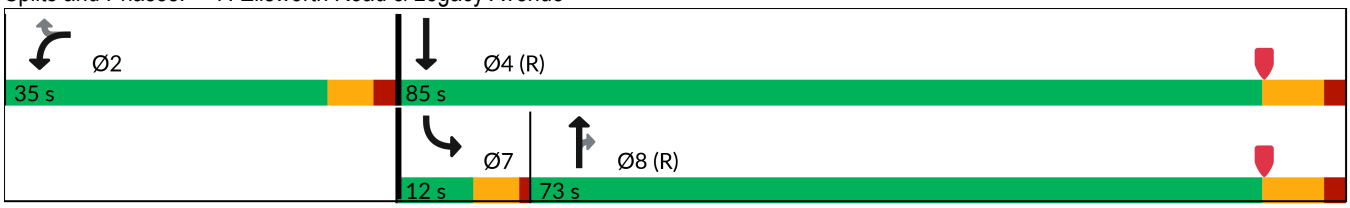
**Notes**

User approved volume balancing among the lanes for turning movement.

| Phase Number | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Movement | WBL | SBT | SBL | NBT |
| Lead/Lag | | | Lead | Lag |
| Lead-Lag Optimize | | | Yes | Yes |
| Recall Mode | None | C-Max | None | C-Max |
| Maximum Split (s) | 35 | 85 | 12 | 73 |
| Maximum Split (%) | 29.2% | 70.8% | 10.0% | 60.8% |
| Minimum Split (s) | 35 | 39.5 | 10 | 26.5 |
| Yellow Time (s) | 4 | 5.5 | 4 | 5.5 |
| All-Red Time (s) | 2 | 2 | 1 | 2 |
| Minimum Initial (s) | 10 | 15 | 5 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | 4 | 4 | | 7 |
| Flash Don't Walk (s) | 25 | 28 | | 12 |
| Dual Entry | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 7.5 | 42.5 | 42.5 | 54.5 |
| End Time (s) | 42.5 | 7.5 | 54.5 | 7.5 |
| Yield/Force Off (s) | 36.5 | 0 | 49.5 | 0 |
| Yield/Force Off 170(s) | 11.5 | 92 | 49.5 | 108 |
| Local Start Time (s) | 7.5 | 42.5 | 42.5 | 54.5 |
| Local Yield (s) | 36.5 | 0 | 49.5 | 0 |
| Local Yield 170(s) | 11.5 | 92 | 49.5 | 108 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 90 |
| Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow | |

Splits and Phases: 7: Ellsworth Road & Legacy Avenue



| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 61 | 122 | 1932 | 58 | 278 | 2234 |
| Future Volume (veh/h) | 61 | 122 | 1932 | 58 | 278 | 2234 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 66 | 133 | 2100 | 63 | 302 | 2428 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 349 | 310 | 2616 | 812 | 337 | 3510 |
| Arrive On Green | 0.20 | 0.20 | 0.51 | 0.51 | 0.09 | 0.46 |
| Sat Flow, veh/h | 1781 | 1585 | 5274 | 1585 | 1781 | 5274 |
| Grp Volume(v), veh/h | 66 | 133 | 2100 | 63 | 302 | 2428 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1585 | 1702 | 1585 | 1781 | 1702 |
| Q Serve(g_s), s | 3.7 | 8.8 | 40.9 | 2.4 | 13.9 | 45.2 |
| Cycle Q Clear(g_c), s | 3.7 | 8.8 | 40.9 | 2.4 | 13.9 | 45.2 |
| Prop In Lane | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Lane Grp Cap(c), veh/h | 349 | 310 | 2616 | 812 | 337 | 3510 |
| V/C Ratio(X) | 0.19 | 0.43 | 0.80 | 0.08 | 0.90 | 0.69 |
| Avail Cap(c_a), veh/h | 349 | 310 | 2616 | 812 | 470 | 3510 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 0.67 | 0.67 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 0.75 | 0.75 |
| Uniform Delay (d), s/veh | 40.3 | 42.4 | 24.2 | 14.9 | 38.0 | 22.3 |
| Incr Delay (d2), s/veh | 1.2 | 4.3 | 2.7 | 0.2 | 12.1 | 0.9 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 3.2 | 6.9 | 23.2 | 1.7 | 15.0 | 25.6 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 41.5 | 46.6 | 27.0 | 15.0 | 50.1 | 23.2 |
| LnGrp LOS | D | D | C | B | D | C |
| Approach Vol, veh/h | 199 | | 2163 | | | 2730 |
| Approach Delay, s/veh | 44.9 | | 26.6 | | | 26.1 |
| Approach LOS | D | | C | | | C |

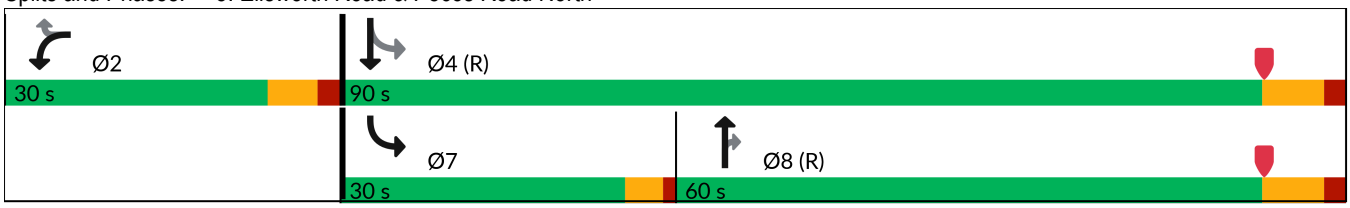
| Timer - Assigned Phs | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 30.0 | 90.0 | 21.0 | 69.0 |
| Change Period (Y+Rc), s | 6.5 | 7.5 | 4.5 | 7.5 |
| Max Green Setting (Gmax), s | 23.5 | 82.5 | 25.5 | 52.5 |
| Max Q Clear Time (g_c+I1), s | 10.8 | 47.2 | 15.9 | 42.9 |
| Green Ext Time (p_c), s | 0.5 | 27.5 | 0.6 | 8.3 |

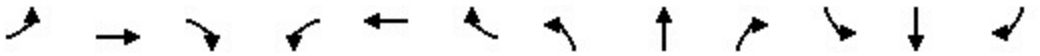
| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 27.1 |
| HCM 7th LOS | C |

| Phase Number | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Movement | WBL | SBTL | SBL | NBT |
| Lead/Lag | | | Lead | Lag |
| Lead-Lag Optimize | | | Yes | Yes |
| Recall Mode | Max | C-Max | None | C-Max |
| Maximum Split (s) | 30 | 90 | 30 | 60 |
| Maximum Split (%) | 25.0% | 75.0% | 25.0% | 50.0% |
| Minimum Split (s) | 24.5 | 25.5 | 9.5 | 25.5 |
| Yellow Time (s) | 4.5 | 5.5 | 3.5 | 5.5 |
| All-Red Time (s) | 2 | 2 | 1 | 2 |
| Minimum Initial (s) | 5 | 15 | 5 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | | | | |
| Flash Don't Walk (s) | | | | |
| Dual Entry | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 7.5 | 37.5 | 37.5 | 67.5 |
| End Time (s) | 37.5 | 7.5 | 67.5 | 7.5 |
| Yield/Force Off (s) | 31 | 0 | 63 | 0 |
| Yield/Force Off 170(s) | 31 | 0 | 63 | 0 |
| Local Start Time (s) | 7.5 | 37.5 | 37.5 | 67.5 |
| Local Yield (s) | 31 | 0 | 63 | 0 |
| Local Yield 170(s) | 31 | 0 | 63 | 0 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 90 |
| Offset: 0 (0%), Referenced to phase 4:SBTL and 8:NBT, Start of Yellow | |

Splits and Phases: 8: Ellsworth Road & Pecos Road North





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 107 | 536 | 96 | 135 | 423 | 21 | 48 | 7 | 14 | 152 | 7 | 41 |
| Future Volume (veh/h) | 107 | 536 | 96 | 135 | 423 | 21 | 48 | 7 | 14 | 152 | 7 | 41 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 116 | 583 | 104 | 147 | 460 | 23 | 52 | 8 | 15 | 165 | 8 | 45 |
| 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 | 573 | 2362 | 733 | 461 | 2780 | 863 | 504 | 74 | 138 | 358 | 20 | 115 |
| Arrive On Green | 0.10 | 0.93 | 0.93 | 0.27 | 1.00 | 1.00 | 0.15 | 0.13 | 0.13 | 0.10 | 0.08 | 0.08 |
| Sat Flow, veh/h | 1781 | 5106 | 1585 | 3456 | 5106 | 1585 | 3456 | 582 | 1092 | 1781 | 245 | 1378 |
| Grp Volume(v), veh/h | 116 | 583 | 104 | 147 | 460 | 23 | 52 | 0 | 23 | 165 | 0 | 53 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1702 | 1585 | 1728 | 1702 | 1585 | 1728 | 0 | 1674 | 1781 | 0 | 1622 |
| Q Serve(g_s), s | 4.1 | 1.3 | 0.7 | 4.1 | 0.0 | 0.0 | 1.6 | 0.0 | 1.5 | 10.0 | 0.0 | 3.7 |
| Cycle Q Clear(g_c), s | 4.1 | 1.3 | 0.7 | 4.1 | 0.0 | 0.0 | 1.6 | 0.0 | 1.5 | 10.0 | 0.0 | 3.7 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.65 | 1.00 | | 0.85 |
| Lane Grp Cap(c), veh/h | 573 | 2362 | 733 | 461 | 2780 | 863 | 504 | 0 | 212 | 358 | 0 | 135 |
| V/C Ratio(X) | 0.20 | 0.25 | 0.14 | 0.32 | 0.17 | 0.03 | 0.10 | 0.00 | 0.11 | 0.46 | 0.00 | 0.39 |
| Avail Cap(c_a), veh/h | 719 | 2362 | 733 | 461 | 2780 | 863 | 504 | 0 | 293 | 599 | 0 | 433 |
| HCM Platoon Ratio | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 14.4 | 2.5 | 2.4 | 39.6 | 0.0 | 0.0 | 44.4 | 0.0 | 46.4 | 43.8 | 0.0 | 52.1 |
| Incr Delay (d2), s/veh | 0.2 | 0.2 | 0.4 | 1.8 | 0.1 | 0.1 | 0.4 | 0.0 | 0.2 | 0.9 | 0.0 | 1.8 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 2.7 | 0.8 | 0.5 | 3.2 | 0.1 | 0.0 | 1.3 | 0.0 | 1.1 | 8.0 | 0.0 | 2.9 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 14.5 | 2.7 | 2.8 | 41.5 | 0.1 | 0.1 | 44.9 | 0.0 | 46.6 | 44.8 | 0.0 | 54.0 |
| LnGrp LOS | B | A | A | D | A | A | D | | D | D | | D |
| Approach Vol, veh/h | | 803 | | | 630 | | | 75 | | | 218 | |
| Approach Delay, s/veh | | 4.4 | | | 9.8 | | | 45.4 | | | 47.0 | |
| Approach LOS | | A | | | A | | | D | | | D | |

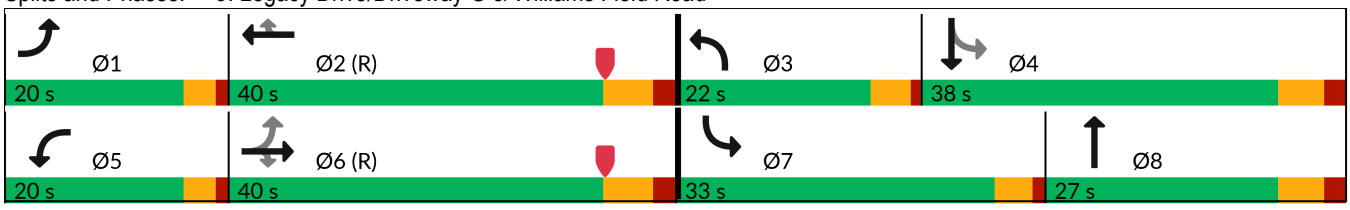
| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 10.2 | 71.8 | 22.0 | 16.0 | 20.0 | 62.0 | 16.8 | 21.2 |
| Change Period (Y+Rc), s | 4.0 | 6.5 | 4.5 | 6.0 | 4.0 | 6.5 | 4.5 | 6.0 |
| Max Green Setting (Gmax), s | 16.0 | 33.5 | 17.5 | 32.0 | 16.0 | 33.5 | 28.5 | 21.0 |
| Max Q Clear Time (g_c+I1), s | 6.1 | 2.0 | 3.6 | 5.7 | 6.1 | 3.3 | 12.0 | 3.5 |
| Green Ext Time (p_c), s | 0.2 | 3.1 | 0.1 | 0.2 | 0.3 | 4.2 | 0.4 | 0.0 |

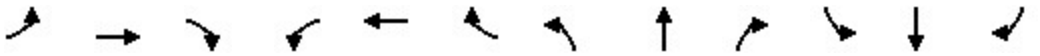
| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 13.5 |
| HCM 7th LOS | B |

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | EBL | WBT | NBL | SBTL | WBL | EBTL | SBL | NBT |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | None | C-Max | Max | None | Max | C-Max | None | None |
| Maximum Split (s) | 20 | 40 | 22 | 38 | 20 | 40 | 33 | 27 |
| Maximum Split (%) | 16.7% | 33.3% | 18.3% | 31.7% | 16.7% | 33.3% | 27.5% | 22.5% |
| Minimum Split (s) | 9.5 | 24.5 | 9.5 | 24 | 12.5 | 24.5 | 9.5 | 24 |
| Yellow Time (s) | 3 | 4.5 | 3.5 | 4 | 3 | 4.5 | 3.5 | 4 |
| All-Red Time (s) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| Minimum Initial (s) | 5 | 15 | 5 | 10 | 5 | 15 | 5 | 10 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | | | | | 7 | | |
| Flash Don't Walk (s) | | | | | | 11 | | |
| Dual Entry | No | Yes | No | Yes | No | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 68 | 88 | 8 | 30 | 68 | 88 | 8 | 41 |
| End Time (s) | 88 | 8 | 30 | 68 | 88 | 8 | 41 | 68 |
| Yield/Force Off (s) | 84 | 1.5 | 25.5 | 62 | 84 | 1.5 | 36.5 | 62 |
| Yield/Force Off 170(s) | 84 | 1.5 | 25.5 | 62 | 84 | 110.5 | 36.5 | 62 |
| Local Start Time (s) | 66.5 | 86.5 | 6.5 | 28.5 | 66.5 | 86.5 | 6.5 | 39.5 |
| Local Yield (s) | 82.5 | 0 | 24 | 60.5 | 82.5 | 0 | 35 | 60.5 |
| Local Yield 170(s) | 82.5 | 0 | 24 | 60.5 | 82.5 | 109 | 35 | 60.5 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 75 |
| Offset: 1.5 (1%), Referenced to phase 2:WBT and 6:EBTL, Start of Yellow | |

Splits and Phases: 9: Legacy Drive/Driveway G & Williams Field Road





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 25 | 374 | 107 | 276 | 421 | 58 | 224 | 17 | 271 | 187 | 22 | 33 |
| Future Volume (veh/h) | 25 | 374 | 107 | 276 | 421 | 58 | 224 | 17 | 271 | 187 | 22 | 33 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 27 | 407 | 116 | 300 | 458 | 0 | 243 | 0 | 307 | 203 | 24 | 36 |
| 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 | 202 | 2421 | 752 | 376 | 2680 | | 402 | 0 | 689 | 461 | 69 | 104 |
| Arrive On Green | 0.12 | 0.95 | 0.95 | 0.14 | 0.70 | 0.00 | 0.14 | 0.00 | 0.11 | 0.13 | 0.10 | 0.10 |
| Sat Flow, veh/h | 3456 | 5106 | 1585 | 3456 | 5106 | 1585 | 1781 | 0 | 3170 | 3456 | 675 | 1013 |
| Grp Volume(v), veh/h | 27 | 407 | 116 | 300 | 458 | 0 | 243 | 0 | 307 | 203 | 0 | 60 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1702 | 1585 | 1728 | 1702 | 1585 | 1781 | 0 | 1585 | 1728 | 0 | 1688 |
| Q Serve(g_s), s | 0.8 | 0.6 | 0.5 | 10.1 | 3.7 | 0.0 | 14.4 | 0.0 | 10.1 | 6.5 | 0.0 | 4.0 |
| Cycle Q Clear(g_c), s | 0.8 | 0.6 | 0.5 | 10.1 | 3.7 | 0.0 | 14.4 | 0.0 | 10.1 | 6.5 | 0.0 | 4.0 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.60 |
| Lane Grp Cap(c), veh/h | 202 | 2421 | 752 | 376 | 2680 | | 402 | 0 | 689 | 461 | 0 | 173 |
| V/C Ratio(X) | 0.13 | 0.17 | 0.15 | 0.80 | 0.17 | | 0.61 | 0.00 | 0.45 | 0.44 | 0.00 | 0.35 |
| Avail Cap(c_a), veh/h | 202 | 2421 | 752 | 950 | 2680 | | 494 | 0 | 993 | 461 | 0 | 246 |
| HCM Platoon Ratio | 2.00 | 2.00 | 2.00 | 1.33 | 1.33 | 1.33 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 0.93 | 0.93 | 0.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 50.3 | 1.6 | 1.6 | 50.0 | 9.2 | 0.0 | 40.0 | 0.0 | 40.7 | 47.9 | 0.0 | 50.1 |
| Incr Delay (d2), s/veh | 1.4 | 0.2 | 0.4 | 3.6 | 0.1 | 0.0 | 1.5 | 0.0 | 0.5 | 3.0 | 0.0 | 1.2 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 0.7 | 0.4 | 0.5 | 7.7 | 2.5 | 0.0 | 10.6 | 0.0 | 7.2 | 5.4 | 0.0 | 3.1 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 51.7 | 1.8 | 2.1 | 53.7 | 9.3 | 0.0 | 41.5 | 0.0 | 41.1 | 50.9 | 0.0 | 51.3 |
| LnGrp LOS | D | A | A | D | A | | D | | D | D | | D |
| Approach Vol, veh/h | | 550 | | | 758 | | | 550 | | | 263 | |
| Approach Delay, s/veh | | 4.3 | | | 26.9 | | | 41.3 | | | 51.0 | |
| Approach LOS | | A | | | C | | | D | | | D | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 20.0 | 19.5 | 17.1 | 63.4 | 20.7 | 18.8 | 11.0 | 69.5 |
| Change Period (Y+Rc), s | 4.0 | 6.5 | 4.0 | 6.5 | 4.0 | 6.5 | 4.0 | 6.5 |
| Max Green Setting (Gmax), s | 16.0 | 24.5 | 33.0 | 25.5 | 23.0 | 17.5 | 7.0 | 51.5 |
| Max Q Clear Time (g_c+I1), s | 8.5 | 12.1 | 12.1 | 2.6 | 16.4 | 6.0 | 2.8 | 5.7 |
| Green Ext Time (p_c), s | 0.4 | 1.0 | 1.0 | 3.2 | 0.4 | 0.2 | 0.0 | 3.5 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 27.7 |
| HCM 7th LOS | C |

**Notes**

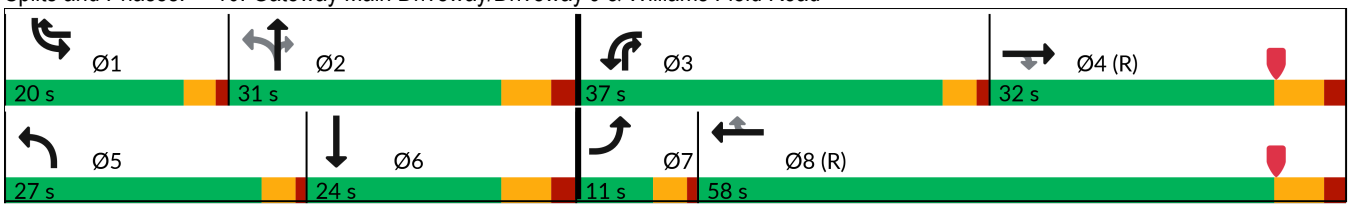
User approved pedestrian interval to be less than phase max green.

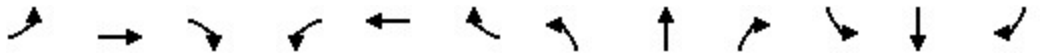
User approved volume balancing among the lanes for turning movement.

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | SBL | NBTL | WBL | EBT | NBL | SBT | EBL | WBT |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | Max | None | None | C-Max | None | None | Max | C-Max |
| Maximum Split (s) | 20 | 31 | 37 | 32 | 27 | 24 | 11 | 58 |
| Maximum Split (%) | 16.7% | 25.8% | 30.8% | 26.7% | 22.5% | 20.0% | 9.2% | 48.3% |
| Minimum Split (s) | 9.5 | 24.5 | 9.5 | 24.5 | 9.5 | 24.5 | 9.5 | 24.5 |
| Yellow Time (s) | 3 | 4.5 | 3 | 4.5 | 3 | 4.5 | 3 | 4.5 |
| All-Red Time (s) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| Minimum Initial (s) | 5 | 10 | 5 | 15 | 5 | 10 | 5 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 7 | | 7 | | 7 | | 7 |
| Flash Don't Walk (s) | | 11 | | 11 | | 11 | | 11 |
| Dual Entry | No | Yes | No | Yes | No | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 4.5 | 24.5 | 55.5 | 92.5 | 4.5 | 31.5 | 55.5 | 66.5 |
| End Time (s) | 24.5 | 55.5 | 92.5 | 4.5 | 31.5 | 55.5 | 66.5 | 4.5 |
| Yield/Force Off (s) | 20.5 | 49 | 88.5 | 118 | 27.5 | 49 | 62.5 | 118 |
| Yield/Force Off 170(s) | 20.5 | 38 | 88.5 | 107 | 27.5 | 38 | 62.5 | 107 |
| Local Start Time (s) | 6.5 | 26.5 | 57.5 | 94.5 | 6.5 | 33.5 | 57.5 | 68.5 |
| Local Yield (s) | 22.5 | 51 | 90.5 | 0 | 29.5 | 51 | 64.5 | 0 |
| Local Yield 170(s) | 22.5 | 40 | 90.5 | 109 | 29.5 | 40 | 64.5 | 109 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 70 |
| Offset: 118 (98%), Referenced to phase 4:EBT and 8:WBT, Start of Yellow | |

Splits and Phases: 10: Gateway Main Driveway/Driveway J & Williams Field Road





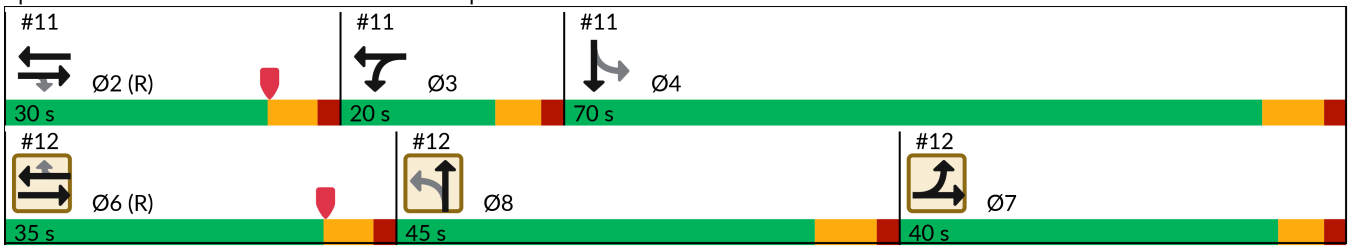
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 0 | 510 | 246 | 57 | 551 | 0 | 0 | 0 | 0 | 430 | 0 | 200 |
| Future Volume (vph) | 0 | 510 | 246 | 57 | 551 | 0 | 0 | 0 | 0 | 430 | 0 | 200 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 360 | | 285 | 290 | | 0 | 0 | | 0 | 400 | | 400 |
| Storage Lanes | 2 | | 1 | 0 | | 0 | 0 | | 0 | 2 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 1.00 | 0.86 | 1.00 | 0.97 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 0.91 | 0.91 | 0.95 |
| Frt | | | 0.850 | | | | | | | | 0.927 | |
| Flt Protected | | | | 0.950 | | | | | | 0.950 | 0.975 | |
| Satd. Flow (prot) | 0 | 6408 | 1583 | 3433 | 3539 | 0 | 0 | 0 | 0 | 1610 | 3064 | 0 |
| Flt Permitted | | | | 0.950 | | | | | | 0.950 | 0.975 | |
| Satd. Flow (perm) | 0 | 6408 | 1583 | 3433 | 3539 | 0 | 0 | 0 | 0 | 1610 | 3064 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 267 | | | | | | | | 123 | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 971 | | | 481 | | | 999 | | | 970 | |
| Travel Time (s) | | 22.1 | | | 10.9 | | | 22.7 | | | 22.0 | |
| 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 |
| Adj. Flow (vph) | 0 | 554 | 267 | 62 | 599 | 0 | 0 | 0 | 0 | 467 | 0 | 217 |
| Shared Lane Traffic (%) | | | | | | | | | | 49% | | |
| Lane Group Flow (vph) | 0 | 554 | 267 | 62 | 599 | 0 | 0 | 0 | 0 | 238 | 446 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 24 | | | 24 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | | 2 | 1 | 1 | 2 | | | | | 1 | 2 | |
| Detector Template | | Thru | Right | Left | Thru | | | | | Left | Thru | |
| Leading Detector (ft) | | 100 | 20 | 20 | 100 | | | | | 20 | 100 | |
| Trailing Detector (ft) | | 0 | 0 | 0 | 0 | | | | | 0 | 0 | |
| Detector 1 Position(ft) | | 0 | 0 | 0 | 0 | | | | | 0 | 0 | |
| Detector 1 Size(ft) | | 6 | 20 | 20 | 6 | | | | | 20 | 6 | |
| Detector 1 Type | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | | | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | | | | 0.0 | |
| Turn Type | | NA | Perm | Prot | NA | | | | | Perm | NA | |
| Protected Phases | | 2 | | 3 | 2 3 | | | | | | 4 | |
| Permitted Phases | | | 2 | | | | | | | 4 | | |

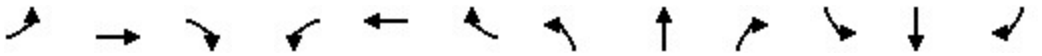
| Lane Group | Ø6 | Ø7 | Ø8 |
|---|---|---|---|
| Lane Configurations | | | |
| Traffic Volume (vph) | | | |
| Future Volume (vph) | | | |
| Ideal Flow (vphpl) | | | |
| Storage Length (ft) | | | |
| Storage Lanes | | | |
| Taper Length (ft) | | | |
| Lane Util. Factor | | | |
| Frt | | | |
| Flt Protected | | | |
| Satd. Flow (prot) | | | |
| Flt Permitted | | | |
| Satd. Flow (perm) | | | |
| Right Turn on Red | | | |
| Satd. Flow (RTOR) | | | |
| Link Speed (mph) | | | |
| Link Distance (ft) | | | |
| Travel Time (s) | | | |
| Peak Hour Factor | | | |
| Adj. Flow (vph) | | | |
| Shared Lane Traffic (%) | | | |
| Lane Group Flow (vph) | | | |
| Enter Blocked Intersection | | | |
| Lane Alignment | | | |
| Median Width(ft) | | | |
| Link Offset(ft) | | | |
| Crosswalk Width(ft) | | | |
| Two way Left Turn Lane | | | |
| Headway Factor | | | |
| Turning Speed (mph) | | | |
| Number of Detectors | | | |
| Detector Template | | | |
| Leading Detector (ft) | | | |
| Trailing Detector (ft) | | | |
| Detector 1 Position(ft) | | | |
| Detector 1 Size(ft) | | | |
| Detector 1 Type | | | |
| Detector 1 Channel | | | |
| Detector 1 Extend (s) | | | |
| Detector 1 Queue (s) | | | |
| Detector 1 Delay (s) | | | |
| Detector 2 Position(ft) | | | |
| Detector 2 Size(ft) | | | |
| Detector 2 Type | | | |
| Detector 2 Channel | | | |
| Detector 2 Extend (s) | | | |
| Turn Type | | | |
| Protected Phases | 6 | 7 | 8 |
| Permitted Phases | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | | 2 | 2 | 3 | 2 3 | | | | | 4 | 4 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | | 15.0 | 15.0 | 5.0 | | | | | | 10.0 | 10.0 | |
| Minimum Split (s) | | 25.5 | 25.5 | 11.0 | | | | | | 46.5 | 46.5 | |
| Total Split (s) | | 30.0 | 30.0 | 20.0 | | | | | | 70.0 | 70.0 | |
| Total Split (%) | | 25.0% | 25.0% | 16.7% | | | | | | 58.3% | 58.3% | |
| Maximum Green (s) | | 23.5 | 23.5 | 14.0 | | | | | | 62.5 | 62.5 | |
| Yellow Time (s) | | 4.5 | 4.5 | 4.0 | | | | | | 5.5 | 5.5 | |
| All-Red Time (s) | | 2.0 | 2.0 | 2.0 | | | | | | 2.0 | 2.0 | |
| Lost Time Adjust (s) | | 0.0 | 0.0 | 0.0 | | | | | | 0.0 | 0.0 | |
| Total Lost Time (s) | | 6.5 | 6.5 | 6.0 | | | | | | 7.5 | 7.5 | |
| Lead/Lag | | | | Lead | | | | | | Lag | Lag | |
| Lead-Lag Optimize? | | | | Yes | | | | | | Yes | Yes | |
| Vehicle Extension (s) | | 3.0 | 3.0 | 3.0 | | | | | | 3.0 | 3.0 | |
| Recall Mode | | C-Max | C-Max | Max | | | | | | None | None | |
| Walk Time (s) | | 4.0 | 4.0 | | | | | | | 4.0 | 4.0 | |
| Flash Don't Walk (s) | | 15.0 | 15.0 | | | | | | | 35.0 | 35.0 | |
| Pedestrian Calls (#/hr) | | 0 | 0 | | | | | | | 0 | 0 | |
| Act Effct Green (s) | | 32.1 | 32.1 | 14.0 | 52.1 | | | | | 53.9 | 53.9 | |
| Actuated g/C Ratio | | 0.27 | 0.27 | 0.12 | 0.43 | | | | | 0.45 | 0.45 | |
| v/c Ratio | | 0.32 | 0.43 | 0.16 | 0.39 | | | | | 0.33 | 0.31 | |
| Control Delay (s/veh) | | 30.9 | 8.9 | 44.2 | 20.8 | | | | | 21.8 | 14.8 | |
| Queue Delay | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | |
| Total Delay (s/veh) | | 30.9 | 8.9 | 44.2 | 20.8 | | | | | 21.8 | 14.8 | |
| LOS | | C | A | D | C | | | | | C | B | |
| Approach Delay (s/veh) | | 23.8 | | | 23.0 | | | | | | 17.3 | |
| Approach LOS | | C | | | C | | | | | | B | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 120 | | | |
| Actuated Cycle Length: 120 | | | |
| Offset: 0 (0%), Referenced to phase 2:EBWB and 6:, Start of Yellow | | | |
| Natural Cycle: 85 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.56 | | | |
| Intersection Signal Delay (s/veh): 21.5 | | Intersection LOS: C | |
| Intersection Capacity Utilization 58.9% | | ICU Level of Service B | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 11: SR24 Eastbound Ramps & Williams Field Road





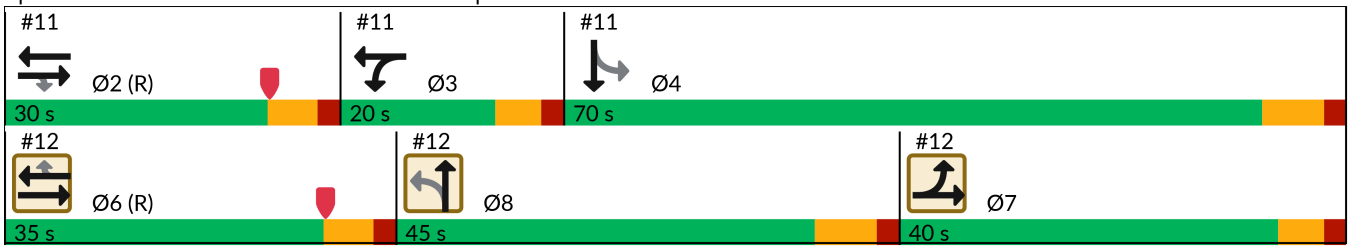
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 222 | 719 | 0 | 0 | 421 | 415 | 185 | 0 | 13 | 0 | 0 | 0 |
| Future Volume (vph) | 222 | 719 | 0 | 0 | 421 | 415 | 185 | 0 | 13 | 0 | 0 | 0 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 290 | | 0 | 365 | | 300 | 375 | | 375 | 0 | | 0 |
| Storage Lanes | 0 | | 0 | 2 | | 1 | 1 | | 1 | 0 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 0.97 | 0.95 | 1.00 | 1.00 | 0.86 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 |
| Frt | | | | | | 0.850 | | 0.850 | | | | |
| Flt Protected | 0.950 | | | | | | 0.950 | | | | | |
| Satd. Flow (prot) | 3433 | 3539 | 0 | 0 | 6408 | 1583 | 1770 | 3008 | 0 | 0 | 0 | 0 |
| Flt Permitted | 0.950 | | | | | | 0.950 | | | | | |
| Satd. Flow (perm) | 3433 | 3539 | 0 | 0 | 6408 | 1583 | 1770 | 3008 | 0 | 0 | 0 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | | | | 451 | | 181 | | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 481 | | | 1418 | | | 897 | | | 1176 | |
| Travel Time (s) | | 10.9 | | | 32.2 | | | 20.4 | | | 26.7 | |
| 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 |
| Adj. Flow (vph) | 241 | 782 | 0 | 0 | 458 | 451 | 201 | 0 | 14 | 0 | 0 | 0 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 241 | 782 | 0 | 0 | 458 | 451 | 201 | 14 | 0 | 0 | 0 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 24 | | | 24 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | | 2 | 1 | 1 | 2 | | | | |
| Detector Template | Left | Thru | | | Thru | Right | Left | Thru | | | | |
| Leading Detector (ft) | 20 | 100 | | | 100 | 20 | 20 | 100 | | | | |
| Trailing Detector (ft) | 0 | 0 | | | 0 | 0 | 0 | 0 | | | | |
| Detector 1 Position(ft) | 0 | 0 | | | 0 | 0 | 0 | 0 | | | | |
| Detector 1 Size(ft) | 20 | 6 | | | 6 | 20 | 20 | 6 | | | | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | | | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | | |
| Turn Type | Prot | NA | | | NA | Perm | Perm | NA | | | | |
| Protected Phases | 7 | 6 7 | | | 6 | | | 8 | | | | |
| Permitted Phases | | | | | | 6 | 8 | | | | | |

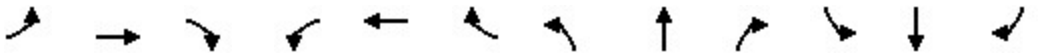
| Lane Group | Ø2 | Ø3 | Ø4 |
|---|---|---|---|
| Lane Configurations | | | |
| Traffic Volume (vph) | | | |
| Future Volume (vph) | | | |
| Ideal Flow (vphpl) | | | |
| Storage Length (ft) | | | |
| Storage Lanes | | | |
| Taper Length (ft) | | | |
| Lane Util. Factor | | | |
| Frt | | | |
| Flt Protected | | | |
| Satd. Flow (prot) | | | |
| Flt Permitted | | | |
| Satd. Flow (perm) | | | |
| Right Turn on Red | | | |
| Satd. Flow (RTOR) | | | |
| Link Speed (mph) | | | |
| Link Distance (ft) | | | |
| Travel Time (s) | | | |
| Peak Hour Factor | | | |
| Adj. Flow (vph) | | | |
| Shared Lane Traffic (%) | | | |
| Lane Group Flow (vph) | | | |
| Enter Blocked Intersection | | | |
| Lane Alignment | | | |
| Median Width(ft) | | | |
| Link Offset(ft) | | | |
| Crosswalk Width(ft) | | | |
| Two way Left Turn Lane | | | |
| Headway Factor | | | |
| Turning Speed (mph) | | | |
| Number of Detectors | | | |
| Detector Template | | | |
| Leading Detector (ft) | | | |
| Trailing Detector (ft) | | | |
| Detector 1 Position(ft) | | | |
| Detector 1 Size(ft) | | | |
| Detector 1 Type | | | |
| Detector 1 Channel | | | |
| Detector 1 Extend (s) | | | |
| Detector 1 Queue (s) | | | |
| Detector 1 Delay (s) | | | |
| Detector 2 Position(ft) | | | |
| Detector 2 Size(ft) | | | |
| Detector 2 Type | | | |
| Detector 2 Channel | | | |
| Detector 2 Extend (s) | | | |
| Turn Type | | | |
| Protected Phases | 2 | 3 | 4 |
| Permitted Phases | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | 7 | 6 7 | | | 6 | 6 | 8 | 8 | | | | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | | | | 15.0 | 15.0 | 10.0 | 10.0 | | | | |
| Minimum Split (s) | 11.0 | | | | 26.5 | 26.5 | 45.5 | 45.5 | | | | |
| Total Split (s) | 40.0 | | | | 35.0 | 35.0 | 45.0 | 45.0 | | | | |
| Total Split (%) | 33.3% | | | | 29.2% | 29.2% | 37.5% | 37.5% | | | | |
| Maximum Green (s) | 34.0 | | | | 28.5 | 28.5 | 37.5 | 37.5 | | | | |
| Yellow Time (s) | 4.0 | | | | 4.5 | 4.5 | 5.5 | 5.5 | | | | |
| All-Red Time (s) | 2.0 | | | | 2.0 | 2.0 | 2.0 | 2.0 | | | | |
| Lost Time Adjust (s) | 0.0 | | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Total Lost Time (s) | 6.0 | | | | 6.5 | 6.5 | 7.5 | 7.5 | | | | |
| Lead/Lag | Lag | | | | | | Lead | Lead | | | | |
| Lead-Lag Optimize? | Yes | | | | | | Yes | Yes | | | | |
| Vehicle Extension (s) | 3.0 | | | | 3.0 | 3.0 | 3.0 | 3.0 | | | | |
| Recall Mode | None | | | | C-Max | C-Max | Max | Max | | | | |
| Walk Time (s) | | | | | 4.0 | 4.0 | 4.0 | 4.0 | | | | |
| Flash Don't Walk (s) | | | | | 16.0 | 16.0 | 34.0 | 34.0 | | | | |
| Pedestrian Calls (#/hr) | | | | | 0 | 0 | 0 | 0 | | | | |
| Act Effct Green (s) | 25.4 | 68.5 | | | 37.1 | 37.1 | 37.5 | 37.5 | | | | |
| Actuated g/C Ratio | 0.21 | 0.57 | | | 0.31 | 0.31 | 0.31 | 0.31 | | | | |
| v/c Ratio | 0.33 | 0.39 | | | 0.23 | 0.56 | 0.36 | 0.01 | | | | |
| Control Delay (s/veh) | 51.4 | 8.1 | | | 54.2 | 28.2 | 34.4 | 0.0 | | | | |
| Queue Delay | 0.0 | 0.1 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Total Delay (s/veh) | 51.4 | 8.2 | | | 54.2 | 28.2 | 34.4 | 0.0 | | | | |
| LOS | D | A | | | D | C | C | A | | | | |
| Approach Delay (s/veh) | | 18.4 | | | 41.3 | | | 32.1 | | | | |
| Approach LOS | | B | | | D | | | C | | | | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 120 | | | |
| Actuated Cycle Length: 120 | | | |
| Offset: 0 (0%), Referenced to phase 2:EBWB and 6:, Start of Yellow | | | |
| Natural Cycle: 85 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.56 | | | |
| Intersection Signal Delay (s/veh): 29.5 | | Intersection LOS: C | |
| Intersection Capacity Utilization 58.9% | | ICU Level of Service B | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 12: SR24 Westbound Ramps & Williams Field Road





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 193 | 327 | 184 | 0 | 374 | 33 | 197 | 0 | 0 | 36 | 0 | 266 |
| Future Volume (veh/h) | 193 | 327 | 184 | 0 | 374 | 33 | 197 | 0 | 0 | 36 | 0 | 266 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 210 | 355 | 200 | 0 | 407 | 36 | 214 | 0 | 0 | 39 | 0 | 289 |
| 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 | 350 | 1229 | 548 | 235 | 722 | 322 | 665 | 1649 | 735 | 778 | 1584 | 707 |
| Arrive On Green | 0.18 | 0.58 | 0.58 | 0.00 | 0.20 | 0.20 | 0.07 | 0.00 | 0.00 | 0.05 | 0.00 | 0.45 |
| Sat Flow, veh/h | 1781 | 3554 | 1585 | 1781 | 3554 | 1585 | 1781 | 3554 | 1585 | 1781 | 3554 | 1585 |
| Grp Volume(v), veh/h | 210 | 355 | 200 | 0 | 407 | 36 | 214 | 0 | 0 | 39 | 0 | 289 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1777 | 1585 | 1781 | 1777 | 1585 | 1781 | 1777 | 1585 | 1781 | 1777 | 1585 |
| Q Serve(g_s), s | 10.8 | 6.1 | 8.1 | 0.0 | 12.4 | 2.2 | 8.0 | 0.0 | 0.0 | 1.4 | 0.0 | 14.8 |
| Cycle Q Clear(g_c), s | 10.8 | 6.1 | 8.1 | 0.0 | 12.4 | 2.2 | 8.0 | 0.0 | 0.0 | 1.4 | 0.0 | 14.8 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 350 | 1229 | 548 | 235 | 722 | 322 | 665 | 1649 | 735 | 778 | 1584 | 707 |
| V/C Ratio(X) | 0.60 | 0.29 | 0.36 | 0.00 | 0.56 | 0.11 | 0.32 | 0.00 | 0.00 | 0.05 | 0.00 | 0.41 |
| Avail Cap(c_a), veh/h | 437 | 1229 | 548 | 360 | 722 | 322 | 665 | 1649 | 735 | 1019 | 1584 | 707 |
| HCM Platoon Ratio | 1.67 | 1.67 | 1.67 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.93 | 0.93 | 0.93 | 0.00 | 0.97 | 0.97 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 29.1 | 17.9 | 18.3 | 0.0 | 43.0 | 39.0 | 16.1 | 0.0 | 0.0 | 15.7 | 0.0 | 22.5 |
| Incr Delay (d2), s/veh | 1.5 | 0.6 | 1.7 | 0.0 | 3.1 | 0.7 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 1.8 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 7.6 | 4.3 | 5.3 | 0.0 | 9.6 | 1.7 | 5.9 | 0.0 | 0.0 | 1.0 | 0.0 | 9.8 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 30.7 | 18.4 | 20.0 | 0.0 | 46.1 | 39.7 | 16.4 | 0.0 | 0.0 | 15.7 | 0.0 | 24.3 |
| LnGrp LOS | C | B | C | | D | D | B | | | B | | C |
| Approach Vol, veh/h | | 765 | | | 443 | | | 214 | | | 328 | |
| Approach Delay, s/veh | | 22.2 | | | 45.6 | | | 16.4 | | | 23.3 | |
| Approach LOS | | C | | | D | | | B | | | C | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 17.1 | 30.9 | 12.0 | 60.0 | 0.0 | 48.0 | 9.8 | 62.2 |
| Change Period (Y+Rc), s | 4.0 | 6.5 | 4.0 | 6.5 | 4.0 | 6.5 | 4.0 | 6.5 |
| Max Green Setting (Gmax), s | 19.0 | 18.5 | 8.0 | 53.5 | 8.5 | 29.0 | 22.0 | 39.5 |
| Max Q Clear Time (g_c+I1), s | 12.8 | 14.4 | 10.0 | 16.8 | 0.0 | 10.1 | 3.4 | 0.0 |
| Green Ext Time (p_c), s | 0.3 | 1.0 | 0.0 | 1.0 | 0.0 | 2.9 | 0.1 | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 27.6 |
| HCM 7th LOS | C |

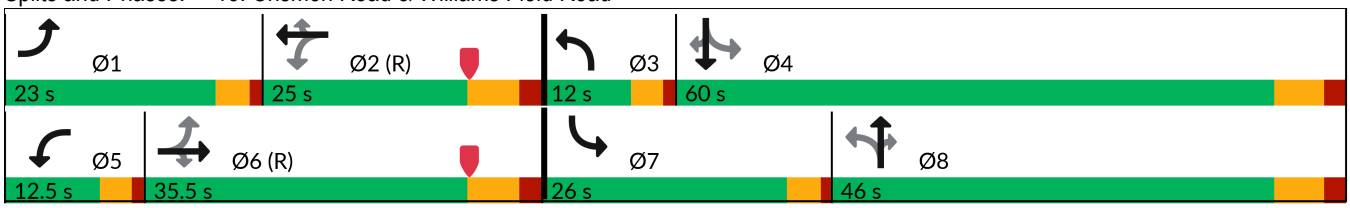
**Notes**

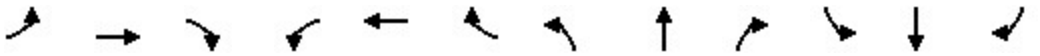
User approved pedestrian interval to be less than phase max green.

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | EBL | WBTL | NBL | SBTL | WBL | EBTL | SBL | NBTL |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | None | C-Max | None | Max | None | C-Max | None | None |
| Maximum Split (s) | 23 | 25 | 12 | 60 | 12.5 | 35.5 | 26 | 46 |
| Maximum Split (%) | 19.2% | 20.8% | 10.0% | 50.0% | 10.4% | 29.6% | 21.7% | 38.3% |
| Minimum Split (s) | 12.5 | 38.5 | 12.5 | 35.5 | 12.5 | 40.5 | 12.5 | 36.5 |
| Yellow Time (s) | 3 | 4.5 | 3 | 4.5 | 3 | 4.5 | 3 | 4.5 |
| All-Red Time (s) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| Minimum Initial (s) | 8 | 15 | 8 | 15 | 8 | 15 | 8 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 7 | | 7 | | 7 | | 7 |
| Flash Don't Walk (s) | | 25 | | 22 | | 27 | | 23 |
| Dual Entry | No | Yes | No | Yes | No | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 78.5 | 101.5 | 6.5 | 18.5 | 78.5 | 91 | 6.5 | 32.5 |
| End Time (s) | 101.5 | 6.5 | 18.5 | 78.5 | 91 | 6.5 | 32.5 | 78.5 |
| Yield/Force Off (s) | 97.5 | 0 | 14.5 | 72 | 87 | 0 | 28.5 | 72 |
| Yield/Force Off 170(s) | 97.5 | 95 | 14.5 | 50 | 87 | 93 | 28.5 | 49 |
| Local Start Time (s) | 78.5 | 101.5 | 6.5 | 18.5 | 78.5 | 91 | 6.5 | 32.5 |
| Local Yield (s) | 97.5 | 0 | 14.5 | 72 | 87 | 0 | 28.5 | 72 |
| Local Yield 170(s) | 97.5 | 95 | 14.5 | 50 | 87 | 93 | 28.5 | 49 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 105 |
| Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow | |

Splits and Phases: 13: Crismon Road & Williams Field Road





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 152 | 157 | 57 | 4 | 165 | 26 | 49 | 291 | 4 | 28 | 445 | 181 |
| Future Volume (veh/h) | 152 | 157 | 57 | 4 | 165 | 26 | 49 | 291 | 4 | 28 | 445 | 181 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 165 | 171 | 62 | 4 | 179 | 28 | 53 | 316 | 4 | 30 | 484 | 197 |
| 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 | 767 | 2076 | 926 | 678 | 1869 | 834 | 195 | 685 | 9 | 254 | 630 | 281 |
| Arrive On Green | 0.07 | 0.58 | 0.58 | 0.01 | 0.53 | 0.53 | 0.06 | 0.19 | 0.19 | 0.04 | 0.18 | 0.18 |
| Sat Flow, veh/h | 1781 | 3554 | 1585 | 1781 | 3554 | 1585 | 1781 | 3594 | 45 | 1781 | 3554 | 1585 |
| Grp Volume(v), veh/h | 165 | 171 | 62 | 4 | 179 | 28 | 53 | 156 | 164 | 30 | 484 | 197 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1777 | 1585 | 1781 | 1777 | 1585 | 1781 | 1777 | 1862 | 1781 | 1777 | 1585 |
| Q Serve(g_s), s | 4.8 | 2.5 | 2.0 | 0.1 | 3.0 | 1.0 | 2.8 | 9.4 | 9.4 | 1.6 | 15.6 | 14.0 |
| Cycle Q Clear(g_c), s | 4.8 | 2.5 | 2.0 | 0.1 | 3.0 | 1.0 | 2.8 | 9.4 | 9.4 | 1.6 | 15.6 | 14.0 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.02 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 767 | 2076 | 926 | 678 | 1869 | 834 | 195 | 338 | 355 | 254 | 630 | 281 |
| V/C Ratio(X) | 0.22 | 0.08 | 0.07 | 0.01 | 0.10 | 0.03 | 0.27 | 0.46 | 0.46 | 0.12 | 0.77 | 0.70 |
| Avail Cap(c_a), veh/h | 930 | 2076 | 926 | 782 | 1869 | 834 | 215 | 496 | 520 | 327 | 1051 | 469 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.97 | 0.97 | 0.97 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 10.2 | 10.9 | 10.8 | 13.0 | 14.2 | 13.7 | 37.5 | 43.1 | 43.1 | 37.4 | 47.0 | 46.4 |
| Incr Delay (d2), s/veh | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.7 | 1.0 | 0.9 | 0.2 | 2.0 | 3.2 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 3.4 | 1.8 | 1.3 | 0.1 | 2.2 | 0.7 | 2.3 | 7.6 | 7.9 | 1.3 | 11.4 | 9.7 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 10.4 | 11.0 | 10.9 | 13.0 | 14.3 | 13.8 | 38.2 | 44.1 | 44.1 | 37.6 | 49.0 | 49.5 |
| LnGrp LOS | B | B | B | B | B | B | D | D | D | D | D | D |
| Approach Vol, veh/h | | 398 | | | 211 | | | 373 | | | 711 | |
| Approach Delay, s/veh | | 10.7 | | | 14.2 | | | 43.2 | | | 48.7 | |
| Approach LOS | | B | | | B | | | D | | | D | |

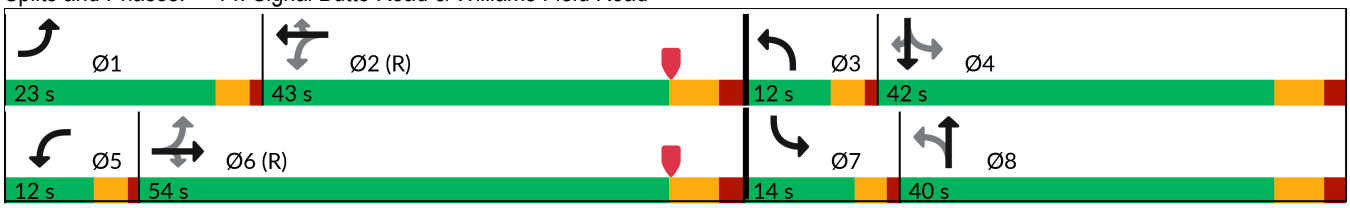
| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 12.0 | 69.6 | 10.6 | 27.8 | 5.0 | 76.6 | 9.1 | 29.4 |
| Change Period (Y+Rc), s | 4.0 | 6.5 | 4.0 | 6.5 | 4.0 | 6.5 | 4.0 | 6.5 |
| Max Green Setting (Gmax), s | 19.0 | 36.5 | 8.0 | 35.5 | 8.0 | 47.5 | 10.0 | 33.5 |
| Max Q Clear Time (g_c+I1), s | 6.8 | 5.0 | 4.8 | 17.6 | 2.1 | 4.5 | 3.6 | 11.4 |
| Green Ext Time (p_c), s | 0.3 | 1.2 | 0.0 | 3.7 | 0.0 | 1.4 | 0.0 | 1.8 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 34.3 |
| HCM 7th LOS | C |

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | EBL | WBTL | NBL | SBTL | WBL | EBTL | SBL | NBTL |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | None | C-Max | None | None | None | C-Max | None | None |
| Maximum Split (s) | 23 | 43 | 12 | 42 | 12 | 54 | 14 | 40 |
| Maximum Split (%) | 19.2% | 35.8% | 10.0% | 35.0% | 10.0% | 45.0% | 11.7% | 33.3% |
| Minimum Split (s) | 12.5 | 38.5 | 12.5 | 35.5 | 12.5 | 40.5 | 12.5 | 36.5 |
| Yellow Time (s) | 3 | 4.5 | 3 | 4.5 | 3 | 4.5 | 3 | 4.5 |
| All-Red Time (s) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| Minimum Initial (s) | 8 | 15 | 8 | 15 | 8 | 15 | 8 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 7 | | 7 | | 7 | | 7 |
| Flash Don't Walk (s) | | 25 | | 22 | | 27 | | 23 |
| Dual Entry | No | Yes | No | Yes | No | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 60.5 | 83.5 | 6.5 | 18.5 | 60.5 | 72.5 | 6.5 | 20.5 |
| End Time (s) | 83.5 | 6.5 | 18.5 | 60.5 | 72.5 | 6.5 | 20.5 | 60.5 |
| Yield/Force Off (s) | 79.5 | 0 | 14.5 | 54 | 68.5 | 0 | 16.5 | 54 |
| Yield/Force Off 170(s) | 79.5 | 95 | 14.5 | 32 | 68.5 | 93 | 16.5 | 31 |
| Local Start Time (s) | 60.5 | 83.5 | 6.5 | 18.5 | 60.5 | 72.5 | 6.5 | 20.5 |
| Local Yield (s) | 79.5 | 0 | 14.5 | 54 | 68.5 | 0 | 16.5 | 54 |
| Local Yield 170(s) | 79.5 | 95 | 14.5 | 32 | 68.5 | 93 | 16.5 | 31 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 105 |
| Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow | |

Splits and Phases: 14: Signal Butte Road & Williams Field Road



| Intersection | |
|---|---|
| Int Delay, s/veh | 0 |

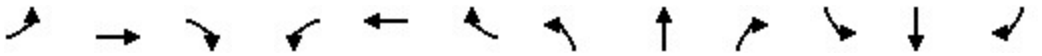
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 0 | 0 | 0 | 0 | 0 | 17 | 0 | 2030 | 0 | 0 | 2762 | 0 |
| Future Vol, veh/h | 0 | 0 | 0 | 0 | 0 | 17 | 0 | 2030 | 0 | 0 | 2762 | 0 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | 0 | - | - | 0 | - | - | 200 | - | - | - |
| 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 | 0 | 0 | 0 | 0 | 0 | 18 | 0 | 2207 | 0 | 0 | 3002 | 0 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | - | - | 1501 | - | - | 1103 | - | 0 | 0 | - | - | 0 |
| Stage 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - | - | - | - | - | - | - |
| Critical Hdwy | - | - | 7.14 | - | - | 7.14 | - | - | - | - | - | - |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | 3.92 | - | - | 3.92 | - | - | - | - | - | - |
| Pot Cap-1 Maneuver | 0 | 0 | *462 | 0 | 0 | *583 | 0 | - | - | 0 | - | - |
| Stage 1 | 0 | 0 | - | 0 | 0 | - | 0 | - | - | 0 | - | - |
| Stage 2 | 0 | 0 | - | 0 | 0 | - | 0 | - | - | 0 | - | - |
| Platoon blocked, % | | | 0 | | | 0 | | - | - | | - | - |
| Mov Cap-1 Maneuver | - | - | *462 | - | - | *583 | - | - | - | - | - | - |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s/v | 0 | 11.38 | 0 | 0 |
| HCM LOS | A | B | | |

| Minor Lane/Major Mvmt | NBT | NBR | EBLn1 | WBLn1 | SBT | SBR |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | - | 583 | - | - |
| HCM Lane V/C Ratio | - | - | - | 0.032 | - | - |
| HCM Control Delay (s/veh) | - | - | 0 | 11.4 | - | - |
| HCM Lane LOS | - | - | A | B | - | - |
| HCM 95th %tile Q(veh) | - | - | - | 0.1 | - | - |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 207 | 0 | 79 | 16 | 0 | 72 | 25 | 1957 | 1 | 59 | 2644 | 59 |
| Future Volume (veh/h) | 207 | 0 | 79 | 16 | 0 | 72 | 25 | 1957 | 1 | 59 | 2644 | 59 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 225 | 0 | 86 | 17 | 0 | 78 | 27 | 2127 | 1 | 64 | 2874 | 64 |
| 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 | 385 | 348 | 295 | 201 | 0 | 264 | 109 | 2235 | 694 | 381 | 3022 | 67 |
| Arrive On Green | 0.12 | 0.00 | 0.19 | 0.02 | 0.00 | 0.08 | 0.03 | 0.58 | 0.58 | 0.17 | 0.59 | 0.59 |
| Sat Flow, veh/h | 1781 | 1870 | 1585 | 1781 | 0 | 3170 | 1781 | 5106 | 1585 | 1781 | 5140 | 114 |
| Grp Volume(v), veh/h | 225 | 0 | 86 | 17 | 0 | 78 | 27 | 2127 | 1 | 64 | 1896 | 1042 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1870 | 1585 | 1781 | 0 | 1585 | 1781 | 1702 | 1585 | 1781 | 1702 | 1850 |
| Q Serve(g_s), s | 13.5 | 0.0 | 5.6 | 1.0 | 0.0 | 2.8 | 1.0 | 46.8 | 0.0 | 1.7 | 62.2 | 63.7 |
| Cycle Q Clear(g_c), s | 13.5 | 0.0 | 5.6 | 1.0 | 0.0 | 2.8 | 1.0 | 46.8 | 0.0 | 1.7 | 62.2 | 63.7 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.06 |
| Lane Grp Cap(c), veh/h | 385 | 348 | 295 | 201 | 0 | 264 | 109 | 2235 | 694 | 381 | 2001 | 1088 |
| V/C Ratio(X) | 0.58 | 0.00 | 0.29 | 0.08 | 0.00 | 0.30 | 0.25 | 0.95 | 0.00 | 0.17 | 0.95 | 0.96 |
| Avail Cap(c_a), veh/h | 385 | 491 | 416 | 266 | 0 | 621 | 273 | 2235 | 694 | 381 | 2001 | 1088 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.33 | 1.33 | 1.33 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 41.7 | 0.0 | 42.0 | 48.9 | 0.0 | 51.7 | 28.3 | 23.9 | 14.1 | 20.5 | 23.0 | 23.3 |
| Incr Delay (d2), s/veh | 2.3 | 0.0 | 0.5 | 0.2 | 0.0 | 0.6 | 1.2 | 10.7 | 0.0 | 1.0 | 11.0 | 18.9 |
| 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(95%),veh/ln | 10.2 | 0.0 | 4.0 | 0.9 | 0.0 | 2.0 | 0.8 | 25.2 | 0.0 | 1.6 | 34.7 | 40.8 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 44.0 | 0.0 | 42.6 | 49.1 | 0.0 | 52.3 | 29.4 | 34.5 | 14.1 | 21.5 | 34.0 | 42.2 |
| LnGrp LOS | D | | D | D | | D | C | C | B | C | C | D |
| Approach Vol, veh/h | | 311 | | | 95 | | | 2155 | | | 3002 | |
| Approach Delay, s/veh | | 43.6 | | | 51.8 | | | 34.5 | | | 36.6 | |
| Approach LOS | | D | | | D | | | C | | | D | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 20.0 | 16.5 | 7.0 | 76.6 | 7.7 | 28.8 | 25.0 | 58.5 |
| Change Period (Y+Rc), s | 5.5 | 6.5 | 4.0 | 6.0 | 5.5 | 6.5 | 4.0 | 6.0 |
| Max Green Setting (Gmax), s | 14.5 | 23.5 | 14.0 | 46.0 | 6.5 | 31.5 | 21.0 | 39.0 |
| Max Q Clear Time (g_c+I1), s | 15.5 | 4.8 | 3.0 | 65.7 | 3.0 | 7.6 | 3.7 | 48.8 |
| Green Ext Time (p_c), s | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.2 | 0.1 | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 36.4 |
| HCM 7th LOS | D |

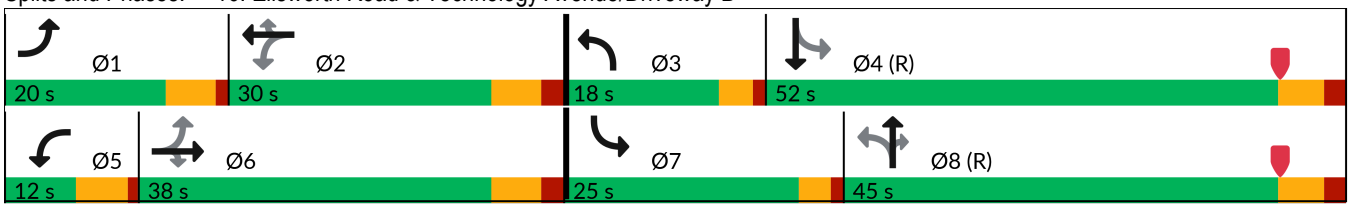
**Notes**

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | EBL | WBTL | NBL | SBTL | WBL | EBTL | SBL | NBTL |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | None | None | None | C-Max | None | None | Max | C-Max |
| Maximum Split (s) | 20 | 30 | 18 | 52 | 12 | 38 | 25 | 45 |
| Maximum Split (%) | 16.7% | 25.0% | 15.0% | 43.3% | 10.0% | 31.7% | 20.8% | 37.5% |
| Minimum Split (s) | 10.5 | 24.5 | 9.5 | 24 | 10.5 | 24.5 | 9.5 | 24 |
| Yellow Time (s) | 4.5 | 4.5 | 3 | 4 | 4.5 | 4.5 | 3 | 4 |
| All-Red Time (s) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| Minimum Initial (s) | 5 | 10 | 5 | 15 | 5 | 10 | 5 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 7 | | 7 | | 7 | | 7 |
| Flash Don't Walk (s) | | 11 | | 11 | | 11 | | 11 |
| Dual Entry | No | Yes | No | Yes | No | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 4.5 | 24.5 | 54.5 | 72.5 | 4.5 | 16.5 | 54.5 | 79.5 |
| End Time (s) | 24.5 | 54.5 | 72.5 | 4.5 | 16.5 | 54.5 | 79.5 | 4.5 |
| Yield/Force Off (s) | 19 | 48 | 68.5 | 118.5 | 11 | 48 | 75.5 | 118.5 |
| Yield/Force Off 170(s) | 19 | 37 | 68.5 | 107.5 | 11 | 37 | 75.5 | 107.5 |
| Local Start Time (s) | 6 | 26 | 56 | 74 | 6 | 18 | 56 | 81 |
| Local Yield (s) | 20.5 | 49.5 | 70 | 0 | 12.5 | 49.5 | 77 | 0 |
| Local Yield 170(s) | 20.5 | 38.5 | 70 | 109 | 12.5 | 38.5 | 77 | 109 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 120 |
| Offset: 118.5 (99%), Referenced to phase 4:SBTL and 8:NBTL, Start of Yellow | |

Splits and Phases: 16: Ellsworth Road & Technology Avenue/Driveway B



| Intersection | |
|---|---|
| Int Delay, s/veh | 0 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 0 | 5 | 1978 | 0 | 0 | 2739 |
| Future Vol, veh/h | 0 | 5 | 1978 | 0 | 0 | 2739 |
| 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 | - | 100 | - | - |
| 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 | 5 | 2150 | 0 | 0 | 2977 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | - | 1075 | 0 | 0 | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | 7.14 | - | - | - | - |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | 3.92 | - | - | - | - |
| Pot Cap-1 Maneuver | 0 | *598 | - | - | 0 | - |
| Stage 1 | 0 | - | - | - | 0 | - |
| Stage 2 | 0 | - | - | - | 0 | - |
| Platoon blocked, % | | 0 | - | - | | - |
| Mov Cap-1 Maneuver | - | *598 | - | - | - | - |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 11.08 | 0 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | SBT |
|---|---|---|---|---|
| Capacity (veh/h) | - | - | 598 | - |
| HCM Lane V/C Ratio | - | - | 0.009 | - |
| HCM Control Delay (s/veh) | - | - | 11.1 | - |
| HCM Lane LOS | - | - | B | - |
| HCM 95th %tile Q(veh) | - | - | 0 | - |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.2 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 0 | 39 | 1940 | 0 | 30 | 2709 |
| Future Vol, veh/h | 0 | 39 | 1940 | 0 | 30 | 2709 |
| 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 | 200 | - | 200 | 200 | - |
| 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 | 42 | 2109 | 0 | 33 | 2945 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 3352 | 1054 | 0 | 0 | 2109 | 0 |
| Stage 1 | 2109 | - | - | - | - | - |
| Stage 2 | 1243 | - | - | - | - | - |
| Critical Hdwy | 5.74 | 7.14 | - | - | 5.34 | - |
| Critical Hdwy Stg 1 | 6.64 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.04 | - | - | - | - | - |
| Follow-up Hdwy | 3.82 | 3.92 | - | - | 3.12 | - |
| Pot Cap-1 Maneuver | *176 | *598 | - | - | 309 | - |
| Stage 1 | *201 | - | - | - | - | - |
| Stage 2 | *490 | - | - | - | - | - |
| Platoon blocked, % | 1 | 0 | - | - | 0 | - |
| Mov Cap-1 Maneuver | *157 | *598 | - | - | 309 | - |
| Mov Cap-2 Maneuver | *157 | - | - | - | - | - |
| Stage 1 | *201 | - | - | - | - | - |
| Stage 2 | *438 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 11.48 | 0 | 0.2 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | WBLn2 | SBL | SBT |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | - | 598 | 309 | - |
| HCM Lane V/C Ratio | - | - | - | 0.071 | 0.106 | - |
| HCM Control Delay (s/veh) | - | - | 0 | 11.5 | 18 | - |
| HCM Lane LOS | - | - | A | B | C | - |
| HCM 95th %tile Q(veh) | - | - | - | 0.2 | 0.4 | - |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.6 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 0 | 0 | 75 | 0 | 0 | 86 | 0 | 1846 | 31 | 36 | 2619 | 54 |
| Future Vol, veh/h | 0 | 0 | 75 | 0 | 0 | 86 | 0 | 1846 | 31 | 36 | 2619 | 54 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | 0 | - | - | 0 | - | - | 200 | 150 | - | - |
| 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 | 0 | 0 | 82 | 0 | 0 | 93 | 0 | 2007 | 34 | 39 | 2847 | 59 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | - | - | 1453 | - | - | 1003 | - | 0 | 0 | 2040 | 0 | 0 |
| Stage 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - | - | - | - | - | - | - |
| Critical Hdwy | - | - | 7.14 | - | - | 7.14 | - | - | - | 5.34 | - | - |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | 3.92 | - | - | 3.92 | - | - | - | 3.12 | - | - |
| Pot Cap-1 Maneuver | 0 | 0 | *492 | 0 | 0 | *613 | 0 | - | - | 321 | - | - |
| Stage 1 | 0 | 0 | - | 0 | 0 | - | 0 | - | - | - | - | - |
| Stage 2 | 0 | 0 | - | 0 | 0 | - | 0 | - | - | - | - | - |
| Platoon blocked, % | | | 0 | | | 0 | | - | - | 0 | - | - |
| Mov Cap-1 Maneuver | - | - | *492 | - | - | *613 | - | - | - | 321 | - | - |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s/v | 13.76 | 11.93 | 0 | 0.24 |
| HCM LOS | B | B | | |

| Minor Lane/Major Mvmt | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 492 | 613 | 321 | - | - |
| HCM Lane V/C Ratio | - | - | 0.166 | 0.153 | 0.122 | - | - |
| HCM Control Delay (s/veh) | - | - | 13.8 | 11.9 | 17.8 | - | - |
| HCM Lane LOS | - | - | B | B | C | - | - |
| HCM 95th %tile Q(veh) | - | - | 0.6 | 0.5 | 0.4 | - | - |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.2 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | ↑↑↑ | ↑↑↑ | ↱ | | ↱ |
| Traffic Vol, veh/h | 0 | 756 | 495 | 21 | 0 | 28 |
| Future Vol, veh/h | 0 | 756 | 495 | 21 | 0 | 28 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | 200 | - | 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 | 822 | 538 | 23 | 0 | 30 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | - | 0 | - | 0 | - | 269 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | - | - | - | - | 7.14 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | - | - | - | 3.92 |
| Pot Cap-1 Maneuver | 0 | - | - | - | 0 | *839 |
| Stage 1 | 0 | - | - | - | 0 | - |
| Stage 2 | 0 | - | - | - | 0 | - |
| Platoon blocked, % | | - | - | - | | 0 |
| Mov Cap-1 Maneuver | - | - | - | - | - | *839 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 0 | 0 | 9.45 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|
| Capacity (veh/h) | - | - | - | 839 |
| HCM Lane V/C Ratio | - | - | - | 0.036 |
| HCM Control Delay (s/veh) | - | - | - | 9.5 |
| HCM Lane LOS | - | - | - | A |
| HCM 95th %tile Q(veh) | - | - | - | 0.1 |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.2 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | ↑↑↑ | ↑↑↑ | ↱ | | ↱ |
| Traffic Vol, veh/h | 0 | 756 | 492 | 22 | 0 | 24 |
| Future Vol, veh/h | 0 | 756 | 492 | 22 | 0 | 24 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | 200 | - | 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 | 822 | 535 | 24 | 0 | 26 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | - | 0 | - | 0 | - | 267 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | - | - | - | - | 7.14 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | - | - | - | 3.92 |
| Pot Cap-1 Maneuver | 0 | - | - | - | 0 | *854 |
| Stage 1 | 0 | - | - | - | 0 | - |
| Stage 2 | 0 | - | - | - | 0 | - |
| Platoon blocked, % | | - | - | - | | 0 |
| Mov Cap-1 Maneuver | - | - | - | - | - | *854 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 0 | 0 | 9.35 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|
| Capacity (veh/h) | - | - | - | 854 |
| HCM Lane V/C Ratio | - | - | - | 0.031 |
| HCM Control Delay (s/veh) | - | - | - | 9.3 |
| HCM Lane LOS | - | - | - | A |
| HCM 95th %tile Q(veh) | - | - | - | 0.1 |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.9 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 81 | 603 | 555 | 38 | 0 | 30 |
| Future Vol, veh/h | 81 | 603 | 555 | 38 | 0 | 30 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 100 | - | - | 200 | - | 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 | 88 | 655 | 603 | 41 | 0 | 33 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 645 | 0 | - | 0 | - | 302 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | 5.34 | - | - | - | - | 7.14 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | 3.12 | - | - | - | - | 3.92 |
| Pot Cap-1 Maneuver | 775 | - | - | - | 0 | *842 |
| Stage 1 | - | - | - | - | 0 | - |
| Stage 2 | - | - | - | - | 0 | - |
| Platoon blocked, % | 0 | - | - | - | | 0 |
| Mov Cap-1 Maneuver | 775 | - | - | - | - | *842 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 1.21 | 0 | 9.45 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 775 | - | - | - | 842 |
| HCM Lane V/C Ratio | 0.114 | - | - | - | 0.039 |
| HCM Control Delay (s/veh) | 10.2 | - | - | - | 9.4 |
| HCM Lane LOS | B | - | - | - | A |
| HCM 95th %tile Q(veh) | 0.4 | - | - | - | 0.1 |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.2 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | ↑↑↑ | ↑↑↑ | ↱ | | ↱ |
| Traffic Vol, veh/h | 0 | 622 | 569 | 60 | 0 | 23 |
| Future Vol, veh/h | 0 | 622 | 569 | 60 | 0 | 23 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | 0 | - | 0 |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 676 | 618 | 65 | 0 | 25 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | - | 0 | - | 0 | - | 309 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | - | - | - | - | 7.14 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | - | - | - | 3.92 |
| Pot Cap-1 Maneuver | 0 | - | - | - | 0 | *842 |
| Stage 1 | 0 | - | - | - | 0 | - |
| Stage 2 | 0 | - | - | - | 0 | - |
| Platoon blocked, % | | - | - | - | | 0 |
| Mov Cap-1 Maneuver | - | - | - | - | - | *842 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 0 | 0 | 9.41 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|
| Capacity (veh/h) | - | - | - | 842 |
| HCM Lane V/C Ratio | - | - | - | 0.03 |
| HCM Control Delay (s/veh) | - | - | - | 9.4 |
| HCM Lane LOS | - | - | - | A |
| HCM 95th %tile Q(veh) | - | - | - | 0.1 |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.6 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 56 | 566 | 601 | 79 | 0 | 28 |
| Future Vol, veh/h | 56 | 566 | 601 | 79 | 0 | 28 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 200 | - | - | 200 | - | 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 | 61 | 615 | 653 | 86 | 0 | 30 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 739 | 0 | - | 0 | - | 327 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | 5.34 | - | - | - | - | 7.14 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | 3.12 | - | - | - | - | 3.92 |
| Pot Cap-1 Maneuver | 722 | - | - | - | 0 | *832 |
| Stage 1 | - | - | - | - | 0 | - |
| Stage 2 | - | - | - | - | 0 | - |
| Platoon blocked, % | 0 | - | - | - | | 0 |
| Mov Cap-1 Maneuver | 722 | - | - | - | - | *832 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 0.94 | 0 | 9.49 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 722 | - | - | - | 832 |
| HCM Lane V/C Ratio | 0.084 | - | - | - | 0.037 |
| HCM Control Delay (s/veh) | 10.4 | - | - | - | 9.5 |
| HCM Lane LOS | B | - | - | - | A |
| HCM 95th %tile Q(veh) | 0.3 | - | - | - | 0.1 |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Intersection | |
|---|---|
| Int Delay, s/veh | 1.3 |

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | ↑↑↑ | ↱ | | ↑↑↑ | | ↱ |
| Traffic Vol, veh/h | 329 | 315 | 0 | 680 | 0 | 193 |
| Future Vol, veh/h | 329 | 315 | 0 | 680 | 0 | 193 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 0 | - | - | - | 0 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 358 | 342 | 0 | 739 | 0 | 210 |

| Major/Minor | Major1 | | Major2 | | Minor1 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 0 | 0 | - | - | - | 179 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | - | - | - | - | 7.14 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | - | - | - | 3.92 |
| Pot Cap-1 Maneuver | - | - | 0 | - | 0 | *869 |
| Stage 1 | - | - | 0 | - | 0 | - |
| Stage 2 | - | - | 0 | - | 0 | - |
| Platoon blocked, % | - | - | | - | | 0 |
| Mov Cap-1 Maneuver | - | - | - | - | - | *869 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | WB | NB |
|---|---|---|---|
| HCM Control Delay, s/v | 0 | 0 | 10.46 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBT |
|---|---|---|---|---|
| Capacity (veh/h) | 869 | - | - | - |
| HCM Lane V/C Ratio | 0.241 | - | - | - |
| HCM Control Delay (s/veh) | 10.5 | - | - | - |
| HCM Lane LOS | B | - | - | - |
| HCM 95th %tile Q(veh) | 0.9 | - | - | - |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

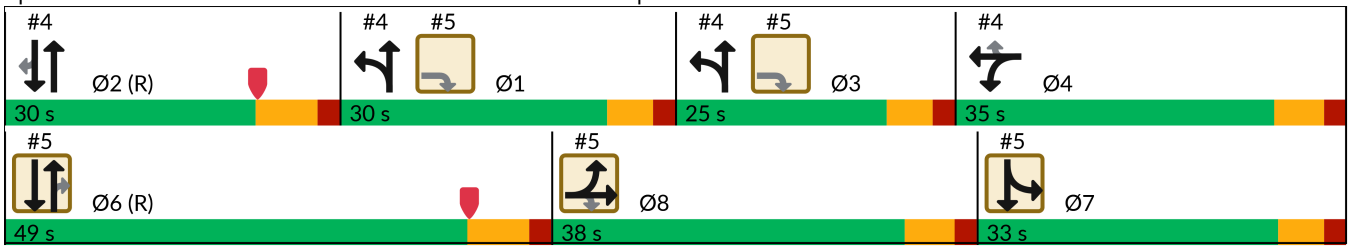
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 0 | 0 | 0 | 25 | 0 | 194 | 1305 | 1292 | 0 | 0 | 819 | 537 |
| Future Volume (vph) | 0 | 0 | 0 | 25 | 0 | 194 | 1305 | 1292 | 0 | 0 | 819 | 537 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | | 0 | 350 | | 350 | 525 | | 0 | 290 | | 285 |
| Storage Lanes | 0 | | 0 | 1 | | 1 | 0 | | 0 | 0 | | 2 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 0.91 | 0.86 | 0.91 | 0.97 | 0.91 | 1.00 | 1.00 | 0.86 | 0.88 |
| Frt | | | | | 0.854 | 0.850 | | | | | | 0.850 |
| Flt Protected | | | | 0.950 | 0.999 | | 0.950 | | | | | |
| Satd. Flow (prot) | 0 | 0 | 0 | 1610 | 2733 | 1441 | 3433 | 5085 | 0 | 0 | 6408 | 2787 |
| Flt Permitted | | | | 0.950 | 0.999 | | 0.950 | | | | | |
| Satd. Flow (perm) | 0 | 0 | 0 | 1610 | 2733 | 1441 | 3433 | 5085 | 0 | 0 | 6408 | 2787 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | | | 218 | 218 | | | | | | 584 |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 841 | | | 605 | | | 688 | | | 312 | |
| Travel Time (s) | | 19.1 | | | 13.8 | | | 15.6 | | | 7.1 | |
| 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 |
| Adj. Flow (vph) | 0 | 0 | 0 | 27 | 0 | 211 | 1418 | 1404 | 0 | 0 | 890 | 584 |
| Shared Lane Traffic (%) | | | | 10% | | 50% | | | | | | |
| Lane Group Flow (vph) | 0 | 0 | 0 | 24 | 109 | 105 | 1418 | 1404 | 0 | 0 | 890 | 584 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 24 | | | 24 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | | | | 1 | 2 | 1 | 1 | 2 | | | 2 | 1 |
| Detector Template | | | | Left | Thru | Right | Left | Thru | | | Thru | Right |
| Leading Detector (ft) | | | | 20 | 100 | 20 | 20 | 100 | | | 100 | 20 |
| Trailing Detector (ft) | | | | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 |
| Detector 1 Position(ft) | | | | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 |
| Detector 1 Size(ft) | | | | 20 | 6 | 20 | 20 | 6 | | | 6 | 20 |
| Detector 1 Type | | | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | | Cl+Ex | Cl+Ex |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Detector 1 Queue (s) | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Detector 1 Delay (s) | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Detector 2 Position(ft) | | | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | | | | Split | NA | Perm | Prot | NA | | | NA | Perm |
| Protected Phases | | | | 4 | 4 | | 1 3 | 1 2 3 | | | 2 | |
| Permitted Phases | | | | | | 4 | | | | | | 2 |

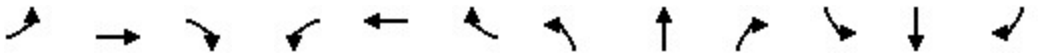
| Lane Group | Ø1 | Ø3 | Ø6 | Ø7 | Ø8 |
|---|---|---|---|---|---|
| Lane Configurations | | | | | |
| Traffic Volume (vph) | | | | | |
| Future Volume (vph) | | | | | |
| Ideal Flow (vphpl) | | | | | |
| Storage Length (ft) | | | | | |
| Storage Lanes | | | | | |
| Taper Length (ft) | | | | | |
| Lane Util. Factor | | | | | |
| Frt | | | | | |
| Flt Protected | | | | | |
| Satd. Flow (prot) | | | | | |
| Flt Permitted | | | | | |
| Satd. Flow (perm) | | | | | |
| Right Turn on Red | | | | | |
| Satd. Flow (RTOR) | | | | | |
| Link Speed (mph) | | | | | |
| Link Distance (ft) | | | | | |
| Travel Time (s) | | | | | |
| Peak Hour Factor | | | | | |
| Adj. Flow (vph) | | | | | |
| Shared Lane Traffic (%) | | | | | |
| Lane Group Flow (vph) | | | | | |
| Enter Blocked Intersection | | | | | |
| Lane Alignment | | | | | |
| Median Width(ft) | | | | | |
| Link Offset(ft) | | | | | |
| Crosswalk Width(ft) | | | | | |
| Two way Left Turn Lane | | | | | |
| Headway Factor | | | | | |
| Turning Speed (mph) | | | | | |
| Number of Detectors | | | | | |
| Detector Template | | | | | |
| Leading Detector (ft) | | | | | |
| Trailing Detector (ft) | | | | | |
| Detector 1 Position(ft) | | | | | |
| Detector 1 Size(ft) | | | | | |
| Detector 1 Type | | | | | |
| Detector 1 Channel | | | | | |
| Detector 1 Extend (s) | | | | | |
| Detector 1 Queue (s) | | | | | |
| Detector 1 Delay (s) | | | | | |
| Detector 2 Position(ft) | | | | | |
| Detector 2 Size(ft) | | | | | |
| Detector 2 Type | | | | | |
| Detector 2 Channel | | | | | |
| Detector 2 Extend (s) | | | | | |
| Turn Type | | | | | |
| Protected Phases | 1 | 3 | 6 | 7 | 8 |
| Permitted Phases | | | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | | | | 4 | 4 | 4 | 1 3 | 1 2 3 | | | 2 | 2 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | | | | 10.0 | 10.0 | 10.0 | | | | | 15.0 | 15.0 |
| Minimum Split (s) | | | | 48.5 | 48.5 | 48.5 | | | | | 25.5 | 25.5 |
| Total Split (s) | | | | 35.0 | 35.0 | 35.0 | | | | | 30.0 | 30.0 |
| Total Split (%) | | | | 29.2% | 29.2% | 29.2% | | | | | 25.0% | 25.0% |
| Maximum Green (s) | | | | 28.5 | 28.5 | 28.5 | | | | | 22.5 | 22.5 |
| Yellow Time (s) | | | | 4.5 | 4.5 | 4.5 | | | | | 5.5 | 5.5 |
| All-Red Time (s) | | | | 2.0 | 2.0 | 2.0 | | | | | 2.0 | 2.0 |
| Lost Time Adjust (s) | | | | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 |
| Total Lost Time (s) | | | | 6.5 | 6.5 | 6.5 | | | | | 7.5 | 7.5 |
| Lead/Lag | | | | Lag | Lag | Lag | | | | | Lead | Lead |
| Lead-Lag Optimize? | | | | Yes | Yes | Yes | | | | | Yes | Yes |
| Vehicle Extension (s) | | | | 3.0 | 3.0 | 3.0 | | | | | 3.0 | 3.0 |
| Recall Mode | | | | None | None | None | | | | | C-Max | C-Max |
| Walk Time (s) | | | | 4.0 | 4.0 | 4.0 | | | | | 4.0 | 4.0 |
| Flash Don't Walk (s) | | | | 38.0 | 38.0 | 38.0 | | | | | 13.0 | 13.0 |
| Pedestrian Calls (#/hr) | | | | 0 | 0 | 0 | | | | | 0 | 0 |
| Act Effct Green (s) | | | | 28.5 | 28.5 | 28.5 | 49.0 | 79.0 | | | 22.5 | 22.5 |
| Actuated g/C Ratio | | | | 0.24 | 0.24 | 0.24 | 0.41 | 0.66 | | | 0.19 | 0.19 |
| v/c Ratio | | | | 0.06 | 0.13 | 0.21 | 1.01 | 0.42 | | | 0.74 | 0.59 |
| Control Delay (s/veh) | | | | 36.1 | 0.3 | 0.9 | 42.5 | 2.8 | | | 50.3 | 6.0 |
| Queue Delay | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Total Delay (s/veh) | | | | 36.1 | 0.3 | 0.9 | 42.5 | 2.8 | | | 50.3 | 6.0 |
| LOS | | | | D | A | A | D | A | | | D | A |
| Approach Delay (s/veh) | | | | | 4.2 | | | 22.8 | | | 32.8 | |
| Approach LOS | | | | | A | | | C | | | C | |

| Intersection Summary | |
|---|---|
| Area Type: | Other |
| Cycle Length: 120 | |
| Actuated Cycle Length: 120 | |
| Offset: 108.5 (90%), Referenced to phase 2:NBSB and 6:, Start of Yellow | |
| Natural Cycle: 130 | |
| Control Type: Actuated-Coordinated | |
| Maximum v/c Ratio: 1.37 | |
| Intersection Signal Delay (s/veh): 25.0 | Intersection LOS: C |
| Intersection Capacity Utilization 86.8% | ICU Level of Service E |
| Analysis Period (min) 15 | |

Splits and Phases: 4: Ellsworth Road & SR24 Westbound Ramps





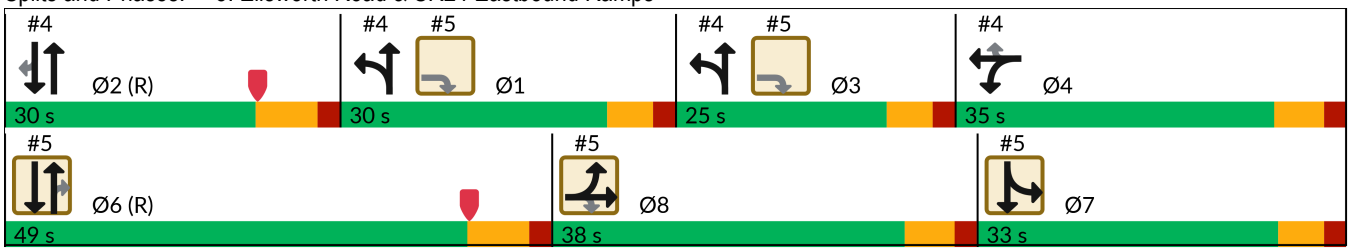
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 549 | 9 | 1722 | 0 | 0 | 0 | 0 | 2050 | 18 | 62 | 794 | 0 |
| Future Volume (vph) | 549 | 9 | 1722 | 0 | 0 | 0 | 0 | 2050 | 18 | 62 | 794 | 0 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 350 | | 350 | 0 | | 0 | 300 | | 300 | 550 | | 0 |
| Storage Lanes | 1 | | 2 | 0 | | 0 | 2 | | 1 | 0 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 0.95 | 0.95 | 0.88 | 1.00 | 1.00 | 1.00 | 1.00 | 0.81 | 1.00 | 0.97 | 0.91 | 1.00 |
| Frt | | | 0.850 | | | | | | 0.850 | | | |
| Flt Protected | 0.950 | 0.954 | | | | | | | | 0.950 | | |
| Satd. Flow (prot) | 1681 | 1688 | 2787 | 0 | 0 | 0 | 0 | 7544 | 1583 | 3433 | 5085 | 0 |
| Flt Permitted | 0.950 | 0.954 | | | | | | | | 0.950 | | |
| Satd. Flow (perm) | 1681 | 1688 | 2787 | 0 | 0 | 0 | 0 | 7544 | 1583 | 3433 | 5085 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 310 | | | | | | 141 | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 651 | | | 441 | | | 838 | | | 688 | |
| Travel Time (s) | | 14.8 | | | 10.0 | | | 19.0 | | | 15.6 | |
| 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 |
| Adj. Flow (vph) | 597 | 10 | 1872 | 0 | 0 | 0 | 0 | 2228 | 20 | 67 | 863 | 0 |
| Shared Lane Traffic (%) | 49% | | | | | | | | | | | |
| Lane Group Flow (vph) | 304 | 303 | 1872 | 0 | 0 | 0 | 0 | 2228 | 20 | 67 | 863 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 24 | | | 24 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | 1 | | | | | 2 | 1 | 1 | 2 | |
| Detector Template | Left | Thru | Right | | | | | Thru | Right | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | 20 | | | | | 100 | 20 | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | 0 | | | | | 0 | 0 | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | 0 | | | | | 0 | 0 | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | 20 | | | | | 6 | 20 | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | | | | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | | | | 0.0 | | | 0.0 | |
| Turn Type | Split | NA | custom | | | | | NA | Perm | Prot | NA | |
| Protected Phases | 8 | 8 | | | | | | 6 | | 7 | 6 7 | |
| Permitted Phases | | | 1 3 8 | | | | | | 6 | | | |

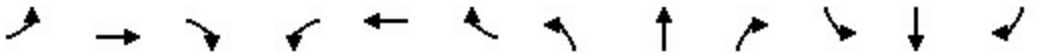
| Lane Group | Ø1 | Ø2 | Ø3 | Ø4 |
|---|---|---|---|---|
| Lane Configurations | | | | |
| Traffic Volume (vph) | | | | |
| Future Volume (vph) | | | | |
| Ideal Flow (vphpl) | | | | |
| Storage Length (ft) | | | | |
| Storage Lanes | | | | |
| Taper Length (ft) | | | | |
| Lane Util. Factor | | | | |
| Frt | | | | |
| Flt Protected | | | | |
| Satd. Flow (prot) | | | | |
| Flt Permitted | | | | |
| Satd. Flow (perm) | | | | |
| Right Turn on Red | | | | |
| Satd. Flow (RTOR) | | | | |
| Link Speed (mph) | | | | |
| Link Distance (ft) | | | | |
| Travel Time (s) | | | | |
| Peak Hour Factor | | | | |
| Adj. Flow (vph) | | | | |
| Shared Lane Traffic (%) | | | | |
| Lane Group Flow (vph) | | | | |
| Enter Blocked Intersection | | | | |
| Lane Alignment | | | | |
| Median Width(ft) | | | | |
| Link Offset(ft) | | | | |
| Crosswalk Width(ft) | | | | |
| Two way Left Turn Lane | | | | |
| Headway Factor | | | | |
| Turning Speed (mph) | | | | |
| Number of Detectors | | | | |
| Detector Template | | | | |
| Leading Detector (ft) | | | | |
| Trailing Detector (ft) | | | | |
| Detector 1 Position(ft) | | | | |
| Detector 1 Size(ft) | | | | |
| Detector 1 Type | | | | |
| Detector 1 Channel | | | | |
| Detector 1 Extend (s) | | | | |
| Detector 1 Queue (s) | | | | |
| Detector 1 Delay (s) | | | | |
| Detector 2 Position(ft) | | | | |
| Detector 2 Size(ft) | | | | |
| Detector 2 Type | | | | |
| Detector 2 Channel | | | | |
| Detector 2 Extend (s) | | | | |
| Turn Type | | | | |
| Protected Phases | 1 | 2 | 3 | 4 |
| Permitted Phases | | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | 8 | 8 | 1 3 8 | | | | | 6 | 6 | 7 | 6 7 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | | | | | 15.0 | 15.0 | 5.0 | | |
| Minimum Split (s) | 46.5 | 46.5 | | | | | | 26.5 | 26.5 | 11.0 | | |
| Total Split (s) | 38.0 | 38.0 | | | | | | 49.0 | 49.0 | 33.0 | | |
| Total Split (%) | 31.7% | 31.7% | | | | | | 40.8% | 40.8% | 27.5% | | |
| Maximum Green (s) | 31.5 | 31.5 | | | | | | 41.5 | 41.5 | 27.0 | | |
| Yellow Time (s) | 4.5 | 4.5 | | | | | | 5.5 | 5.5 | 4.0 | | |
| All-Red Time (s) | 2.0 | 2.0 | | | | | | 2.0 | 2.0 | 2.0 | | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | | | | | 0.0 | 0.0 | 0.0 | | |
| Total Lost Time (s) | 6.5 | 6.5 | | | | | | 7.5 | 7.5 | 6.0 | | |
| Lead/Lag | Lead | Lead | | | | | | | | Lag | | |
| Lead-Lag Optimize? | Yes | Yes | | | | | | | | Yes | | |
| Vehicle Extension (s) | 3.0 | 3.0 | | | | | | 3.0 | 3.0 | 3.0 | | |
| Recall Mode | None | None | | | | | | C-Max | C-Max | Max | | |
| Walk Time (s) | 4.0 | 4.0 | | | | | | 4.0 | 4.0 | | | |
| Flash Don't Walk (s) | 36.0 | 36.0 | | | | | | 15.0 | 15.0 | | | |
| Pedestrian Calls (#/hr) | 0 | 0 | | | | | | 0 | 0 | | | |
| Act Effct Green (s) | 31.5 | 31.5 | 51.0 | | | | | 41.5 | 41.5 | 27.0 | 74.5 | |
| Actuated g/C Ratio | 0.26 | 0.26 | 0.43 | | | | | 0.35 | 0.35 | 0.23 | 0.62 | |
| v/c Ratio | 0.69 | 0.68 | 1.37 | | | | | 0.85 | 0.03 | 0.09 | 0.27 | |
| Control Delay (s/veh) | 49.2 | 48.9 | 199.2 | | | | | 42.8 | 0.1 | 62.4 | 1.7 | |
| Queue Delay | 1.0 | 0.9 | 0.0 | | | | | 0.1 | 0.0 | 0.0 | 0.0 | |
| Total Delay (s/veh) | 50.1 | 49.8 | 199.2 | | | | | 42.9 | 0.1 | 62.4 | 1.7 | |
| LOS | D | D | F | | | | | D | A | E | A | |
| Approach Delay (s/veh) | | 162.7 | | | | | | 42.5 | | | 6.1 | |
| Approach LOS | | F | | | | | | D | | | A | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 120 | | | |
| Actuated Cycle Length: 120 | | | |
| Offset: 108.5 (90%), Referenced to phase 2:NBSB and 6:, Start of Yellow | | | |
| Natural Cycle: 130 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 1.37 | | | |
| Intersection Signal Delay (s/veh): 89.2 | | Intersection LOS: F | |
| Intersection Capacity Utilization 86.8% | | ICU Level of Service E | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 5: Ellsworth Road & SR24 Eastbound Ramps





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 103 | 97 | 29 | 460 | 82 | 551 | 23 | 1205 | 221 | 780 | 1760 | 60 |
| Future Volume (veh/h) | 103 | 97 | 29 | 460 | 82 | 551 | 23 | 1205 | 221 | 780 | 1760 | 60 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 112 | 105 | 32 | 500 | 89 | 599 | 25 | 1310 | 240 | 848 | 1913 | 65 |
| 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 | 166 | 245 | 109 | 547 | 637 | 720 | 81 | 1435 | 446 | 950 | 2722 | 92 |
| Arrive On Green | 0.05 | 0.07 | 0.07 | 0.16 | 0.18 | 0.18 | 0.05 | 0.56 | 0.56 | 0.28 | 0.54 | 0.54 |
| Sat Flow, veh/h | 3456 | 3554 | 1585 | 3456 | 3554 | 1585 | 3456 | 5106 | 1585 | 3456 | 5071 | 172 |
| Grp Volume(v), veh/h | 112 | 105 | 32 | 500 | 89 | 599 | 25 | 1310 | 240 | 848 | 1283 | 695 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1777 | 1585 | 1728 | 1777 | 1585 | 1728 | 1702 | 1585 | 1728 | 1702 | 1839 |
| Q Serve(g_s), s | 3.8 | 3.4 | 2.3 | 17.1 | 2.5 | 21.5 | 0.8 | 27.7 | 11.4 | 28.3 | 33.6 | 33.7 |
| Cycle Q Clear(g_c), s | 3.8 | 3.4 | 2.3 | 17.1 | 2.5 | 21.5 | 0.8 | 27.7 | 11.4 | 28.3 | 33.6 | 33.7 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.09 |
| Lane Grp Cap(c), veh/h | 166 | 245 | 109 | 547 | 637 | 720 | 81 | 1435 | 446 | 950 | 1827 | 987 |
| V/C Ratio(X) | 0.67 | 0.43 | 0.29 | 0.91 | 0.14 | 0.83 | 0.31 | 0.91 | 0.54 | 0.89 | 0.70 | 0.70 |
| Avail Cap(c_a), veh/h | 259 | 370 | 165 | 547 | 637 | 720 | 274 | 1435 | 446 | 950 | 1827 | 987 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.72 | 0.72 | 0.72 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 56.2 | 53.6 | 53.1 | 49.7 | 41.5 | 28.7 | 56.2 | 24.9 | 21.4 | 41.8 | 20.7 | 20.7 |
| Incr Delay (d2), s/veh | 4.7 | 1.2 | 1.5 | 22.2 | 0.5 | 10.8 | 1.5 | 7.9 | 3.3 | 12.5 | 2.3 | 4.2 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 3.2 | 2.8 | 1.7 | 14.0 | 2.1 | 23.6 | 0.7 | 13.1 | 6.5 | 19.7 | 19.5 | 21.6 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 60.9 | 54.8 | 54.6 | 71.9 | 41.9 | 39.6 | 57.7 | 32.8 | 24.7 | 54.3 | 23.0 | 24.9 |
| LnGrp LOS | E | D | D | E | D | D | E | C | C | D | C | C |
| Approach Vol, veh/h | | 249 | | | 1188 | | | 1575 | | | 2826 | |
| Approach Delay, s/veh | | 57.5 | | | 53.3 | | | 32.0 | | | 32.8 | |
| Approach LOS | | E | | | D | | | C | | | C | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 11.8 | 28.0 | 8.3 | 71.9 | 25.0 | 14.8 | 39.0 | 41.2 |
| Change Period (Y+Rc), s | 6.0 | 6.5 | 5.5 | 7.5 | 6.0 | * 6.5 | 6.0 | 7.5 |
| Max Green Setting (Gmax), s | 9.0 | 21.5 | 9.5 | 54.5 | 19.0 | * 13 | 33.0 | 30.5 |
| Max Q Clear Time (g_c+I1), s | 5.8 | 23.5 | 2.8 | 35.7 | 19.1 | 5.4 | 30.3 | 29.7 |
| Green Ext Time (p_c), s | 0.1 | 0.0 | 0.0 | 13.5 | 0.0 | 0.3 | 1.0 | 0.7 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 37.8 |
| HCM 7th LOS | D |

**Notes**

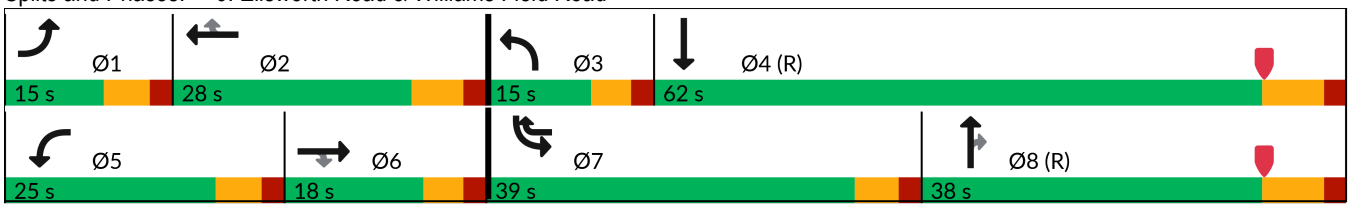
User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | EBL | WBT | NBL | SBT | WBL | EBT | SBL | NBT |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | None | Max | None | C-Max | Max | None | Max | C-Max |
| Maximum Split (s) | 15 | 28 | 15 | 62 | 25 | 18 | 39 | 38 |
| Maximum Split (%) | 12.5% | 23.3% | 12.5% | 51.7% | 20.8% | 15.0% | 32.5% | 31.7% |
| Minimum Split (s) | 11 | 36.5 | 10.5 | 35.5 | 24 | 23.5 | 11 | 37.5 |
| Yellow Time (s) | 4 | 4.5 | 3.5 | 5.5 | 4 | 3.5 | 4 | 5.5 |
| All-Red Time (s) | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Minimum Initial (s) | 5 | 15 | 5 | 15 | 5 | 5 | 5 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 4 | | 7 | | 7 | | 7 |
| Flash Don't Walk (s) | | 26 | | 21 | | 11 | | 23 |
| Dual Entry | No | Yes | No | Yes | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 38.5 | 53.5 | 81.5 | 96.5 | 38.5 | 63.5 | 81.5 | 0.5 |
| End Time (s) | 53.5 | 81.5 | 96.5 | 38.5 | 63.5 | 81.5 | 0.5 | 38.5 |
| Yield/Force Off (s) | 47.5 | 75 | 91 | 31 | 57.5 | 76 | 114.5 | 31 |
| Yield/Force Off 170(s) | 47.5 | 49 | 91 | 10 | 57.5 | 65 | 114.5 | 8 |
| Local Start Time (s) | 7.5 | 22.5 | 50.5 | 65.5 | 7.5 | 32.5 | 50.5 | 89.5 |
| Local Yield (s) | 16.5 | 44 | 60 | 0 | 26.5 | 45 | 83.5 | 0 |
| Local Yield 170(s) | 16.5 | 18 | 60 | 99 | 26.5 | 34 | 83.5 | 97 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 120 |
| Offset: 31 (26%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow | |

Splits and Phases: 6: Ellsworth Road & Williams Field Road



| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 161 | 227 | 1199 | 194 | 339 | 1885 |
| Future Volume (veh/h) | 161 | 227 | 1199 | 194 | 339 | 1885 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 141 | 284 | 1303 | 211 | 368 | 2049 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 356 | 634 | 1936 | 601 | 922 | 3510 |
| Arrive On Green | 0.20 | 0.20 | 0.38 | 0.38 | 0.09 | 0.23 |
| Sat Flow, veh/h | 1781 | 3170 | 5274 | 1585 | 3456 | 5274 |
| Grp Volume(v), veh/h | 141 | 284 | 1303 | 211 | 368 | 2049 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1585 | 1702 | 1585 | 1728 | 1702 |
| Q Serve(g_s), s | 8.3 | 9.4 | 25.5 | 11.4 | 12.1 | 42.9 |
| Cycle Q Clear(g_c), s | 8.3 | 9.4 | 25.5 | 11.4 | 12.1 | 42.9 |
| Prop In Lane | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Lane Grp Cap(c), veh/h | 356 | 634 | 1936 | 601 | 922 | 3510 |
| V/C Ratio(X) | 0.40 | 0.45 | 0.67 | 0.35 | 0.40 | 0.58 |
| Avail Cap(c_a), veh/h | 356 | 634 | 1936 | 601 | 922 | 3510 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 0.33 | 0.33 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 0.53 | 0.53 |
| Uniform Delay (d), s/veh | 41.7 | 42.2 | 31.0 | 26.7 | 45.6 | 31.1 |
| Incr Delay (d2), s/veh | 3.3 | 2.3 | 1.9 | 1.6 | 0.7 | 0.4 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 7.1 | 7.0 | 15.4 | 7.8 | 8.3 | 24.6 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 45.0 | 44.5 | 32.9 | 28.3 | 46.3 | 31.5 |
| LnGrp LOS | D | D | C | C | D | C |
| Approach Vol, veh/h | 425 | | 1514 | | | 2417 |
| Approach Delay, s/veh | 44.6 | | 32.3 | | | 33.7 |
| Approach LOS | D | | C | | | C |

| Timer - Assigned Phs | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 30.0 | 90.0 | 37.0 | 53.0 |
| Change Period (Y+Rc), s | 6.0 | 7.5 | 5.0 | 7.5 |
| Max Green Setting (Gmax), s | 24.0 | 82.5 | 32.0 | 45.5 |
| Max Q Clear Time (g_c+I1), s | 11.4 | 44.9 | 14.1 | 27.5 |
| Green Ext Time (p_c), s | 1.3 | 20.7 | 1.1 | 8.7 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 34.3 |
| HCM 7th LOS | C |

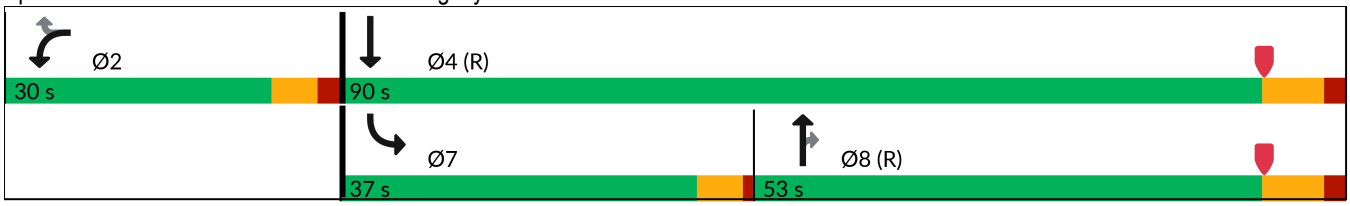
**Notes**

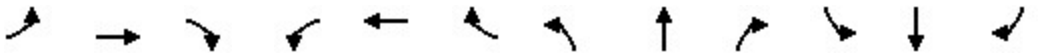
User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

| Phase Number | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Movement | WBL | SBT | SBL | NBT |
| Lead/Lag | | | Lead | Lag |
| Lead-Lag Optimize | | | Yes | Yes |
| Recall Mode | Max | C-Max | Max | C-Max |
| Maximum Split (s) | 30 | 90 | 37 | 53 |
| Maximum Split (%) | 25.0% | 75.0% | 30.8% | 44.2% |
| Minimum Split (s) | 35 | 39.5 | 10 | 26.5 |
| Yellow Time (s) | 4 | 5.5 | 4 | 5.5 |
| All-Red Time (s) | 2 | 2 | 1 | 2 |
| Minimum Initial (s) | 10 | 15 | 5 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | 4 | 4 | | 7 |
| Flash Don't Walk (s) | 25 | 28 | | 12 |
| Dual Entry | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 55 | 85 | 85 | 2 |
| End Time (s) | 85 | 55 | 2 | 55 |
| Yield/Force Off (s) | 79 | 47.5 | 117 | 47.5 |
| Yield/Force Off 170(s) | 54 | 19.5 | 117 | 35.5 |
| Local Start Time (s) | 7.5 | 37.5 | 37.5 | 74.5 |
| Local Yield (s) | 31.5 | 0 | 69.5 | 0 |
| Local Yield 170(s) | 6.5 | 92 | 69.5 | 108 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 80 |
| Offset: 47.5 (40%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow | |

Splits and Phases: 7: Ellsworth Road & Legacy Avenue





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 142 | 745 | 174 | 150 | 549 | 35 | 391 | 8 | 115 | 158 | 4 | 69 |
| Future Volume (veh/h) | 142 | 745 | 174 | 150 | 549 | 35 | 391 | 8 | 115 | 158 | 4 | 69 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 161 | 847 | 198 | 170 | 624 | 40 | 444 | 9 | 131 | 180 | 5 | 78 |
| Peak Hour Factor | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 460 | 1766 | 548 | 634 | 2320 | 720 | 706 | 19 | 281 | 357 | 8 | 125 |
| Arrive On Green | 0.02 | 0.11 | 0.11 | 0.06 | 0.15 | 0.15 | 0.20 | 0.19 | 0.19 | 0.11 | 0.08 | 0.08 |
| Sat Flow, veh/h | 1781 | 5106 | 1585 | 3456 | 5106 | 1585 | 3456 | 103 | 1498 | 1781 | 96 | 1503 |
| Grp Volume(v), veh/h | 161 | 847 | 198 | 170 | 624 | 40 | 444 | 0 | 140 | 180 | 0 | 83 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1702 | 1585 | 1728 | 1702 | 1585 | 1728 | 0 | 1601 | 1781 | 0 | 1600 |
| Q Serve(g_s), s | 6.8 | 18.7 | 13.9 | 5.6 | 13.0 | 2.6 | 14.1 | 0.0 | 9.3 | 10.9 | 0.0 | 6.0 |
| Cycle Q Clear(g_c), s | 6.8 | 18.7 | 13.9 | 5.6 | 13.0 | 2.6 | 14.1 | 0.0 | 9.3 | 10.9 | 0.0 | 6.0 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.94 | 1.00 | | 0.94 |
| Lane Grp Cap(c), veh/h | 460 | 1766 | 548 | 634 | 2320 | 720 | 706 | 0 | 300 | 357 | 0 | 133 |
| V/C Ratio(X) | 0.35 | 0.48 | 0.36 | 0.27 | 0.27 | 0.06 | 0.63 | 0.00 | 0.47 | 0.50 | 0.00 | 0.62 |
| Avail Cap(c_a), veh/h | 549 | 1766 | 548 | 634 | 2320 | 720 | 706 | 0 | 454 | 409 | 0 | 320 |
| HCM Platoon Ratio | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 23.3 | 43.0 | 40.9 | 48.7 | 33.4 | 28.9 | 43.6 | 0.0 | 43.4 | 43.6 | 0.0 | 53.2 |
| Incr Delay (d2), s/veh | 0.5 | 0.9 | 1.8 | 1.0 | 0.3 | 0.1 | 4.2 | 0.0 | 1.1 | 1.1 | 0.0 | 4.7 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 5.4 | 13.4 | 10.3 | 4.6 | 9.9 | 1.8 | 10.6 | 0.0 | 6.9 | 8.6 | 0.0 | 4.7 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 23.8 | 44.0 | 42.8 | 49.7 | 33.6 | 29.1 | 47.8 | 0.0 | 44.6 | 44.7 | 0.0 | 57.9 |
| LnGrp LOS | C | D | D | D | C | C | D | | D | D | | E |
| Approach Vol, veh/h | | 1206 | | | 834 | | | 584 | | | 263 | |
| Approach Delay, s/veh | | 41.1 | | | 36.7 | | | 47.0 | | | 48.8 | |
| Approach LOS | | D | | | D | | | D | | | D | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 13.0 | 61.0 | 17.5 | 28.5 | 26.0 | 48.0 | 30.0 | 16.0 |
| Change Period (Y+Rc), s | 4.0 | 6.5 | 4.5 | * 6 | 4.0 | 6.5 | 5.5 | 6.0 |
| Max Green Setting (Gmax), s | 15.0 | 34.5 | 16.5 | * 34 | 22.0 | 27.5 | 24.5 | 24.0 |
| Max Q Clear Time (g_c+I1), s | 8.8 | 15.0 | 12.9 | 11.3 | 7.6 | 20.7 | 16.1 | 8.0 |
| Green Ext Time (p_c), s | 0.2 | 3.9 | 0.2 | 0.8 | 0.4 | 3.3 | 1.1 | 0.3 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 41.7 |
| HCM 7th LOS | D |

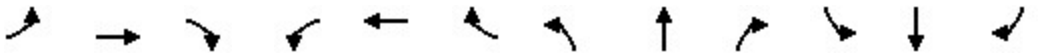
**Notes**

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | EBL | WBT | SBL | NBT | WBL | EBTL | NBL | SBTL |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | None | C-Max | None | None | Max | C-Max | Max | None |
| Maximum Split (s) | 19 | 41 | 21 | 39 | 26 | 34 | 30 | 30 |
| Maximum Split (%) | 15.8% | 34.2% | 17.5% | 32.5% | 21.7% | 28.3% | 25.0% | 25.0% |
| Minimum Split (s) | 9.5 | 24.5 | 9.5 | 22.5 | 12.5 | 24.5 | 24 | 24 |
| Yellow Time (s) | 3 | 4.5 | 3.5 | 4 | 3 | 4.5 | 3.5 | 4 |
| All-Red Time (s) | 1 | 2 | 1 | 1 | 1 | 2 | 2 | 2 |
| Minimum Initial (s) | 5 | 15 | 5 | 5 | 5 | 15 | 5 | 10 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | | | | | 7 | | |
| Flash Don't Walk (s) | | | | | | 11 | | |
| Dual Entry | No | Yes | No | Yes | No | Yes | Yes | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 101 | 0 | 41 | 62 | 101 | 7 | 41 | 71 |
| End Time (s) | 0 | 41 | 62 | 101 | 7 | 41 | 71 | 101 |
| Yield/Force Off (s) | 116 | 34.5 | 57.5 | 96 | 3 | 34.5 | 65.5 | 95 |
| Yield/Force Off 170(s) | 116 | 34.5 | 57.5 | 96 | 3 | 23.5 | 65.5 | 95 |
| Local Start Time (s) | 66.5 | 85.5 | 6.5 | 27.5 | 66.5 | 92.5 | 6.5 | 36.5 |
| Local Yield (s) | 81.5 | 0 | 23 | 61.5 | 88.5 | 0 | 31 | 60.5 |
| Local Yield 170(s) | 81.5 | 0 | 23 | 61.5 | 88.5 | 109 | 31 | 60.5 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 85 |
| Offset: 34.5 (29%), Referenced to phase 2:WBT and 6:EBTL, Start of Yellow | |

Splits and Phases: 9: Legacy Drive/Driveway G & Williams Field Road



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 46 | 747 | 117 | 336 | 509 | 61 | 246 | 18 | 315 | 175 | 15 | 24 |
| Future Volume (veh/h) | 46 | 747 | 117 | 336 | 509 | 61 | 246 | 18 | 315 | 175 | 15 | 24 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 50 | 812 | 127 | 365 | 553 | 0 | 267 | 0 | 355 | 190 | 16 | 26 |
| 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 | 117 | 1425 | 442 | 720 | 2317 | | 550 | 0 | 1334 | 432 | 128 | 209 |
| Arrive On Green | 0.01 | 0.09 | 0.09 | 0.42 | 0.91 | 0.00 | 0.14 | 0.00 | 0.21 | 0.13 | 0.20 | 0.20 |
| Sat Flow, veh/h | 3456 | 5106 | 1585 | 3456 | 5106 | 1585 | 1781 | 0 | 3170 | 3456 | 641 | 1042 |
| Grp Volume(v), veh/h | 50 | 812 | 127 | 365 | 553 | 0 | 267 | 0 | 355 | 190 | 0 | 42 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1702 | 1585 | 1728 | 1702 | 1585 | 1781 | 0 | 1585 | 1728 | 0 | 1683 |
| Q Serve(g_s), s | 1.7 | 18.3 | 9.0 | 9.4 | 1.5 | 0.0 | 14.0 | 0.0 | 8.8 | 6.1 | 0.0 | 2.5 |
| Cycle Q Clear(g_c), s | 1.7 | 18.3 | 9.0 | 9.4 | 1.5 | 0.0 | 14.0 | 0.0 | 8.8 | 6.1 | 0.0 | 2.5 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.62 |
| Lane Grp Cap(c), veh/h | 117 | 1425 | 442 | 720 | 2317 | | 550 | 0 | 1334 | 432 | 0 | 337 |
| V/C Ratio(X) | 0.43 | 0.57 | 0.29 | 0.51 | 0.24 | | 0.49 | 0.00 | 0.27 | 0.44 | 0.00 | 0.12 |
| Avail Cap(c_a), veh/h | 202 | 1425 | 442 | 720 | 2317 | | 647 | 0 | 1334 | 432 | 0 | 337 |
| HCM Platoon Ratio | 0.33 | 0.33 | 0.33 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 0.86 | 0.86 | 0.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 58.2 | 47.6 | 43.3 | 30.4 | 3.1 | 0.0 | 31.0 | 0.0 | 22.7 | 48.6 | 0.0 | 39.4 |
| Incr Delay (d2), s/veh | 2.5 | 1.7 | 1.6 | 2.2 | 0.2 | 0.0 | 0.7 | 0.0 | 0.5 | 3.2 | 0.0 | 0.8 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 1.4 | 13.4 | 7.1 | 6.5 | 1.0 | 0.0 | 10.2 | 0.0 | 6.1 | 5.1 | 0.0 | 2.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 60.6 | 49.2 | 45.0 | 32.6 | 3.3 | 0.0 | 31.7 | 0.0 | 23.2 | 51.8 | 0.0 | 40.1 |
| LnGrp LOS | E | D | D | C | A | | C | | C | D | | D |
| Approach Vol, veh/h | | 989 | | | 918 | | | 622 | | | 232 | |
| Approach Delay, s/veh | | 49.3 | | | 15.0 | | | 26.8 | | | 49.7 | |
| Approach LOS | | D | | | B | | | C | | | D | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 19.0 | 32.0 | 29.0 | 40.0 | 20.5 | 30.5 | 8.1 | 60.9 |
| Change Period (Y+Rc), s | 4.0 | 6.5 | 4.0 | 6.5 | 4.0 | 6.5 | 4.0 | 6.5 |
| Max Green Setting (Gmax), s | 15.0 | 25.5 | 25.0 | 33.5 | 23.0 | 17.5 | 7.0 | 51.5 |
| Max Q Clear Time (g_c+I1), s | 8.1 | 10.8 | 11.4 | 20.3 | 16.0 | 4.5 | 3.7 | 3.5 |
| Green Ext Time (p_c), s | 0.3 | 1.2 | 1.1 | 5.0 | 0.5 | 0.1 | 0.0 | 4.4 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 32.8 |
| HCM 7th LOS | C |

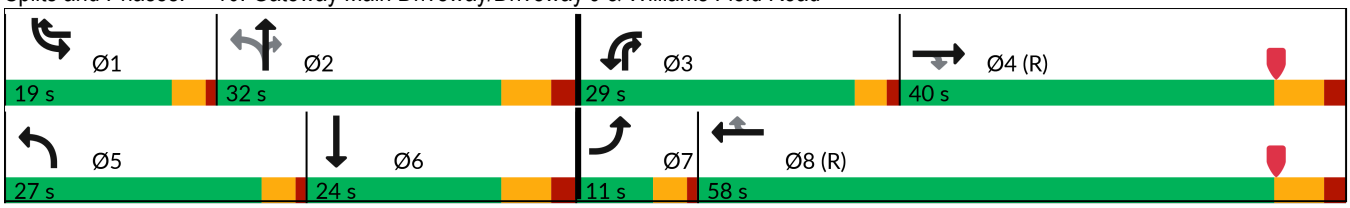
**Notes**

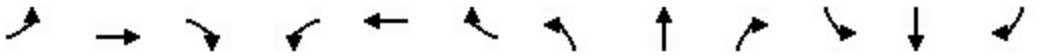
User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | SBL | NBTL | WBL | EBT | NBL | SBT | EBL | WBT |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | Max | Max | Max | C-Max | None | Max | None | C-Max |
| Maximum Split (s) | 19 | 32 | 29 | 40 | 27 | 24 | 11 | 58 |
| Maximum Split (%) | 15.8% | 26.7% | 24.2% | 33.3% | 22.5% | 20.0% | 9.2% | 48.3% |
| Minimum Split (s) | 9.5 | 24.5 | 9.5 | 24.5 | 9.5 | 24.5 | 22 | 24.5 |
| Yellow Time (s) | 3 | 4.5 | 3 | 4.5 | 3 | 4.5 | 3 | 4.5 |
| All-Red Time (s) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| Minimum Initial (s) | 5 | 10 | 5 | 15 | 5 | 10 | 5 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 7 | | 7 | | 7 | 7 | 7 |
| Flash Don't Walk (s) | | 11 | | 11 | | 11 | 11 | 11 |
| Dual Entry | No | Yes | No | Yes | No | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 4.5 | 23.5 | 55.5 | 84.5 | 4.5 | 31.5 | 55.5 | 66.5 |
| End Time (s) | 23.5 | 55.5 | 84.5 | 4.5 | 31.5 | 55.5 | 66.5 | 4.5 |
| Yield/Force Off (s) | 19.5 | 49 | 80.5 | 118 | 27.5 | 49 | 62.5 | 118 |
| Yield/Force Off 170(s) | 19.5 | 38 | 80.5 | 107 | 27.5 | 38 | 51.5 | 107 |
| Local Start Time (s) | 6.5 | 25.5 | 57.5 | 86.5 | 6.5 | 33.5 | 57.5 | 68.5 |
| Local Yield (s) | 21.5 | 51 | 82.5 | 0 | 29.5 | 51 | 64.5 | 0 |
| Local Yield 170(s) | 21.5 | 40 | 82.5 | 109 | 29.5 | 40 | 53.5 | 109 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 85 |
| Offset: 118 (98%), Referenced to phase 4:EBT and 8:WBT, Start of Yellow | |

Splits and Phases: 10: Gateway Main Driveway/Driveway J & Williams Field Road





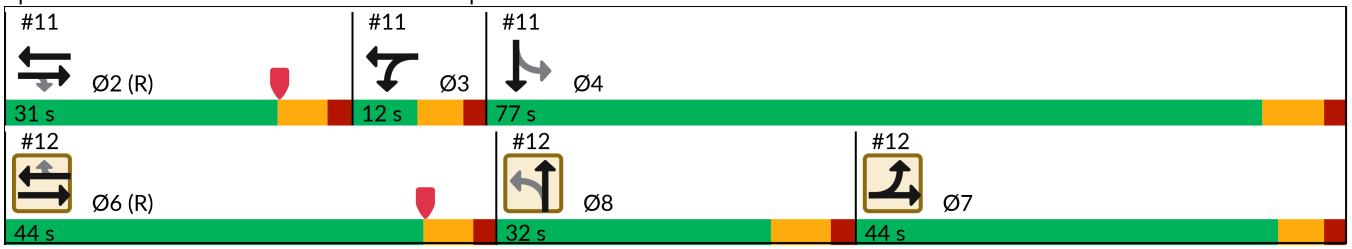
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 0 | 902 | 287 | 63 | 543 | 0 | 0 | 0 | 0 | 537 | 0 | 358 |
| Future Volume (vph) | 0 | 902 | 287 | 63 | 543 | 0 | 0 | 0 | 0 | 537 | 0 | 358 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 360 | | 285 | 290 | | 0 | 0 | | 0 | 400 | | 400 |
| Storage Lanes | 2 | | 1 | 0 | | 0 | 0 | | 0 | 2 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 1.00 | 0.86 | 1.00 | 0.97 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 0.91 | 0.91 | 0.95 |
| Frt | | | 0.850 | | | | | | | | 0.908 | |
| Flt Protected | | | | 0.950 | | | | | | 0.950 | 0.981 | |
| Satd. Flow (prot) | 0 | 6408 | 1583 | 3433 | 3539 | 0 | 0 | 0 | 0 | 1610 | 3020 | 0 |
| Flt Permitted | | | | 0.950 | | | | | | 0.950 | 0.981 | |
| Satd. Flow (perm) | 0 | 6408 | 1583 | 3433 | 3539 | 0 | 0 | 0 | 0 | 1610 | 3020 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 312 | | | | | | | | 86 | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 971 | | | 481 | | | 999 | | | 970 | |
| Travel Time (s) | | 22.1 | | | 10.9 | | | 22.7 | | | 22.0 | |
| 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 |
| Adj. Flow (vph) | 0 | 980 | 312 | 68 | 590 | 0 | 0 | 0 | 0 | 584 | 0 | 389 |
| Shared Lane Traffic (%) | | | | | | | | | | 42% | | |
| Lane Group Flow (vph) | 0 | 980 | 312 | 68 | 590 | 0 | 0 | 0 | 0 | 339 | 634 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 24 | | | 24 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | | 2 | 1 | 1 | 2 | | | | | 1 | 2 | |
| Detector Template | | Thru | Right | Left | Thru | | | | | Left | Thru | |
| Leading Detector (ft) | | 100 | 20 | 20 | 100 | | | | | 20 | 100 | |
| Trailing Detector (ft) | | 0 | 0 | 0 | 0 | | | | | 0 | 0 | |
| Detector 1 Position(ft) | | 0 | 0 | 0 | 0 | | | | | 0 | 0 | |
| Detector 1 Size(ft) | | 6 | 20 | 20 | 6 | | | | | 20 | 6 | |
| Detector 1 Type | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | | | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | | | | 0.0 | |
| Turn Type | | NA | Perm | Prot | NA | | | | | Perm | NA | |
| Protected Phases | | 2 | | 3 | 2 3 | | | | | | 4 | |
| Permitted Phases | | | 2 | | | | | | | 4 | | |

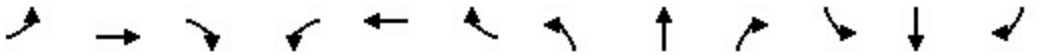
| Lane Group | Ø6 | Ø7 | Ø8 |
|---|---|---|---|
| Lane Configurations | | | |
| Traffic Volume (vph) | | | |
| Future Volume (vph) | | | |
| Ideal Flow (vphpl) | | | |
| Storage Length (ft) | | | |
| Storage Lanes | | | |
| Taper Length (ft) | | | |
| Lane Util. Factor | | | |
| Frt | | | |
| Flt Protected | | | |
| Satd. Flow (prot) | | | |
| Flt Permitted | | | |
| Satd. Flow (perm) | | | |
| Right Turn on Red | | | |
| Satd. Flow (RTOR) | | | |
| Link Speed (mph) | | | |
| Link Distance (ft) | | | |
| Travel Time (s) | | | |
| Peak Hour Factor | | | |
| Adj. Flow (vph) | | | |
| Shared Lane Traffic (%) | | | |
| Lane Group Flow (vph) | | | |
| Enter Blocked Intersection | | | |
| Lane Alignment | | | |
| Median Width(ft) | | | |
| Link Offset(ft) | | | |
| Crosswalk Width(ft) | | | |
| Two way Left Turn Lane | | | |
| Headway Factor | | | |
| Turning Speed (mph) | | | |
| Number of Detectors | | | |
| Detector Template | | | |
| Leading Detector (ft) | | | |
| Trailing Detector (ft) | | | |
| Detector 1 Position(ft) | | | |
| Detector 1 Size(ft) | | | |
| Detector 1 Type | | | |
| Detector 1 Channel | | | |
| Detector 1 Extend (s) | | | |
| Detector 1 Queue (s) | | | |
| Detector 1 Delay (s) | | | |
| Detector 2 Position(ft) | | | |
| Detector 2 Size(ft) | | | |
| Detector 2 Type | | | |
| Detector 2 Channel | | | |
| Detector 2 Extend (s) | | | |
| Turn Type | | | |
| Protected Phases | 6 | 7 | 8 |
| Permitted Phases | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | | 2 | 2 | 3 | 2 3 | | | | | 4 | 4 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | | 15.0 | 15.0 | 5.0 | | | | | | 10.0 | 10.0 | |
| Minimum Split (s) | | 25.5 | 25.5 | 11.0 | | | | | | 46.5 | 46.5 | |
| Total Split (s) | | 31.0 | 31.0 | 12.0 | | | | | | 77.0 | 77.0 | |
| Total Split (%) | | 25.8% | 25.8% | 10.0% | | | | | | 64.2% | 64.2% | |
| Maximum Green (s) | | 24.5 | 24.5 | 6.0 | | | | | | 69.5 | 69.5 | |
| Yellow Time (s) | | 4.5 | 4.5 | 4.0 | | | | | | 5.5 | 5.5 | |
| All-Red Time (s) | | 2.0 | 2.0 | 2.0 | | | | | | 2.0 | 2.0 | |
| Lost Time Adjust (s) | | 0.0 | 0.0 | 0.0 | | | | | | 0.0 | 0.0 | |
| Total Lost Time (s) | | 6.5 | 6.5 | 6.0 | | | | | | 7.5 | 7.5 | |
| Lead/Lag | | | | Lead | | | | | | Lag | Lag | |
| Lead-Lag Optimize? | | | | Yes | | | | | | Yes | Yes | |
| Vehicle Extension (s) | | 3.0 | 3.0 | 3.0 | | | | | | 3.0 | 3.0 | |
| Recall Mode | | C-Max | C-Max | None | | | | | | None | None | |
| Walk Time (s) | | 4.0 | 4.0 | | | | | | | 4.0 | 4.0 | |
| Flash Don't Walk (s) | | 15.0 | 15.0 | | | | | | | 35.0 | 35.0 | |
| Pedestrian Calls (#/hr) | | 0 | 0 | | | | | | | 0 | 0 | |
| Act Effct Green (s) | | 27.9 | 27.9 | 6.0 | 39.9 | | | | | 66.1 | 66.1 | |
| Actuated g/C Ratio | | 0.23 | 0.23 | 0.05 | 0.33 | | | | | 0.55 | 0.55 | |
| v/c Ratio | | 0.66 | 0.51 | 0.40 | 0.50 | | | | | 0.38 | 0.37 | |
| Control Delay (s/veh) | | 39.0 | 9.4 | 55.3 | 28.5 | | | | | 16.3 | 13.2 | |
| Queue Delay | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | |
| Total Delay (s/veh) | | 39.0 | 9.4 | 55.3 | 28.5 | | | | | 16.3 | 13.2 | |
| LOS | | D | A | E | C | | | | | B | B | |
| Approach Delay (s/veh) | | 31.9 | | | 31.3 | | | | | | 14.3 | |
| Approach LOS | | C | | | C | | | | | | B | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 120 | | | |
| Actuated Cycle Length: 120 | | | |
| Offset: 0 (0%), Referenced to phase 2:EBWB and 6:, Start of Yellow | | | |
| Natural Cycle: 95 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.91 | | | |
| Intersection Signal Delay (s/veh): 25.9 | | Intersection LOS: C | |
| Intersection Capacity Utilization 89.3% | | ICU Level of Service E | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 11: SR24 Eastbound Ramps & Williams Field Road





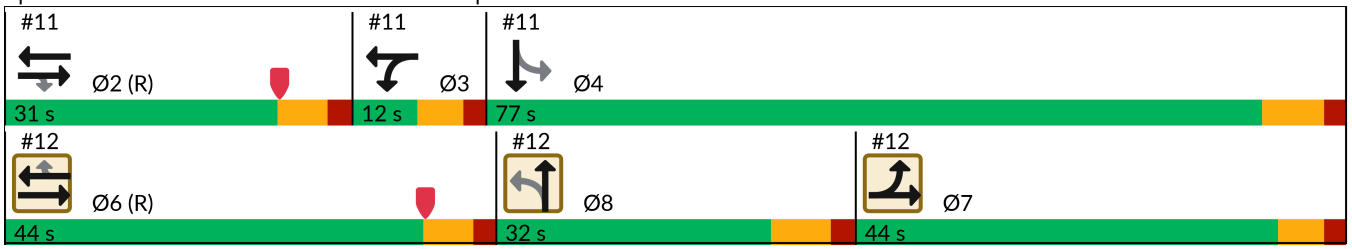
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 563 | 893 | 0 | 0 | 384 | 719 | 218 | 0 | 13 | 0 | 0 | 0 |
| Future Volume (vph) | 563 | 893 | 0 | 0 | 384 | 719 | 218 | 0 | 13 | 0 | 0 | 0 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 290 | | 0 | 365 | | 300 | 375 | | 375 | 0 | | 0 |
| Storage Lanes | 0 | | 0 | 2 | | 1 | 1 | | 1 | 0 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 0.97 | 0.95 | 1.00 | 1.00 | 0.86 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 |
| Frt | | | | | | 0.850 | | 0.850 | | | | |
| Flt Protected | 0.950 | | | | | | 0.950 | | | | | |
| Satd. Flow (prot) | 3433 | 3539 | 0 | 0 | 6408 | 1583 | 1770 | 3008 | 0 | 0 | 0 | 0 |
| Flt Permitted | 0.950 | | | | | | 0.950 | | | | | |
| Satd. Flow (perm) | 3433 | 3539 | 0 | 0 | 6408 | 1583 | 1770 | 3008 | 0 | 0 | 0 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | | | | 488 | | 167 | | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 481 | | | 694 | | | 897 | | | 1176 | |
| Travel Time (s) | | 10.9 | | | 15.8 | | | 20.4 | | | 26.7 | |
| 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 |
| Adj. Flow (vph) | 612 | 971 | 0 | 0 | 417 | 782 | 237 | 0 | 14 | 0 | 0 | 0 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 612 | 971 | 0 | 0 | 417 | 782 | 237 | 14 | 0 | 0 | 0 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 24 | | | 24 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | | 2 | 1 | 1 | 2 | | | | |
| Detector Template | Left | Thru | | | Thru | Right | Left | Thru | | | | |
| Leading Detector (ft) | 20 | 100 | | | 100 | 20 | 20 | 100 | | | | |
| Trailing Detector (ft) | 0 | 0 | | | 0 | 0 | 0 | 0 | | | | |
| Detector 1 Position(ft) | 0 | 0 | | | 0 | 0 | 0 | 0 | | | | |
| Detector 1 Size(ft) | 20 | 6 | | | 6 | 20 | 20 | 6 | | | | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | | | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | | |
| Turn Type | Prot | NA | | | NA | Perm | Perm | NA | | | | |
| Protected Phases | 7 | 6 7 | | | 6 | | | 8 | | | | |
| Permitted Phases | | | | | | 6 | 8 | | | | | |

| Lane Group | Ø2 | Ø3 | Ø4 |
|---|---|---|---|
| Lane Configurations | | | |
| Traffic Volume (vph) | | | |
| Future Volume (vph) | | | |
| Ideal Flow (vphpl) | | | |
| Storage Length (ft) | | | |
| Storage Lanes | | | |
| Taper Length (ft) | | | |
| Lane Util. Factor | | | |
| Frt | | | |
| Flt Protected | | | |
| Satd. Flow (prot) | | | |
| Flt Permitted | | | |
| Satd. Flow (perm) | | | |
| Right Turn on Red | | | |
| Satd. Flow (RTOR) | | | |
| Link Speed (mph) | | | |
| Link Distance (ft) | | | |
| Travel Time (s) | | | |
| Peak Hour Factor | | | |
| Adj. Flow (vph) | | | |
| Shared Lane Traffic (%) | | | |
| Lane Group Flow (vph) | | | |
| Enter Blocked Intersection | | | |
| Lane Alignment | | | |
| Median Width(ft) | | | |
| Link Offset(ft) | | | |
| Crosswalk Width(ft) | | | |
| Two way Left Turn Lane | | | |
| Headway Factor | | | |
| Turning Speed (mph) | | | |
| Number of Detectors | | | |
| Detector Template | | | |
| Leading Detector (ft) | | | |
| Trailing Detector (ft) | | | |
| Detector 1 Position(ft) | | | |
| Detector 1 Size(ft) | | | |
| Detector 1 Type | | | |
| Detector 1 Channel | | | |
| Detector 1 Extend (s) | | | |
| Detector 1 Queue (s) | | | |
| Detector 1 Delay (s) | | | |
| Detector 2 Position(ft) | | | |
| Detector 2 Size(ft) | | | |
| Detector 2 Type | | | |
| Detector 2 Channel | | | |
| Detector 2 Extend (s) | | | |
| Turn Type | | | |
| Protected Phases | 2 | 3 | 4 |
| Permitted Phases | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | 7 | 6 7 | | | 6 | 6 | 8 | 8 | | | | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | | | | 15.0 | 15.0 | 10.0 | 10.0 | | | | |
| Minimum Split (s) | 11.0 | | | | 26.5 | 26.5 | 45.5 | 45.5 | | | | |
| Total Split (s) | 44.0 | | | | 44.0 | 44.0 | 32.0 | 32.0 | | | | |
| Total Split (%) | 36.7% | | | | 36.7% | 36.7% | 26.7% | 26.7% | | | | |
| Maximum Green (s) | 38.0 | | | | 37.5 | 37.5 | 24.5 | 24.5 | | | | |
| Yellow Time (s) | 4.0 | | | | 4.5 | 4.5 | 5.5 | 5.5 | | | | |
| All-Red Time (s) | 2.0 | | | | 2.0 | 2.0 | 2.0 | 2.0 | | | | |
| Lost Time Adjust (s) | 0.0 | | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Total Lost Time (s) | 6.0 | | | | 6.5 | 6.5 | 7.5 | 7.5 | | | | |
| Lead/Lag | Lag | | | | | | Lead | Lead | | | | |
| Lead-Lag Optimize? | Yes | | | | | | Yes | Yes | | | | |
| Vehicle Extension (s) | 3.0 | | | | 3.0 | 3.0 | 3.0 | 3.0 | | | | |
| Recall Mode | None | | | | C-Max | C-Max | Max | Max | | | | |
| Walk Time (s) | | | | | 4.0 | 4.0 | 4.0 | 4.0 | | | | |
| Flash Don't Walk (s) | | | | | 16.0 | 16.0 | 34.0 | 34.0 | | | | |
| Pedestrian Calls (#/hr) | | | | | 0 | 0 | 0 | 0 | | | | |
| Act Effct Green (s) | 34.6 | 81.5 | | | 40.9 | 40.9 | 24.5 | 24.5 | | | | |
| Actuated g/C Ratio | 0.29 | 0.68 | | | 0.34 | 0.34 | 0.20 | 0.20 | | | | |
| v/c Ratio | 0.62 | 0.40 | | | 0.19 | 0.91 | 0.66 | 0.02 | | | | |
| Control Delay (s/veh) | 52.3 | 5.0 | | | 29.0 | 30.3 | 53.6 | 0.1 | | | | |
| Queue Delay | 0.0 | 0.2 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Total Delay (s/veh) | 52.3 | 5.2 | | | 29.0 | 30.3 | 53.6 | 0.1 | | | | |
| LOS | D | A | | | C | C | D | A | | | | |
| Approach Delay (s/veh) | | 23.4 | | | 29.8 | | | 50.6 | | | | |
| Approach LOS | | C | | | C | | | D | | | | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 120 | | | |
| Actuated Cycle Length: 120 | | | |
| Offset: 0 (0%), Referenced to phase 2:EBWB and 6:, Start of Yellow | | | |
| Natural Cycle: 95 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.91 | | | |
| Intersection Signal Delay (s/veh): 28.2 | | Intersection LOS: C | |
| Intersection Capacity Utilization 89.3% | | ICU Level of Service E | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 12: SR24 Westbound Ramps & Williams Field Road



| Intersection | |
|---|---|
| Int Delay, s/veh | 0 |

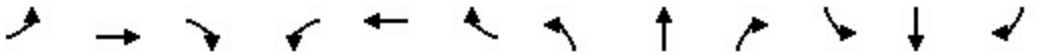
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 1900 | 0 | 0 | 2521 | 0 |
| Future Vol, veh/h | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 1900 | 0 | 0 | 2521 | 0 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | 0 | - | - | 0 | - | - | 200 | - | - | - |
| 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 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 2065 | 0 | 0 | 2740 | 0 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | - | - | 1370 | - | - | 1033 | - | 0 | 0 | - | - | 0 |
| Stage 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - | - | - | - | - | - | - |
| Critical Hdwy | - | - | 7.14 | - | - | 7.14 | - | - | - | - | - | - |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | 3.92 | - | - | 3.92 | - | - | - | - | - | - |
| Pot Cap-1 Maneuver | 0 | 0 | *507 | 0 | 0 | *613 | 0 | - | - | 0 | - | - |
| Stage 1 | 0 | 0 | - | 0 | 0 | - | 0 | - | - | 0 | - | - |
| Stage 2 | 0 | 0 | - | 0 | 0 | - | 0 | - | - | 0 | - | - |
| Platoon blocked, % | | | 0 | | | 0 | | - | - | | - | - |
| Mov Cap-1 Maneuver | - | - | *507 | - | - | *613 | - | - | - | - | - | - |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s/v | 0 | 10.91 | 0 | 0 |
| HCM LOS | A | B | | |

| Minor Lane/Major Mvmt | NBT | NBR | EBLn1 | WBLn1 | SBT | SBR |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | - | 613 | - | - |
| HCM Lane V/C Ratio | - | - | - | 0.005 | - | - |
| HCM Control Delay (s/veh) | - | - | 0 | 10.9 | - | - |
| HCM Lane LOS | - | - | A | B | - | - |
| HCM 95th %tile Q(veh) | - | - | - | 0 | - | - |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 207 | 0 | 79 | 5 | 0 | 35 | 25 | 1865 | 3 | 61 | 2401 | 59 |
| Future Volume (veh/h) | 207 | 0 | 79 | 5 | 0 | 35 | 25 | 1865 | 3 | 61 | 2401 | 59 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 225 | 0 | 86 | 5 | 0 | 38 | 27 | 2027 | 3 | 66 | 2610 | 64 |
| 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 | 493 | 502 | 426 | 252 | 0 | 436 | 106 | 2085 | 647 | 301 | 2650 | 65 |
| Arrive On Green | 0.14 | 0.00 | 0.27 | 0.01 | 0.00 | 0.14 | 0.02 | 0.41 | 0.41 | 0.18 | 0.69 | 0.69 |
| Sat Flow, veh/h | 1781 | 1870 | 1585 | 1781 | 0 | 3170 | 1781 | 5106 | 1585 | 1781 | 5127 | 125 |
| Grp Volume(v), veh/h | 225 | 0 | 86 | 5 | 0 | 38 | 27 | 2027 | 3 | 66 | 1728 | 946 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1870 | 1585 | 1781 | 0 | 1585 | 1781 | 1702 | 1585 | 1781 | 1702 | 1848 |
| Q Serve(g_s), s | 12.3 | 0.0 | 5.0 | 0.3 | 0.0 | 1.3 | 1.0 | 46.7 | 0.1 | 2.0 | 58.6 | 60.1 |
| Cycle Q Clear(g_c), s | 12.3 | 0.0 | 5.0 | 0.3 | 0.0 | 1.3 | 1.0 | 46.7 | 0.1 | 2.0 | 58.6 | 60.1 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.07 |
| Lane Grp Cap(c), veh/h | 493 | 502 | 426 | 252 | 0 | 436 | 106 | 2085 | 647 | 301 | 1760 | 955 |
| V/C Ratio(X) | 0.46 | 0.00 | 0.20 | 0.02 | 0.00 | 0.09 | 0.26 | 0.97 | 0.00 | 0.22 | 0.98 | 0.99 |
| Avail Cap(c_a), veh/h | 493 | 502 | 426 | 337 | 0 | 436 | 225 | 2085 | 647 | 301 | 1760 | 955 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.33 | 1.33 | 1.33 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 34.5 | 0.0 | 33.9 | 44.1 | 0.0 | 45.2 | 29.5 | 34.8 | 21.0 | 21.7 | 18.2 | 18.5 |
| Incr Delay (d2), s/veh | 3.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.4 | 1.3 | 14.2 | 0.0 | 1.7 | 17.6 | 26.9 |
| 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(95%),veh/ln | 9.7 | 0.0 | 3.6 | 0.2 | 0.0 | 0.9 | 0.9 | 29.2 | 0.1 | 1.6 | 29.5 | 35.1 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 37.5 | 0.0 | 34.2 | 44.1 | 0.0 | 45.6 | 30.8 | 49.0 | 21.1 | 23.4 | 35.8 | 45.3 |
| LnGrp LOS | D | | C | D | | D | C | D | C | C | D | D |
| Approach Vol, veh/h | | 311 | | | 43 | | | 2057 | | | 2740 | |
| Approach Delay, s/veh | | 36.6 | | | 45.4 | | | 48.7 | | | 38.8 | |
| Approach LOS | | D | | | D | | | D | | | D | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 6.3 | 38.7 | 7.0 | 68.0 | 22.0 | 23.0 | 20.0 | 55.0 |
| Change Period (Y+Rc), s | 5.5 | 6.5 | 4.0 | 6.0 | 5.5 | 6.5 | 4.0 | 6.0 |
| Max Green Setting (Gmax), s | 6.5 | 26.5 | 11.0 | 54.0 | 16.5 | 16.5 | 16.0 | 49.0 |
| Max Q Clear Time (g_c+I1), s | 2.3 | 7.0 | 3.0 | 62.1 | 14.3 | 3.3 | 4.0 | 48.7 |
| Green Ext Time (p_c), s | 0.0 | 0.2 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 42.7 |
| HCM 7th LOS | D |

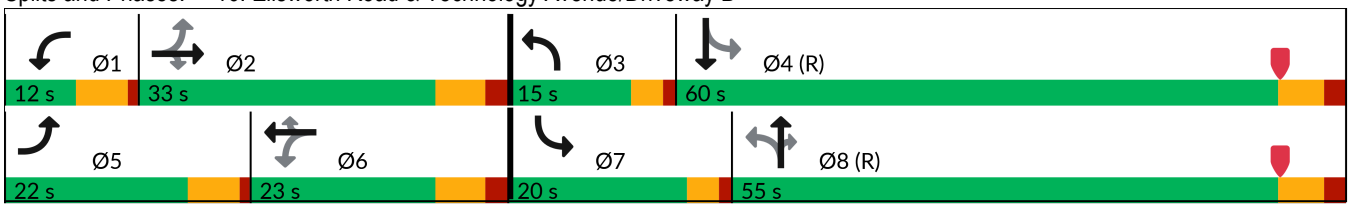
**Notes**

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | WBL | EBTL | NBL | SBTL | EBL | WBTL | SBL | NBTL |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | None | None | None | C-Max | Max | Max | Max | C-Max |
| Maximum Split (s) | 12 | 33 | 15 | 60 | 22 | 23 | 20 | 55 |
| Maximum Split (%) | 10.0% | 27.5% | 12.5% | 50.0% | 18.3% | 19.2% | 16.7% | 45.8% |
| Minimum Split (s) | 10.5 | 24.5 | 9.5 | 24 | 23.5 | 24.5 | 9.5 | 24 |
| Yellow Time (s) | 4.5 | 4.5 | 3 | 4 | 4.5 | 4.5 | 3 | 4 |
| All-Red Time (s) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| Minimum Initial (s) | 5 | 10 | 5 | 15 | 5 | 10 | 5 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 7 | | 7 | | 7 | | 7 |
| Flash Don't Walk (s) | | 11 | | 11 | | 11 | | 11 |
| Dual Entry | No | Yes | No | Yes | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 60 | 72 | 105 | 0 | 60 | 82 | 105 | 5 |
| End Time (s) | 72 | 105 | 0 | 60 | 82 | 105 | 5 | 60 |
| Yield/Force Off (s) | 66.5 | 98.5 | 116 | 54 | 76.5 | 98.5 | 1 | 54 |
| Yield/Force Off 170(s) | 66.5 | 87.5 | 116 | 43 | 76.5 | 87.5 | 1 | 43 |
| Local Start Time (s) | 6 | 18 | 51 | 66 | 6 | 28 | 51 | 71 |
| Local Yield (s) | 12.5 | 44.5 | 62 | 0 | 22.5 | 44.5 | 67 | 0 |
| Local Yield 170(s) | 12.5 | 33.5 | 62 | 109 | 22.5 | 33.5 | 67 | 109 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 125 |
| Offset: 54 (45%), Referenced to phase 4:SBTL and 8:NBTL, Start of Yellow | |

Splits and Phases: 16: Ellsworth Road & Technology Avenue/Driveway B



| Intersection | |
|---|---|
| Int Delay, s/veh | 0 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 0 | 6 | 1887 | 1 | 0 | 2485 |
| Future Vol, veh/h | 0 | 6 | 1887 | 1 | 0 | 2485 |
| 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 | - | 100 | - | - |
| 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 | 7 | 2051 | 1 | 0 | 2701 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | - | 1026 | 0 | 0 | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | 7.14 | - | - | - | - |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | 3.92 | - | - | - | - |
| Pot Cap-1 Maneuver | 0 | *613 | - | - | 0 | - |
| Stage 1 | 0 | - | - | - | 0 | - |
| Stage 2 | 0 | - | - | - | 0 | - |
| Platoon blocked, % | | 0 | - | - | | - |
| Mov Cap-1 Maneuver | - | *613 | - | - | - | - |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 10.94 | 0 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | SBT |
|---|---|---|---|---|
| Capacity (veh/h) | - | - | 613 | - |
| HCM Lane V/C Ratio | - | - | 0.011 | - |
| HCM Control Delay (s/veh) | - | - | 10.9 | - |
| HCM Lane LOS | - | - | B | - |
| HCM 95th %tile Q(veh) | - | - | 0 | - |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.2 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 0 | 16 | 1873 | 1 | 33 | 2451 |
| Future Vol, veh/h | 0 | 16 | 1873 | 1 | 33 | 2451 |
| 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 | 200 | - | 200 | 200 | - |
| 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 | 17 | 2036 | 1 | 36 | 2664 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 3173 | 1018 | 0 | 0 | 2037 | 0 |
| Stage 1 | 2036 | - | - | - | - | - |
| Stage 2 | 1137 | - | - | - | - | - |
| Critical Hdwy | 5.74 | 7.14 | - | - | 5.34 | - |
| Critical Hdwy Stg 1 | 6.64 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.04 | - | - | - | - | - |
| Follow-up Hdwy | 3.82 | 3.92 | - | - | 3.12 | - |
| Pot Cap-1 Maneuver | *140 | *613 | - | - | 323 | - |
| Stage 1 | *211 | - | - | - | - | - |
| Stage 2 | *536 | - | - | - | - | - |
| Platoon blocked, % | 1 | 0 | - | - | 0 | - |
| Mov Cap-1 Maneuver | *125 | *613 | - | - | 323 | - |
| Mov Cap-2 Maneuver | *125 | - | - | - | - | - |
| Stage 1 | *211 | - | - | - | - | - |
| Stage 2 | *476 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 11.05 | 0 | 0.23 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | WBLn2 | SBL | SBT |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | - | 613 | 323 | - |
| HCM Lane V/C Ratio | - | - | - | 0.028 | 0.111 | - |
| HCM Control Delay (s/veh) | - | - | 0 | 11 | 17.5 | - |
| HCM Lane LOS | - | - | A | B | C | - |
| HCM 95th %tile Q(veh) | - | - | - | 0.1 | 0.4 | - |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.5 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 0 | 0 | 75 | 0 | 0 | 51 | 0 | 1814 | 34 | 40 | 2357 | 54 |
| Future Vol, veh/h | 0 | 0 | 75 | 0 | 0 | 51 | 0 | 1814 | 34 | 40 | 2357 | 54 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | 0 | - | - | 0 | - | - | 200 | 150 | - | - |
| 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 | 0 | 0 | 82 | 0 | 0 | 55 | 0 | 1972 | 37 | 43 | 2562 | 59 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | - | - | 1310 | - | - | 986 | - | 0 | 0 | 2009 | 0 | 0 |
| Stage 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - | - | - | - | - | - | - |
| Critical Hdwy | - | - | 7.14 | - | - | 7.14 | - | - | - | 5.34 | - | - |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | 3.92 | - | - | 3.92 | - | - | - | 3.12 | - | - |
| Pot Cap-1 Maneuver | 0 | 0 | *537 | 0 | 0 | *628 | 0 | - | - | 314 | - | - |
| Stage 1 | 0 | 0 | - | 0 | 0 | - | 0 | - | - | - | - | - |
| Stage 2 | 0 | 0 | - | 0 | 0 | - | 0 | - | - | - | - | - |
| Platoon blocked, % | | | 0 | | | 0 | | - | - | 0 | - | - |
| Mov Cap-1 Maneuver | - | - | *537 | - | - | *628 | - | - | - | 314 | - | - |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s/v | 12.89 | 11.29 | 0 | 0.3 |
| HCM LOS | B | B | | |

| Minor Lane/Major Mvmt | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 537 | 628 | 314 | - | - |
| HCM Lane V/C Ratio | - | - | 0.152 | 0.088 | 0.139 | - | - |
| HCM Control Delay (s/veh) | - | - | 12.9 | 11.3 | 18.3 | - | - |
| HCM Lane LOS | - | - | B | B | C | - | - |
| HCM 95th %tile Q(veh) | - | - | 0.5 | 0.3 | 0.5 | - | - |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.3 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | ↑↑↑ | ↑↑↑ | ↱ | | ↱ |
| Traffic Vol, veh/h | 0 | 1098 | 1020 | 33 | 0 | 67 |
| Future Vol, veh/h | 0 | 1098 | 1020 | 33 | 0 | 67 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | 200 | - | 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 | 1193 | 1109 | 36 | 0 | 73 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | - | 0 | - | 0 | - | 554 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | - | - | - | - | 7.14 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | - | - | - | 3.92 |
| Pot Cap-1 Maneuver | 0 | - | - | - | 0 | *763 |
| Stage 1 | 0 | - | - | - | 0 | - |
| Stage 2 | 0 | - | - | - | 0 | - |
| Platoon blocked, % | | - | - | - | | 0 |
| Mov Cap-1 Maneuver | - | - | - | - | - | *763 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 0 | 0 | 10.21 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|
| Capacity (veh/h) | - | - | - | 763 |
| HCM Lane V/C Ratio | - | - | - | 0.095 |
| HCM Control Delay (s/veh) | - | - | - | 10.2 |
| HCM Lane LOS | - | - | - | B |
| HCM 95th %tile Q(veh) | - | - | - | 0.3 |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.3 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | ↑↑↑ | ↑↑↑ | ↱ | | ↱ |
| Traffic Vol, veh/h | 0 | 1098 | 991 | 34 | 0 | 62 |
| Future Vol, veh/h | 0 | 1098 | 991 | 34 | 0 | 62 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | 200 | - | 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 | 1193 | 1077 | 37 | 0 | 67 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | - | 0 | - | 0 | - | 539 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | - | - | - | - | 7.14 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | - | - | - | 3.92 |
| Pot Cap-1 Maneuver | 0 | - | - | - | 0 | *763 |
| Stage 1 | 0 | - | - | - | 0 | - |
| Stage 2 | 0 | - | - | - | 0 | - |
| Platoon blocked, % | | - | - | - | | 0 |
| Mov Cap-1 Maneuver | - | - | - | - | - | *763 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 0 | 0 | 10.17 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|
| Capacity (veh/h) | - | - | - | 763 |
| HCM Lane V/C Ratio | - | - | - | 0.088 |
| HCM Control Delay (s/veh) | - | - | - | 10.2 |
| HCM Lane LOS | - | - | - | B |
| HCM 95th %tile Q(veh) | - | - | - | 0.3 |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Intersection | |
|---|---|
| Int Delay, s/veh | 1.1 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 114 | 872 | 680 | 46 | 0 | 69 |
| Future Vol, veh/h | 114 | 872 | 680 | 46 | 0 | 69 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 100 | - | - | 200 | - | 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 | 124 | 948 | 739 | 50 | 0 | 75 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 789 | 0 | - | 0 | - | 370 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | 5.34 | - | - | - | - | 7.14 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | 3.12 | - | - | - | - | 3.92 |
| Pot Cap-1 Maneuver | 740 | - | - | - | 0 | *812 |
| Stage 1 | - | - | - | - | 0 | - |
| Stage 2 | - | - | - | - | 0 | - |
| Platoon blocked, % | 0 | - | - | - | | 0 |
| Mov Cap-1 Maneuver | 740 | - | - | - | - | *812 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 1.25 | 0 | 9.88 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 740 | - | - | - | 812 |
| HCM Lane V/C Ratio | 0.168 | - | - | - | 0.092 |
| HCM Control Delay (s/veh) | 10.8 | - | - | - | 9.9 |
| HCM Lane LOS | B | - | - | - | A |
| HCM 95th %tile Q(veh) | 0.6 | - | - | - | 0.3 |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.3 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | ↑↑↑ | ↑↑↑ | ↱ | | ↱ |
| Traffic Vol, veh/h | 0 | 912 | 675 | 74 | 0 | 50 |
| Future Vol, veh/h | 0 | 912 | 675 | 74 | 0 | 50 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | 0 | - | 0 |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 991 | 734 | 80 | 0 | 54 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | - | 0 | - | 0 | - | 367 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | - | - | - | - | 7.14 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | - | - | - | 3.92 |
| Pot Cap-1 Maneuver | 0 | - | - | - | 0 | *812 |
| Stage 1 | 0 | - | - | - | 0 | - |
| Stage 2 | 0 | - | - | - | 0 | - |
| Platoon blocked, % | | - | - | - | | 0 |
| Mov Cap-1 Maneuver | - | - | - | - | - | *812 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 0 | 0 | 9.75 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|
| Capacity (veh/h) | - | - | - | 812 |
| HCM Lane V/C Ratio | - | - | - | 0.067 |
| HCM Control Delay (s/veh) | - | - | - | 9.8 |
| HCM Lane LOS | - | - | - | A |
| HCM 95th %tile Q(veh) | - | - | - | 0.2 |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.9 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 84 | 828 | 686 | 97 | 0 | 62 |
| Future Vol, veh/h | 84 | 828 | 686 | 97 | 0 | 62 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 200 | - | - | 200 | - | 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 | 91 | 900 | 746 | 105 | 0 | 67 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 851 | 0 | - | 0 | - | 373 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | 5.34 | - | - | - | - | 7.14 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | 3.12 | - | - | - | - | 3.92 |
| Pot Cap-1 Maneuver | 670 | - | - | - | 0 | *818 |
| Stage 1 | - | - | - | - | 0 | - |
| Stage 2 | - | - | - | - | 0 | - |
| Platoon blocked, % | 0 | - | - | - | | 0 |
| Mov Cap-1 Maneuver | 670 | - | - | - | - | *818 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 1.03 | 0 | 9.8 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 670 | - | - | - | 818 |
| HCM Lane V/C Ratio | 0.136 | - | - | - | 0.082 |
| HCM Control Delay (s/veh) | 11.2 | - | - | - | 9.8 |
| HCM Lane LOS | B | - | - | - | A |
| HCM 95th %tile Q(veh) | 0.5 | - | - | - | 0.3 |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Intersection | |
|---|---|
| Int Delay, s/veh | 1.4 |

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | ↑↑↑ | ↱ | | ↑↑↑ | | ↱ |
| Traffic Vol, veh/h | 624 | 322 | 0 | 782 | 0 | 238 |
| Future Vol, veh/h | 624 | 322 | 0 | 782 | 0 | 238 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 0 | - | - | - | 0 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 678 | 350 | 0 | 850 | 0 | 259 |

| Major/Minor | Major1 | | Major2 | | Minor1 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 0 | 0 | - | - | - | 339 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | - | - | - | - | 7.14 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | - | - | - | 3.92 |
| Pot Cap-1 Maneuver | - | - | 0 | - | 0 | *824 |
| Stage 1 | - | - | 0 | - | 0 | - |
| Stage 2 | - | - | 0 | - | 0 | - |
| Platoon blocked, % | - | - | | - | | 0 |
| Mov Cap-1 Maneuver | - | - | - | - | - | *824 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | WB | NB |
|---|---|---|---|
| HCM Control Delay, s/v | 0 | 0 | 11.36 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBT |
|---|---|---|---|---|
| Capacity (veh/h) | 824 | - | - | - |
| HCM Lane V/C Ratio | 0.314 | - | - | - |
| HCM Control Delay (s/veh) | 11.4 | - | - | - |
| HCM Lane LOS | B | - | - | - |
| HCM 95th %tile Q(veh) | 1.3 | - | - | - |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

# Appendix L – Year 2044 No Build Capacity Analysis

L

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 190 | 10 | 1330 | 56 | 1 | 930 |
| Future Volume (veh/h) | 190 | 10 | 1330 | 56 | 1 | 930 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 207 | 11 | 1446 | 61 | 1 | 1011 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 265 | 236 | 3579 | 1111 | 364 | 3579 |
| Arrive On Green | 0.15 | 0.15 | 1.00 | 1.00 | 0.70 | 0.70 |
| Sat Flow, veh/h | 1781 | 1585 | 5274 | 1585 | 348 | 5274 |
| Grp Volume(v), veh/h | 207 | 11 | 1446 | 61 | 1 | 1011 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1585 | 1702 | 1585 | 348 | 1702 |
| Q Serve(g_s), s | 6.7 | 0.4 | 0.0 | 0.0 | 0.1 | 4.4 |
| Cycle Q Clear(g_c), s | 6.7 | 0.4 | 0.0 | 0.0 | 0.1 | 4.4 |
| Prop In Lane | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Lane Grp Cap(c), veh/h | 265 | 236 | 3579 | 1111 | 364 | 3579 |
| V/C Ratio(X) | 0.78 | 0.05 | 0.40 | 0.05 | 0.00 | 0.28 |
| Avail Cap(c_a), veh/h | 609 | 542 | 3579 | 1111 | 364 | 3579 |
| HCM Platoon Ratio | 1.00 | 1.00 | 2.00 | 2.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 0.86 | 0.86 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 24.6 | 21.9 | 0.0 | 0.0 | 2.7 | 3.3 |
| Incr Delay (d2), s/veh | 4.9 | 0.1 | 0.3 | 0.1 | 0.0 | 0.2 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 5.4 | 0.2 | 0.2 | 0.0 | 0.0 | 1.7 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 29.5 | 22.0 | 0.3 | 0.1 | 2.7 | 3.5 |
| LnGrp LOS | C | C | A | A | A | A |
| Approach Vol, veh/h | 218 | | 1507 | | | 1012 |
| Approach Delay, s/veh | 29.1 | | 0.3 | | | 3.5 |
| Approach LOS | C | | A | | | A |

| Timer - Assigned Phs | 2 | | | 6 | 8 |
|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 46.6 | | | 46.6 | 13.4 |
| Change Period (Y+Rc), s | 4.5 | | | 4.5 | 4.5 |
| Max Green Setting (Gmax), s | 30.5 | | | 30.5 | 20.5 |
| Max Q Clear Time (g_c+I1), s | 2.0 | | | 6.4 | 8.7 |
| Green Ext Time (p_c), s | 13.3 | | | 7.9 | 0.5 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 3.8 |
| HCM 7th LOS | A |

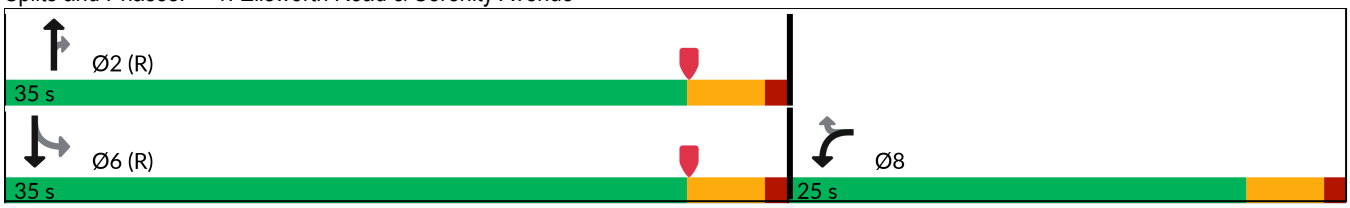
**Notes**

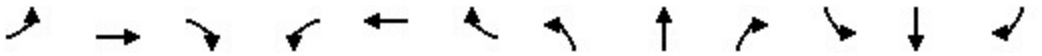
User approved pedestrian interval to be less than phase max green.

| Phase Number | 2 | 6 | 8 |
|---|---|---|---|
| Movement | NBT | SBTL | WBL |
| Lead/Lag | | | |
| Lead-Lag Optimize | | | |
| Recall Mode | C-Max | C-Max | None |
| Maximum Split (s) | 35 | 35 | 25 |
| Maximum Split (%) | 58.3% | 58.3% | 41.7% |
| Minimum Split (s) | 22.5 | 22.5 | 22.5 |
| Yellow Time (s) | 3.5 | 3.5 | 3.5 |
| All-Red Time (s) | 1 | 1 | 1 |
| Minimum Initial (s) | 5 | 5 | 5 |
| Vehicle Extension (s) | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 |
| Walk Time (s) | 7 | 7 | 7 |
| Flash Don't Walk (s) | 11 | 11 | 11 |
| Dual Entry | Yes | Yes | Yes |
| Inhibit Max | Yes | Yes | Yes |
| Start Time (s) | 29.5 | 29.5 | 4.5 |
| End Time (s) | 4.5 | 4.5 | 29.5 |
| Yield/Force Off (s) | 0 | 0 | 25 |
| Yield/Force Off 170(s) | 49 | 49 | 14 |
| Local Start Time (s) | 29.5 | 29.5 | 4.5 |
| Local Yield (s) | 0 | 0 | 25 |
| Local Yield 170(s) | 49 | 49 | 14 |

| Intersection Summary | |
|---|---|
| Cycle Length | 60 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 45 |
| Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Yellow | |

Splits and Phases: 1: Ellsworth Road & Serenity Avenue





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 194 | 90 | 74 | 447 | 210 | 192 | 580 | 992 | 237 | 79 | 449 | 591 |
| Future Volume (veh/h) | 194 | 90 | 74 | 447 | 210 | 192 | 580 | 992 | 237 | 79 | 449 | 591 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 211 | 98 | 80 | 486 | 228 | 209 | 630 | 1078 | 258 | 86 | 488 | 642 |
| 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 | 432 | 839 | 260 | 570 | 1042 | 324 | 893 | 2203 | 945 | 136 | 1128 | 548 |
| Arrive On Green | 0.13 | 0.16 | 0.16 | 0.16 | 0.20 | 0.20 | 0.09 | 0.14 | 0.14 | 0.07 | 0.37 | 0.37 |
| Sat Flow, veh/h | 3456 | 5106 | 1585 | 3456 | 5106 | 1585 | 3456 | 5106 | 1585 | 3456 | 5106 | 1585 |
| Grp Volume(v), veh/h | 211 | 98 | 80 | 486 | 228 | 209 | 630 | 1078 | 258 | 86 | 488 | 642 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1702 | 1585 | 1728 | 1702 | 1585 | 1728 | 1702 | 1585 | 1728 | 1702 | 1585 |
| Q Serve(g_s), s | 6.8 | 2.0 | 5.3 | 16.4 | 4.5 | 14.5 | 21.3 | 23.4 | 12.6 | 2.9 | 8.6 | 26.5 |
| Cycle Q Clear(g_c), s | 6.8 | 2.0 | 5.3 | 16.4 | 4.5 | 14.5 | 21.3 | 23.4 | 12.6 | 2.9 | 8.6 | 26.5 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 432 | 839 | 260 | 570 | 1042 | 324 | 893 | 2203 | 945 | 136 | 1128 | 548 |
| V/C Ratio(X) | 0.49 | 0.12 | 0.31 | 0.85 | 0.22 | 0.65 | 0.71 | 0.49 | 0.27 | 0.63 | 0.43 | 1.17 |
| Avail Cap(c_a), veh/h | 432 | 839 | 260 | 835 | 1042 | 324 | 893 | 2203 | 945 | 288 | 1128 | 548 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.33 | 0.33 | 0.33 | 1.67 | 1.67 | 1.67 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.67 | 0.67 | 0.67 | 0.94 | 0.94 | 0.94 |
| Uniform Delay (d), s/veh | 48.9 | 42.7 | 44.1 | 48.7 | 39.8 | 43.8 | 50.4 | 39.3 | 18.6 | 55.2 | 32.2 | 33.2 |
| Incr Delay (d2), s/veh | 3.9 | 0.3 | 3.0 | 5.8 | 0.5 | 9.6 | 3.2 | 0.5 | 0.5 | 4.5 | 1.1 | 94.3 |
| 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(95%),veh/ln | 5.7 | 1.5 | 4.2 | 12.0 | 3.5 | 10.7 | 14.6 | 15.2 | 8.5 | 2.4 | 6.1 | 43.3 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 52.8 | 43.0 | 47.2 | 54.5 | 40.3 | 53.3 | 53.6 | 39.8 | 19.1 | 59.7 | 33.4 | 127.5 |
| LnGrp LOS | D | D | D | D | D | D | D | D | B | E | C | F |
| Approach Vol, veh/h | | 389 | | | 923 | | | 1966 | | | 1216 | |
| Approach Delay, s/veh | | 49.2 | | | 50.7 | | | 41.5 | | | 84.9 | |
| Approach LOS | | D | | | D | | | D | | | F | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 20.0 | 31.0 | 35.0 | 34.0 | 24.8 | 26.2 | 9.7 | 59.3 |
| Change Period (Y+Rc), s | 5.0 | 6.5 | 4.0 | 7.5 | 5.0 | 6.5 | 5.0 | 7.5 |
| Max Green Setting (Gmax), s | 15.0 | 24.5 | 31.0 | 26.5 | 29.0 | 10.5 | 10.0 | 46.5 |
| Max Q Clear Time (g_c+I1), s | 8.8 | 16.5 | 23.3 | 28.5 | 18.4 | 7.3 | 4.9 | 25.4 |
| Green Ext Time (p_c), s | 0.3 | 1.4 | 1.6 | 0.0 | 1.4 | 0.2 | 0.1 | 9.1 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 55.8 |
| HCM 7th LOS | E |

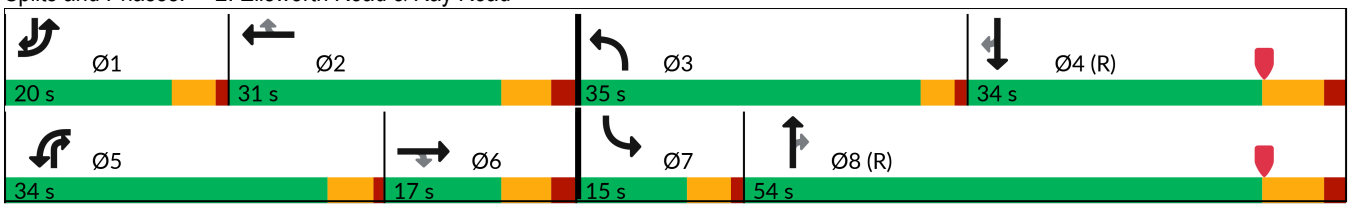
**Notes**

User approved pedestrian interval to be less than phase max green.

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | EBL | WBT | NBL | SBT | WBL | EBT | SBL | NBT |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | Max | Max | Max | C-Max | None | Max | None | C-Max |
| Maximum Split (s) | 20 | 31 | 35 | 34 | 34 | 17 | 15 | 54 |
| Maximum Split (%) | 16.7% | 25.8% | 29.2% | 28.3% | 28.3% | 14.2% | 12.5% | 45.0% |
| Minimum Split (s) | 10 | 34.5 | 12 | 37.5 | 10 | 35.5 | 12 | 37.5 |
| Yellow Time (s) | 4 | 4.5 | 3 | 5.5 | 4 | 4.5 | 4 | 5.5 |
| All-Red Time (s) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| Minimum Initial (s) | 5 | 10 | 5 | 15 | 5 | 10 | 5 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 4 | | 4 | | 4 | | 4 |
| Flash Don't Walk (s) | | 22 | | 26 | | 23 | | 26 |
| Dual Entry | No | Yes | No | Yes | No | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 109.8 | 9.8 | 40.8 | 75.8 | 109.8 | 23.8 | 40.8 | 55.8 |
| End Time (s) | 9.8 | 40.8 | 75.8 | 109.8 | 23.8 | 40.8 | 55.8 | 109.8 |
| Yield/Force Off (s) | 4.8 | 34.3 | 71.8 | 102.3 | 18.8 | 34.3 | 50.8 | 102.3 |
| Yield/Force Off 170(s) | 4.8 | 12.3 | 71.8 | 76.3 | 18.8 | 11.3 | 50.8 | 76.3 |
| Local Start Time (s) | 7.5 | 27.5 | 58.5 | 93.5 | 7.5 | 41.5 | 58.5 | 73.5 |
| Local Yield (s) | 22.5 | 52 | 89.5 | 0 | 36.5 | 52 | 68.5 | 0 |
| Local Yield 170(s) | 22.5 | 30 | 89.5 | 94 | 36.5 | 29 | 68.5 | 94 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 115 |
| Offset: 102.3 (85%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow | |

Splits and Phases: 2: Ellsworth Road & Ray Road



| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 292 | 266 | 1529 | 223 | 128 | 841 |
| Future Volume (veh/h) | 292 | 266 | 1529 | 223 | 128 | 841 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 317 | 289 | 1662 | 242 | 139 | 914 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 922 | 423 | 2319 | 720 | 432 | 3170 |
| Arrive On Green | 0.27 | 0.27 | 0.45 | 0.45 | 0.04 | 0.20 |
| Sat Flow, veh/h | 3456 | 1585 | 5274 | 1585 | 3456 | 5274 |
| Grp Volume(v), veh/h | 317 | 289 | 1662 | 242 | 139 | 914 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1585 | 1702 | 1585 | 1728 | 1702 |
| Q Serve(g_s), s | 8.9 | 19.6 | 31.6 | 11.8 | 4.7 | 18.2 |
| Cycle Q Clear(g_c), s | 8.9 | 19.6 | 31.6 | 11.8 | 4.7 | 18.2 |
| Prop In Lane | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Lane Grp Cap(c), veh/h | 922 | 423 | 2319 | 720 | 432 | 3170 |
| V/C Ratio(X) | 0.34 | 0.68 | 0.72 | 0.34 | 0.32 | 0.29 |
| Avail Cap(c_a), veh/h | 922 | 423 | 2319 | 720 | 432 | 3170 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 0.33 | 0.33 |
| Upstream Filter(I) | 1.00 | 1.00 | 0.88 | 0.88 | 0.81 | 0.81 |
| Uniform Delay (d), s/veh | 35.5 | 39.5 | 26.5 | 21.1 | 52.6 | 25.3 |
| Incr Delay (d2), s/veh | 1.0 | 8.7 | 1.7 | 1.1 | 1.6 | 0.2 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 7.0 | 13.5 | 18.5 | 7.9 | 3.8 | 12.4 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 36.5 | 48.1 | 28.2 | 22.2 | 54.2 | 25.5 |
| LnGrp LOS | D | D | C | C | D | C |
| Approach Vol, veh/h | 606 | | 1904 | | | 1053 |
| Approach Delay, s/veh | 42.1 | | 27.4 | | | 29.3 |
| Approach LOS | D | | C | | | C |

| Timer - Assigned Phs | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 38.0 | 82.0 | 20.0 | 62.0 |
| Change Period (Y+Rc), s | 6.0 | 7.5 | 5.0 | 7.5 |
| Max Green Setting (Gmax), s | 32.0 | 74.5 | 15.0 | 54.5 |
| Max Q Clear Time (g_c+I1), s | 21.6 | 20.2 | 6.7 | 33.6 |
| Green Ext Time (p_c), s | 1.0 | 1.0 | 0.1 | 3.0 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 30.5 |
| HCM 7th LOS | C |

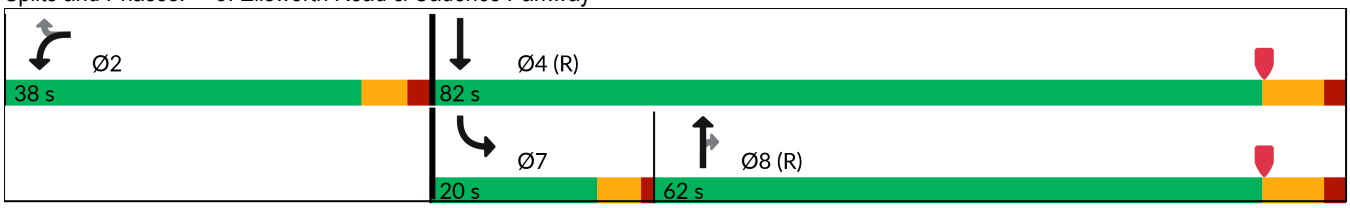
**Notes**

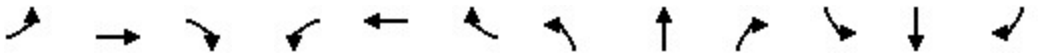
User approved pedestrian interval to be less than phase max green.

| Phase Number | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Movement | WBL | SBT | SBL | NBT |
| Lead/Lag | | | Lead | Lag |
| Lead-Lag Optimize | | | Yes | Yes |
| Recall Mode | Max | C-Max | Max | C-Max |
| Maximum Split (s) | 38 | 82 | 20 | 62 |
| Maximum Split (%) | 31.7% | 68.3% | 16.7% | 51.7% |
| Minimum Split (s) | 35 | 22.5 | 10 | 32.5 |
| Yellow Time (s) | 4 | 5.5 | 4 | 5.5 |
| All-Red Time (s) | 2 | 2 | 1 | 2 |
| Minimum Initial (s) | 10 | 15 | 5 | 15 |
| Vehicle Extension (s) | 2 | 0.2 | 2 | 0.2 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | 4 | | | 7 |
| Flash Don't Walk (s) | 25 | | | 18 |
| Dual Entry | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 67 | 105 | 105 | 5 |
| End Time (s) | 105 | 67 | 5 | 67 |
| Yield/Force Off (s) | 99 | 59.5 | 0 | 59.5 |
| Yield/Force Off 170(s) | 74 | 59.5 | 0 | 41.5 |
| Local Start Time (s) | 7.5 | 45.5 | 45.5 | 65.5 |
| Local Yield (s) | 39.5 | 0 | 60.5 | 0 |
| Local Yield 170(s) | 14.5 | 0 | 60.5 | 102 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 80 |
| Offset: 59.5 (50%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow | |

Splits and Phases: 3: Ellsworth Road & Cadence Parkway





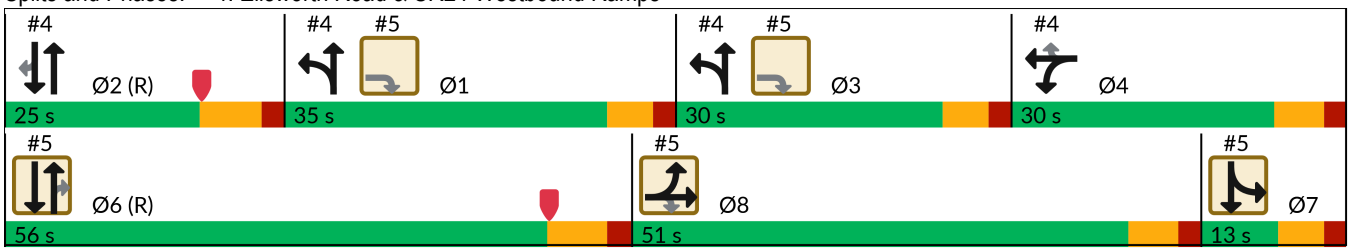
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 0 | 0 | 0 | 37 | 0 | 150 | 1536 | 1596 | 0 | 0 | 589 | 540 |
| Future Volume (vph) | 0 | 0 | 0 | 37 | 0 | 150 | 1536 | 1596 | 0 | 0 | 589 | 540 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | | 0 | 350 | | 350 | 525 | | 0 | 290 | | 285 |
| Storage Lanes | 0 | | 0 | 1 | | 1 | 0 | | 0 | 0 | | 2 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 0.91 | 0.86 | 0.91 | 0.97 | 0.91 | 1.00 | 1.00 | 0.86 | 0.88 |
| Frt | | | | | 0.857 | 0.850 | | | | | | 0.850 |
| Flt Protected | | | | 0.950 | 0.998 | | 0.950 | | | | | |
| Satd. Flow (prot) | 0 | 0 | 0 | 1610 | 2740 | 1441 | 3433 | 5085 | 0 | 0 | 6408 | 2787 |
| Flt Permitted | | | | 0.950 | 0.998 | | 0.950 | | | | | |
| Satd. Flow (perm) | 0 | 0 | 0 | 1610 | 2740 | 1441 | 3433 | 5085 | 0 | 0 | 6408 | 2787 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | | | 164 | 164 | | | | | | 519 |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 841 | | | 605 | | | 688 | | | 624 | |
| Travel Time (s) | | 19.1 | | | 13.8 | | | 15.6 | | | 14.2 | |
| 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 |
| Adj. Flow (vph) | 0 | 0 | 0 | 40 | 0 | 163 | 1670 | 1735 | 0 | 0 | 640 | 587 |
| Shared Lane Traffic (%) | | | | 10% | | 50% | | | | | | |
| Lane Group Flow (vph) | 0 | 0 | 0 | 36 | 86 | 81 | 1670 | 1735 | 0 | 0 | 640 | 587 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 24 | | | 24 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | | | | 1 | 2 | 1 | 1 | 2 | | | 2 | 1 |
| Detector Template | | | | Left | Thru | Right | Left | Thru | | | Thru | Right |
| Leading Detector (ft) | | | | 20 | 100 | 20 | 20 | 100 | | | 100 | 20 |
| Trailing Detector (ft) | | | | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 |
| Detector 1 Position(ft) | | | | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 |
| Detector 1 Size(ft) | | | | 20 | 6 | 20 | 20 | 6 | | | 6 | 20 |
| Detector 1 Type | | | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | | Cl+Ex | Cl+Ex |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Detector 1 Queue (s) | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Detector 1 Delay (s) | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Detector 2 Position(ft) | | | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | | | | Split | NA | Perm | Prot | NA | | | NA | Perm |
| Protected Phases | | | | 4 | 4 | | 1 3 | 1 2 3 | | | 2 | |
| Permitted Phases | | | | | | 4 | | | | | | 2 |

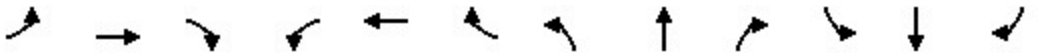
| Lane Group | Ø1 | Ø3 | Ø6 | Ø7 | Ø8 |
|---|---|---|---|---|---|
| Lane Configurations | | | | | |
| Traffic Volume (vph) | | | | | |
| Future Volume (vph) | | | | | |
| Ideal Flow (vphpl) | | | | | |
| Storage Length (ft) | | | | | |
| Storage Lanes | | | | | |
| Taper Length (ft) | | | | | |
| Lane Util. Factor | | | | | |
| Frt | | | | | |
| Flt Protected | | | | | |
| Satd. Flow (prot) | | | | | |
| Flt Permitted | | | | | |
| Satd. Flow (perm) | | | | | |
| Right Turn on Red | | | | | |
| Satd. Flow (RTOR) | | | | | |
| Link Speed (mph) | | | | | |
| Link Distance (ft) | | | | | |
| Travel Time (s) | | | | | |
| Peak Hour Factor | | | | | |
| Adj. Flow (vph) | | | | | |
| Shared Lane Traffic (%) | | | | | |
| Lane Group Flow (vph) | | | | | |
| Enter Blocked Intersection | | | | | |
| Lane Alignment | | | | | |
| Median Width(ft) | | | | | |
| Link Offset(ft) | | | | | |
| Crosswalk Width(ft) | | | | | |
| Two way Left Turn Lane | | | | | |
| Headway Factor | | | | | |
| Turning Speed (mph) | | | | | |
| Number of Detectors | | | | | |
| Detector Template | | | | | |
| Leading Detector (ft) | | | | | |
| Trailing Detector (ft) | | | | | |
| Detector 1 Position(ft) | | | | | |
| Detector 1 Size(ft) | | | | | |
| Detector 1 Type | | | | | |
| Detector 1 Channel | | | | | |
| Detector 1 Extend (s) | | | | | |
| Detector 1 Queue (s) | | | | | |
| Detector 1 Delay (s) | | | | | |
| Detector 2 Position(ft) | | | | | |
| Detector 2 Size(ft) | | | | | |
| Detector 2 Type | | | | | |
| Detector 2 Channel | | | | | |
| Detector 2 Extend (s) | | | | | |
| Turn Type | | | | | |
| Protected Phases | 1 | 3 | 6 | 7 | 8 |
| Permitted Phases | | | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | | | | 4 | 4 | 4 | 1 3 | 1 2 3 | | | 2 | 2 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | | | | 10.0 | 10.0 | 10.0 | | | | | 15.0 | 15.0 |
| Minimum Split (s) | | | | 48.5 | 48.5 | 48.5 | | | | | 25.5 | 25.5 |
| Total Split (s) | | | | 30.0 | 30.0 | 30.0 | | | | | 25.0 | 25.0 |
| Total Split (%) | | | | 25.0% | 25.0% | 25.0% | | | | | 20.8% | 20.8% |
| Maximum Green (s) | | | | 23.5 | 23.5 | 23.5 | | | | | 17.5 | 17.5 |
| Yellow Time (s) | | | | 4.5 | 4.5 | 4.5 | | | | | 5.5 | 5.5 |
| All-Red Time (s) | | | | 2.0 | 2.0 | 2.0 | | | | | 2.0 | 2.0 |
| Lost Time Adjust (s) | | | | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 |
| Total Lost Time (s) | | | | 6.5 | 6.5 | 6.5 | | | | | 7.5 | 7.5 |
| Lead/Lag | | | | Lag | Lag | Lag | | | | | Lead | Lead |
| Lead-Lag Optimize? | | | | Yes | Yes | Yes | | | | | Yes | Yes |
| Vehicle Extension (s) | | | | 4.0 | 4.0 | 4.0 | | | | | 2.0 | 2.0 |
| Recall Mode | | | | None | None | None | | | | | C-Max | C-Max |
| Walk Time (s) | | | | 4.0 | 4.0 | 4.0 | | | | | 4.0 | 4.0 |
| Flash Don't Walk (s) | | | | 38.0 | 38.0 | 38.0 | | | | | 13.0 | 13.0 |
| Pedestrian Calls (#/hr) | | | | 0 | 0 | 0 | | | | | 0 | 0 |
| Act Effct Green (s) | | | | 23.5 | 23.5 | 23.5 | 59.0 | 84.0 | | | 17.5 | 17.5 |
| Actuated g/C Ratio | | | | 0.20 | 0.20 | 0.20 | 0.49 | 0.70 | | | 0.15 | 0.15 |
| v/c Ratio | | | | 0.11 | 0.13 | 0.20 | 0.99 | 0.49 | | | 0.69 | 0.69 |
| Control Delay (s/veh) | | | | 40.9 | 0.4 | 1.1 | 27.2 | 1.0 | | | 76.2 | 33.8 |
| Queue Delay | | | | 0.0 | 0.0 | 0.0 | 38.8 | 0.0 | | | 0.0 | 0.0 |
| Total Delay (s/veh) | | | | 40.9 | 0.4 | 1.1 | 66.0 | 1.0 | | | 76.2 | 33.8 |
| LOS | | | | D | A | A | E | A | | | E | C |
| Approach Delay (s/veh) | | | | | 7.8 | | | 32.8 | | | 55.9 | |
| Approach LOS | | | | | A | | | C | | | E | |

| Intersection Summary | |
|---|---|
| Area Type: | Other |
| Cycle Length: 120 | |
| Actuated Cycle Length: 120 | |
| Offset: 0 (0%), Referenced to phase 2:NBSB and 6:, Start of Yellow | |
| Natural Cycle: 150 | |
| Control Type: Actuated-Coordinated | |
| Maximum v/c Ratio: 0.99 | |
| Intersection Signal Delay (s/veh): 37.6 | Intersection LOS: D |
| Intersection Capacity Utilization 87.7% | ICU Level of Service E |
| Analysis Period (min) 15 | |

Splits and Phases: 4: Ellsworth Road & SR24 Westbound Ramps





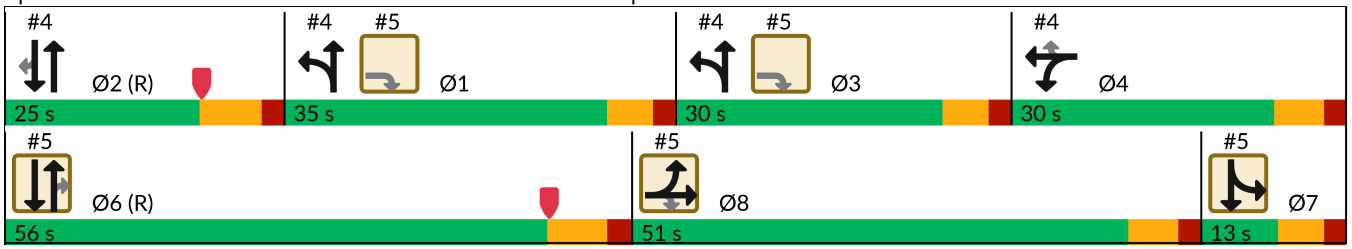
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 346 | 4 | 1601 | 0 | 0 | 0 | 0 | 2768 | 22 | 58 | 582 | 0 |
| Future Volume (vph) | 346 | 4 | 1601 | 0 | 0 | 0 | 0 | 2768 | 22 | 58 | 582 | 0 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 350 | | 350 | 0 | | 0 | 300 | | 300 | 550 | | 0 |
| Storage Lanes | 1 | | 2 | 0 | | 0 | 2 | | 1 | 0 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 0.95 | 0.95 | 0.88 | 1.00 | 1.00 | 1.00 | 1.00 | 0.81 | 1.00 | 0.97 | 0.91 | 1.00 |
| Frt | | | 0.850 | | | | | | 0.850 | | | |
| Flt Protected | 0.950 | 0.953 | | | | | | | | 0.950 | | |
| Satd. Flow (prot) | 1681 | 1686 | 2787 | 0 | 0 | 0 | 0 | 7544 | 1583 | 3433 | 5085 | 0 |
| Flt Permitted | 0.950 | 0.953 | | | | | | | | 0.950 | | |
| Satd. Flow (perm) | 1681 | 1686 | 2787 | 0 | 0 | 0 | 0 | 7544 | 1583 | 3433 | 5085 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 382 | | | | | | 145 | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 651 | | | 441 | | | 838 | | | 688 | |
| Travel Time (s) | | 14.8 | | | 10.0 | | | 19.0 | | | 15.6 | |
| 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 |
| Adj. Flow (vph) | 376 | 4 | 1740 | 0 | 0 | 0 | 0 | 3009 | 24 | 63 | 633 | 0 |
| Shared Lane Traffic (%) | 49% | | | | | | | | | | | |
| Lane Group Flow (vph) | 192 | 188 | 1740 | 0 | 0 | 0 | 0 | 3009 | 24 | 63 | 633 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 24 | | | 24 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | 1 | | | | | 2 | 1 | 1 | 2 | |
| Detector Template | Left | Thru | Right | | | | | Thru | Right | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | 20 | | | | | 100 | 20 | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | 0 | | | | | 0 | 0 | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | 0 | | | | | 0 | 0 | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | 20 | | | | | 6 | 20 | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | | | | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | | | | 0.0 | | | 0.0 | |
| Turn Type | Split | NA | custom | | | | | NA | Perm | Prot | NA | |
| Protected Phases | 8 | 8 | | | | | | 6 | | 7 | 6 7 | |
| Permitted Phases | | | 1 3 8 | | | | | | 6 | | | |

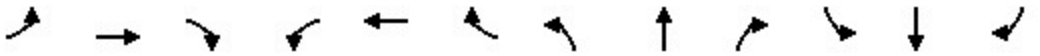
| Lane Group | Ø1 | Ø2 | Ø3 | Ø4 |
|---|---|---|---|---|
| Lane Configurations | | | | |
| Traffic Volume (vph) | | | | |
| Future Volume (vph) | | | | |
| Ideal Flow (vphpl) | | | | |
| Storage Length (ft) | | | | |
| Storage Lanes | | | | |
| Taper Length (ft) | | | | |
| Lane Util. Factor | | | | |
| Frt | | | | |
| Flt Protected | | | | |
| Satd. Flow (prot) | | | | |
| Flt Permitted | | | | |
| Satd. Flow (perm) | | | | |
| Right Turn on Red | | | | |
| Satd. Flow (RTOR) | | | | |
| Link Speed (mph) | | | | |
| Link Distance (ft) | | | | |
| Travel Time (s) | | | | |
| Peak Hour Factor | | | | |
| Adj. Flow (vph) | | | | |
| Shared Lane Traffic (%) | | | | |
| Lane Group Flow (vph) | | | | |
| Enter Blocked Intersection | | | | |
| Lane Alignment | | | | |
| Median Width(ft) | | | | |
| Link Offset(ft) | | | | |
| Crosswalk Width(ft) | | | | |
| Two way Left Turn Lane | | | | |
| Headway Factor | | | | |
| Turning Speed (mph) | | | | |
| Number of Detectors | | | | |
| Detector Template | | | | |
| Leading Detector (ft) | | | | |
| Trailing Detector (ft) | | | | |
| Detector 1 Position(ft) | | | | |
| Detector 1 Size(ft) | | | | |
| Detector 1 Type | | | | |
| Detector 1 Channel | | | | |
| Detector 1 Extend (s) | | | | |
| Detector 1 Queue (s) | | | | |
| Detector 1 Delay (s) | | | | |
| Detector 2 Position(ft) | | | | |
| Detector 2 Size(ft) | | | | |
| Detector 2 Type | | | | |
| Detector 2 Channel | | | | |
| Detector 2 Extend (s) | | | | |
| Turn Type | | | | |
| Protected Phases | 1 | 2 | 3 | 4 |
| Permitted Phases | | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | 8 | 8 | 1 3 8 | | | | | 6 | 6 | 7 | 6 7 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | | | | | 15.0 | 15.0 | 5.0 | | |
| Minimum Split (s) | 46.5 | 46.5 | | | | | | 26.5 | 26.5 | 11.0 | | |
| Total Split (s) | 51.0 | 51.0 | | | | | | 56.0 | 56.0 | 13.0 | | |
| Total Split (%) | 42.5% | 42.5% | | | | | | 46.7% | 46.7% | 10.8% | | |
| Maximum Green (s) | 44.5 | 44.5 | | | | | | 48.5 | 48.5 | 7.0 | | |
| Yellow Time (s) | 4.5 | 4.5 | | | | | | 5.5 | 5.5 | 4.0 | | |
| All-Red Time (s) | 2.0 | 2.0 | | | | | | 2.0 | 2.0 | 2.0 | | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | | | | | 0.0 | 0.0 | 0.0 | | |
| Total Lost Time (s) | 6.5 | 6.5 | | | | | | 7.5 | 7.5 | 6.0 | | |
| Lead/Lag | Lead | Lead | | | | | | | | Lag | | |
| Lead-Lag Optimize? | Yes | Yes | | | | | | | | Yes | | |
| Vehicle Extension (s) | 4.0 | 4.0 | | | | | | 2.0 | 2.0 | 2.0 | | |
| Recall Mode | None | None | | | | | | C-Max | C-Max | None | | |
| Walk Time (s) | 4.0 | 4.0 | | | | | | 4.0 | 4.0 | | | |
| Flash Don't Walk (s) | 36.0 | 36.0 | | | | | | 15.0 | 15.0 | | | |
| Pedestrian Calls (#/hr) | 0 | 0 | | | | | | 0 | 0 | | | |
| Act Effct Green (s) | 44.5 | 44.5 | 74.0 | | | | | 48.5 | 48.5 | 7.0 | 61.5 | |
| Actuated g/C Ratio | 0.37 | 0.37 | 0.62 | | | | | 0.40 | 0.40 | 0.06 | 0.51 | |
| v/c Ratio | 0.31 | 0.30 | 0.93 | | | | | 0.99 | 0.03 | 0.31 | 0.24 | |
| Control Delay (s/veh) | 28.6 | 28.4 | 26.1 | | | | | 40.8 | 0.0 | 85.5 | 1.5 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | | | | | 14.9 | 0.0 | 0.0 | 0.0 | |
| Total Delay (s/veh) | 28.6 | 28.5 | 26.1 | | | | | 55.7 | 0.0 | 85.5 | 1.5 | |
| LOS | C | C | C | | | | | E | A | F | A | |
| Approach Delay (s/veh) | | 26.5 | | | | | | 55.3 | | | 9.1 | |
| Approach LOS | | C | | | | | | E | | | A | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 120 | | | |
| Actuated Cycle Length: 120 | | | |
| Offset: 0 (0%), Referenced to phase 2:NBSB and 6:, Start of Yellow | | | |
| Natural Cycle: 150 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.99 | | | |
| Intersection Signal Delay (s/veh): 39.4 | | Intersection LOS: D | |
| Intersection Capacity Utilization 87.7% | | ICU Level of Service E | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 5: Ellsworth Road & SR24 Eastbound Ramps





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 68 | 144 | 69 | 114 | 458 | 35 | 167 | 2598 | 46 | 142 | 1755 | 165 |
| Future Volume (veh/h) | 68 | 144 | 69 | 114 | 458 | 35 | 167 | 2598 | 46 | 142 | 1755 | 165 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 74 | 157 | 75 | 124 | 498 | 38 | 182 | 2824 | 50 | 154 | 1908 | 179 |
| 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 | 132 | 497 | 222 | 181 | 548 | 340 | 246 | 2794 | 867 | 209 | 2569 | 240 |
| Arrive On Green | 0.04 | 0.14 | 0.14 | 0.02 | 0.05 | 0.05 | 0.14 | 1.00 | 1.00 | 0.12 | 1.00 | 1.00 |
| Sat Flow, veh/h | 3456 | 3554 | 1585 | 3456 | 3554 | 1585 | 3456 | 5106 | 1585 | 3456 | 4751 | 443 |
| Grp Volume(v), veh/h | 74 | 157 | 75 | 124 | 498 | 38 | 182 | 2824 | 50 | 154 | 1364 | 723 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1777 | 1585 | 1728 | 1777 | 1585 | 1728 | 1702 | 1585 | 1728 | 1702 | 1791 |
| Q Serve(g_s), s | 2.5 | 4.8 | 5.1 | 4.3 | 16.7 | 2.6 | 6.1 | 0.0 | 0.0 | 5.2 | 0.0 | 0.0 |
| Cycle Q Clear(g_c), s | 2.5 | 4.8 | 5.1 | 4.3 | 16.7 | 2.6 | 6.1 | 0.0 | 0.0 | 5.2 | 0.0 | 0.0 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.25 |
| Lane Grp Cap(c), veh/h | 132 | 497 | 222 | 181 | 548 | 340 | 246 | 2794 | 867 | 209 | 1840 | 968 |
| V/C Ratio(X) | 0.56 | 0.32 | 0.34 | 0.68 | 0.91 | 0.11 | 0.74 | 1.01 | 0.06 | 0.74 | 0.74 | 0.75 |
| Avail Cap(c_a), veh/h | 202 | 548 | 244 | 202 | 548 | 340 | 706 | 2794 | 867 | 432 | 1840 | 968 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 0.33 | 0.33 | 0.33 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 0.93 | 0.93 | 0.93 | 0.35 | 0.35 | 0.35 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 56.7 | 46.4 | 46.6 | 58.0 | 56.1 | 42.6 | 50.4 | 0.0 | 0.0 | 51.8 | 0.0 | 0.0 |
| Incr Delay (d2), s/veh | 1.4 | 0.1 | 0.3 | 5.6 | 20.4 | 0.6 | 1.5 | 12.9 | 0.0 | 1.9 | 2.7 | 5.2 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 2.0 | 3.8 | 3.7 | 3.7 | 14.5 | 1.9 | 4.1 | 5.1 | 0.0 | 3.9 | 1.3 | 2.5 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 58.1 | 46.6 | 46.9 | 63.6 | 76.5 | 43.3 | 51.9 | 12.9 | 0.0 | 53.7 | 2.7 | 5.2 |
| LnGrp LOS | E | D | D | E | E | D | D | F | A | D | A | A |
| Approach Vol, veh/h | | 306 | | | 660 | | | 3056 | | | 2241 | |
| Approach Delay, s/veh | | 49.5 | | | 72.2 | | | 15.0 | | | 7.0 | |
| Approach LOS | | D | | | E | | | B | | | A | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 9.6 | 25.0 | 13.0 | 72.4 | 11.3 | 23.3 | 12.3 | 73.2 |
| Change Period (Y+Rc), s | 5.0 | 6.5 | 4.5 | 7.5 | 5.0 | 6.5 | 5.0 | 7.5 |
| Max Green Setting (Gmax), s | 7.0 | 18.5 | 24.5 | 46.5 | 7.0 | 18.5 | 15.0 | 55.5 |
| Max Q Clear Time (g_c+I1), s | 4.5 | 18.7 | 8.1 | 2.0 | 6.3 | 7.1 | 7.2 | 2.0 |
| Green Ext Time (p_c), s | 0.0 | 0.0 | 0.5 | 16.4 | 0.0 | 0.6 | 0.2 | 34.3 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 19.8 |
| HCM 7th LOS | B |

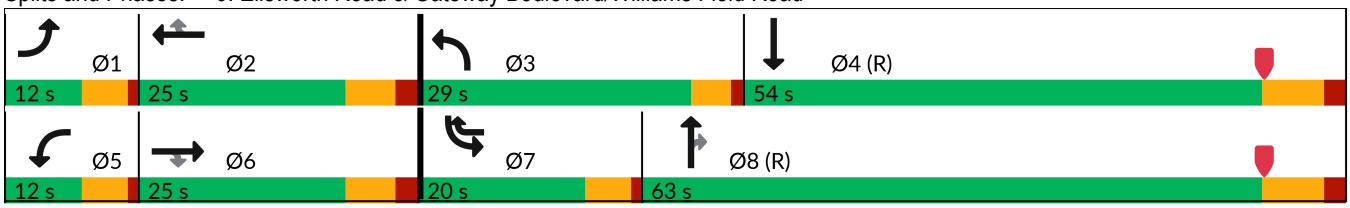
**Notes**

User approved pedestrian interval to be less than phase max green.

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | EBL | WBT | NBL | SBT | WBL | EBT | SBL | NBT |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | None | Max | None | C-Max | None | None | None | C-Max |
| Maximum Split (s) | 12 | 25 | 29 | 54 | 12 | 25 | 20 | 63 |
| Maximum Split (%) | 10.0% | 20.8% | 24.2% | 45.0% | 10.0% | 20.8% | 16.7% | 52.5% |
| Minimum Split (s) | 11 | 36.5 | 10.5 | 35.5 | 24 | 37.5 | 11 | 37.5 |
| Yellow Time (s) | 4 | 4.5 | 3.5 | 5.5 | 4 | 4.5 | 4 | 5.5 |
| All-Red Time (s) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| Minimum Initial (s) | 5 | 15 | 5 | 15 | 5 | 15 | 5 | 15 |
| Vehicle Extension (s) | 1 | 2 | 3 | 2 | 1 | 2 | 2 | 2 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 4 | | 7 | | 4 | | 7 |
| Flash Don't Walk (s) | | 26 | | 21 | | 27 | | 23 |
| Dual Entry | No | Yes | No | Yes | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 27.5 | 39.5 | 64.5 | 93.5 | 27.5 | 39.5 | 64.5 | 84.5 |
| End Time (s) | 39.5 | 64.5 | 93.5 | 27.5 | 39.5 | 64.5 | 84.5 | 27.5 |
| Yield/Force Off (s) | 34.5 | 58 | 89 | 20 | 34.5 | 58 | 79.5 | 20 |
| Yield/Force Off 170(s) | 34.5 | 32 | 89 | 119 | 34.5 | 31 | 79.5 | 117 |
| Local Start Time (s) | 7.5 | 19.5 | 44.5 | 73.5 | 7.5 | 19.5 | 44.5 | 64.5 |
| Local Yield (s) | 14.5 | 38 | 69 | 0 | 14.5 | 38 | 59.5 | 0 |
| Local Yield 170(s) | 14.5 | 12 | 69 | 99 | 14.5 | 11 | 59.5 | 97 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 150 |
| Offset: 20 (17%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow | |

Splits and Phases: 6: Ellsworth Road & Gateway Boulevard/Williams Field Road



| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 0 | 1 | 2850 | 17 | 11 | 1906 |
| Future Volume (veh/h) | 0 | 1 | 2850 | 17 | 11 | 1906 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 0 | 1 | 3098 | 18 | 12 | 2072 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 282 | 502 | 3440 | 1068 | 47 | 3723 |
| Arrive On Green | 0.00 | 0.16 | 1.00 | 1.00 | 0.01 | 0.73 |
| Sat Flow, veh/h | 1781 | 3170 | 5274 | 1585 | 3456 | 5274 |
| Grp Volume(v), veh/h | 0 | 1 | 3098 | 18 | 12 | 2072 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1585 | 1702 | 1585 | 1728 | 1702 |
| Q Serve(g_s), s | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 22.2 |
| Cycle Q Clear(g_c), s | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 22.2 |
| Prop In Lane | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Lane Grp Cap(c), veh/h | 282 | 502 | 3440 | 1068 | 47 | 3723 |
| V/C Ratio(X) | 0.00 | 0.00 | 0.90 | 0.02 | 0.25 | 0.56 |
| Avail Cap(c_a), veh/h | 282 | 502 | 3440 | 1068 | 288 | 3723 |
| HCM Platoon Ratio | 1.00 | 1.00 | 2.00 | 2.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.00 | 1.00 | 0.25 | 0.25 | 0.49 | 0.49 |
| Uniform Delay (d), s/veh | 0.0 | 42.5 | 0.0 | 0.0 | 58.6 | 7.4 |
| Incr Delay (d2), s/veh | 0.0 | 0.0 | 1.2 | 0.0 | 1.4 | 0.3 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 0.0 | 0.0 | 0.7 | 0.0 | 0.3 | 9.1 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 0.0 | 42.5 | 1.2 | 0.0 | 59.9 | 7.7 |
| LnGrp LOS | | D | A | A | E | A |
| Approach Vol, veh/h | 1 | | 3116 | | | 2084 |
| Approach Delay, s/veh | 42.5 | | 1.1 | | | 8.0 |
| Approach LOS | D | | A | | | A |

| Timer - Assigned Phs | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 25.0 | 95.0 | 6.6 | 88.4 |
| Change Period (Y+Rc), s | 6.0 | 7.5 | 5.0 | 7.5 |
| Max Green Setting (Gmax), s | 19.0 | 87.5 | 10.0 | 72.5 |
| Max Q Clear Time (g_c+I1), s | 2.0 | 24.2 | 2.4 | 2.0 |
| Green Ext Time (p_c), s | 0.0 | 26.6 | 0.0 | 56.9 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 3.9 |
| HCM 7th LOS | A |

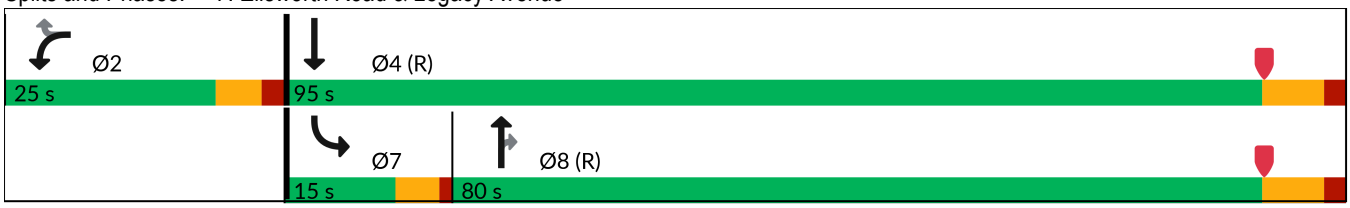
**Notes**

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

| Phase Number | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Movement | WBL | SBT | SBL | NBT |
| Lead/Lag | | | Lead | Lag |
| Lead-Lag Optimize | | | Yes | Yes |
| Recall Mode | Max | C-Max | None | C-Max |
| Maximum Split (s) | 25 | 95 | 15 | 80 |
| Maximum Split (%) | 20.8% | 79.2% | 12.5% | 66.7% |
| Minimum Split (s) | 35 | 39.5 | 10 | 26.5 |
| Yellow Time (s) | 4 | 5.5 | 4 | 5.5 |
| All-Red Time (s) | 2 | 2 | 1 | 2 |
| Minimum Initial (s) | 10 | 15 | 5 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | 4 | 4 | | 7 |
| Flash Don't Walk (s) | 25 | 28 | | 12 |
| Dual Entry | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 7.5 | 32.5 | 32.5 | 47.5 |
| End Time (s) | 32.5 | 7.5 | 47.5 | 7.5 |
| Yield/Force Off (s) | 26.5 | 0 | 42.5 | 0 |
| Yield/Force Off 170(s) | 1.5 | 92 | 42.5 | 108 |
| Local Start Time (s) | 7.5 | 32.5 | 32.5 | 47.5 |
| Local Yield (s) | 26.5 | 0 | 42.5 | 0 |
| Local Yield 170(s) | 1.5 | 92 | 42.5 | 108 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 130 |
| Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow | |

Splits and Phases: 7: Ellsworth Road & Legacy Avenue



| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 116 | 188 | 2708 | 73 | 79 | 1805 |
| Future Volume (veh/h) | 116 | 188 | 2708 | 73 | 79 | 1805 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 126 | 204 | 2943 | 79 | 86 | 1962 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 349 | 310 | 3118 | 968 | 136 | 3510 |
| Arrive On Green | 0.20 | 0.20 | 0.61 | 0.61 | 0.04 | 0.69 |
| Sat Flow, veh/h | 1781 | 1585 | 5274 | 1585 | 1781 | 5274 |
| Grp Volume(v), veh/h | 126 | 204 | 2943 | 79 | 86 | 1962 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1585 | 1702 | 1585 | 1781 | 1702 |
| Q Serve(g_s), s | 7.3 | 14.3 | 63.6 | 2.5 | 2.0 | 23.4 |
| Cycle Q Clear(g_c), s | 7.3 | 14.3 | 63.6 | 2.5 | 2.0 | 23.4 |
| Prop In Lane | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Lane Grp Cap(c), veh/h | 349 | 310 | 3118 | 968 | 136 | 3510 |
| V/C Ratio(X) | 0.36 | 0.66 | 0.94 | 0.08 | 0.63 | 0.56 |
| Avail Cap(c_a), veh/h | 349 | 310 | 3118 | 968 | 222 | 3510 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 0.81 | 0.81 |
| Uniform Delay (d), s/veh | 41.8 | 44.5 | 21.5 | 9.6 | 30.3 | 9.5 |
| Incr Delay (d2), s/veh | 2.9 | 10.4 | 7.5 | 0.2 | 3.9 | 0.5 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 6.3 | 10.7 | 33.9 | 1.6 | 3.1 | 12.4 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 44.6 | 54.9 | 28.9 | 9.7 | 34.1 | 10.0 |
| LnGrp LOS | D | D | C | A | C | B |
| Approach Vol, veh/h | 330 | | 3022 | | | 2048 |
| Approach Delay, s/veh | 51.0 | | 28.4 | | | 11.1 |
| Approach LOS | D | | C | | | B |

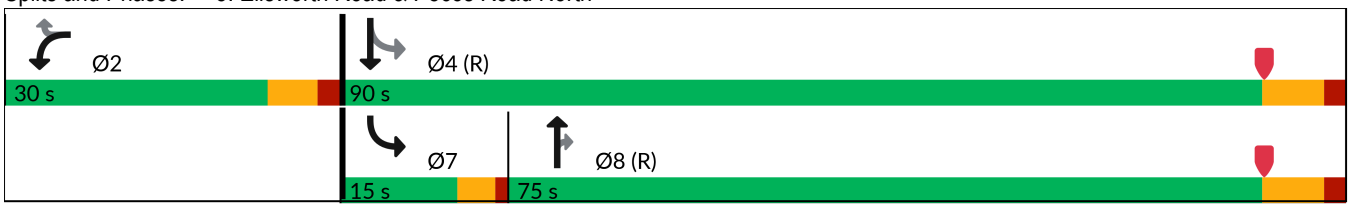
| Timer - Assigned Phs | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 30.0 | 90.0 | 9.2 | 80.8 |
| Change Period (Y+Rc), s | 6.5 | 7.5 | 4.5 | 7.5 |
| Max Green Setting (Gmax), s | 23.5 | 82.5 | 10.5 | 67.5 |
| Max Q Clear Time (g_c+I1), s | 16.3 | 25.4 | 4.0 | 65.6 |
| Green Ext Time (p_c), s | 0.6 | 27.8 | 0.1 | 1.9 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 23.2 |
| HCM 7th LOS | C |

| Phase Number | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Movement | WBL | SBTL | SBL | NBT |
| Lead/Lag | | | Lead | Lag |
| Lead-Lag Optimize | | | Yes | Yes |
| Recall Mode | Max | C-Max | None | C-Max |
| Maximum Split (s) | 30 | 90 | 15 | 75 |
| Maximum Split (%) | 25.0% | 75.0% | 12.5% | 62.5% |
| Minimum Split (s) | 24.5 | 25.5 | 9.5 | 25.5 |
| Yellow Time (s) | 4.5 | 5.5 | 3.5 | 5.5 |
| All-Red Time (s) | 2 | 2 | 1 | 2 |
| Minimum Initial (s) | 5 | 15 | 5 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | 0 | 0 | | 0 |
| Flash Don't Walk (s) | 0 | 0 | | 0 |
| Dual Entry | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 7.5 | 37.5 | 37.5 | 52.5 |
| End Time (s) | 37.5 | 7.5 | 52.5 | 7.5 |
| Yield/Force Off (s) | 31 | 0 | 48 | 0 |
| Yield/Force Off 170(s) | 31 | 0 | 48 | 0 |
| Local Start Time (s) | 7.5 | 37.5 | 37.5 | 52.5 |
| Local Yield (s) | 31 | 0 | 48 | 0 |
| Local Yield 170(s) | 31 | 0 | 48 | 0 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 100 |
| Offset: 0 (0%), Referenced to phase 4:SBTL and 8:NBT, Start of Yellow | |

Splits and Phases: 8: Ellsworth Road & Pecos Road North



| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 305 | 19 | 27 | 607 | 3 | 2 |
| Future Volume (veh/h) | 305 | 19 | 27 | 607 | 3 | 2 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 332 | 21 | 29 | 660 | 3 | 2 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 1236 | 1047 | 890 | 1456 | 24 | 21 |
| Arrive On Green | 1.00 | 1.00 | 0.10 | 1.00 | 0.01 | 0.01 |
| Sat Flow, veh/h | 1870 | 1585 | 1781 | 1870 | 1781 | 1585 |
| Grp Volume(v), veh/h | 332 | 21 | 29 | 660 | 3 | 2 |
| Grp Sat Flow(s),veh/h/ln | 1870 | 1585 | 1781 | 1870 | 1781 | 1585 |
| Q Serve(g_s), s | 0.0 | 0.0 | 0.2 | 0.0 | 0.1 | 0.1 |
| Cycle Q Clear(g_c), s | 0.0 | 0.0 | 0.2 | 0.0 | 0.1 | 0.1 |
| Prop In Lane | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Lane Grp Cap(c), veh/h | 1236 | 1047 | 890 | 1456 | 24 | 21 |
| V/C Ratio(X) | 0.27 | 0.02 | 0.03 | 0.45 | 0.13 | 0.09 |
| Avail Cap(c_a), veh/h | 1236 | 1047 | 1037 | 1456 | 534 | 476 |
| HCM Platoon Ratio | 2.00 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.94 | 0.94 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 0.0 | 0.0 | 1.9 | 0.0 | 29.3 | 29.2 |
| Incr Delay (d2), s/veh | 0.5 | 0.0 | 0.0 | 1.0 | 2.4 | 1.9 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 0.3 | 0.0 | 0.0 | 0.7 | 0.1 | 0.1 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 0.5 | 0.0 | 1.9 | 1.0 | 31.6 | 31.2 |
| LnGrp LOS | A | A | A | A | C | C |
| Approach Vol, veh/h | 353 | | | 689 | 5 | |
| Approach Delay, s/veh | 0.5 | | | 1.1 | 31.4 | |
| Approach LOS | A | | | A | C | |

| Timer - Assigned Phs | 2 | | | 5 | 6 | 8 |
|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 53.2 | | | 7.1 | 46.1 | 6.8 |
| Change Period (Y+Rc), s | 6.5 | | | 4.0 | 6.5 | 6.0 |
| Max Green Setting (Gmax), s | 29.5 | | | 8.0 | 17.5 | 18.0 |
| Max Q Clear Time (g_c+I1), s | 2.0 | | | 2.2 | 2.0 | 2.1 |
| Green Ext Time (p_c), s | 4.3 | | | 0.0 | 1.6 | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 1.0 |
| HCM 7th LOS | A |

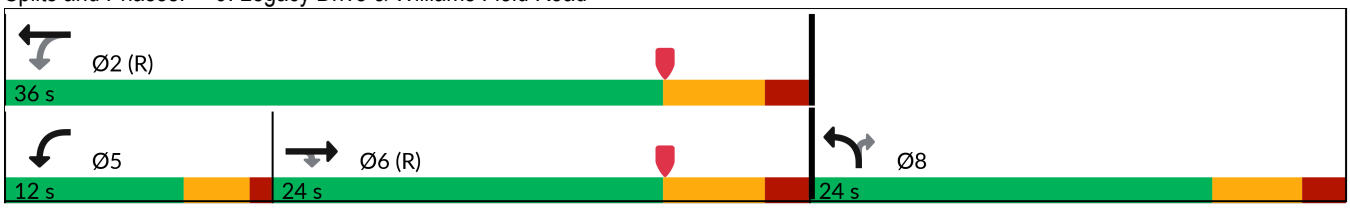
**Notes**

User approved pedestrian interval to be less than phase max green.

| Phase Number | 2 | 5 | 6 | 8 |
|---|---|---|---|---|
| Movement | WBTL | WBL | EBT | NBL |
| Lead/Lag | | Lead | Lag | |
| Lead-Lag Optimize | | Yes | Yes | |
| Recall Mode | C-Max | None | C-Max | None |
| Maximum Split (s) | 36 | 12 | 24 | 24 |
| Maximum Split (%) | 60.0% | 20.0% | 40.0% | 40.0% |
| Minimum Split (s) | 24.5 | 12.5 | 24.5 | 24 |
| Yellow Time (s) | 4.5 | 3 | 4.5 | 4 |
| All-Red Time (s) | 2 | 1 | 2 | 2 |
| Minimum Initial (s) | 15 | 8 | 15 | 10 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | | | 7 | |
| Flash Don't Walk (s) | | | 11 | |
| Dual Entry | Yes | No | Yes | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 30.5 | 30.5 | 42.5 | 6.5 |
| End Time (s) | 6.5 | 42.5 | 6.5 | 30.5 |
| Yield/Force Off (s) | 0 | 38.5 | 0 | 24.5 |
| Yield/Force Off 170(s) | 0 | 38.5 | 49 | 24.5 |
| Local Start Time (s) | 30.5 | 30.5 | 42.5 | 6.5 |
| Local Yield (s) | 0 | 38.5 | 0 | 24.5 |
| Local Yield 170(s) | 0 | 38.5 | 49 | 24.5 |

| Intersection Summary | |
|---|---|
| Cycle Length | 60 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 65 |
| Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBT, Start of Yellow | |

Splits and Phases: 9: Legacy Drive & Williams Field Road



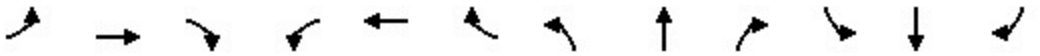
| Intersection | |
|---|---|
| Int Delay, s/veh | 0.1 |

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | ↑ | ↱ | | ↑ | | ↱ |
| Traffic Vol, veh/h | 306 | 2 | 7 | 638 | 0 | 1 |
| Future Vol, veh/h | 306 | 2 | 7 | 638 | 0 | 1 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 150 | - | - | - | - |
| 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 | 333 | 2 | 8 | 693 | 0 | 1 |

| Major/Minor | Major1 | | Major2 | | Minor1 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 0 | 0 | 335 | 0 | - | 333 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | - | 4.12 | - | - | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | 2.218 | - | - | 3.318 |
| Pot Cap-1 Maneuver | - | - | 1236 | - | 0 | 779 |
| Stage 1 | - | - | - | - | 0 | - |
| Stage 2 | - | - | - | - | 0 | - |
| Platoon blocked, % | - | - | 0 | - | | 0 |
| Mov Cap-1 Maneuver | - | - | 1236 | - | - | 779 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | WB | NB |
|---|---|---|---|
| HCM Control Delay, s/v | 0 | 0.09 | 9.63 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT |
|---|---|---|---|---|---|
| Capacity (veh/h) | 779 | - | - | 1236 | - |
| HCM Lane V/C Ratio | 0.001 | - | - | 0.006 | - |
| HCM Control Delay (s/veh) | 9.6 | - | - | 7.9 | - |
| HCM Lane LOS | A | - | - | A | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0 | - |



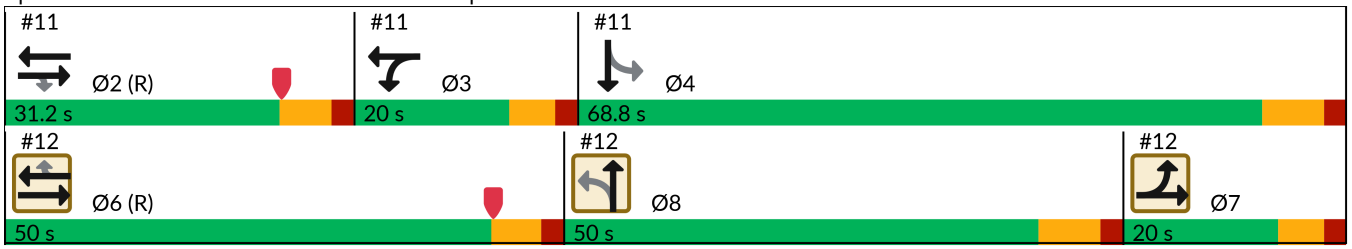
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 0 | 136 | 171 | 54 | 604 | 0 | 0 | 0 | 0 | 273 | 0 | 46 |
| Future Volume (vph) | 0 | 136 | 171 | 54 | 604 | 0 | 0 | 0 | 0 | 273 | 0 | 46 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 360 | | 285 | 290 | | 0 | 0 | | 0 | 400 | | 400 |
| Storage Lanes | 2 | | 1 | 0 | | 0 | 0 | | 0 | 2 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 1.00 | 0.86 | 1.00 | 0.97 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 0.91 | 0.91 | 0.95 |
| Frt | | | 0.850 | | | | | | | | 0.962 | |
| Flt Protected | | | | 0.950 | | | | | | 0.950 | 0.964 | |
| Satd. Flow (prot) | 0 | 6408 | 1583 | 3433 | 3539 | 0 | 0 | 0 | 0 | 1610 | 3144 | 0 |
| Flt Permitted | | | | 0.950 | | | | | | 0.950 | 0.964 | |
| Satd. Flow (perm) | 0 | 6408 | 1583 | 3433 | 3539 | 0 | 0 | 0 | 0 | 1610 | 3144 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 186 | | | | | | | | 91 | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 971 | | | 481 | | | 999 | | | 970 | |
| Travel Time (s) | | 22.1 | | | 10.9 | | | 22.7 | | | 22.0 | |
| 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 |
| Adj. Flow (vph) | 0 | 148 | 186 | 59 | 657 | 0 | 0 | 0 | 0 | 297 | 0 | 50 |
| Shared Lane Traffic (%) | | | | | | | | | | 50% | | |
| Lane Group Flow (vph) | 0 | 148 | 186 | 59 | 657 | 0 | 0 | 0 | 0 | 148 | 199 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 24 | | | 24 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | | 2 | 1 | 1 | 2 | | | | | 1 | 2 | |
| Detector Template | | Thru | Right | Left | Thru | | | | | Left | Thru | |
| Leading Detector (ft) | | 100 | 20 | 20 | 100 | | | | | 20 | 100 | |
| Trailing Detector (ft) | | 0 | 0 | 0 | 0 | | | | | 0 | 0 | |
| Detector 1 Position(ft) | | 0 | 0 | 0 | 0 | | | | | 0 | 0 | |
| Detector 1 Size(ft) | | 6 | 20 | 20 | 6 | | | | | 20 | 6 | |
| Detector 1 Type | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | | | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | | | | 0.0 | |
| Turn Type | | NA | Perm | Prot | NA | | | | | Perm | NA | |
| Protected Phases | | 2 | | 3 | 2 3 | | | | | | 4 | |
| Permitted Phases | | | 2 | | | | | | | 4 | | |

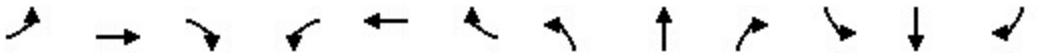
| Lane Group | Ø6 | Ø7 | Ø8 |
|---|---|---|---|
| Lane Configurations | | | |
| Traffic Volume (vph) | | | |
| Future Volume (vph) | | | |
| Ideal Flow (vphpl) | | | |
| Storage Length (ft) | | | |
| Storage Lanes | | | |
| Taper Length (ft) | | | |
| Lane Util. Factor | | | |
| Frt | | | |
| Flt Protected | | | |
| Satd. Flow (prot) | | | |
| Flt Permitted | | | |
| Satd. Flow (perm) | | | |
| Right Turn on Red | | | |
| Satd. Flow (RTOR) | | | |
| Link Speed (mph) | | | |
| Link Distance (ft) | | | |
| Travel Time (s) | | | |
| Peak Hour Factor | | | |
| Adj. Flow (vph) | | | |
| Shared Lane Traffic (%) | | | |
| Lane Group Flow (vph) | | | |
| Enter Blocked Intersection | | | |
| Lane Alignment | | | |
| Median Width(ft) | | | |
| Link Offset(ft) | | | |
| Crosswalk Width(ft) | | | |
| Two way Left Turn Lane | | | |
| Headway Factor | | | |
| Turning Speed (mph) | | | |
| Number of Detectors | | | |
| Detector Template | | | |
| Leading Detector (ft) | | | |
| Trailing Detector (ft) | | | |
| Detector 1 Position(ft) | | | |
| Detector 1 Size(ft) | | | |
| Detector 1 Type | | | |
| Detector 1 Channel | | | |
| Detector 1 Extend (s) | | | |
| Detector 1 Queue (s) | | | |
| Detector 1 Delay (s) | | | |
| Detector 2 Position(ft) | | | |
| Detector 2 Size(ft) | | | |
| Detector 2 Type | | | |
| Detector 2 Channel | | | |
| Detector 2 Extend (s) | | | |
| Turn Type | | | |
| Protected Phases | 6 | 7 | 8 |
| Permitted Phases | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | | 2 | 2 | 3 | 2 3 | | | | | 4 | 4 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | | 15.0 | 15.0 | 5.0 | | | | | | 10.0 | 10.0 | |
| Minimum Split (s) | | 25.5 | 25.5 | 11.0 | | | | | | 46.5 | 46.5 | |
| Total Split (s) | | 31.2 | 31.2 | 20.0 | | | | | | 68.8 | 68.8 | |
| Total Split (%) | | 26.0% | 26.0% | 16.7% | | | | | | 57.3% | 57.3% | |
| Maximum Green (s) | | 24.7 | 24.7 | 14.0 | | | | | | 61.3 | 61.3 | |
| Yellow Time (s) | | 4.5 | 4.5 | 4.0 | | | | | | 5.5 | 5.5 | |
| All-Red Time (s) | | 2.0 | 2.0 | 2.0 | | | | | | 2.0 | 2.0 | |
| Lost Time Adjust (s) | | 0.0 | 0.0 | 0.0 | | | | | | 0.0 | 0.0 | |
| Total Lost Time (s) | | 6.5 | 6.5 | 6.0 | | | | | | 7.5 | 7.5 | |
| Lead/Lag | | | | Lead | | | | | | Lag | Lag | |
| Lead-Lag Optimize? | | | | Yes | | | | | | Yes | Yes | |
| Vehicle Extension (s) | | 3.0 | 3.0 | 3.0 | | | | | | 3.0 | 3.0 | |
| Recall Mode | | C-Max | C-Max | None | | | | | | None | None | |
| Walk Time (s) | | 4.0 | 4.0 | | | | | | | 4.0 | 4.0 | |
| Flash Don't Walk (s) | | 15.0 | 15.0 | | | | | | | 35.0 | 35.0 | |
| Pedestrian Calls (#/hr) | | 0 | 0 | | | | | | | 0 | 0 | |
| Act Effct Green (s) | | 36.2 | 36.2 | 9.8 | 51.9 | | | | | 54.1 | 54.1 | |
| Actuated g/C Ratio | | 0.30 | 0.30 | 0.08 | 0.43 | | | | | 0.45 | 0.45 | |
| v/c Ratio | | 0.08 | 0.31 | 0.21 | 0.43 | | | | | 0.20 | 0.14 | |
| Control Delay (s/veh) | | 16.1 | 9.4 | 56.4 | 27.6 | | | | | 19.4 | 9.3 | |
| Queue Delay | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | |
| Total Delay (s/veh) | | 16.1 | 9.4 | 56.4 | 27.6 | | | | | 19.4 | 9.3 | |
| LOS | | B | A | E | C | | | | | B | A | |
| Approach Delay (s/veh) | | 12.4 | | | 29.9 | | | | | | 13.6 | |
| Approach LOS | | B | | | C | | | | | | B | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 120 | | | |
| Actuated Cycle Length: 120 | | | |
| Offset: 65.3 (54%), Referenced to phase 2:EBWB and 6:, Start of Yellow | | | |
| Natural Cycle: 85 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.83 | | | |
| Intersection Signal Delay (s/veh): 21.7 | | Intersection LOS: C | |
| Intersection Capacity Utilization 84.5% | | ICU Level of Service E | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 11: SR24 Eastbound Ramps & Williams Field Road





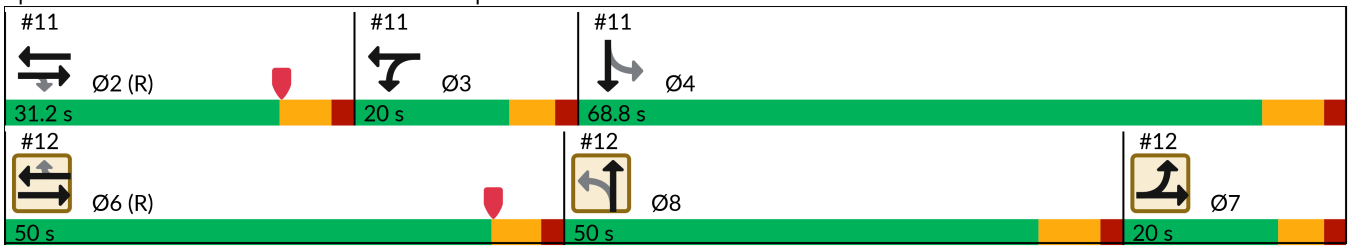
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 23 | 389 | 0 | 0 | 285 | 695 | 372 | 0 | 55 | 0 | 0 | 0 |
| Future Volume (vph) | 23 | 389 | 0 | 0 | 285 | 695 | 372 | 0 | 55 | 0 | 0 | 0 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 290 | | 0 | 365 | | 300 | 375 | | 375 | 0 | | 0 |
| Storage Lanes | 0 | | 0 | 2 | | 1 | 1 | | 1 | 0 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 0.97 | 0.95 | 1.00 | 1.00 | 0.86 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 |
| Frt | | | | | | 0.850 | | 0.850 | | | | |
| Flt Protected | 0.950 | | | | | | 0.950 | | | | | |
| Satd. Flow (prot) | 3433 | 3539 | 0 | 0 | 6408 | 1583 | 1770 | 3008 | 0 | 0 | 0 | 0 |
| Flt Permitted | 0.950 | | | | | | 0.950 | | | | | |
| Satd. Flow (perm) | 3433 | 3539 | 0 | 0 | 6408 | 1583 | 1770 | 3008 | 0 | 0 | 0 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | | | | 755 | | 388 | | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 481 | | | 1418 | | | 897 | | | 1176 | |
| Travel Time (s) | | 10.9 | | | 32.2 | | | 20.4 | | | 26.7 | |
| 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 |
| Adj. Flow (vph) | 25 | 423 | 0 | 0 | 310 | 755 | 404 | 0 | 60 | 0 | 0 | 0 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 25 | 423 | 0 | 0 | 310 | 755 | 404 | 60 | 0 | 0 | 0 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 24 | | | 24 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | | 2 | 1 | 1 | 2 | | | | |
| Detector Template | Left | Thru | | | Thru | Right | Left | Thru | | | | |
| Leading Detector (ft) | 20 | 100 | | | 100 | 20 | 20 | 100 | | | | |
| Trailing Detector (ft) | 0 | 0 | | | 0 | 0 | 0 | 0 | | | | |
| Detector 1 Position(ft) | 0 | 0 | | | 0 | 0 | 0 | 0 | | | | |
| Detector 1 Size(ft) | 20 | 6 | | | 6 | 20 | 20 | 6 | | | | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | | | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | | |
| Turn Type | Prot | NA | | | NA | Perm | Perm | NA | | | | |
| Protected Phases | 7 | 6 7 | | | 6 | | | 8 | | | | |
| Permitted Phases | | | | | | 6 | 8 | | | | | |

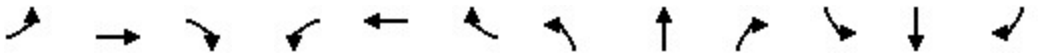
| Lane Group | Ø2 | Ø3 | Ø4 |
|---|---|---|---|
| Lane Configurations | | | |
| Traffic Volume (vph) | | | |
| Future Volume (vph) | | | |
| Ideal Flow (vphpl) | | | |
| Storage Length (ft) | | | |
| Storage Lanes | | | |
| Taper Length (ft) | | | |
| Lane Util. Factor | | | |
| Frt | | | |
| Flt Protected | | | |
| Satd. Flow (prot) | | | |
| Flt Permitted | | | |
| Satd. Flow (perm) | | | |
| Right Turn on Red | | | |
| Satd. Flow (RTOR) | | | |
| Link Speed (mph) | | | |
| Link Distance (ft) | | | |
| Travel Time (s) | | | |
| Peak Hour Factor | | | |
| Adj. Flow (vph) | | | |
| Shared Lane Traffic (%) | | | |
| Lane Group Flow (vph) | | | |
| Enter Blocked Intersection | | | |
| Lane Alignment | | | |
| Median Width(ft) | | | |
| Link Offset(ft) | | | |
| Crosswalk Width(ft) | | | |
| Two way Left Turn Lane | | | |
| Headway Factor | | | |
| Turning Speed (mph) | | | |
| Number of Detectors | | | |
| Detector Template | | | |
| Leading Detector (ft) | | | |
| Trailing Detector (ft) | | | |
| Detector 1 Position(ft) | | | |
| Detector 1 Size(ft) | | | |
| Detector 1 Type | | | |
| Detector 1 Channel | | | |
| Detector 1 Extend (s) | | | |
| Detector 1 Queue (s) | | | |
| Detector 1 Delay (s) | | | |
| Detector 2 Position(ft) | | | |
| Detector 2 Size(ft) | | | |
| Detector 2 Type | | | |
| Detector 2 Channel | | | |
| Detector 2 Extend (s) | | | |
| Turn Type | | | |
| Protected Phases | 2 | 3 | 4 |
| Permitted Phases | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | 7 | 6 7 | | | 6 | 6 | 8 | 8 | | | | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | | | | 15.0 | 15.0 | 10.0 | 10.0 | | | | |
| Minimum Split (s) | 11.0 | | | | 26.5 | 26.5 | 45.5 | 45.5 | | | | |
| Total Split (s) | 20.0 | | | | 50.0 | 50.0 | 50.0 | 50.0 | | | | |
| Total Split (%) | 16.7% | | | | 41.7% | 41.7% | 41.7% | 41.7% | | | | |
| Maximum Green (s) | 14.0 | | | | 43.5 | 43.5 | 42.5 | 42.5 | | | | |
| Yellow Time (s) | 4.0 | | | | 4.5 | 4.5 | 5.5 | 5.5 | | | | |
| All-Red Time (s) | 2.0 | | | | 2.0 | 2.0 | 2.0 | 2.0 | | | | |
| Lost Time Adjust (s) | 0.0 | | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Total Lost Time (s) | 6.0 | | | | 6.5 | 6.5 | 7.5 | 7.5 | | | | |
| Lead/Lag | Lag | | | | | | Lead | Lead | | | | |
| Lead-Lag Optimize? | Yes | | | | | | Yes | Yes | | | | |
| Vehicle Extension (s) | 3.0 | | | | 3.0 | 3.0 | 3.0 | 3.0 | | | | |
| Recall Mode | None | | | | C-Max | C-Max | None | None | | | | |
| Walk Time (s) | | | | | 4.0 | 4.0 | 4.0 | 4.0 | | | | |
| Flash Don't Walk (s) | | | | | 16.0 | 16.0 | 34.0 | 34.0 | | | | |
| Pedestrian Calls (#/hr) | | | | | 0 | 0 | 0 | 0 | | | | |
| Act Effct Green (s) | 11.9 | 72.9 | | | 55.0 | 55.0 | 33.1 | 33.1 | | | | |
| Actuated g/C Ratio | 0.10 | 0.61 | | | 0.46 | 0.46 | 0.28 | 0.28 | | | | |
| v/c Ratio | 0.07 | 0.20 | | | 0.11 | 0.67 | 0.83 | 0.05 | | | | |
| Control Delay (s/veh) | 53.0 | 14.7 | | | 22.9 | 17.0 | 54.7 | 0.1 | | | | |
| Queue Delay | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Total Delay (s/veh) | 53.0 | 14.7 | | | 22.9 | 17.0 | 54.7 | 0.1 | | | | |
| LOS | D | B | | | C | B | D | A | | | | |
| Approach Delay (s/veh) | | 16.8 | | | 18.7 | | | 47.7 | | | | |
| Approach LOS | | B | | | B | | | D | | | | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 120 | | | |
| Actuated Cycle Length: 120 | | | |
| Offset: 65.3 (54%), Referenced to phase 2:EBWB and 6:, Start of Yellow | | | |
| Natural Cycle: 85 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.83 | | | |
| Intersection Signal Delay (s/veh): 25.1 | | Intersection LOS: C | |
| Intersection Capacity Utilization 84.5% | | ICU Level of Service E | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 12: SR24 Westbound Ramps & Williams Field Road





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 99 | 176 | 0 | 0 | 477 | 69 | 124 | 0 | 0 | 59 | 0 | 375 |
| Future Volume (veh/h) | 99 | 176 | 0 | 0 | 477 | 69 | 124 | 0 | 0 | 59 | 0 | 375 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 108 | 191 | 0 | 0 | 518 | 75 | 135 | 0 | 0 | 64 | 0 | 408 |
| 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 | 402 | 1701 | 759 | 515 | 1352 | 603 | 486 | 1140 | 509 | 606 | 1105 | 493 |
| Arrive On Green | 0.13 | 0.96 | 0.00 | 0.00 | 0.38 | 0.38 | 0.07 | 0.00 | 0.00 | 0.06 | 0.00 | 0.31 |
| Sat Flow, veh/h | 1781 | 3554 | 1585 | 1781 | 3554 | 1585 | 1781 | 3554 | 1585 | 1781 | 3554 | 1585 |
| Grp Volume(v), veh/h | 108 | 191 | 0 | 0 | 518 | 75 | 135 | 0 | 0 | 64 | 0 | 408 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1777 | 1585 | 1781 | 1777 | 1585 | 1781 | 1777 | 1585 | 1781 | 1777 | 1585 |
| Q Serve(g_s), s | 4.1 | 0.3 | 0.0 | 0.0 | 12.7 | 3.7 | 6.1 | 0.0 | 0.0 | 2.8 | 0.0 | 28.7 |
| Cycle Q Clear(g_c), s | 4.1 | 0.3 | 0.0 | 0.0 | 12.7 | 3.7 | 6.1 | 0.0 | 0.0 | 2.8 | 0.0 | 28.7 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 402 | 1701 | 759 | 515 | 1352 | 603 | 486 | 1140 | 509 | 606 | 1105 | 493 |
| V/C Ratio(X) | 0.27 | 0.11 | 0.00 | 0.00 | 0.38 | 0.12 | 0.28 | 0.00 | 0.00 | 0.11 | 0.00 | 0.83 |
| Avail Cap(c_a), veh/h | 509 | 1701 | 759 | 640 | 1352 | 603 | 631 | 1140 | 509 | 649 | 1105 | 493 |
| HCM Platoon Ratio | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.99 | 0.99 | 0.00 | 0.00 | 0.97 | 0.97 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 18.1 | 1.3 | 0.0 | 0.0 | 27.0 | 24.2 | 25.0 | 0.0 | 0.0 | 24.7 | 0.0 | 38.4 |
| Incr Delay (d2), s/veh | 0.4 | 0.1 | 0.0 | 0.0 | 0.8 | 0.4 | 0.3 | 0.0 | 0.0 | 0.1 | 0.0 | 14.7 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 3.0 | 0.3 | 0.0 | 0.0 | 9.3 | 2.6 | 4.7 | 0.0 | 0.0 | 2.2 | 0.0 | 19.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 18.5 | 1.5 | 0.0 | 0.0 | 27.8 | 24.6 | 25.3 | 0.0 | 0.0 | 24.8 | 0.0 | 53.1 |
| LnGrp LOS | B | A | | | C | C | C | | | C | | D |
| Approach Vol, veh/h | | 299 | | | 593 | | | 135 | | | 472 | |
| Approach Delay, s/veh | | 7.6 | | | 27.3 | | | 25.3 | | | 49.3 | |
| Approach LOS | | A | | | C | | | C | | | D | |

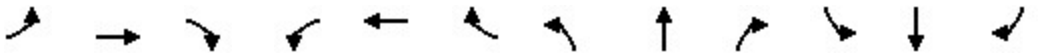
| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 11.8 | 52.2 | 12.2 | 43.8 | 0.0 | 63.9 | 11.1 | 45.0 |
| Change Period (Y+Rc), s | 4.0 | 6.5 | 4.0 | 6.5 | 4.0 | 6.5 | 4.0 | 6.5 |
| Max Green Setting (Gmax), s | 15.0 | 35.5 | 18.0 | 30.5 | 8.5 | 42.0 | 10.0 | 38.5 |
| Max Q Clear Time (g_c+I1), s | 6.1 | 14.7 | 8.1 | 30.7 | 0.0 | 2.3 | 4.8 | 0.0 |
| Green Ext Time (p_c), s | 0.1 | 3.7 | 0.2 | 0.0 | 0.0 | 1.3 | 0.0 | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 30.1 |
| HCM 7th LOS | C |

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | EBL | WBTL | NBL | SBTL | WBL | EBTL | SBL | NBTL |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | None | C-Max | None | Max | None | C-Max | None | Max |
| Maximum Split (s) | 19 | 42 | 22 | 37 | 12.5 | 48.5 | 14 | 45 |
| Maximum Split (%) | 15.8% | 35.0% | 18.3% | 30.8% | 10.4% | 40.4% | 11.7% | 37.5% |
| Minimum Split (s) | 12.5 | 38.5 | 12.5 | 35.5 | 12.5 | 40.5 | 12.5 | 36.5 |
| Yellow Time (s) | 3 | 4.5 | 3 | 4.5 | 3 | 4.5 | 3 | 4.5 |
| All-Red Time (s) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| Minimum Initial (s) | 8 | 15 | 8 | 15 | 8 | 15 | 8 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 7 | | 7 | | 7 | | 7 |
| Flash Don't Walk (s) | | 25 | | 22 | | 27 | | 23 |
| Dual Entry | No | Yes | No | Yes | No | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 65.5 | 84.5 | 6.5 | 28.5 | 65.5 | 78 | 6.5 | 20.5 |
| End Time (s) | 84.5 | 6.5 | 28.5 | 65.5 | 78 | 6.5 | 20.5 | 65.5 |
| Yield/Force Off (s) | 80.5 | 0 | 24.5 | 59 | 74 | 0 | 16.5 | 59 |
| Yield/Force Off 170(s) | 80.5 | 95 | 24.5 | 37 | 74 | 93 | 16.5 | 36 |
| Local Start Time (s) | 65.5 | 84.5 | 6.5 | 28.5 | 65.5 | 78 | 6.5 | 20.5 |
| Local Yield (s) | 80.5 | 0 | 24.5 | 59 | 74 | 0 | 16.5 | 59 |
| Local Yield 170(s) | 80.5 | 95 | 24.5 | 37 | 74 | 93 | 16.5 | 36 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 105 |
| Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow | |

Splits and Phases: 13: Williams Field Road & Crismon Road



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 76 | 110 | 40 | 8 | 241 | 54 | 44 | 639 | 10 | 29 | 362 | 243 |
| Future Volume (veh/h) | 76 | 110 | 40 | 8 | 241 | 54 | 44 | 639 | 10 | 29 | 362 | 243 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 83 | 120 | 43 | 9 | 262 | 59 | 48 | 695 | 11 | 32 | 393 | 264 |
| 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 | 542 | 1575 | 702 | 577 | 1414 | 631 | 330 | 1149 | 18 | 255 | 1106 | 494 |
| Arrive On Green | 0.06 | 0.44 | 0.44 | 0.02 | 0.40 | 0.40 | 0.05 | 0.32 | 0.32 | 0.04 | 0.31 | 0.31 |
| Sat Flow, veh/h | 1781 | 3554 | 1585 | 1781 | 3554 | 1585 | 1781 | 3580 | 57 | 1781 | 3554 | 1585 |
| Grp Volume(v), veh/h | 83 | 120 | 43 | 9 | 262 | 59 | 48 | 345 | 361 | 32 | 393 | 264 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1777 | 1585 | 1781 | 1777 | 1585 | 1781 | 1777 | 1860 | 1781 | 1777 | 1585 |
| Q Serve(g_s), s | 3.1 | 2.3 | 1.9 | 0.4 | 5.8 | 2.8 | 2.1 | 19.6 | 19.6 | 1.4 | 10.3 | 16.5 |
| Cycle Q Clear(g_c), s | 3.1 | 2.3 | 1.9 | 0.4 | 5.8 | 2.8 | 2.1 | 19.6 | 19.6 | 1.4 | 10.3 | 16.5 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.03 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 542 | 1575 | 702 | 577 | 1414 | 631 | 330 | 570 | 597 | 255 | 1106 | 494 |
| V/C Ratio(X) | 0.15 | 0.08 | 0.06 | 0.02 | 0.19 | 0.09 | 0.15 | 0.60 | 0.61 | 0.13 | 0.36 | 0.53 |
| Avail Cap(c_a), veh/h | 638 | 1575 | 702 | 665 | 1414 | 631 | 384 | 570 | 597 | 295 | 1106 | 494 |
| 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 | 17.5 | 19.3 | 19.1 | 20.6 | 23.5 | 22.6 | 25.4 | 34.3 | 34.3 | 26.9 | 32.0 | 34.1 |
| Incr Delay (d2), s/veh | 0.1 | 0.1 | 0.2 | 0.0 | 0.3 | 0.3 | 0.2 | 4.7 | 4.5 | 0.2 | 0.9 | 4.1 |
| 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(95%),veh/ln | 2.3 | 1.8 | 1.3 | 0.3 | 4.5 | 2.0 | 1.7 | 14.2 | 14.7 | 1.1 | 8.1 | 11.2 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 17.6 | 19.3 | 19.3 | 20.6 | 23.8 | 22.9 | 25.6 | 39.1 | 38.9 | 27.1 | 32.9 | 38.3 |
| LnGrp LOS | B | B | B | C | C | C | C | D | D | C | C | D |
| Approach Vol, veh/h | | 246 | | | 330 | | | 754 | | | 689 | |
| Approach Delay, s/veh | | 18.8 | | | 23.5 | | | 38.1 | | | 34.7 | |
| Approach LOS | | B | | | C | | | D | | | C | |

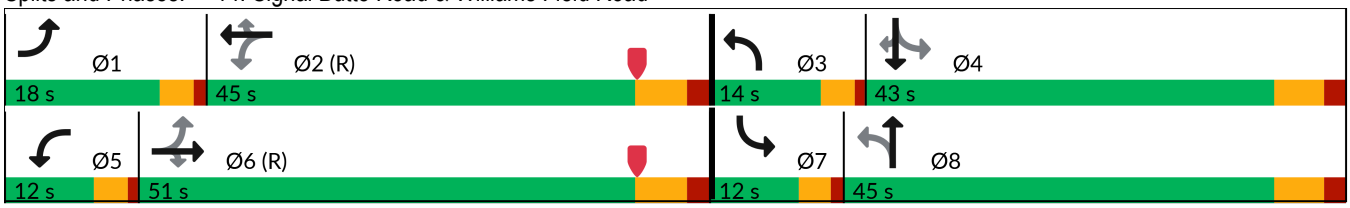
| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 11.5 | 54.3 | 10.4 | 43.9 | 6.1 | 59.7 | 9.2 | 45.0 |
| Change Period (Y+Rc), s | 4.0 | 6.5 | 4.0 | 6.5 | 4.0 | 6.5 | 4.0 | 6.5 |
| Max Green Setting (Gmax), s | 14.0 | 38.5 | 10.0 | 36.5 | 8.0 | 44.5 | 8.0 | 38.5 |
| Max Q Clear Time (g_c+I1), s | 5.1 | 7.8 | 4.1 | 18.5 | 2.4 | 4.3 | 3.4 | 21.6 |
| Green Ext Time (p_c), s | 0.1 | 2.0 | 0.0 | 3.3 | 0.0 | 0.9 | 0.0 | 4.1 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 32.2 |
| HCM 7th LOS | C |

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | EBL | WBTL | NBL | SBTL | WBL | EBTL | SBL | NBTL |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | None | C-Max | None | Max | None | C-Max | None | Max |
| Maximum Split (s) | 18 | 45 | 14 | 43 | 12 | 51 | 12 | 45 |
| Maximum Split (%) | 15.0% | 37.5% | 11.7% | 35.8% | 10.0% | 42.5% | 10.0% | 37.5% |
| Minimum Split (s) | 12 | 38.5 | 12 | 35.5 | 12 | 40.5 | 12 | 36.5 |
| Yellow Time (s) | 3 | 4.5 | 3 | 4.5 | 3 | 4.5 | 3 | 4.5 |
| All-Red Time (s) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| Minimum Initial (s) | 8 | 15 | 8 | 15 | 8 | 15 | 8 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 7 | | 7 | | 7 | | 7 |
| Flash Don't Walk (s) | | 25 | | 22 | | 27 | | 23 |
| Dual Entry | No | Yes | No | Yes | No | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 63.5 | 81.5 | 6.5 | 20.5 | 63.5 | 75.5 | 6.5 | 18.5 |
| End Time (s) | 81.5 | 6.5 | 20.5 | 63.5 | 75.5 | 6.5 | 18.5 | 63.5 |
| Yield/Force Off (s) | 77.5 | 0 | 16.5 | 57 | 71.5 | 0 | 14.5 | 57 |
| Yield/Force Off 170(s) | 77.5 | 95 | 16.5 | 35 | 71.5 | 93 | 14.5 | 34 |
| Local Start Time (s) | 63.5 | 81.5 | 6.5 | 20.5 | 63.5 | 75.5 | 6.5 | 18.5 |
| Local Yield (s) | 77.5 | 0 | 16.5 | 57 | 71.5 | 0 | 14.5 | 57 |
| Local Yield 170(s) | 77.5 | 95 | 16.5 | 35 | 71.5 | 93 | 14.5 | 34 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 105 |
| Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow | |

Splits and Phases: 14: Signal Butte Road & Williams Field Road



| Intersection | |
|---|---|
| Int Delay, s/veh | 0.1 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 0 | 55 | 0 | 2725 | 2081 | 128 |
| Future Vol, veh/h | 0 | 55 | 0 | 2725 | 2081 | 128 |
| 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 | 60 | 0 | 2962 | 2262 | 139 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | - | 1201 | - | 0 | - | 0 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | 7.14 | - | - | - | - |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | 3.92 | - | - | - | - |
| Pot Cap-1 Maneuver | 0 | *583 | 0 | - | - | - |
| Stage 1 | 0 | - | 0 | - | - | - |
| Stage 2 | 0 | - | 0 | - | - | - |
| Platoon blocked, % | | 0 | | - | - | - |
| Mov Cap-1 Maneuver | - | *583 | - | - | - | - |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 11.88 | 0 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|
| Capacity (veh/h) | - | 583 | - | - |
| HCM Lane V/C Ratio | - | 0.103 | - | - |
| HCM Control Delay (s/veh) | - | 11.9 | - | - |
| HCM Lane LOS | - | B | - | - |
| HCM 95th %tile Q(veh) | - | 0.3 | - | - |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 180 | 87 | 117 | 2633 | 2000 | 141 |
| Future Volume (veh/h) | 180 | 87 | 117 | 2633 | 2000 | 141 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | 1.00 | | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 196 | 95 | 127 | 2862 | 2174 | 153 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 340 | 302 | 167 | 3600 | 3070 | 214 |
| Arrive On Green | 0.19 | 0.19 | 0.06 | 0.94 | 0.21 | 0.21 |
| Sat Flow, veh/h | 1781 | 1585 | 1781 | 5274 | 5041 | 340 |
| Grp Volume(v), veh/h | 196 | 95 | 127 | 2862 | 1513 | 814 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1585 | 1781 | 1702 | 1702 | 1809 |
| Q Serve(g_s), s | 12.0 | 6.2 | 2.9 | 16.5 | 49.5 | 50.2 |
| Cycle Q Clear(g_c), s | 12.0 | 6.2 | 2.9 | 16.5 | 49.5 | 50.2 |
| Prop In Lane | 1.00 | 1.00 | 1.00 | | | 0.19 |
| Lane Grp Cap(c), veh/h | 340 | 302 | 167 | 3600 | 2145 | 1140 |
| V/C Ratio(X) | 0.58 | 0.31 | 0.76 | 0.80 | 0.71 | 0.71 |
| Avail Cap(c_a), veh/h | 340 | 302 | 280 | 3600 | 2145 | 1140 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.33 | 1.33 | 0.33 | 0.33 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 44.1 | 41.8 | 27.6 | 1.6 | 37.2 | 37.5 |
| Incr Delay (d2), s/veh | 7.0 | 2.7 | 6.9 | 1.9 | 2.0 | 3.8 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 10.0 | 4.8 | 4.8 | 4.0 | 31.0 | 33.8 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 51.1 | 44.5 | 34.5 | 3.5 | 39.2 | 41.3 |
| LnGrp LOS | D | D | C | A | D | D |
| Approach Vol, veh/h | 291 | | | 2989 | 2327 | |
| Approach Delay, s/veh | 48.9 | | | 4.8 | 39.9 | |
| Approach LOS | D | | | A | D | |

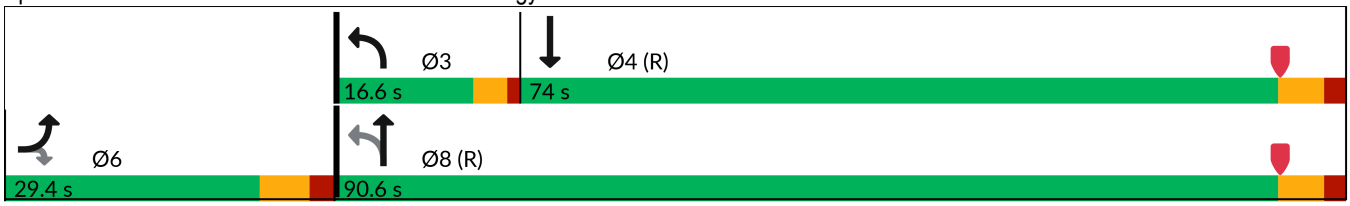
| Timer - Assigned Phs | | 3 | 4 | | 6 | 8 |
|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 9.0 | 81.6 | | 29.4 | 90.6 |
| Change Period (Y+Rc), s | | 4.0 | 6.0 | | 6.5 | 6.0 |
| Max Green Setting (Gmax), s | | 12.6 | 68.0 | | 22.9 | 84.6 |
| Max Q Clear Time (g_c+I1), s | | 4.9 | 52.2 | | 14.0 | 18.5 |
| Green Ext Time (p_c), s | | 0.2 | 13.3 | | 0.6 | 53.7 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 21.7 |
| HCM 7th LOS | C |

| Phase Number | 3 | 4 | 6 | 8 |
|---|---|---|---|---|
| Movement | NBL | SBT | EBL | NBTL |
| Lead/Lag | Lead | Lag | | |
| Lead-Lag Optimize | Yes | Yes | | |
| Recall Mode | None | C-Max | Max | C-Max |
| Maximum Split (s) | 16.6 | 74 | 29.4 | 90.6 |
| Maximum Split (%) | 13.8% | 61.7% | 24.5% | 75.5% |
| Minimum Split (s) | 9.5 | 24 | 24.5 | 24 |
| Yellow Time (s) | 3 | 4 | 4.5 | 4 |
| All-Red Time (s) | 1 | 2 | 2 | 2 |
| Minimum Initial (s) | 5 | 15 | 10 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 7 | 7 | 7 |
| Flash Don't Walk (s) | | 11 | 11 | 11 |
| Dual Entry | No | Yes | Yes | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 35.4 | 52 | 6 | 35.4 |
| End Time (s) | 52 | 6 | 35.4 | 6 |
| Yield/Force Off (s) | 48 | 0 | 28.9 | 0 |
| Yield/Force Off 170(s) | 48 | 109 | 17.9 | 109 |
| Local Start Time (s) | 35.4 | 52 | 6 | 35.4 |
| Local Yield (s) | 48 | 0 | 28.9 | 0 |
| Local Yield 170(s) | 48 | 109 | 17.9 | 109 |

| Intersection Summary | | |
|---|---|---|
| Cycle Length | 120 | |
| Control Type | Actuated-Coordinated | |
| Natural Cycle | 80 | |
| Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBTL, Start of Yellow | | |

Splits and Phases: 16: Ellsworth Road & Technology Avenue



| Intersection | |
|---|---|
| Int Delay, s/veh | 0.1 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 0 | 39 | 0 | 2661 | 1981 | 78 |
| Future Vol, veh/h | 0 | 39 | 0 | 2661 | 1981 | 78 |
| 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 | 42 | 0 | 2892 | 2153 | 85 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | - | 1119 | - | 0 | - | 0 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | 7.14 | - | - | - | - |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | 3.92 | - | - | - | - |
| Pot Cap-1 Maneuver | 0 | *598 | 0 | - | - | - |
| Stage 1 | 0 | - | 0 | - | - | - |
| Stage 2 | 0 | - | 0 | - | - | - |
| Platoon blocked, % | | 0 | | - | - | - |
| Mov Cap-1 Maneuver | - | *598 | - | - | - | - |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 11.48 | 0 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|
| Capacity (veh/h) | - | 598 | - | - |
| HCM Lane V/C Ratio | - | 0.071 | - | - |
| HCM Control Delay (s/veh) | - | 11.5 | - | - |
| HCM Lane LOS | - | B | - | - |
| HCM 95th %tile Q(veh) | - | 0.2 | - | - |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 15 | 0 | 1058 | 41 | 4 | 1154 |
| Future Volume (veh/h) | 15 | 0 | 1058 | 41 | 4 | 1154 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 16 | 0 | 1150 | 45 | 4 | 1254 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 35 | 31 | 4241 | 1316 | 486 | 4241 |
| Arrive On Green | 0.02 | 0.00 | 0.83 | 0.83 | 0.83 | 0.83 |
| Sat Flow, veh/h | 1781 | 1585 | 5274 | 1585 | 468 | 5274 |
| Grp Volume(v), veh/h | 16 | 0 | 1150 | 45 | 4 | 1254 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1585 | 1702 | 1585 | 468 | 1702 |
| Q Serve(g_s), s | 0.5 | 0.0 | 3.0 | 0.3 | 0.1 | 3.3 |
| Cycle Q Clear(g_c), s | 0.5 | 0.0 | 3.0 | 0.3 | 3.1 | 3.3 |
| Prop In Lane | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Lane Grp Cap(c), veh/h | 35 | 31 | 4241 | 1316 | 486 | 4241 |
| V/C Ratio(X) | 0.46 | 0.00 | 0.27 | 0.03 | 0.01 | 0.30 |
| Avail Cap(c_a), veh/h | 549 | 489 | 4241 | 1316 | 486 | 4241 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 0.72 | 0.72 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 29.1 | 0.0 | 1.1 | 0.9 | 1.4 | 1.1 |
| Incr Delay (d2), s/veh | 9.2 | 0.0 | 0.1 | 0.0 | 0.0 | 0.2 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 0.6 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 38.3 | 0.0 | 1.2 | 0.9 | 1.5 | 1.3 |
| LnGrp LOS | D | | A | A | A | A |
| Approach Vol, veh/h | 16 | | 1195 | | | 1258 |
| Approach Delay, s/veh | 38.3 | | 1.2 | | | 1.3 |
| Approach LOS | D | | A | | | A |

| Timer - Assigned Phs | 2 | | | 6 | 8 |
|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 54.3 | | | 54.3 | 5.7 |
| Change Period (Y+Rc), s | 4.5 | | | 4.5 | 4.5 |
| Max Green Setting (Gmax), s | 32.5 | | | 32.5 | 18.5 |
| Max Q Clear Time (g_c+I1), s | 5.0 | | | 5.3 | 2.5 |
| Green Ext Time (p_c), s | 9.8 | | | 10.8 | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 1.5 |
| HCM 7th LOS | A |

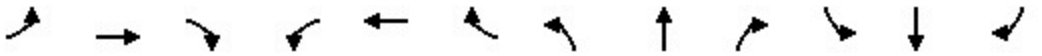
**Notes**

User approved pedestrian interval to be less than phase max green.

| Phase Number | 2 | 6 | 8 |
|---|---|---|---|
| Movement | NBT | SBTL | WBL |
| Lead/Lag | | | |
| Lead-Lag Optimize | | | |
| Recall Mode | C-Max | C-Max | None |
| Maximum Split (s) | 37 | 37 | 23 |
| Maximum Split (%) | 61.7% | 61.7% | 38.3% |
| Minimum Split (s) | 22.5 | 22.5 | 22.5 |
| Yellow Time (s) | 3.5 | 3.5 | 3.5 |
| All-Red Time (s) | 1 | 1 | 1 |
| Minimum Initial (s) | 5 | 5 | 5 |
| Vehicle Extension (s) | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 |
| Walk Time (s) | 7 | 7 | 7 |
| Flash Don't Walk (s) | 11 | 11 | 11 |
| Dual Entry | Yes | Yes | Yes |
| Inhibit Max | Yes | Yes | Yes |
| Start Time (s) | 27.5 | 27.5 | 4.5 |
| End Time (s) | 4.5 | 4.5 | 27.5 |
| Yield/Force Off (s) | 0 | 0 | 23 |
| Yield/Force Off 170(s) | 49 | 49 | 12 |
| Local Start Time (s) | 27.5 | 27.5 | 4.5 |
| Local Yield (s) | 0 | 0 | 23 |
| Local Yield 170(s) | 49 | 49 | 12 |

| Intersection Summary | |
|---|---|
| Cycle Length | 60 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 45 |
| Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Yellow | |

Splits and Phases: 1: Ellsworth Road & Serenity Avenue



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 410 | 299 | 264 | 396 | 128 | 115 | 172 | 574 | 472 | 226 | 706 | 242 |
| Future Volume (veh/h) | 410 | 299 | 264 | 396 | 128 | 115 | 172 | 574 | 472 | 226 | 706 | 242 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 446 | 325 | 287 | 430 | 139 | 125 | 187 | 624 | 513 | 246 | 767 | 263 |
| 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 | 528 | 1255 | 390 | 510 | 1229 | 382 | 582 | 1128 | 584 | 642 | 1258 | 633 |
| Arrive On Green | 0.15 | 0.25 | 0.25 | 0.15 | 0.24 | 0.24 | 0.06 | 0.07 | 0.07 | 0.06 | 0.08 | 0.08 |
| Sat Flow, veh/h | 3456 | 5106 | 1585 | 3456 | 5106 | 1585 | 3456 | 5106 | 1585 | 3456 | 5106 | 1585 |
| Grp Volume(v), veh/h | 446 | 325 | 287 | 430 | 139 | 125 | 187 | 624 | 513 | 246 | 767 | 263 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1702 | 1585 | 1728 | 1702 | 1585 | 1728 | 1702 | 1585 | 1728 | 1702 | 1585 |
| Q Serve(g_s), s | 15.1 | 6.2 | 20.0 | 14.5 | 2.5 | 7.8 | 6.2 | 14.2 | 26.5 | 8.2 | 17.4 | 15.4 |
| Cycle Q Clear(g_c), s | 15.1 | 6.2 | 20.0 | 14.5 | 2.5 | 7.8 | 6.2 | 14.2 | 26.5 | 8.2 | 17.4 | 15.4 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 528 | 1255 | 390 | 510 | 1229 | 382 | 582 | 1128 | 584 | 642 | 1258 | 633 |
| V/C Ratio(X) | 0.84 | 0.26 | 0.74 | 0.84 | 0.11 | 0.33 | 0.32 | 0.55 | 0.88 | 0.38 | 0.61 | 0.42 |
| Avail Cap(c_a), veh/h | 806 | 1255 | 390 | 778 | 1229 | 382 | 582 | 1128 | 584 | 642 | 1258 | 633 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.81 | 0.81 | 0.81 | 0.98 | 0.98 | 0.98 |
| Uniform Delay (d), s/veh | 49.5 | 36.4 | 41.7 | 49.8 | 35.6 | 37.5 | 50.1 | 49.9 | 40.9 | 49.7 | 49.6 | 32.1 |
| Incr Delay (d2), s/veh | 5.2 | 0.5 | 11.7 | 5.3 | 0.2 | 2.3 | 0.3 | 0.5 | 12.0 | 0.4 | 0.8 | 0.4 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 11.2 | 4.7 | 14.0 | 10.9 | 2.0 | 5.9 | 5.1 | 10.3 | 21.6 | 6.8 | 12.7 | 10.8 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 54.6 | 36.9 | 53.4 | 55.0 | 35.7 | 39.8 | 50.3 | 50.4 | 52.9 | 50.1 | 50.4 | 32.5 |
| LnGrp LOS | D | D | D | E | D | D | D | D | D | D | D | C |
| Approach Vol, veh/h | | 1058 | | | 694 | | | 1324 | | | 1276 | |
| Approach Delay, s/veh | | 48.9 | | | 48.4 | | | 51.4 | | | 46.6 | |
| Approach LOS | | D | | | D | | | D | | | D | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 23.3 | 35.4 | 24.2 | 37.1 | 22.7 | 36.0 | 27.3 | 34.0 |
| Change Period (Y+Rc), s | 5.0 | 6.5 | 4.0 | 7.5 | 5.0 | 6.5 | 5.0 | 7.5 |
| Max Green Setting (Gmax), s | 28.0 | 28.5 | 11.0 | 29.5 | 27.0 | 29.5 | 13.0 | 26.5 |
| Max Q Clear Time (g_c+I1), s | 17.1 | 9.8 | 8.2 | 19.4 | 16.5 | 22.0 | 10.2 | 28.5 |
| Green Ext Time (p_c), s | 1.3 | 1.2 | 0.2 | 4.4 | 1.2 | 2.0 | 0.2 | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 48.9 |
| HCM 7th LOS | D |

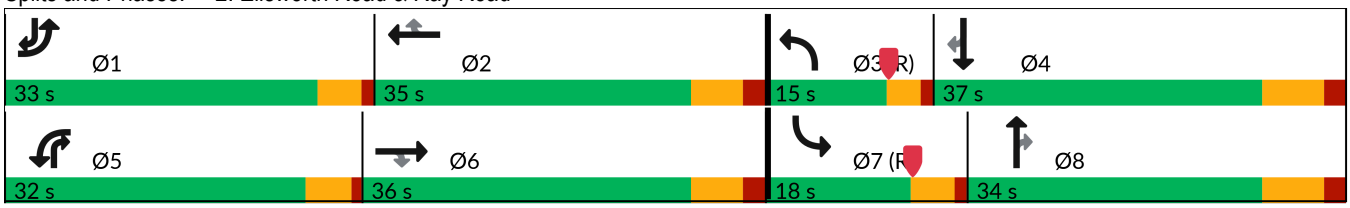
**Notes**

User approved pedestrian interval to be less than phase max green.

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | EBL | WBT | NBL | SBT | WBL | EBT | SBL | NBT |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | None | Max | C-Max | None | None | Max | C-Max | None |
| Maximum Split (s) | 33 | 35 | 15 | 37 | 32 | 36 | 18 | 34 |
| Maximum Split (%) | 27.5% | 29.2% | 12.5% | 30.8% | 26.7% | 30.0% | 15.0% | 28.3% |
| Minimum Split (s) | 10 | 34.5 | 12 | 37.5 | 10 | 35.5 | 12 | 37.5 |
| Yellow Time (s) | 4 | 4.5 | 3 | 5.5 | 4 | 4.5 | 4 | 5.5 |
| All-Red Time (s) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| Minimum Initial (s) | 5 | 10 | 5 | 15 | 5 | 10 | 5 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 4 | | 4 | | 4 | | 4 |
| Flash Don't Walk (s) | | 22 | | 26 | | 23 | | 26 |
| Dual Entry | No | Yes | No | Yes | No | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 41 | 74 | 109 | 4 | 41 | 73 | 109 | 7 |
| End Time (s) | 74 | 109 | 4 | 41 | 73 | 109 | 7 | 41 |
| Yield/Force Off (s) | 69 | 102.5 | 0 | 33.5 | 68 | 102.5 | 2 | 33.5 |
| Yield/Force Off 170(s) | 69 | 80.5 | 0 | 7.5 | 68 | 79.5 | 2 | 7.5 |
| Local Start Time (s) | 41 | 74 | 109 | 4 | 41 | 73 | 109 | 7 |
| Local Yield (s) | 69 | 102.5 | 0 | 33.5 | 68 | 102.5 | 2 | 33.5 |
| Local Yield 170(s) | 69 | 80.5 | 0 | 7.5 | 68 | 79.5 | 2 | 7.5 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 95 |
| Offset: 0 (0%), Referenced to phase 3:NBL and 7:SBL, Start of Yellow | |

Splits and Phases: 2: Ellsworth Road & Ray Road



| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 303 | 162 | 1067 | 336 | 191 | 1169 |
| Future Volume (veh/h) | 303 | 162 | 1067 | 336 | 191 | 1169 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 329 | 176 | 1160 | 365 | 208 | 1271 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 691 | 317 | 1979 | 614 | 893 | 3510 |
| Arrive On Green | 0.20 | 0.20 | 0.13 | 0.13 | 0.26 | 0.69 |
| Sat Flow, veh/h | 3456 | 1585 | 5274 | 1585 | 3456 | 5274 |
| Grp Volume(v), veh/h | 329 | 176 | 1160 | 365 | 208 | 1271 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1585 | 1702 | 1585 | 1728 | 1702 |
| Q Serve(g_s), s | 10.1 | 12.0 | 25.7 | 26.1 | 5.7 | 12.4 |
| Cycle Q Clear(g_c), s | 10.1 | 12.0 | 25.7 | 26.1 | 5.7 | 12.4 |
| Prop In Lane | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Lane Grp Cap(c), veh/h | 691 | 317 | 1979 | 614 | 893 | 3510 |
| V/C Ratio(X) | 0.48 | 0.56 | 0.59 | 0.59 | 0.23 | 0.36 |
| Avail Cap(c_a), veh/h | 691 | 317 | 1979 | 614 | 893 | 3510 |
| HCM Platoon Ratio | 1.00 | 1.00 | 0.33 | 0.33 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 0.93 | 0.93 | 0.70 | 0.70 |
| Uniform Delay (d), s/veh | 42.4 | 43.2 | 43.3 | 43.4 | 35.1 | 7.8 |
| Incr Delay (d2), s/veh | 2.3 | 6.9 | 1.2 | 3.9 | 0.4 | 0.2 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 8.0 | 9.1 | 17.4 | 17.2 | 4.3 | 6.5 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 44.8 | 50.0 | 44.4 | 47.3 | 35.5 | 8.0 |
| LnGrp LOS | D | D | D | D | D | A |
| Approach Vol, veh/h | 505 | | 1525 | | | 1479 |
| Approach Delay, s/veh | 46.6 | | 45.1 | | | 11.9 |
| Approach LOS | D | | D | | | B |

| Timer - Assigned Phs | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 30.0 | 90.0 | 36.0 | 54.0 |
| Change Period (Y+Rc), s | 6.0 | 7.5 | 5.0 | 7.5 |
| Max Green Setting (Gmax), s | 24.0 | 82.5 | 31.0 | 46.5 |
| Max Q Clear Time (g_c+I1), s | 14.0 | 14.4 | 7.7 | 28.1 |
| Green Ext Time (p_c), s | 0.8 | 1.5 | 0.3 | 1.8 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 31.3 |
| HCM 7th LOS | C |

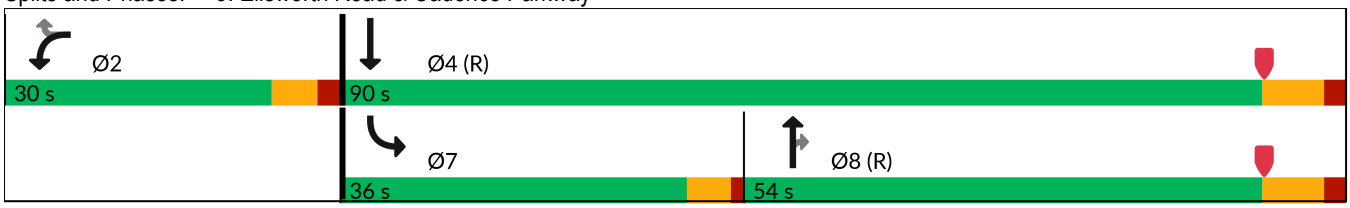
**Notes**

User approved pedestrian interval to be less than phase max green.

| Phase Number | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Movement | WBL | SBT | SBL | NBT |
| Lead/Lag | | | Lead | Lag |
| Lead-Lag Optimize | | | Yes | Yes |
| Recall Mode | Max | C-Max | Max | C-Max |
| Maximum Split (s) | 30 | 90 | 36 | 54 |
| Maximum Split (%) | 25.0% | 75.0% | 30.0% | 45.0% |
| Minimum Split (s) | 35.5 | 25.5 | 13 | 32.5 |
| Yellow Time (s) | 4 | 5.5 | 4 | 5.5 |
| All-Red Time (s) | 2 | 2 | 1 | 2 |
| Minimum Initial (s) | 10 | 15 | 5 | 15 |
| Vehicle Extension (s) | 2 | 0.2 | 2 | 0.2 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | 4 | | | 7 |
| Flash Don't Walk (s) | 25 | | | 18 |
| Dual Entry | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 109 | 19 | 19 | 55 |
| End Time (s) | 19 | 109 | 55 | 109 |
| Yield/Force Off (s) | 13 | 101.5 | 50 | 101.5 |
| Yield/Force Off 170(s) | 108 | 101.5 | 50 | 83.5 |
| Local Start Time (s) | 7.5 | 37.5 | 37.5 | 73.5 |
| Local Yield (s) | 31.5 | 0 | 68.5 | 0 |
| Local Yield 170(s) | 6.5 | 0 | 68.5 | 102 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 85 |
| Offset: 101.5 (85%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow | |

Splits and Phases: 3: Ellsworth Road & Cadence Parkway



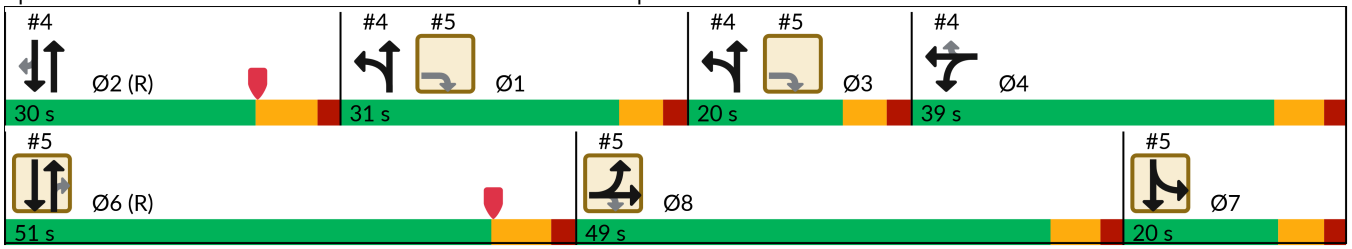
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 0 | 0 | 0 | 25 | 0 | 108 | 1399 | 1309 | 0 | 0 | 842 | 609 |
| Future Volume (vph) | 0 | 0 | 0 | 25 | 0 | 108 | 1399 | 1309 | 0 | 0 | 842 | 609 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | | 0 | 350 | | 350 | 525 | | 0 | 290 | | 285 |
| Storage Lanes | 0 | | 0 | 1 | | 1 | 0 | | 0 | 0 | | 2 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 0.91 | 0.86 | 0.91 | 0.97 | 0.91 | 1.00 | 1.00 | 0.86 | 0.88 |
| Frt | | | | | 0.857 | 0.850 | | | | | | 0.850 |
| Flt Protected | | | | 0.950 | 0.998 | | 0.950 | | | | | |
| Satd. Flow (prot) | 0 | 0 | 0 | 1610 | 2740 | 1441 | 3433 | 5085 | 0 | 0 | 6408 | 2787 |
| Flt Permitted | | | | 0.950 | 0.998 | | 0.950 | | | | | |
| Satd. Flow (perm) | 0 | 0 | 0 | 1610 | 2740 | 1441 | 3433 | 5085 | 0 | 0 | 6408 | 2787 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | | | 218 | 218 | | | | | | 662 |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 841 | | | 605 | | | 688 | | | 624 | |
| Travel Time (s) | | 19.1 | | | 13.8 | | | 15.6 | | | 14.2 | |
| 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 |
| Adj. Flow (vph) | 0 | 0 | 0 | 27 | 0 | 117 | 1521 | 1423 | 0 | 0 | 915 | 662 |
| Shared Lane Traffic (%) | | | | 10% | | 50% | | | | | | |
| Lane Group Flow (vph) | 0 | 0 | 0 | 24 | 62 | 58 | 1521 | 1423 | 0 | 0 | 915 | 662 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 24 | | | 24 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | | | | 1 | 2 | 1 | 1 | 2 | | | 2 | 1 |
| Detector Template | | | | Left | Thru | Right | Left | Thru | | | Thru | Right |
| Leading Detector (ft) | | | | 20 | 100 | 20 | 20 | 100 | | | 100 | 20 |
| Trailing Detector (ft) | | | | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 |
| Detector 1 Position(ft) | | | | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 |
| Detector 1 Size(ft) | | | | 20 | 6 | 20 | 20 | 6 | | | 6 | 20 |
| Detector 1 Type | | | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | | Cl+Ex | Cl+Ex |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Detector 1 Queue (s) | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Detector 1 Delay (s) | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Detector 2 Position(ft) | | | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | | | | Split | NA | Perm | Prot | NA | | | NA | Perm |
| Protected Phases | | | | 4 | 4 | | 1 3 | 1 2 3 | | | 2 | |
| Permitted Phases | | | | | | 4 | | | | | | 2 |

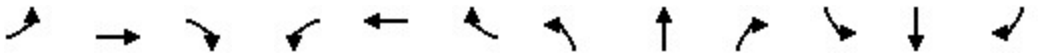
| Lane Group | Ø1 | Ø3 | Ø6 | Ø7 | Ø8 |
|---|---|---|---|---|---|
| Lane Configurations | | | | | |
| Traffic Volume (vph) | | | | | |
| Future Volume (vph) | | | | | |
| Ideal Flow (vphpl) | | | | | |
| Storage Length (ft) | | | | | |
| Storage Lanes | | | | | |
| Taper Length (ft) | | | | | |
| Lane Util. Factor | | | | | |
| Frt | | | | | |
| Flt Protected | | | | | |
| Satd. Flow (prot) | | | | | |
| Flt Permitted | | | | | |
| Satd. Flow (perm) | | | | | |
| Right Turn on Red | | | | | |
| Satd. Flow (RTOR) | | | | | |
| Link Speed (mph) | | | | | |
| Link Distance (ft) | | | | | |
| Travel Time (s) | | | | | |
| Peak Hour Factor | | | | | |
| Adj. Flow (vph) | | | | | |
| Shared Lane Traffic (%) | | | | | |
| Lane Group Flow (vph) | | | | | |
| Enter Blocked Intersection | | | | | |
| Lane Alignment | | | | | |
| Median Width(ft) | | | | | |
| Link Offset(ft) | | | | | |
| Crosswalk Width(ft) | | | | | |
| Two way Left Turn Lane | | | | | |
| Headway Factor | | | | | |
| Turning Speed (mph) | | | | | |
| Number of Detectors | | | | | |
| Detector Template | | | | | |
| Leading Detector (ft) | | | | | |
| Trailing Detector (ft) | | | | | |
| Detector 1 Position(ft) | | | | | |
| Detector 1 Size(ft) | | | | | |
| Detector 1 Type | | | | | |
| Detector 1 Channel | | | | | |
| Detector 1 Extend (s) | | | | | |
| Detector 1 Queue (s) | | | | | |
| Detector 1 Delay (s) | | | | | |
| Detector 2 Position(ft) | | | | | |
| Detector 2 Size(ft) | | | | | |
| Detector 2 Type | | | | | |
| Detector 2 Channel | | | | | |
| Detector 2 Extend (s) | | | | | |
| Turn Type | | | | | |
| Protected Phases | 1 | 3 | 6 | 7 | 8 |
| Permitted Phases | | | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | | | | 4 | 4 | 4 | 1 3 | 1 2 3 | | | 2 | 2 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | | | | 10.0 | 10.0 | 10.0 | | | | | 15.0 | 15.0 |
| Minimum Split (s) | | | | 48.5 | 48.5 | 48.5 | | | | | 25.5 | 25.5 |
| Total Split (s) | | | | 39.0 | 39.0 | 39.0 | | | | | 30.0 | 30.0 |
| Total Split (%) | | | | 32.5% | 32.5% | 32.5% | | | | | 25.0% | 25.0% |
| Maximum Green (s) | | | | 32.5 | 32.5 | 32.5 | | | | | 22.5 | 22.5 |
| Yellow Time (s) | | | | 4.5 | 4.5 | 4.5 | | | | | 5.5 | 5.5 |
| All-Red Time (s) | | | | 2.0 | 2.0 | 2.0 | | | | | 2.0 | 2.0 |
| Lost Time Adjust (s) | | | | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 |
| Total Lost Time (s) | | | | 6.5 | 6.5 | 6.5 | | | | | 7.5 | 7.5 |
| Lead/Lag | | | | Lag | Lag | Lag | | | | | Lead | Lead |
| Lead-Lag Optimize? | | | | Yes | Yes | Yes | | | | | Yes | Yes |
| Vehicle Extension (s) | | | | 4.0 | 4.0 | 4.0 | | | | | 2.0 | 2.0 |
| Recall Mode | | | | None | None | None | | | | | C-Max | C-Max |
| Walk Time (s) | | | | 4.0 | 4.0 | 4.0 | | | | | 4.0 | 4.0 |
| Flash Don't Walk (s) | | | | 38.0 | 38.0 | 38.0 | | | | | 13.0 | 13.0 |
| Pedestrian Calls (#/hr) | | | | 0 | 0 | 0 | | | | | 0 | 0 |
| Act Effct Green (s) | | | | 28.0 | 28.0 | 28.0 | 52.7 | 84.0 | | | 22.6 | 22.6 |
| Actuated g/C Ratio | | | | 0.23 | 0.23 | 0.23 | 0.44 | 0.70 | | | 0.19 | 0.19 |
| v/c Ratio | | | | 0.06 | 0.08 | 0.12 | 1.01 | 0.40 | | | 0.76 | 0.62 |
| Control Delay (s/veh) | | | | 33.1 | 0.2 | 0.5 | 49.1 | 5.0 | | | 64.6 | 21.7 |
| Queue Delay | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Total Delay (s/veh) | | | | 33.1 | 0.2 | 0.5 | 49.1 | 5.0 | | | 64.6 | 21.7 |
| LOS | | | | C | A | A | D | A | | | E | C |
| Approach Delay (s/veh) | | | | | 5.8 | | | 27.8 | | | 46.6 | |
| Approach LOS | | | | | A | | | C | | | D | |

| Intersection Summary | |
|---|---|
| Area Type: | Other |
| Cycle Length: 120 | |
| Actuated Cycle Length: 120 | |
| Offset: 0 (0%), Referenced to phase 2:NBSB and 6:, Start of Yellow | |
| Natural Cycle: 150 | |
| Control Type: Actuated-Coordinated | |
| Maximum v/c Ratio: 1.49 | |
| Intersection Signal Delay (s/veh): 33.5 | Intersection LOS: C |
| Intersection Capacity Utilization 106.7% | ICU Level of Service G |
| Analysis Period (min) 15 | |

Splits and Phases: 4: Ellsworth Road & SR24 Westbound Ramps





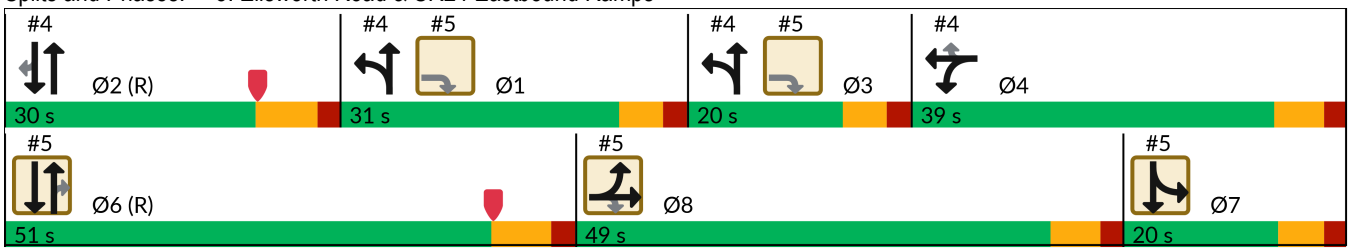
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 640 | 2 | 2308 | 0 | 0 | 0 | 0 | 2115 | 37 | 122 | 761 | 0 |
| Future Volume (vph) | 640 | 2 | 2308 | 0 | 0 | 0 | 0 | 2115 | 37 | 122 | 761 | 0 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 350 | | 350 | 0 | | 0 | 300 | | 300 | 550 | | 0 |
| Storage Lanes | 1 | | 2 | 0 | | 0 | 2 | | 1 | 0 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 0.95 | 0.95 | 0.88 | 1.00 | 1.00 | 1.00 | 1.00 | 0.81 | 1.00 | 0.97 | 0.91 | 1.00 |
| Frt | | | 0.850 | | | | | | 0.850 | | | |
| Flt Protected | 0.950 | 0.953 | | | | | | | | 0.950 | | |
| Satd. Flow (prot) | 1681 | 1686 | 2787 | 0 | 0 | 0 | 0 | 7544 | 1583 | 3433 | 5085 | 0 |
| Flt Permitted | 0.950 | 0.953 | | | | | | | | 0.950 | | |
| Satd. Flow (perm) | 1681 | 1686 | 2787 | 0 | 0 | 0 | 0 | 7544 | 1583 | 3433 | 5085 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 245 | | | | | | 200 | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 651 | | | 441 | | | 838 | | | 688 | |
| Travel Time (s) | | 14.8 | | | 10.0 | | | 19.0 | | | 15.6 | |
| 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 |
| Adj. Flow (vph) | 696 | 2 | 2509 | 0 | 0 | 0 | 0 | 2299 | 40 | 133 | 827 | 0 |
| Shared Lane Traffic (%) | 50% | | | | | | | | | | | |
| Lane Group Flow (vph) | 348 | 350 | 2509 | 0 | 0 | 0 | 0 | 2299 | 40 | 133 | 827 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 24 | | | 24 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | 1 | | | | | 2 | 1 | 1 | 2 | |
| Detector Template | Left | Thru | Right | | | | | Thru | Right | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | 20 | | | | | 100 | 20 | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | 0 | | | | | 0 | 0 | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | 0 | | | | | 0 | 0 | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | 20 | | | | | 6 | 20 | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | | | | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | | | | 0.0 | | | 0.0 | |
| Turn Type | Split | NA | custom | | | | | NA | Perm | Prot | NA | |
| Protected Phases | 8 | 8 | | | | | | 6 | | 7 | 6 7 | |
| Permitted Phases | | | 1 3 8 | | | | | | 6 | | | |

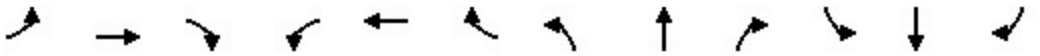
| Lane Group | Ø1 | Ø2 | Ø3 | Ø4 |
|---|---|---|---|---|
| Lane Configurations | | | | |
| Traffic Volume (vph) | | | | |
| Future Volume (vph) | | | | |
| Ideal Flow (vphpl) | | | | |
| Storage Length (ft) | | | | |
| Storage Lanes | | | | |
| Taper Length (ft) | | | | |
| Lane Util. Factor | | | | |
| Frt | | | | |
| Flt Protected | | | | |
| Satd. Flow (prot) | | | | |
| Flt Permitted | | | | |
| Satd. Flow (perm) | | | | |
| Right Turn on Red | | | | |
| Satd. Flow (RTOR) | | | | |
| Link Speed (mph) | | | | |
| Link Distance (ft) | | | | |
| Travel Time (s) | | | | |
| Peak Hour Factor | | | | |
| Adj. Flow (vph) | | | | |
| Shared Lane Traffic (%) | | | | |
| Lane Group Flow (vph) | | | | |
| Enter Blocked Intersection | | | | |
| Lane Alignment | | | | |
| Median Width(ft) | | | | |
| Link Offset(ft) | | | | |
| Crosswalk Width(ft) | | | | |
| Two way Left Turn Lane | | | | |
| Headway Factor | | | | |
| Turning Speed (mph) | | | | |
| Number of Detectors | | | | |
| Detector Template | | | | |
| Leading Detector (ft) | | | | |
| Trailing Detector (ft) | | | | |
| Detector 1 Position(ft) | | | | |
| Detector 1 Size(ft) | | | | |
| Detector 1 Type | | | | |
| Detector 1 Channel | | | | |
| Detector 1 Extend (s) | | | | |
| Detector 1 Queue (s) | | | | |
| Detector 1 Delay (s) | | | | |
| Detector 2 Position(ft) | | | | |
| Detector 2 Size(ft) | | | | |
| Detector 2 Type | | | | |
| Detector 2 Channel | | | | |
| Detector 2 Extend (s) | | | | |
| Turn Type | | | | |
| Protected Phases | 1 | 2 | 3 | 4 |
| Permitted Phases | | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | 8 | 8 | 1 3 8 | | | | | 6 | 6 | 7 | 6 7 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | | | | | 15.0 | 15.0 | 5.0 | | |
| Minimum Split (s) | 46.5 | 46.5 | | | | | | 26.5 | 26.5 | 11.0 | | |
| Total Split (s) | 49.0 | 49.0 | | | | | | 51.0 | 51.0 | 20.0 | | |
| Total Split (%) | 40.8% | 40.8% | | | | | | 42.5% | 42.5% | 16.7% | | |
| Maximum Green (s) | 42.5 | 42.5 | | | | | | 43.5 | 43.5 | 14.0 | | |
| Yellow Time (s) | 4.5 | 4.5 | | | | | | 5.5 | 5.5 | 4.0 | | |
| All-Red Time (s) | 2.0 | 2.0 | | | | | | 2.0 | 2.0 | 2.0 | | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | | | | | 0.0 | 0.0 | 0.0 | | |
| Total Lost Time (s) | 6.5 | 6.5 | | | | | | 7.5 | 7.5 | 6.0 | | |
| Lead/Lag | Lead | Lead | | | | | | | | Lag | | |
| Lead-Lag Optimize? | Yes | Yes | | | | | | | | Yes | | |
| Vehicle Extension (s) | 4.0 | 4.0 | | | | | | 2.0 | 2.0 | 2.0 | | |
| Recall Mode | None | None | | | | | | C-Max | C-Max | None | | |
| Walk Time (s) | 4.0 | 4.0 | | | | | | 4.0 | 4.0 | | | |
| Flash Don't Walk (s) | 36.0 | 36.0 | | | | | | 15.0 | 15.0 | | | |
| Pedestrian Calls (#/hr) | 0 | 0 | | | | | | 0 | 0 | | | |
| Act Effct Green (s) | 42.5 | 42.5 | 67.9 | | | | | 43.6 | 43.6 | 13.9 | 63.5 | |
| Actuated g/C Ratio | 0.35 | 0.35 | 0.57 | | | | | 0.36 | 0.36 | 0.12 | 0.53 | |
| v/c Ratio | 0.58 | 0.59 | 1.49 | | | | | 0.84 | 0.06 | 0.34 | 0.31 | |
| Control Delay (s/veh) | 36.4 | 36.4 | 247.5 | | | | | 18.8 | 0.1 | 77.7 | 1.4 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Delay (s/veh) | 36.4 | 36.4 | 247.5 | | | | | 18.8 | 0.1 | 77.7 | 1.4 | |
| LOS | D | D | F | | | | | B | A | E | A | |
| Approach Delay (s/veh) | | 201.5 | | | | | | 18.5 | | | 12.0 | |
| Approach LOS | | F | | | | | | B | | | B | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 120 | | | |
| Actuated Cycle Length: 120 | | | |
| Offset: 0 (0%), Referenced to phase 2:NBSB and 6:, Start of Yellow | | | |
| Natural Cycle: 150 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 1.49 | | | |
| Intersection Signal Delay (s/veh): 107.8 | | Intersection LOS: F | |
| Intersection Capacity Utilization 106.7% | | ICU Level of Service G | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 5: Ellsworth Road & SR24 Eastbound Ramps





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 274 | 322 | 192 | 92 | 289 | 67 | 167 | 1812 | 75 | 540 | 2580 | 108 |
| Future Volume (veh/h) | 274 | 322 | 192 | 92 | 289 | 67 | 167 | 1812 | 75 | 540 | 2580 | 108 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 298 | 350 | 209 | 100 | 314 | 73 | 182 | 1970 | 82 | 587 | 2804 | 117 |
| 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 | 351 | 661 | 295 | 155 | 459 | 469 | 239 | 2055 | 638 | 576 | 2537 | 104 |
| Arrive On Green | 0.10 | 0.19 | 0.19 | 0.09 | 0.26 | 0.26 | 0.02 | 0.13 | 0.13 | 0.33 | 1.00 | 1.00 |
| Sat Flow, veh/h | 3456 | 3554 | 1585 | 3456 | 3554 | 1585 | 3456 | 5106 | 1585 | 3456 | 5030 | 207 |
| Grp Volume(v), veh/h | 298 | 350 | 209 | 100 | 314 | 73 | 182 | 1970 | 82 | 587 | 1885 | 1036 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1777 | 1585 | 1728 | 1777 | 1585 | 1728 | 1702 | 1585 | 1728 | 1702 | 1833 |
| Q Serve(g_s), s | 10.2 | 10.7 | 14.8 | 3.4 | 9.6 | 3.7 | 6.3 | 46.0 | 5.5 | 20.0 | 0.0 | 54.8 |
| Cycle Q Clear(g_c), s | 10.2 | 10.7 | 14.8 | 3.4 | 9.6 | 3.7 | 6.3 | 46.0 | 5.5 | 20.0 | 0.0 | 54.8 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.11 |
| Lane Grp Cap(c), veh/h | 351 | 661 | 295 | 155 | 459 | 469 | 239 | 2055 | 638 | 576 | 1717 | 924 |
| V/C Ratio(X) | 0.85 | 0.53 | 0.71 | 0.65 | 0.68 | 0.16 | 0.76 | 0.96 | 0.13 | 1.02 | 1.10 | 1.12 |
| Avail Cap(c_a), veh/h | 374 | 661 | 295 | 288 | 459 | 469 | 274 | 2055 | 638 | 576 | 1717 | 924 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 | 0.33 | 0.33 | 0.33 | 2.00 | 2.00 | 2.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 0.97 | 0.97 | 0.97 | 0.49 | 0.49 | 0.49 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 53.0 | 44.1 | 45.8 | 53.7 | 42.3 | 26.4 | 57.7 | 51.0 | 33.5 | 40.0 | 0.0 | 0.0 |
| Incr Delay (d2), s/veh | 14.7 | 0.4 | 6.6 | 1.6 | 7.8 | 0.7 | 4.4 | 7.2 | 0.2 | 42.4 | 53.8 | 68.6 |
| 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(95%),veh/ln | 8.8 | 8.3 | 10.5 | 2.6 | 7.6 | 2.6 | 5.0 | 27.9 | 3.9 | 16.0 | 19.9 | 26.5 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 67.7 | 44.5 | 52.4 | 55.3 | 50.1 | 27.1 | 62.0 | 58.2 | 33.7 | 82.4 | 53.8 | 68.6 |
| LnGrp LOS | E | D | D | E | D | C | E | E | C | F | F | F |
| Approach Vol, veh/h | | 857 | | | 487 | | | 2234 | | | 3508 | |
| Approach Delay, s/veh | | 54.5 | | | 47.7 | | | 57.6 | | | 63.0 | |
| Approach LOS | | D | | | D | | | E | | | E | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 17.2 | 22.0 | 12.8 | 68.0 | 10.4 | 28.8 | 25.0 | 55.8 |
| Change Period (Y+Rc), s | 5.0 | 6.5 | 4.5 | 7.5 | 5.0 | 6.5 | 5.0 | 7.5 |
| Max Green Setting (Gmax), s | 13.0 | 15.5 | 9.5 | 58.5 | 10.0 | 18.5 | 20.0 | 47.5 |
| Max Q Clear Time (g_c+I1), s | 12.2 | 11.6 | 8.3 | 56.8 | 5.4 | 16.8 | 22.0 | 48.0 |
| Green Ext Time (p_c), s | 0.0 | 0.6 | 0.0 | 1.6 | 0.0 | 0.4 | 0.0 | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 59.2 |
| HCM 7th LOS | E |

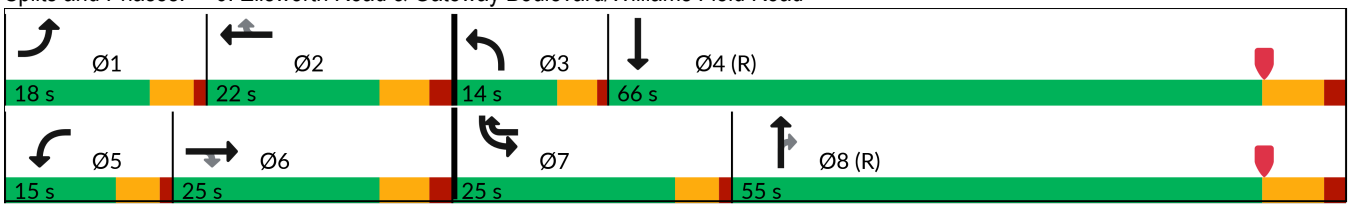
**Notes**

User approved pedestrian interval to be less than phase max green.

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | EBL | WBT | NBL | SBT | WBL | EBT | SBL | NBT |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | None | Max | None | C-Max | None | None | None | C-Max |
| Maximum Split (s) | 18 | 22 | 14 | 66 | 15 | 25 | 25 | 55 |
| Maximum Split (%) | 15.0% | 18.3% | 11.7% | 55.0% | 12.5% | 20.8% | 20.8% | 45.8% |
| Minimum Split (s) | 11 | 36.5 | 10.5 | 35.5 | 24 | 37.5 | 11 | 37.5 |
| Yellow Time (s) | 4 | 4.5 | 3.5 | 5.5 | 4 | 4.5 | 4 | 5.5 |
| All-Red Time (s) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| Minimum Initial (s) | 5 | 15 | 5 | 15 | 5 | 15 | 5 | 15 |
| Vehicle Extension (s) | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 2 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 4 | | 7 | | 4 | | 7 |
| Flash Don't Walk (s) | | 26 | | 21 | | 27 | | 23 |
| Dual Entry | No | Yes | No | Yes | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 57.5 | 75.5 | 97.5 | 111.5 | 57.5 | 72.5 | 97.5 | 2.5 |
| End Time (s) | 75.5 | 97.5 | 111.5 | 57.5 | 72.5 | 97.5 | 2.5 | 57.5 |
| Yield/Force Off (s) | 70.5 | 91 | 107 | 50 | 67.5 | 91 | 117.5 | 50 |
| Yield/Force Off 170(s) | 70.5 | 65 | 107 | 29 | 67.5 | 64 | 117.5 | 27 |
| Local Start Time (s) | 7.5 | 25.5 | 47.5 | 61.5 | 7.5 | 22.5 | 47.5 | 72.5 |
| Local Yield (s) | 20.5 | 41 | 57 | 0 | 17.5 | 41 | 67.5 | 0 |
| Local Yield 170(s) | 20.5 | 15 | 57 | 99 | 17.5 | 14 | 67.5 | 97 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 150 |
| Offset: 50 (42%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow | |

Splits and Phases: 6: Ellsworth Road & Gateway Boulevard/Williams Field Road



| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 48 | 20 | 1983 | 275 | 32 | 2817 |
| Future Volume (veh/h) | 48 | 20 | 1983 | 275 | 32 | 2817 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 52 | 22 | 2155 | 299 | 35 | 3062 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 861 | 383 | 2659 | 826 | 288 | 3298 |
| Arrive On Green | 0.24 | 0.24 | 1.00 | 1.00 | 0.17 | 1.00 |
| Sat Flow, veh/h | 3563 | 1585 | 5274 | 1585 | 3456 | 5274 |
| Grp Volume(v), veh/h | 52 | 22 | 2155 | 299 | 35 | 3062 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1585 | 1702 | 1585 | 1728 | 1702 |
| Q Serve(g_s), s | 1.3 | 1.3 | 0.0 | 0.0 | 1.0 | 0.0 |
| Cycle Q Clear(g_c), s | 1.3 | 1.3 | 0.0 | 0.0 | 1.0 | 0.0 |
| Prop In Lane | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Lane Grp Cap(c), veh/h | 861 | 383 | 2659 | 826 | 288 | 3298 |
| V/C Ratio(X) | 0.06 | 0.06 | 0.81 | 0.36 | 0.12 | 0.93 |
| Avail Cap(c_a), veh/h | 861 | 383 | 2659 | 826 | 288 | 3298 |
| HCM Platoon Ratio | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 0.40 | 0.40 | 0.09 | 0.09 |
| Uniform Delay (d), s/veh | 35.0 | 35.0 | 0.0 | 0.0 | 46.3 | 0.0 |
| Incr Delay (d2), s/veh | 0.1 | 0.3 | 1.1 | 0.5 | 0.1 | 0.6 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 1.1 | 1.0 | 0.5 | 0.2 | 0.8 | 0.3 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 35.1 | 35.3 | 1.1 | 0.5 | 46.3 | 0.6 |
| LnGrp LOS | D | D | A | A | D | A |
| Approach Vol, veh/h | 74 | | 2454 | | | 3097 |
| Approach Delay, s/veh | 35.2 | | 1.1 | | | 1.1 |
| Approach LOS | D | | A | | | A |

| Timer - Assigned Phs | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 35.0 | 85.0 | 15.0 | 70.0 |
| Change Period (Y+Rc), s | 6.0 | 7.5 | 5.0 | 7.5 |
| Max Green Setting (Gmax), s | 29.0 | 77.5 | 10.0 | 62.5 |
| Max Q Clear Time (g_c+I1), s | 3.3 | 2.0 | 3.0 | 2.0 |
| Green Ext Time (p_c), s | 0.2 | 59.0 | 0.0 | 31.4 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 1.6 |
| HCM 7th LOS | A |

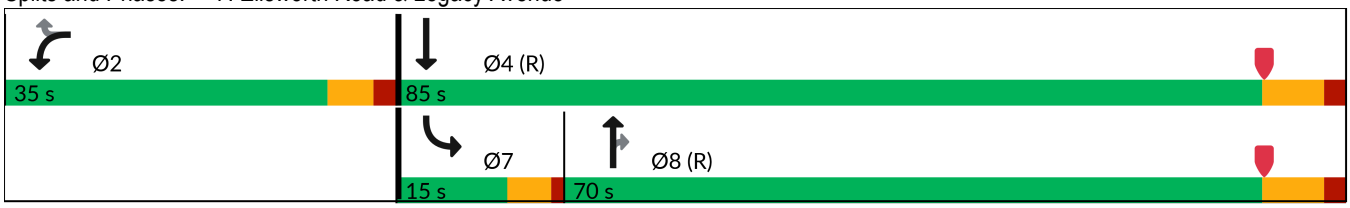
**Notes**

User approved volume balancing among the lanes for turning movement.

| Phase Number | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Movement | WBL | SBT | SBL | NBT |
| Lead/Lag | | | Lead | Lag |
| Lead-Lag Optimize | | | Yes | Yes |
| Recall Mode | Max | C-Max | Max | C-Max |
| Maximum Split (s) | 35 | 85 | 15 | 70 |
| Maximum Split (%) | 29.2% | 70.8% | 12.5% | 58.3% |
| Minimum Split (s) | 35 | 39.5 | 10 | 26.5 |
| Yellow Time (s) | 4 | 5.5 | 4 | 5.5 |
| All-Red Time (s) | 2 | 2 | 1 | 2 |
| Minimum Initial (s) | 10 | 15 | 5 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | 4 | 4 | | 7 |
| Flash Don't Walk (s) | 25 | 28 | | 12 |
| Dual Entry | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 7.5 | 42.5 | 42.5 | 57.5 |
| End Time (s) | 42.5 | 7.5 | 57.5 | 7.5 |
| Yield/Force Off (s) | 36.5 | 0 | 52.5 | 0 |
| Yield/Force Off 170(s) | 11.5 | 92 | 52.5 | 108 |
| Local Start Time (s) | 7.5 | 42.5 | 42.5 | 57.5 |
| Local Yield (s) | 36.5 | 0 | 52.5 | 0 |
| Local Yield 170(s) | 11.5 | 92 | 52.5 | 108 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 100 |
| Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow | |

Splits and Phases: 7: Ellsworth Road & Legacy Avenue



| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 69 | 108 | 2207 | 67 | 291 | 2592 |
| Future Volume (veh/h) | 69 | 108 | 2207 | 67 | 291 | 2592 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 75 | 117 | 2399 | 73 | 316 | 2817 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 267 | 238 | 2789 | 866 | 346 | 3744 |
| Arrive On Green | 0.15 | 0.15 | 0.55 | 0.55 | 0.10 | 0.49 |
| Sat Flow, veh/h | 1781 | 1585 | 5274 | 1585 | 1781 | 5274 |
| Grp Volume(v), veh/h | 75 | 117 | 2399 | 73 | 316 | 2817 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1585 | 1702 | 1585 | 1781 | 1702 |
| Q Serve(g_s), s | 4.5 | 8.1 | 48.3 | 2.6 | 15.7 | 53.4 |
| Cycle Q Clear(g_c), s | 4.5 | 8.1 | 48.3 | 2.6 | 15.7 | 53.4 |
| Prop In Lane | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Lane Grp Cap(c), veh/h | 267 | 238 | 2789 | 866 | 346 | 3744 |
| V/C Ratio(X) | 0.28 | 0.49 | 0.86 | 0.08 | 0.91 | 0.75 |
| Avail Cap(c_a), veh/h | 267 | 238 | 2789 | 866 | 384 | 3744 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 0.67 | 0.67 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 0.28 | 0.28 |
| Uniform Delay (d), s/veh | 45.3 | 46.8 | 23.3 | 12.9 | 41.8 | 21.7 |
| Incr Delay (d2), s/veh | 2.6 | 7.1 | 3.7 | 0.2 | 9.0 | 0.4 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 3.9 | 6.6 | 26.7 | 1.8 | 13.4 | 26.6 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 47.9 | 53.9 | 27.0 | 13.1 | 50.8 | 22.1 |
| LnGrp LOS | D | D | C | B | D | C |
| Approach Vol, veh/h | 192 | | 2472 | | | 3133 |
| Approach Delay, s/veh | 51.6 | | 26.6 | | | 25.0 |
| Approach LOS | D | | C | | | C |

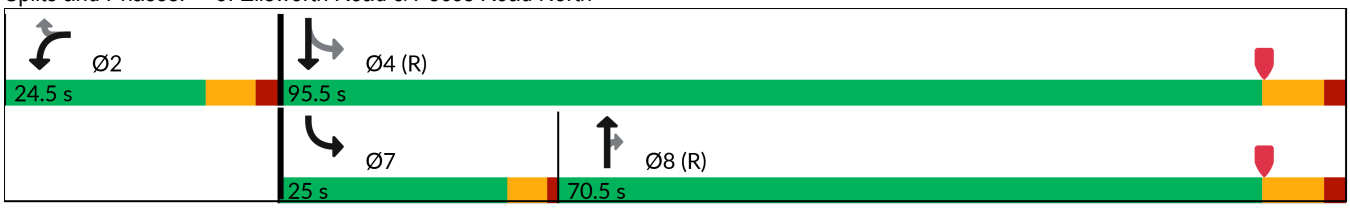
| Timer - Assigned Phs | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 24.5 | 95.5 | 22.5 | 73.0 |
| Change Period (Y+Rc), s | 6.5 | 7.5 | 4.5 | 7.5 |
| Max Green Setting (Gmax), s | 18.0 | 88.0 | 20.5 | 63.0 |
| Max Q Clear Time (g_c+I1), s | 10.1 | 55.4 | 17.7 | 50.3 |
| Green Ext Time (p_c), s | 0.3 | 28.9 | 0.3 | 11.4 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 26.6 |
| HCM 7th LOS | C |

| Phase Number | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Movement | WBL | SBTL | SBL | NBT |
| Lead/Lag | | | Lead | Lag |
| Lead-Lag Optimize | | | Yes | Yes |
| Recall Mode | Max | C-Max | None | C-Max |
| Maximum Split (s) | 24.5 | 95.5 | 25 | 70.5 |
| Maximum Split (%) | 20.4% | 79.6% | 20.8% | 58.8% |
| Minimum Split (s) | 24.5 | 25.5 | 9.5 | 25.5 |
| Yellow Time (s) | 4.5 | 5.5 | 3.5 | 5.5 |
| All-Red Time (s) | 2 | 2 | 1 | 2 |
| Minimum Initial (s) | 5 | 15 | 5 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | 0 | 0 | | 0 |
| Flash Don't Walk (s) | 0 | 0 | | 0 |
| Dual Entry | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 7.5 | 32 | 32 | 57 |
| End Time (s) | 32 | 7.5 | 57 | 7.5 |
| Yield/Force Off (s) | 25.5 | 0 | 52.5 | 0 |
| Yield/Force Off 170(s) | 25.5 | 0 | 52.5 | 0 |
| Local Start Time (s) | 7.5 | 32 | 32 | 57 |
| Local Yield (s) | 25.5 | 0 | 52.5 | 0 |
| Local Yield 170(s) | 25.5 | 0 | 52.5 | 0 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 90 |
| Offset: 0 (0%), Referenced to phase 4:SBTL and 8:NBT, Start of Yellow | |

Splits and Phases: 8: Ellsworth Road & Pecos Road North



| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 805 | 101 | 142 | 397 | 50 | 15 |
| Future Volume (veh/h) | 805 | 101 | 142 | 397 | 50 | 15 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 875 | 110 | 154 | 432 | 54 | 16 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 1348 | 1143 | 590 | 1535 | 134 | 119 |
| Arrive On Green | 1.00 | 1.00 | 0.07 | 0.82 | 0.08 | 0.08 |
| Sat Flow, veh/h | 1870 | 1585 | 1781 | 1870 | 1781 | 1585 |
| Grp Volume(v), veh/h | 875 | 110 | 154 | 432 | 54 | 16 |
| Grp Sat Flow(s),veh/h/ln | 1870 | 1585 | 1781 | 1870 | 1781 | 1585 |
| Q Serve(g_s), s | 0.0 | 0.0 | 2.2 | 6.5 | 3.5 | 1.1 |
| Cycle Q Clear(g_c), s | 0.0 | 0.0 | 2.2 | 6.5 | 3.5 | 1.1 |
| Prop In Lane | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Lane Grp Cap(c), veh/h | 1348 | 1143 | 590 | 1535 | 134 | 119 |
| V/C Ratio(X) | 0.65 | 0.10 | 0.26 | 0.28 | 0.40 | 0.13 |
| Avail Cap(c_a), veh/h | 1348 | 1143 | 650 | 1535 | 267 | 238 |
| HCM Platoon Ratio | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.52 | 0.52 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 0.0 | 0.0 | 2.5 | 2.5 | 52.9 | 51.8 |
| Incr Delay (d2), s/veh | 1.3 | 0.1 | 0.2 | 0.5 | 1.9 | 0.5 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 0.9 | 0.0 | 1.0 | 2.8 | 2.9 | 0.8 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 1.3 | 0.1 | 2.8 | 3.0 | 54.9 | 52.3 |
| LnGrp LOS | A | A | A | A | D | D |
| Approach Vol, veh/h | 985 | | | 586 | 70 | |
| Approach Delay, s/veh | 1.1 | | | 2.9 | 54.3 | |
| Approach LOS | A | | | A | D | |

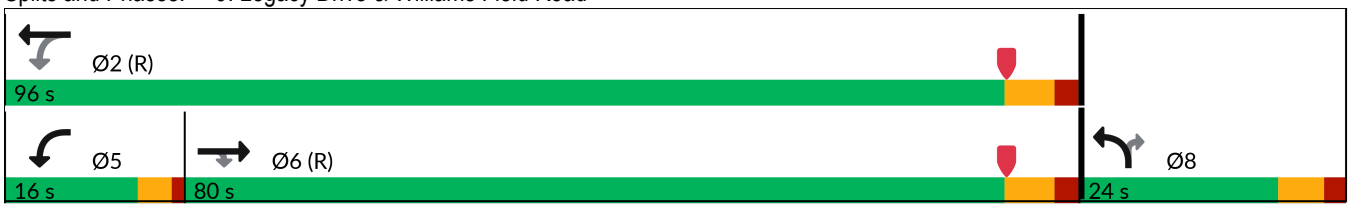
| Timer - Assigned Phs | | 2 | | | 5 | 6 | 8 |
|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 105.0 | | | 12.0 | 93.0 | 15.0 |
| Change Period (Y+Rc), s | | 6.5 | | | 4.0 | 6.5 | 6.0 |
| Max Green Setting (Gmax), s | | 89.5 | | | 12.0 | 73.5 | 18.0 |
| Max Q Clear Time (g_c+I1), s | | 8.5 | | | 4.2 | 2.0 | 5.5 |
| Green Ext Time (p_c), s | | 2.6 | | | 0.2 | 8.0 | 0.1 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 4.0 |
| HCM 7th LOS | A |

| Phase Number | 2 | 5 | 6 | 8 |
|---|---|---|---|---|
| Movement | WBTL | WBL | EBT | NBL |
| Lead/Lag | | Lead | Lag | |
| Lead-Lag Optimize | | Yes | Yes | |
| Recall Mode | C-Max | None | C-Max | None |
| Maximum Split (s) | 96 | 16 | 80 | 24 |
| Maximum Split (%) | 80.0% | 13.3% | 66.7% | 20.0% |
| Minimum Split (s) | 24.5 | 12.5 | 24.5 | 24 |
| Yellow Time (s) | 4.5 | 3 | 4.5 | 4 |
| All-Red Time (s) | 2 | 1 | 2 | 2 |
| Minimum Initial (s) | 15 | 8 | 15 | 10 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | | | 7 | |
| Flash Don't Walk (s) | | | 11 | |
| Dual Entry | Yes | No | Yes | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 30.5 | 30.5 | 46.5 | 6.5 |
| End Time (s) | 6.5 | 46.5 | 6.5 | 30.5 |
| Yield/Force Off (s) | 0 | 42.5 | 0 | 24.5 |
| Yield/Force Off 170(s) | 0 | 42.5 | 109 | 24.5 |
| Local Start Time (s) | 30.5 | 30.5 | 46.5 | 6.5 |
| Local Yield (s) | 0 | 42.5 | 0 | 24.5 |
| Local Yield 170(s) | 0 | 42.5 | 109 | 24.5 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 90 |
| Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBT, Start of Yellow | |

Splits and Phases: 9: Legacy Drive & Williams Field Road



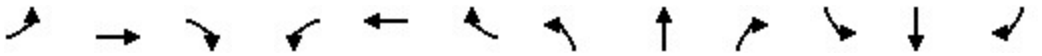
| Intersection | |
|---|---|
| Int Delay, s/veh | 2.2 |

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | ↑ | ↱ | | ↑ | | ↱ |
| Traffic Vol, veh/h | 604 | 189 | 158 | 561 | 0 | 125 |
| Future Vol, veh/h | 604 | 189 | 158 | 561 | 0 | 125 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 150 | - | - | - | - |
| 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 | 657 | 205 | 172 | 610 | 0 | 136 |

| Major/Minor | Major1 | | Major2 | | Minor1 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 0 | 0 | 862 | 0 | - | 657 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | - | 4.12 | - | - | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | 2.218 | - | - | 3.318 |
| Pot Cap-1 Maneuver | - | - | 687 | - | 0 | 528 |
| Stage 1 | - | - | - | - | 0 | - |
| Stage 2 | - | - | - | - | 0 | - |
| Platoon blocked, % | - | - | 0 | - | | 0 |
| Mov Cap-1 Maneuver | - | - | 687 | - | - | 528 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | WB | NB |
|---|---|---|---|
| HCM Control Delay, s/v | 0 | 2.63 | 14.16 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT |
|---|---|---|---|---|---|
| Capacity (veh/h) | 528 | - | - | 687 | - |
| HCM Lane V/C Ratio | 0.257 | - | - | 0.25 | - |
| HCM Control Delay (s/veh) | 14.2 | - | - | 12 | - |
| HCM Lane LOS | B | - | - | B | - |
| HCM 95th %tile Q(veh) | 1 | - | - | 1 | - |



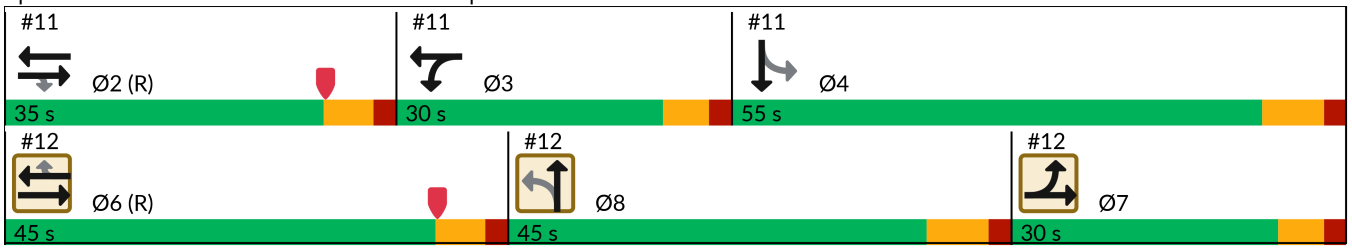
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 0 | 332 | 401 | 59 | 546 | 0 | 0 | 0 | 0 | 323 | 0 | 197 |
| Future Volume (vph) | 0 | 332 | 401 | 59 | 546 | 0 | 0 | 0 | 0 | 323 | 0 | 197 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 360 | | 285 | 290 | | 0 | 0 | | 0 | 400 | | 400 |
| Storage Lanes | 2 | | 1 | 0 | | 0 | 0 | | 0 | 2 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 1.00 | 0.86 | 1.00 | 0.97 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 0.91 | 0.91 | 0.95 |
| Frt | | | 0.850 | | | | | | | | 0.913 | |
| Flt Protected | | | | 0.950 | | | | | | 0.950 | 0.980 | |
| Satd. Flow (prot) | 0 | 6408 | 1583 | 3433 | 3539 | 0 | 0 | 0 | 0 | 1610 | 3033 | 0 |
| Flt Permitted | | | | 0.950 | | | | | | 0.950 | 0.980 | |
| Satd. Flow (perm) | 0 | 6408 | 1583 | 3433 | 3539 | 0 | 0 | 0 | 0 | 1610 | 3033 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 436 | | | | | | | | 214 | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 971 | | | 481 | | | 999 | | | 970 | |
| Travel Time (s) | | 22.1 | | | 10.9 | | | 22.7 | | | 22.0 | |
| 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 |
| Adj. Flow (vph) | 0 | 361 | 436 | 64 | 593 | 0 | 0 | 0 | 0 | 351 | 0 | 214 |
| Shared Lane Traffic (%) | | | | | | | | | | 44% | | |
| Lane Group Flow (vph) | 0 | 361 | 436 | 64 | 593 | 0 | 0 | 0 | 0 | 197 | 368 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 24 | | | 24 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | | 2 | 1 | 1 | 2 | | | | | 1 | 2 | |
| Detector Template | | Thru | Right | Left | Thru | | | | | Left | Thru | |
| Leading Detector (ft) | | 100 | 20 | 20 | 100 | | | | | 20 | 100 | |
| Trailing Detector (ft) | | 0 | 0 | 0 | 0 | | | | | 0 | 0 | |
| Detector 1 Position(ft) | | 0 | 0 | 0 | 0 | | | | | 0 | 0 | |
| Detector 1 Size(ft) | | 6 | 20 | 20 | 6 | | | | | 20 | 6 | |
| Detector 1 Type | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | | | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | | | | 0.0 | |
| Turn Type | | NA | Perm | Prot | NA | | | | | Perm | NA | |
| Protected Phases | | 2 | | 3 | 2 3 | | | | | | 4 | |
| Permitted Phases | | | 2 | | | | | | | 4 | | |

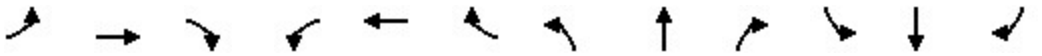
| Lane Group | Ø6 | Ø7 | Ø8 |
|---|---|---|---|
| Lane Configurations | | | |
| Traffic Volume (vph) | | | |
| Future Volume (vph) | | | |
| Ideal Flow (vphpl) | | | |
| Storage Length (ft) | | | |
| Storage Lanes | | | |
| Taper Length (ft) | | | |
| Lane Util. Factor | | | |
| Frt | | | |
| Flt Protected | | | |
| Satd. Flow (prot) | | | |
| Flt Permitted | | | |
| Satd. Flow (perm) | | | |
| Right Turn on Red | | | |
| Satd. Flow (RTOR) | | | |
| Link Speed (mph) | | | |
| Link Distance (ft) | | | |
| Travel Time (s) | | | |
| Peak Hour Factor | | | |
| Adj. Flow (vph) | | | |
| Shared Lane Traffic (%) | | | |
| Lane Group Flow (vph) | | | |
| Enter Blocked Intersection | | | |
| Lane Alignment | | | |
| Median Width(ft) | | | |
| Link Offset(ft) | | | |
| Crosswalk Width(ft) | | | |
| Two way Left Turn Lane | | | |
| Headway Factor | | | |
| Turning Speed (mph) | | | |
| Number of Detectors | | | |
| Detector Template | | | |
| Leading Detector (ft) | | | |
| Trailing Detector (ft) | | | |
| Detector 1 Position(ft) | | | |
| Detector 1 Size(ft) | | | |
| Detector 1 Type | | | |
| Detector 1 Channel | | | |
| Detector 1 Extend (s) | | | |
| Detector 1 Queue (s) | | | |
| Detector 1 Delay (s) | | | |
| Detector 2 Position(ft) | | | |
| Detector 2 Size(ft) | | | |
| Detector 2 Type | | | |
| Detector 2 Channel | | | |
| Detector 2 Extend (s) | | | |
| Turn Type | | | |
| Protected Phases | 6 | 7 | 8 |
| Permitted Phases | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | | 2 | 2 | 3 | 2 3 | | | | | 4 | 4 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | | 15.0 | 15.0 | 5.0 | | | | | | 10.0 | 10.0 | |
| Minimum Split (s) | | 25.5 | 25.5 | 11.0 | | | | | | 46.5 | 46.5 | |
| Total Split (s) | | 35.0 | 35.0 | 30.0 | | | | | | 55.0 | 55.0 | |
| Total Split (%) | | 29.2% | 29.2% | 25.0% | | | | | | 45.8% | 45.8% | |
| Maximum Green (s) | | 28.5 | 28.5 | 24.0 | | | | | | 47.5 | 47.5 | |
| Yellow Time (s) | | 4.5 | 4.5 | 4.0 | | | | | | 5.5 | 5.5 | |
| All-Red Time (s) | | 2.0 | 2.0 | 2.0 | | | | | | 2.0 | 2.0 | |
| Lost Time Adjust (s) | | 0.0 | 0.0 | 0.0 | | | | | | 0.0 | 0.0 | |
| Total Lost Time (s) | | 6.5 | 6.5 | 6.0 | | | | | | 7.5 | 7.5 | |
| Lead/Lag | | | | Lead | | | | | | Lag | Lag | |
| Lead-Lag Optimize? | | | | Yes | | | | | | Yes | Yes | |
| Vehicle Extension (s) | | 3.0 | 3.0 | 3.0 | | | | | | 3.0 | 3.0 | |
| Recall Mode | | C-Max | C-Max | Max | | | | | | None | None | |
| Walk Time (s) | | 4.0 | 4.0 | | | | | | | 4.0 | 4.0 | |
| Flash Don't Walk (s) | | 15.0 | 15.0 | | | | | | | 35.0 | 35.0 | |
| Pedestrian Calls (#/hr) | | 0 | 0 | | | | | | | 0 | 0 | |
| Act Effct Green (s) | | 35.2 | 35.2 | 24.0 | 65.2 | | | | | 40.8 | 40.8 | |
| Actuated g/C Ratio | | 0.29 | 0.29 | 0.20 | 0.54 | | | | | 0.34 | 0.34 | |
| v/c Ratio | | 0.19 | 0.56 | 0.09 | 0.31 | | | | | 0.36 | 0.31 | |
| Control Delay (s/veh) | | 31.5 | 8.8 | 47.8 | 20.6 | | | | | 31.2 | 11.9 | |
| Queue Delay | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | |
| Total Delay (s/veh) | | 31.5 | 8.8 | 47.8 | 20.6 | | | | | 31.2 | 11.9 | |
| LOS | | C | A | D | C | | | | | C | B | |
| Approach Delay (s/veh) | | 19.1 | | | 23.2 | | | | | | 18.6 | |
| Approach LOS | | B | | | C | | | | | | B | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 120 | | | |
| Actuated Cycle Length: 120 | | | |
| Offset: 0 (0%), Referenced to phase 2:EBWB and 6:, Start of Yellow | | | |
| Natural Cycle: 85 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.56 | | | |
| Intersection Signal Delay (s/veh): 20.3 | | Intersection LOS: C | |
| Intersection Capacity Utilization 65.0% | | ICU Level of Service C | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 11: SR24 Eastbound Ramps & Williams Field Road





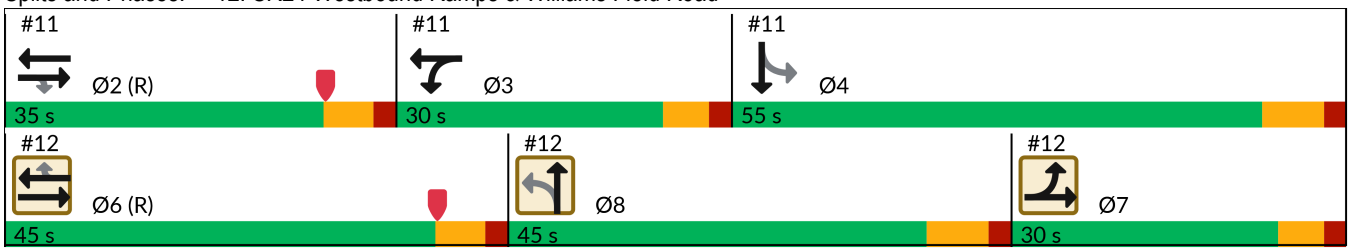
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 140 | 516 | 0 | 0 | 328 | 468 | 275 | 0 | 14 | 0 | 0 | 0 |
| Future Volume (vph) | 140 | 516 | 0 | 0 | 328 | 468 | 275 | 0 | 14 | 0 | 0 | 0 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 290 | | 0 | 365 | | 300 | 375 | | 375 | 0 | | 0 |
| Storage Lanes | 0 | | 0 | 2 | | 1 | 1 | | 1 | 0 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 0.97 | 0.95 | 1.00 | 1.00 | 0.86 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 |
| Frt | | | | | | 0.850 | | 0.850 | | | | |
| Flt Protected | 0.950 | | | | | | 0.950 | | | | | |
| Satd. Flow (prot) | 3433 | 3539 | 0 | 0 | 6408 | 1583 | 1770 | 3008 | 0 | 0 | 0 | 0 |
| Flt Permitted | 0.950 | | | | | | 0.950 | | | | | |
| Satd. Flow (perm) | 3433 | 3539 | 0 | 0 | 6408 | 1583 | 1770 | 3008 | 0 | 0 | 0 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | | | | 509 | | 305 | | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 481 | | | 1418 | | | 897 | | | 1176 | |
| Travel Time (s) | | 10.9 | | | 32.2 | | | 20.4 | | | 26.7 | |
| 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 |
| Adj. Flow (vph) | 152 | 561 | 0 | 0 | 357 | 509 | 299 | 0 | 15 | 0 | 0 | 0 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 152 | 561 | 0 | 0 | 357 | 509 | 299 | 15 | 0 | 0 | 0 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 24 | | | 24 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | | 2 | 1 | 1 | 2 | | | | |
| Detector Template | Left | Thru | | | Thru | Right | Left | Thru | | | | |
| Leading Detector (ft) | 20 | 100 | | | 100 | 20 | 20 | 100 | | | | |
| Trailing Detector (ft) | 0 | 0 | | | 0 | 0 | 0 | 0 | | | | |
| Detector 1 Position(ft) | 0 | 0 | | | 0 | 0 | 0 | 0 | | | | |
| Detector 1 Size(ft) | 20 | 6 | | | 6 | 20 | 20 | 6 | | | | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | | | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | | |
| Turn Type | Prot | NA | | | NA | Perm | Perm | NA | | | | |
| Protected Phases | 7 | 6 7 | | | 6 | | | 8 | | | | |
| Permitted Phases | | | | | | 6 | 8 | | | | | |

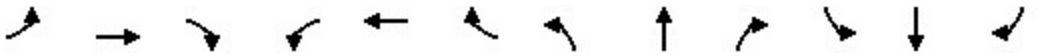
| Lane Group | Ø2 | Ø3 | Ø4 |
|---|---|---|---|
| Lane Configurations | | | |
| Traffic Volume (vph) | | | |
| Future Volume (vph) | | | |
| Ideal Flow (vphpl) | | | |
| Storage Length (ft) | | | |
| Storage Lanes | | | |
| Taper Length (ft) | | | |
| Lane Util. Factor | | | |
| Frt | | | |
| Flt Protected | | | |
| Satd. Flow (prot) | | | |
| Flt Permitted | | | |
| Satd. Flow (perm) | | | |
| Right Turn on Red | | | |
| Satd. Flow (RTOR) | | | |
| Link Speed (mph) | | | |
| Link Distance (ft) | | | |
| Travel Time (s) | | | |
| Peak Hour Factor | | | |
| Adj. Flow (vph) | | | |
| Shared Lane Traffic (%) | | | |
| Lane Group Flow (vph) | | | |
| Enter Blocked Intersection | | | |
| Lane Alignment | | | |
| Median Width(ft) | | | |
| Link Offset(ft) | | | |
| Crosswalk Width(ft) | | | |
| Two way Left Turn Lane | | | |
| Headway Factor | | | |
| Turning Speed (mph) | | | |
| Number of Detectors | | | |
| Detector Template | | | |
| Leading Detector (ft) | | | |
| Trailing Detector (ft) | | | |
| Detector 1 Position(ft) | | | |
| Detector 1 Size(ft) | | | |
| Detector 1 Type | | | |
| Detector 1 Channel | | | |
| Detector 1 Extend (s) | | | |
| Detector 1 Queue (s) | | | |
| Detector 1 Delay (s) | | | |
| Detector 2 Position(ft) | | | |
| Detector 2 Size(ft) | | | |
| Detector 2 Type | | | |
| Detector 2 Channel | | | |
| Detector 2 Extend (s) | | | |
| Turn Type | | | |
| Protected Phases | 2 | 3 | 4 |
| Permitted Phases | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | 7 | 6 7 | | | 6 | 6 | 8 | 8 | | | | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | | | | 15.0 | 15.0 | 10.0 | 10.0 | | | | |
| Minimum Split (s) | 11.0 | | | | 26.5 | 26.5 | 45.5 | 45.5 | | | | |
| Total Split (s) | 30.0 | | | | 45.0 | 45.0 | 45.0 | 45.0 | | | | |
| Total Split (%) | 25.0% | | | | 37.5% | 37.5% | 37.5% | 37.5% | | | | |
| Maximum Green (s) | 24.0 | | | | 38.5 | 38.5 | 37.5 | 37.5 | | | | |
| Yellow Time (s) | 4.0 | | | | 4.5 | 4.5 | 5.5 | 5.5 | | | | |
| All-Red Time (s) | 2.0 | | | | 2.0 | 2.0 | 2.0 | 2.0 | | | | |
| Lost Time Adjust (s) | 0.0 | | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Total Lost Time (s) | 6.0 | | | | 6.5 | 6.5 | 7.5 | 7.5 | | | | |
| Lead/Lag | Lag | | | | | | Lead | Lead | | | | |
| Lead-Lag Optimize? | Yes | | | | | | Yes | Yes | | | | |
| Vehicle Extension (s) | 3.0 | | | | 3.0 | 3.0 | 3.0 | 3.0 | | | | |
| Recall Mode | None | | | | C-Max | C-Max | Max | Max | | | | |
| Walk Time (s) | | | | | 4.0 | 4.0 | 4.0 | 4.0 | | | | |
| Flash Don't Walk (s) | | | | | 16.0 | 16.0 | 34.0 | 34.0 | | | | |
| Pedestrian Calls (#/hr) | | | | | 0 | 0 | 0 | 0 | | | | |
| Act Effct Green (s) | 17.3 | 68.5 | | | 45.2 | 45.2 | 37.5 | 37.5 | | | | |
| Actuated g/C Ratio | 0.14 | 0.57 | | | 0.38 | 0.38 | 0.31 | 0.31 | | | | |
| v/c Ratio | 0.31 | 0.28 | | | 0.15 | 0.56 | 0.54 | 0.01 | | | | |
| Control Delay (s/veh) | 53.0 | 6.1 | | | 34.4 | 19.7 | 38.5 | 0.0 | | | | |
| Queue Delay | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Total Delay (s/veh) | 53.0 | 6.1 | | | 34.4 | 19.7 | 38.5 | 0.0 | | | | |
| LOS | D | A | | | C | B | D | A | | | | |
| Approach Delay (s/veh) | | 16.1 | | | 25.7 | | | 36.7 | | | | |
| Approach LOS | | B | | | C | | | D | | | | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 120 | | | |
| Actuated Cycle Length: 120 | | | |
| Offset: 0 (0%), Referenced to phase 2:EBWB and 6:, Start of Yellow | | | |
| Natural Cycle: 85 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.56 | | | |
| Intersection Signal Delay (s/veh): 23.9 | | Intersection LOS: C | |
| Intersection Capacity Utilization 65.0% | | ICU Level of Service C | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 12: SR24 Westbound Ramps & Williams Field Road





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 192 | 310 | 0 | 0 | 351 | 39 | 165 | 0 | 0 | 42 | 0 | 281 |
| Future Volume (veh/h) | 192 | 310 | 0 | 0 | 351 | 39 | 165 | 0 | 0 | 42 | 0 | 281 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 209 | 337 | 0 | 0 | 382 | 42 | 179 | 0 | 0 | 46 | 0 | 305 |
| 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 | 526 | 1828 | 815 | 470 | 1392 | 621 | 493 | 1037 | 462 | 513 | 903 | 403 |
| Arrive On Green | 0.18 | 1.00 | 0.00 | 0.00 | 0.39 | 0.39 | 0.09 | 0.00 | 0.00 | 0.05 | 0.00 | 0.25 |
| Sat Flow, veh/h | 1781 | 3554 | 1585 | 1781 | 3554 | 1585 | 1781 | 3554 | 1585 | 1781 | 3554 | 1585 |
| Grp Volume(v), veh/h | 209 | 337 | 0 | 0 | 382 | 42 | 179 | 0 | 0 | 46 | 0 | 305 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1777 | 1585 | 1781 | 1777 | 1585 | 1781 | 1777 | 1585 | 1781 | 1777 | 1585 |
| Q Serve(g_s), s | 8.3 | 0.0 | 0.0 | 0.0 | 8.8 | 2.0 | 8.6 | 0.0 | 0.0 | 2.2 | 0.0 | 21.3 |
| Cycle Q Clear(g_c), s | 8.3 | 0.0 | 0.0 | 0.0 | 8.8 | 2.0 | 8.6 | 0.0 | 0.0 | 2.2 | 0.0 | 21.3 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 526 | 1828 | 815 | 470 | 1392 | 621 | 493 | 1037 | 462 | 513 | 903 | 403 |
| V/C Ratio(X) | 0.40 | 0.18 | 0.00 | 0.00 | 0.27 | 0.07 | 0.36 | 0.00 | 0.00 | 0.09 | 0.00 | 0.76 |
| Avail Cap(c_a), veh/h | 664 | 1828 | 815 | 595 | 1392 | 621 | 585 | 1105 | 493 | 572 | 903 | 403 |
| HCM Platoon Ratio | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.97 | 0.97 | 0.00 | 0.00 | 0.99 | 0.99 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 16.1 | 0.0 | 0.0 | 0.0 | 24.9 | 22.8 | 27.3 | 0.0 | 0.0 | 29.6 | 0.0 | 41.3 |
| Incr Delay (d2), s/veh | 0.5 | 0.2 | 0.0 | 0.0 | 0.5 | 0.2 | 0.4 | 0.0 | 0.0 | 0.1 | 0.0 | 12.5 |
| 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(95%),veh/ln | 5.4 | 0.1 | 0.0 | 0.0 | 6.9 | 1.4 | 6.7 | 0.0 | 0.0 | 1.7 | 0.0 | 14.8 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 16.6 | 0.2 | 0.0 | 0.0 | 25.4 | 23.0 | 27.7 | 0.0 | 0.0 | 29.7 | 0.0 | 53.8 |
| LnGrp LOS | B | A | | | C | C | C | | | C | | D |
| Approach Vol, veh/h | | 546 | | | 424 | | | 179 | | | 351 | |
| Approach Delay, s/veh | | 6.5 | | | 25.1 | | | 27.7 | | | 50.7 | |
| Approach LOS | | A | | | C | | | C | | | D | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 14.7 | 53.5 | 14.8 | 37.0 | 0.0 | 68.2 | 10.3 | 41.5 |
| Change Period (Y+Rc), s | 4.0 | 6.5 | 4.0 | 6.5 | 4.0 | 6.5 | 4.0 | 6.5 |
| Max Green Setting (Gmax), s | 20.0 | 31.5 | 17.0 | 30.5 | 8.5 | 43.0 | 10.2 | 37.3 |
| Max Q Clear Time (g_c+I1), s | 10.3 | 10.8 | 10.6 | 23.3 | 0.0 | 2.0 | 4.2 | 0.0 |
| Green Ext Time (p_c), s | 0.4 | 2.6 | 0.2 | 0.6 | 0.0 | 2.4 | 0.0 | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 24.6 |
| HCM 7th LOS | C |

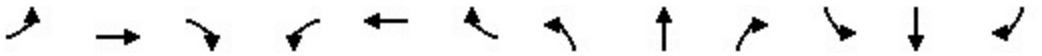
**Notes**

User approved pedestrian interval to be less than phase max green.

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | EBL | WBTL | NBL | SBTL | WBL | EBTL | SBL | NBTL |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | None | C-Max | None | Max | None | C-Max | None | None |
| Maximum Split (s) | 24 | 38 | 21 | 37 | 12.5 | 49.5 | 14.2 | 43.8 |
| Maximum Split (%) | 20.0% | 31.7% | 17.5% | 30.8% | 10.4% | 41.3% | 11.8% | 36.5% |
| Minimum Split (s) | 12.5 | 38.5 | 12.5 | 35.5 | 12.5 | 40.5 | 12.5 | 36.5 |
| Yellow Time (s) | 3 | 4.5 | 3 | 4.5 | 3 | 4.5 | 3 | 4.5 |
| All-Red Time (s) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| Minimum Initial (s) | 8 | 15 | 8 | 15 | 8 | 15 | 8 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 7 | | 7 | | 7 | | 7 |
| Flash Don't Walk (s) | | 25 | | 22 | | 27 | | 23 |
| Dual Entry | No | Yes | No | Yes | No | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 97.5 | 1.5 | 39.5 | 60.5 | 97.5 | 110 | 39.5 | 53.7 |
| End Time (s) | 1.5 | 39.5 | 60.5 | 97.5 | 110 | 39.5 | 53.7 | 97.5 |
| Yield/Force Off (s) | 117.5 | 33 | 56.5 | 91 | 106 | 33 | 49.7 | 91 |
| Yield/Force Off 170(s) | 117.5 | 8 | 56.5 | 69 | 106 | 6 | 49.7 | 68 |
| Local Start Time (s) | 64.5 | 88.5 | 6.5 | 27.5 | 64.5 | 77 | 6.5 | 20.7 |
| Local Yield (s) | 84.5 | 0 | 23.5 | 58 | 73 | 0 | 16.7 | 58 |
| Local Yield 170(s) | 84.5 | 95 | 23.5 | 36 | 73 | 93 | 16.7 | 35 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 105 |
| Offset: 33 (28%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow | |

Splits and Phases: 13: Williams Field Road & Crismon Road



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 133 | 196 | 27 | 5 | 186 | 30 | 19 | 339 | 5 | 33 | 518 | 168 |
| Future Volume (veh/h) | 133 | 196 | 27 | 5 | 186 | 30 | 19 | 339 | 5 | 33 | 518 | 168 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 145 | 213 | 29 | 5 | 202 | 33 | 21 | 368 | 5 | 36 | 563 | 183 |
| 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 | 635 | 1738 | 775 | 571 | 1539 | 687 | 233 | 1002 | 14 | 342 | 1038 | 463 |
| Arrive On Green | 0.07 | 0.49 | 0.49 | 0.01 | 0.43 | 0.43 | 0.03 | 0.28 | 0.28 | 0.05 | 0.29 | 0.29 |
| Sat Flow, veh/h | 1781 | 3554 | 1585 | 1781 | 3554 | 1585 | 1781 | 3590 | 49 | 1781 | 3554 | 1585 |
| Grp Volume(v), veh/h | 145 | 213 | 29 | 5 | 202 | 33 | 21 | 182 | 191 | 36 | 563 | 183 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1777 | 1585 | 1781 | 1777 | 1585 | 1781 | 1777 | 1862 | 1781 | 1777 | 1585 |
| Q Serve(g_s), s | 5.1 | 3.9 | 1.1 | 0.2 | 4.1 | 1.4 | 1.0 | 9.9 | 9.9 | 1.7 | 16.0 | 11.1 |
| Cycle Q Clear(g_c), s | 5.1 | 3.9 | 1.1 | 0.2 | 4.1 | 1.4 | 1.0 | 9.9 | 9.9 | 1.7 | 16.0 | 11.1 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.03 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 635 | 1738 | 775 | 571 | 1539 | 687 | 233 | 496 | 520 | 342 | 1038 | 463 |
| V/C Ratio(X) | 0.23 | 0.12 | 0.04 | 0.01 | 0.13 | 0.05 | 0.09 | 0.37 | 0.37 | 0.11 | 0.54 | 0.40 |
| Avail Cap(c_a), veh/h | 814 | 1738 | 775 | 672 | 1539 | 687 | 292 | 496 | 520 | 377 | 1038 | 463 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.99 | 0.99 | 0.99 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 15.5 | 16.7 | 16.0 | 18.6 | 20.4 | 19.7 | 29.6 | 34.7 | 34.7 | 28.3 | 35.7 | 34.0 |
| Incr Delay (d2), s/veh | 0.2 | 0.1 | 0.1 | 0.0 | 0.2 | 0.1 | 0.2 | 2.1 | 2.0 | 0.1 | 2.0 | 2.5 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 3.8 | 2.9 | 0.8 | 0.1 | 3.2 | 1.0 | 0.8 | 8.1 | 8.4 | 1.3 | 11.6 | 8.1 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 15.7 | 16.8 | 16.0 | 18.7 | 20.6 | 19.8 | 29.7 | 36.8 | 36.7 | 28.4 | 37.8 | 36.5 |
| LnGrp LOS | B | B | B | B | C | B | C | D | D | C | D | D |
| Approach Vol, veh/h | | 387 | | | 240 | | | 394 | | | 782 | |
| Approach Delay, s/veh | | 16.3 | | | 20.5 | | | 36.4 | | | 37.0 | |
| Approach LOS | | B | | | C | | | D | | | D | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 11.9 | 58.5 | 8.0 | 41.6 | 5.2 | 65.2 | 9.6 | 40.0 |
| Change Period (Y+Rc), s | 4.0 | 6.5 | 4.0 | 6.5 | 4.0 | 6.5 | 4.0 | 6.5 |
| Max Green Setting (Gmax), s | 20.0 | 37.5 | 8.0 | 33.5 | 8.0 | 49.5 | 8.0 | 33.5 |
| Max Q Clear Time (g_c+I1), s | 7.1 | 6.1 | 3.0 | 18.0 | 2.2 | 5.9 | 3.7 | 11.9 |
| Green Ext Time (p_c), s | 0.3 | 1.4 | 0.0 | 4.0 | 0.0 | 1.6 | 0.0 | 2.1 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 30.2 |
| HCM 7th LOS | C |

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | EBL | WBTL | NBL | SBTL | WBL | EBTL | SBL | NBTL |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | None | C-Max | None | Max | None | C-Max | None | Max |
| Maximum Split (s) | 24 | 44 | 12 | 40 | 12 | 56 | 12 | 40 |
| Maximum Split (%) | 20.0% | 36.7% | 10.0% | 33.3% | 10.0% | 46.7% | 10.0% | 33.3% |
| Minimum Split (s) | 12 | 38.5 | 12 | 35.5 | 12 | 40.5 | 12 | 36.5 |
| Yellow Time (s) | 3 | 4.5 | 3 | 4.5 | 3 | 4.5 | 3 | 4.5 |
| All-Red Time (s) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| Minimum Initial (s) | 8 | 15 | 8 | 15 | 8 | 15 | 8 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 7 | | 7 | | 7 | | 7 |
| Flash Don't Walk (s) | | 25 | | 22 | | 27 | | 23 |
| Dual Entry | No | Yes | No | Yes | No | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 58.5 | 82.5 | 6.5 | 18.5 | 58.5 | 70.5 | 6.5 | 18.5 |
| End Time (s) | 82.5 | 6.5 | 18.5 | 58.5 | 70.5 | 6.5 | 18.5 | 58.5 |
| Yield/Force Off (s) | 78.5 | 0 | 14.5 | 52 | 66.5 | 0 | 14.5 | 52 |
| Yield/Force Off 170(s) | 78.5 | 95 | 14.5 | 30 | 66.5 | 93 | 14.5 | 29 |
| Local Start Time (s) | 58.5 | 82.5 | 6.5 | 18.5 | 58.5 | 70.5 | 6.5 | 18.5 |
| Local Yield (s) | 78.5 | 0 | 14.5 | 52 | 66.5 | 0 | 14.5 | 52 |
| Local Yield 170(s) | 78.5 | 95 | 14.5 | 30 | 66.5 | 93 | 14.5 | 29 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 105 |
| Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow | |

Splits and Phases: 14: Signal Butte Road & Williams Field Road

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.2 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 0 | 68 | 0 | 2161 | 2972 | 122 |
| Future Vol, veh/h | 0 | 68 | 0 | 2161 | 2972 | 122 |
| 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 | 74 | 0 | 2349 | 3230 | 133 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | - | 1682 | - | 0 | - | 0 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | 7.14 | - | - | - | - |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | 3.92 | - | - | - | - |
| Pot Cap-1 Maneuver | 0 | *432 | 0 | - | - | - |
| Stage 1 | 0 | - | 0 | - | - | - |
| Stage 2 | 0 | - | 0 | - | - | - |
| Platoon blocked, % | | 1 | | - | - | - |
| Mov Cap-1 Maneuver | - | *432 | - | - | - | - |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 15.05 | 0 | 0 |
| HCM LOS | C | | |

| Minor Lane/Major Mvmt | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|
| Capacity (veh/h) | - | 432 | - | - |
| HCM Lane V/C Ratio | - | 0.171 | - | - |
| HCM Control Delay (s/veh) | - | 15 | - | - |
| HCM Lane LOS | - | C | - | - |
| HCM 95th %tile Q(veh) | - | 0.6 | - | - |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 190 | 128 | 95 | 2029 | 2910 | 130 |
| Future Volume (veh/h) | 190 | 128 | 95 | 2029 | 2910 | 130 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | 1.00 | | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 207 | 139 | 103 | 2205 | 3163 | 141 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 334 | 297 | 132 | 3617 | 3183 | 140 |
| Arrive On Green | 0.19 | 0.19 | 0.08 | 1.00 | 0.43 | 0.43 |
| Sat Flow, veh/h | 1781 | 1585 | 1781 | 5274 | 5183 | 220 |
| Grp Volume(v), veh/h | 207 | 139 | 103 | 2205 | 2132 | 1172 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1585 | 1781 | 1702 | 1702 | 1831 |
| Q Serve(g_s), s | 12.8 | 9.4 | 2.6 | 0.0 | 74.5 | 76.2 |
| Cycle Q Clear(g_c), s | 12.8 | 9.4 | 2.6 | 0.0 | 74.5 | 76.2 |
| Prop In Lane | 1.00 | 1.00 | 1.00 | | | 0.12 |
| Lane Grp Cap(c), veh/h | 334 | 297 | 132 | 3617 | 2160 | 1162 |
| V/C Ratio(X) | 0.62 | 0.47 | 0.78 | 0.61 | 0.99 | 1.01 |
| Avail Cap(c_a), veh/h | 334 | 297 | 179 | 3617 | 2160 | 1162 |
| HCM Platoon Ratio | 1.00 | 1.00 | 2.00 | 2.00 | 0.67 | 0.67 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 44.8 | 43.4 | 31.8 | 0.0 | 34.0 | 34.5 |
| Incr Delay (d2), s/veh | 8.4 | 5.2 | 14.3 | 0.8 | 16.5 | 28.5 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 10.6 | 7.4 | 4.3 | 0.5 | 46.6 | 55.4 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 53.2 | 48.6 | 46.1 | 0.8 | 50.5 | 62.9 |
| LnGrp LOS | D | D | D | A | D | F |
| Approach Vol, veh/h | 346 | | | 2308 | 3304 | |
| Approach Delay, s/veh | 51.4 | | | 2.8 | 54.9 | |
| Approach LOS | D | | | A | D | |

| Timer - Assigned Phs | | 3 | 4 | | 6 | 8 |
|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 8.8 | 82.2 | | 29.0 | 91.0 |
| Change Period (Y+Rc), s | | 4.0 | 6.0 | | 6.5 | 6.0 |
| Max Green Setting (Gmax), s | | 8.0 | 73.0 | | 22.5 | 85.0 |
| Max Q Clear Time (g_c+I1), s | | 4.6 | 78.2 | | 14.8 | 2.0 |
| Green Ext Time (p_c), s | | 0.1 | 0.0 | | 0.7 | 40.7 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 34.5 |
| HCM 7th LOS | C |

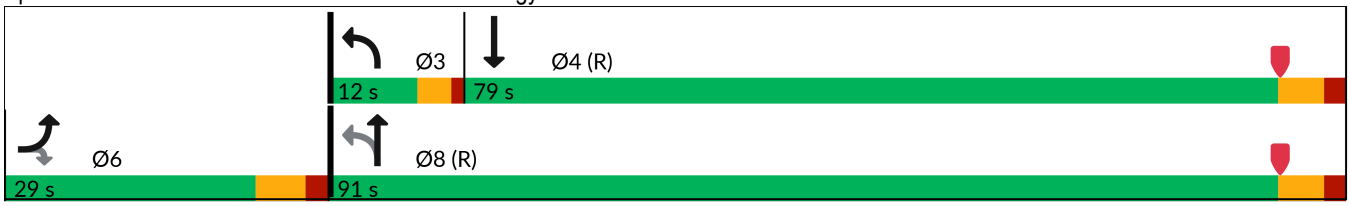
**Notes**

User approved pedestrian interval to be less than phase max green.

| Phase Number | 3 | 4 | 6 | 8 |
|---|---|---|---|---|
| Movement | NBL | SBT | EBL | NBTL |
| Lead/Lag | Lead | Lag | | |
| Lead-Lag Optimize | Yes | Yes | | |
| Recall Mode | None | C-Max | Max | C-Max |
| Maximum Split (s) | 12 | 79 | 29 | 91 |
| Maximum Split (%) | 10.0% | 65.8% | 24.2% | 75.8% |
| Minimum Split (s) | 9.5 | 24 | 24.5 | 24 |
| Yellow Time (s) | 3 | 4 | 4.5 | 4 |
| All-Red Time (s) | 1 | 2 | 2 | 2 |
| Minimum Initial (s) | 5 | 15 | 10 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 7 | 7 | 7 |
| Flash Don't Walk (s) | | 11 | 11 | 11 |
| Dual Entry | No | Yes | Yes | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 35 | 47 | 6 | 35 |
| End Time (s) | 47 | 6 | 35 | 6 |
| Yield/Force Off (s) | 43 | 0 | 28.5 | 0 |
| Yield/Force Off 170(s) | 43 | 109 | 17.5 | 109 |
| Local Start Time (s) | 35 | 47 | 6 | 35 |
| Local Yield (s) | 43 | 0 | 28.5 | 0 |
| Local Yield 170(s) | 43 | 109 | 17.5 | 109 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 110 |
| Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBTL, Start of Yellow | |

Splits and Phases: 16: Ellsworth Road & Technology Avenue



| Intersection | |
|---|---|
| Int Delay, s/veh | 0.3 |

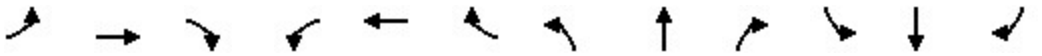
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 0 | 102 | 0 | 2064 | 2990 | 27 |
| Future Vol, veh/h | 0 | 102 | 0 | 2064 | 2990 | 27 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | 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 | 111 | 0 | 2243 | 3250 | 29 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | - | 1640 | - | 0 | - | 0 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | 7.14 | - | - | - | - |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | 3.92 | - | - | - | - |
| Pot Cap-1 Maneuver | 0 | *432 | 0 | - | - | - |
| Stage 1 | 0 | - | 0 | - | - | - |
| Stage 2 | 0 | - | 0 | - | - | - |
| Platoon blocked, % | | 1 | | - | - | - |
| Mov Cap-1 Maneuver | - | *432 | - | - | - | - |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 16.19 | 0 | 0 |
| HCM LOS | C | | |

| Minor Lane/Major Mvmt | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|
| Capacity (veh/h) | - | 432 | - | - |
| HCM Lane V/C Ratio | - | 0.257 | - | - |
| HCM Control Delay (s/veh) | - | 16.2 | - | - |
| HCM Lane LOS | - | C | - | - |
| HCM 95th %tile Q(veh) | - | 1 | - | - |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |



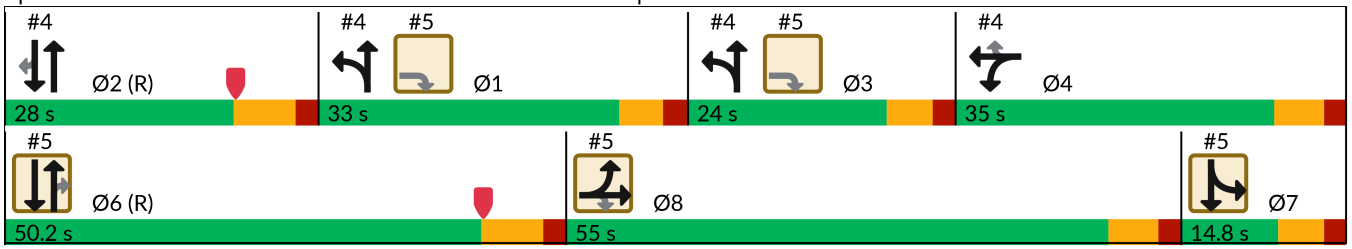
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 0 | 0 | 0 | 40 | 0 | 226 | 1343 | 1323 | 0 | 0 | 816 | 624 |
| Future Volume (vph) | 0 | 0 | 0 | 40 | 0 | 226 | 1343 | 1323 | 0 | 0 | 816 | 624 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | | 0 | 350 | | 350 | 525 | | 0 | 290 | | 285 |
| Storage Lanes | 0 | | 0 | 1 | | 1 | 0 | | 0 | 0 | | 2 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 0.91 | 0.86 | 0.91 | 0.97 | 0.91 | 1.00 | 1.00 | 0.86 | 0.88 |
| Frt | | | | | 0.855 | 0.850 | | | | | | 0.850 |
| Flt Protected | | | | 0.950 | 0.998 | | 0.950 | | | | | |
| Satd. Flow (prot) | 0 | 0 | 0 | 1610 | 2734 | 1441 | 3433 | 5085 | 0 | 0 | 6408 | 2787 |
| Flt Permitted | | | | 0.950 | 0.998 | | 0.950 | | | | | |
| Satd. Flow (perm) | 0 | 0 | 0 | 1610 | 2734 | 1441 | 3433 | 5085 | 0 | 0 | 6408 | 2787 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | | | 218 | 218 | | | | | | 678 |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 841 | | | 605 | | | 688 | | | 312 | |
| Travel Time (s) | | 19.1 | | | 13.8 | | | 15.6 | | | 7.1 | |
| 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 |
| Adj. Flow (vph) | 0 | 0 | 0 | 43 | 0 | 246 | 1460 | 1438 | 0 | 0 | 887 | 678 |
| Shared Lane Traffic (%) | | | | 10% | | 50% | | | | | | |
| Lane Group Flow (vph) | 0 | 0 | 0 | 39 | 127 | 123 | 1460 | 1438 | 0 | 0 | 887 | 678 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 24 | | | 24 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | | | | 1 | 2 | 1 | 1 | 2 | | | 2 | 1 |
| Detector Template | | | | Left | Thru | Right | Left | Thru | | | Thru | Right |
| Leading Detector (ft) | | | | 20 | 100 | 20 | 20 | 100 | | | 100 | 20 |
| Trailing Detector (ft) | | | | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 |
| Detector 1 Position(ft) | | | | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 |
| Detector 1 Size(ft) | | | | 20 | 6 | 20 | 20 | 6 | | | 6 | 20 |
| Detector 1 Type | | | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | | Cl+Ex | Cl+Ex |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Detector 1 Queue (s) | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Detector 1 Delay (s) | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Detector 2 Position(ft) | | | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | | | | Split | NA | Perm | Prot | NA | | | NA | Perm |
| Protected Phases | | | | 4 | 4 | | 1 3 | 1 2 3 | | | 2 | |
| Permitted Phases | | | | | | 4 | | | | | | 2 |

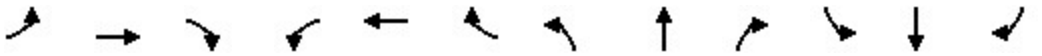
| Lane Group | Ø1 | Ø3 | Ø6 | Ø7 | Ø8 |
|---|---|---|---|---|---|
| Lane Configurations | | | | | |
| Traffic Volume (vph) | | | | | |
| Future Volume (vph) | | | | | |
| Ideal Flow (vphpl) | | | | | |
| Storage Length (ft) | | | | | |
| Storage Lanes | | | | | |
| Taper Length (ft) | | | | | |
| Lane Util. Factor | | | | | |
| Frt | | | | | |
| Flt Protected | | | | | |
| Satd. Flow (prot) | | | | | |
| Flt Permitted | | | | | |
| Satd. Flow (perm) | | | | | |
| Right Turn on Red | | | | | |
| Satd. Flow (RTOR) | | | | | |
| Link Speed (mph) | | | | | |
| Link Distance (ft) | | | | | |
| Travel Time (s) | | | | | |
| Peak Hour Factor | | | | | |
| Adj. Flow (vph) | | | | | |
| Shared Lane Traffic (%) | | | | | |
| Lane Group Flow (vph) | | | | | |
| Enter Blocked Intersection | | | | | |
| Lane Alignment | | | | | |
| Median Width(ft) | | | | | |
| Link Offset(ft) | | | | | |
| Crosswalk Width(ft) | | | | | |
| Two way Left Turn Lane | | | | | |
| Headway Factor | | | | | |
| Turning Speed (mph) | | | | | |
| Number of Detectors | | | | | |
| Detector Template | | | | | |
| Leading Detector (ft) | | | | | |
| Trailing Detector (ft) | | | | | |
| Detector 1 Position(ft) | | | | | |
| Detector 1 Size(ft) | | | | | |
| Detector 1 Type | | | | | |
| Detector 1 Channel | | | | | |
| Detector 1 Extend (s) | | | | | |
| Detector 1 Queue (s) | | | | | |
| Detector 1 Delay (s) | | | | | |
| Detector 2 Position(ft) | | | | | |
| Detector 2 Size(ft) | | | | | |
| Detector 2 Type | | | | | |
| Detector 2 Channel | | | | | |
| Detector 2 Extend (s) | | | | | |
| Turn Type | | | | | |
| Protected Phases | 1 | 3 | 6 | 7 | 8 |
| Permitted Phases | | | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | | | | 4 | 4 | 4 | 1 3 | 1 2 3 | | | 2 | 2 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | | | | 10.0 | 10.0 | 10.0 | | | | | 15.0 | 15.0 |
| Minimum Split (s) | | | | 48.5 | 48.5 | 48.5 | | | | | 25.5 | 25.5 |
| Total Split (s) | | | | 35.0 | 35.0 | 35.0 | | | | | 28.0 | 28.0 |
| Total Split (%) | | | | 29.2% | 29.2% | 29.2% | | | | | 23.3% | 23.3% |
| Maximum Green (s) | | | | 28.5 | 28.5 | 28.5 | | | | | 20.5 | 20.5 |
| Yellow Time (s) | | | | 4.5 | 4.5 | 4.5 | | | | | 5.5 | 5.5 |
| All-Red Time (s) | | | | 2.0 | 2.0 | 2.0 | | | | | 2.0 | 2.0 |
| Lost Time Adjust (s) | | | | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 |
| Total Lost Time (s) | | | | 6.5 | 6.5 | 6.5 | | | | | 7.5 | 7.5 |
| Lead/Lag | | | | Lag | Lag | Lag | | | | | Lead | Lead |
| Lead-Lag Optimize? | | | | Yes | Yes | Yes | | | | | Yes | Yes |
| Vehicle Extension (s) | | | | 4.0 | 4.0 | 4.0 | | | | | 2.0 | 2.0 |
| Recall Mode | | | | None | None | None | | | | | C-Max | C-Max |
| Walk Time (s) | | | | 4.0 | 4.0 | 4.0 | | | | | 4.0 | 4.0 |
| Flash Don't Walk (s) | | | | 38.0 | 38.0 | 38.0 | | | | | 13.0 | 13.0 |
| Pedestrian Calls (#/hr) | | | | 0 | 0 | 0 | | | | | 0 | 0 |
| Act Effct Green (s) | | | | 28.5 | 28.5 | 28.5 | 51.0 | 79.0 | | | 20.5 | 20.5 |
| Actuated g/C Ratio | | | | 0.24 | 0.24 | 0.24 | 0.43 | 0.66 | | | 0.17 | 0.17 |
| v/c Ratio | | | | 0.10 | 0.16 | 0.24 | 1.00 | 0.43 | | | 0.81 | 0.65 |
| Control Delay (s/veh) | | | | 36.8 | 0.4 | 1.1 | 42.2 | 3.7 | | | 54.6 | 6.6 |
| Queue Delay | | | | 0.0 | 0.0 | 0.0 | 1.9 | 0.0 | | | 0.0 | 0.0 |
| Total Delay (s/veh) | | | | 36.8 | 0.4 | 1.1 | 44.1 | 3.7 | | | 54.6 | 6.6 |
| LOS | | | | D | A | A | D | A | | | D | A |
| Approach Delay (s/veh) | | | | | 5.6 | | | 24.1 | | | 33.8 | |
| Approach LOS | | | | | A | | | C | | | C | |

| Intersection Summary | |
|---|---|
| Area Type: | Other |
| Cycle Length: 120 | |
| Actuated Cycle Length: 120 | |
| Offset: 0 (0%), Referenced to phase 2:NBSB and 6:, Start of Yellow | |
| Natural Cycle: 150 | |
| Control Type: Actuated-Coordinated | |
| Maximum v/c Ratio: 1.25 | |
| Intersection Signal Delay (s/veh): 26.2 | Intersection LOS: C |
| Intersection Capacity Utilization 96.2% | ICU Level of Service F |
| Analysis Period (min) 15 | |

Splits and Phases: 4: Ellsworth Road & SR24 Westbound Ramps





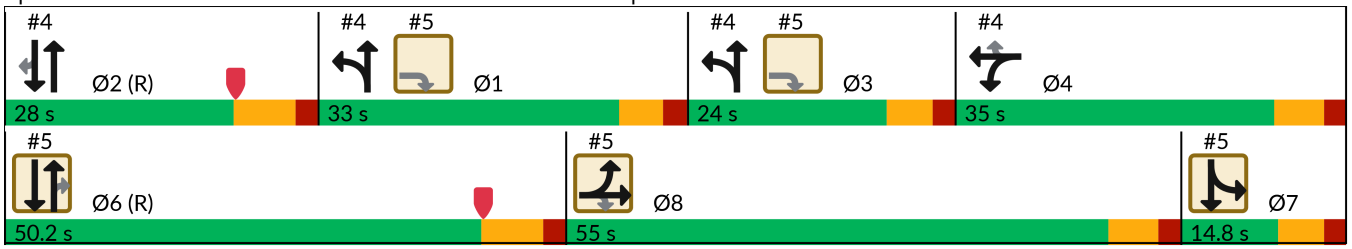
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 639 | 11 | 1991 | 0 | 0 | 0 | 0 | 2030 | 50 | 73 | 793 | 0 |
| Future Volume (vph) | 639 | 11 | 1991 | 0 | 0 | 0 | 0 | 2030 | 50 | 73 | 793 | 0 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 350 | | 350 | 0 | | 0 | 300 | | 300 | 550 | | 0 |
| Storage Lanes | 1 | | 2 | 0 | | 0 | 2 | | 1 | 0 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 0.95 | 0.95 | 0.88 | 1.00 | 1.00 | 1.00 | 1.00 | 0.81 | 1.00 | 0.97 | 0.91 | 1.00 |
| Frt | | | 0.850 | | | | | | 0.850 | | | |
| Flt Protected | 0.950 | 0.954 | | | | | | | | 0.950 | | |
| Satd. Flow (prot) | 1681 | 1688 | 2787 | 0 | 0 | 0 | 0 | 7544 | 1583 | 3433 | 5085 | 0 |
| Flt Permitted | 0.950 | 0.954 | | | | | | | | 0.950 | | |
| Satd. Flow (perm) | 1681 | 1688 | 2787 | 0 | 0 | 0 | 0 | 7544 | 1583 | 3433 | 5085 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 177 | | | | | | 200 | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 651 | | | 441 | | | 838 | | | 688 | |
| Travel Time (s) | | 14.8 | | | 10.0 | | | 19.0 | | | 15.6 | |
| 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 |
| Adj. Flow (vph) | 695 | 12 | 2164 | 0 | 0 | 0 | 0 | 2207 | 54 | 79 | 862 | 0 |
| Shared Lane Traffic (%) | 49% | | | | | | | | | | | |
| Lane Group Flow (vph) | 354 | 353 | 2164 | 0 | 0 | 0 | 0 | 2207 | 54 | 79 | 862 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 24 | | | 24 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | 1 | | | | | 2 | 1 | 1 | 2 | |
| Detector Template | Left | Thru | Right | | | | | Thru | Right | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | 20 | | | | | 100 | 20 | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | 0 | | | | | 0 | 0 | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | 0 | | | | | 0 | 0 | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | 20 | | | | | 6 | 20 | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | | | | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | | | | 0.0 | | | 0.0 | |
| Turn Type | Split | NA | custom | | | | | NA | Perm | Prot | NA | |
| Protected Phases | 8 | 8 | | | | | | 6 | | 7 | 6 7 | |
| Permitted Phases | | | 1 3 8 | | | | | | 6 | | | |

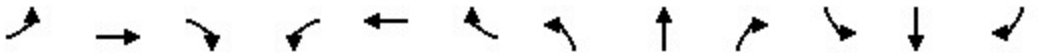
| Lane Group | Ø1 | Ø2 | Ø3 | Ø4 |
|---|---|---|---|---|
| Lane Configurations | | | | |
| Traffic Volume (vph) | | | | |
| Future Volume (vph) | | | | |
| Ideal Flow (vphpl) | | | | |
| Storage Length (ft) | | | | |
| Storage Lanes | | | | |
| Taper Length (ft) | | | | |
| Lane Util. Factor | | | | |
| Frt | | | | |
| Flt Protected | | | | |
| Satd. Flow (prot) | | | | |
| Flt Permitted | | | | |
| Satd. Flow (perm) | | | | |
| Right Turn on Red | | | | |
| Satd. Flow (RTOR) | | | | |
| Link Speed (mph) | | | | |
| Link Distance (ft) | | | | |
| Travel Time (s) | | | | |
| Peak Hour Factor | | | | |
| Adj. Flow (vph) | | | | |
| Shared Lane Traffic (%) | | | | |
| Lane Group Flow (vph) | | | | |
| Enter Blocked Intersection | | | | |
| Lane Alignment | | | | |
| Median Width(ft) | | | | |
| Link Offset(ft) | | | | |
| Crosswalk Width(ft) | | | | |
| Two way Left Turn Lane | | | | |
| Headway Factor | | | | |
| Turning Speed (mph) | | | | |
| Number of Detectors | | | | |
| Detector Template | | | | |
| Leading Detector (ft) | | | | |
| Trailing Detector (ft) | | | | |
| Detector 1 Position(ft) | | | | |
| Detector 1 Size(ft) | | | | |
| Detector 1 Type | | | | |
| Detector 1 Channel | | | | |
| Detector 1 Extend (s) | | | | |
| Detector 1 Queue (s) | | | | |
| Detector 1 Delay (s) | | | | |
| Detector 2 Position(ft) | | | | |
| Detector 2 Size(ft) | | | | |
| Detector 2 Type | | | | |
| Detector 2 Channel | | | | |
| Detector 2 Extend (s) | | | | |
| Turn Type | | | | |
| Protected Phases | 1 | 2 | 3 | 4 |
| Permitted Phases | | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | 8 | 8 | 1 3 8 | | | | | 6 | 6 | 7 | 6 7 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | | | | | 15.0 | 15.0 | 5.0 | | |
| Minimum Split (s) | 46.5 | 46.5 | | | | | | 26.5 | 26.5 | 11.0 | | |
| Total Split (s) | 55.0 | 55.0 | | | | | | 50.2 | 50.2 | 14.8 | | |
| Total Split (%) | 45.8% | 45.8% | | | | | | 41.8% | 41.8% | 12.3% | | |
| Maximum Green (s) | 48.5 | 48.5 | | | | | | 42.7 | 42.7 | 8.8 | | |
| Yellow Time (s) | 4.5 | 4.5 | | | | | | 5.5 | 5.5 | 4.0 | | |
| All-Red Time (s) | 2.0 | 2.0 | | | | | | 2.0 | 2.0 | 2.0 | | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | | | | | 0.0 | 0.0 | 0.0 | | |
| Total Lost Time (s) | 6.5 | 6.5 | | | | | | 7.5 | 7.5 | 6.0 | | |
| Lead/Lag | Lead | Lead | | | | | | | | Lag | | |
| Lead-Lag Optimize? | Yes | Yes | | | | | | | | Yes | | |
| Vehicle Extension (s) | 4.0 | 4.0 | | | | | | 2.0 | 2.0 | 2.0 | | |
| Recall Mode | None | None | | | | | | C-Max | C-Max | None | | |
| Walk Time (s) | 4.0 | 4.0 | | | | | | 4.0 | 4.0 | | | |
| Flash Don't Walk (s) | 36.0 | 36.0 | | | | | | 15.0 | 15.0 | | | |
| Pedestrian Calls (#/hr) | 0 | 0 | | | | | | 0 | 0 | | | |
| Act Effct Green (s) | 48.5 | 48.5 | 71.2 | | | | | 42.7 | 42.7 | 8.8 | 57.5 | |
| Actuated g/C Ratio | 0.40 | 0.40 | 0.59 | | | | | 0.36 | 0.36 | 0.07 | 0.48 | |
| v/c Ratio | 0.52 | 0.52 | 1.25 | | | | | 0.82 | 0.08 | 0.31 | 0.35 | |
| Control Delay (s/veh) | 30.4 | 30.3 | 143.1 | | | | | 33.5 | 0.2 | 81.8 | 2.0 | |
| Queue Delay | 0.1 | 0.1 | 0.0 | | | | | 0.1 | 0.0 | 0.0 | 0.0 | |
| Total Delay (s/veh) | 30.5 | 30.4 | 143.1 | | | | | 33.7 | 0.2 | 81.8 | 2.0 | |
| LOS | C | C | F | | | | | C | A | F | A | |
| Approach Delay (s/veh) | | 115.3 | | | | | | 32.9 | | | 8.7 | |
| Approach LOS | | F | | | | | | C | | | A | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 120 | | | |
| Actuated Cycle Length: 120 | | | |
| Offset: 0 (0%), Referenced to phase 2:NBSB and 6:, Start of Yellow | | | |
| Natural Cycle: 150 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 1.25 | | | |
| Intersection Signal Delay (s/veh): 68.1 | | Intersection LOS: E | |
| Intersection Capacity Utilization 96.2% | | ICU Level of Service F | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 5: Ellsworth Road & SR24 Eastbound Ramps





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 280 | 323 | 196 | 198 | 289 | 454 | 174 | 1378 | 99 | 892 | 2060 | 118 |
| Future Volume (veh/h) | 280 | 323 | 196 | 198 | 289 | 454 | 174 | 1378 | 99 | 892 | 2060 | 118 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 304 | 351 | 213 | 215 | 314 | 493 | 189 | 1498 | 108 | 970 | 2239 | 128 |
| 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 | 357 | 827 | 369 | 273 | 740 | 647 | 158 | 1472 | 457 | 691 | 2208 | 125 |
| Arrive On Green | 0.10 | 0.23 | 0.23 | 0.03 | 0.07 | 0.07 | 0.09 | 0.58 | 0.58 | 0.27 | 0.59 | 0.59 |
| Sat Flow, veh/h | 3456 | 3554 | 1585 | 3456 | 3554 | 1585 | 3456 | 5106 | 1585 | 3456 | 4943 | 281 |
| Grp Volume(v), veh/h | 304 | 351 | 213 | 215 | 314 | 493 | 189 | 1498 | 108 | 970 | 1537 | 830 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1777 | 1585 | 1728 | 1777 | 1585 | 1728 | 1702 | 1585 | 1728 | 1702 | 1820 |
| Q Serve(g_s), s | 10.4 | 10.1 | 14.3 | 7.4 | 10.2 | 25.0 | 5.5 | 34.6 | 4.0 | 24.0 | 53.6 | 53.6 |
| Cycle Q Clear(g_c), s | 10.4 | 10.1 | 14.3 | 7.4 | 10.2 | 25.0 | 5.5 | 34.6 | 4.0 | 24.0 | 53.6 | 53.6 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.15 |
| Lane Grp Cap(c), veh/h | 357 | 827 | 369 | 273 | 740 | 647 | 158 | 1472 | 457 | 691 | 1520 | 813 |
| V/C Ratio(X) | 0.85 | 0.42 | 0.58 | 0.79 | 0.42 | 0.76 | 1.19 | 1.02 | 0.24 | 1.40 | 1.01 | 1.02 |
| Avail Cap(c_a), veh/h | 374 | 827 | 369 | 374 | 740 | 647 | 158 | 1472 | 457 | 691 | 1520 | 813 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 0.33 | 0.33 | 0.33 | 2.00 | 2.00 | 2.00 | 1.33 | 1.33 | 1.33 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 0.63 | 0.63 | 0.63 | 0.78 | 0.78 | 0.78 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 52.9 | 39.2 | 40.8 | 57.4 | 49.0 | 34.9 | 54.5 | 25.4 | 18.9 | 44.0 | 24.4 | 24.4 |
| Incr Delay (d2), s/veh | 15.4 | 0.1 | 1.5 | 3.2 | 1.1 | 5.3 | 125.0 | 25.2 | 0.9 | 190.2 | 25.7 | 37.1 |
| 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(95%),veh/ln | 9.0 | 7.9 | 9.7 | 5.9 | 7.9 | 17.9 | 8.7 | 18.5 | 2.7 | 42.8 | 31.8 | 37.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 68.2 | 39.3 | 42.3 | 60.7 | 50.1 | 40.2 | 179.5 | 50.6 | 19.9 | 234.3 | 50.1 | 61.4 |
| LnGrp LOS | E | D | D | E | D | D | F | F | B | F | F | F |
| Approach Vol, veh/h | | 868 | | | 1022 | | | 1795 | | | 3337 | |
| Approach Delay, s/veh | | 50.2 | | | 47.5 | | | 62.3 | | | 106.4 | |
| Approach LOS | | D | | | D | | | E | | | F | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 17.4 | 31.5 | 10.0 | 61.1 | 14.5 | 34.4 | 29.0 | 42.1 |
| Change Period (Y+Rc), s | 5.0 | 6.5 | 4.5 | 7.5 | 5.0 | 6.5 | 5.0 | 7.5 |
| Max Green Setting (Gmax), s | 13.0 | 25.0 | 5.5 | 53.0 | 13.0 | 25.0 | 24.0 | 34.0 |
| Max Q Clear Time (g_c+I1), s | 12.4 | 27.0 | 7.5 | 55.6 | 9.4 | 16.3 | 26.0 | 36.6 |
| Green Ext Time (p_c), s | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 1.4 | 0.0 | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 79.6 |
| HCM 7th LOS | E |

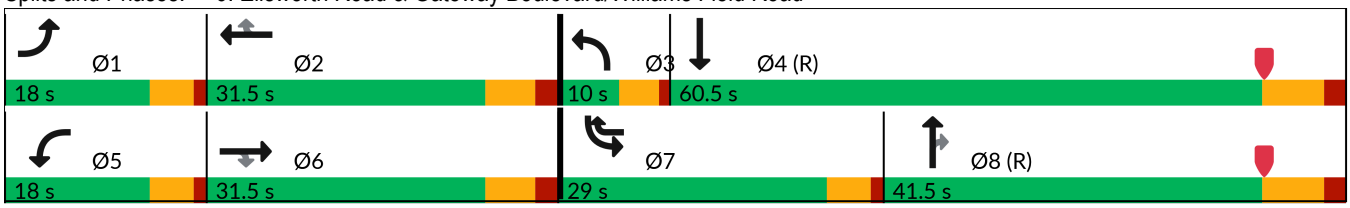
**Notes**

User approved pedestrian interval to be less than phase max green.

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | EBL | WBT | NBL | SBT | WBL | EBT | SBL | NBT |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | None | Max | None | C-Max | None | None | None | C-Max |
| Maximum Split (s) | 18 | 31.5 | 10 | 60.5 | 18 | 31.5 | 29 | 41.5 |
| Maximum Split (%) | 15.0% | 26.3% | 8.3% | 50.4% | 15.0% | 26.3% | 24.2% | 34.6% |
| Minimum Split (s) | 10 | 36.5 | 9.5 | 35.5 | 10 | 37.5 | 10 | 37.5 |
| Yellow Time (s) | 4 | 4.5 | 3.5 | 5.5 | 4 | 4.5 | 4 | 5.5 |
| All-Red Time (s) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| Minimum Initial (s) | 5 | 15 | 5 | 15 | 5 | 15 | 5 | 15 |
| Vehicle Extension (s) | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 2 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 4 | | 7 | | 4 | | 7 |
| Flash Don't Walk (s) | | 26 | | 21 | | 27 | | 23 |
| Dual Entry | No | Yes | No | Yes | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 7.5 | 25.5 | 57 | 67 | 7.5 | 25.5 | 57 | 86 |
| End Time (s) | 25.5 | 57 | 67 | 7.5 | 25.5 | 57 | 86 | 7.5 |
| Yield/Force Off (s) | 20.5 | 50.5 | 62.5 | 0 | 20.5 | 50.5 | 81 | 0 |
| Yield/Force Off 170(s) | 20.5 | 24.5 | 62.5 | 99 | 20.5 | 23.5 | 81 | 97 |
| Local Start Time (s) | 7.5 | 25.5 | 57 | 67 | 7.5 | 25.5 | 57 | 86 |
| Local Yield (s) | 20.5 | 50.5 | 62.5 | 0 | 20.5 | 50.5 | 81 | 0 |
| Local Yield 170(s) | 20.5 | 24.5 | 62.5 | 99 | 20.5 | 23.5 | 81 | 97 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 145 |
| Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow | |

Splits and Phases: 6: Ellsworth Road & Gateway Boulevard/Williams Field Road



| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 169 | 238 | 1295 | 204 | 356 | 1999 |
| Future Volume (veh/h) | 169 | 238 | 1295 | 204 | 356 | 1999 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 148 | 298 | 1408 | 222 | 387 | 2173 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 430 | 766 | 2402 | 746 | 462 | 3298 |
| Arrive On Green | 0.24 | 0.24 | 0.47 | 0.47 | 0.13 | 0.65 |
| Sat Flow, veh/h | 1781 | 3170 | 5274 | 1585 | 3456 | 5274 |
| Grp Volume(v), veh/h | 148 | 298 | 1408 | 222 | 387 | 2173 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1585 | 1702 | 1585 | 1728 | 1702 |
| Q Serve(g_s), s | 8.2 | 9.4 | 24.2 | 10.4 | 13.1 | 31.5 |
| Cycle Q Clear(g_c), s | 8.2 | 9.4 | 24.2 | 10.4 | 13.1 | 31.5 |
| Prop In Lane | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Lane Grp Cap(c), veh/h | 430 | 766 | 2402 | 746 | 462 | 3298 |
| V/C Ratio(X) | 0.34 | 0.39 | 0.59 | 0.30 | 0.84 | 0.66 |
| Avail Cap(c_a), veh/h | 430 | 766 | 2402 | 746 | 720 | 3298 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 0.13 | 0.13 |
| Uniform Delay (d), s/veh | 37.6 | 38.1 | 23.2 | 19.6 | 50.7 | 13.1 |
| Incr Delay (d2), s/veh | 2.2 | 1.5 | 1.1 | 1.0 | 0.7 | 0.1 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 7.0 | 6.9 | 14.2 | 6.8 | 6.9 | 12.0 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 39.8 | 39.6 | 24.3 | 20.6 | 51.4 | 13.2 |
| LnGrp LOS | D | D | C | C | D | B |
| Approach Vol, veh/h | 446 | | 1630 | | | 2560 |
| Approach Delay, s/veh | 39.6 | | 23.8 | | | 19.0 |
| Approach LOS | D | | C | | | B |

| Timer - Assigned Phs | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 35.0 | 85.0 | 21.1 | 63.9 |
| Change Period (Y+Rc), s | 6.0 | 7.5 | 5.0 | 7.5 |
| Max Green Setting (Gmax), s | 29.0 | 77.5 | 25.0 | 47.5 |
| Max Q Clear Time (g_c+I1), s | 11.4 | 33.5 | 15.1 | 26.2 |
| Green Ext Time (p_c), s | 1.5 | 24.6 | 1.0 | 10.4 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 22.7 |
| HCM 7th LOS | C |

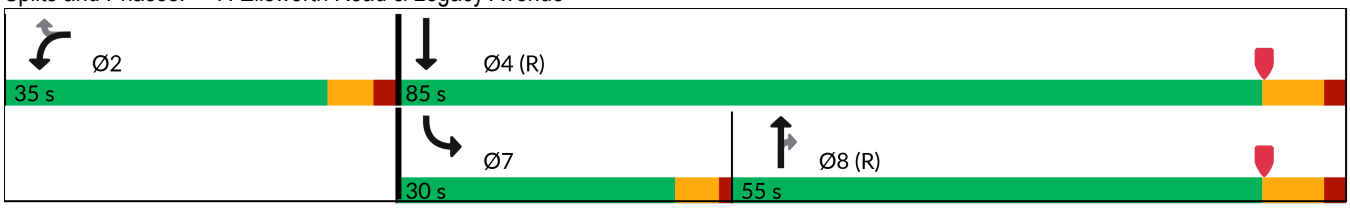
**Notes**

User approved volume balancing among the lanes for turning movement.

| Phase Number | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Movement | WBL | SBT | SBL | NBT |
| Lead/Lag | | | Lead | Lag |
| Lead-Lag Optimize | | | Yes | Yes |
| Recall Mode | Max | C-Max | None | C-Max |
| Maximum Split (s) | 35 | 85 | 30 | 55 |
| Maximum Split (%) | 29.2% | 70.8% | 25.0% | 45.8% |
| Minimum Split (s) | 35 | 39.5 | 10 | 26.5 |
| Yellow Time (s) | 4 | 5.5 | 4 | 5.5 |
| All-Red Time (s) | 2 | 2 | 1 | 2 |
| Minimum Initial (s) | 10 | 15 | 5 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | 4 | 4 | | 7 |
| Flash Don't Walk (s) | 25 | 28 | | 12 |
| Dual Entry | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 7.5 | 42.5 | 42.5 | 72.5 |
| End Time (s) | 42.5 | 7.5 | 72.5 | 7.5 |
| Yield/Force Off (s) | 36.5 | 0 | 67.5 | 0 |
| Yield/Force Off 170(s) | 11.5 | 92 | 67.5 | 108 |
| Local Start Time (s) | 7.5 | 42.5 | 42.5 | 72.5 |
| Local Yield (s) | 36.5 | 0 | 67.5 | 0 |
| Local Yield 170(s) | 11.5 | 92 | 67.5 | 108 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 80 |
| Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow | |

Splits and Phases: 7: Ellsworth Road & Legacy Avenue



| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 1068 | 183 | 158 | 464 | 411 | 121 |
| Future Volume (veh/h) | 1068 | 183 | 158 | 464 | 411 | 121 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 1214 | 208 | 180 | 527 | 467 | 138 |
| Peak Hour Factor | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 974 | 825 | 209 | 1192 | 460 | 409 |
| Arrive On Green | 1.00 | 1.00 | 0.03 | 0.21 | 0.26 | 0.26 |
| Sat Flow, veh/h | 1870 | 1585 | 1781 | 1870 | 1781 | 1585 |
| Grp Volume(v), veh/h | 1214 | 208 | 180 | 527 | 467 | 138 |
| Grp Sat Flow(s),veh/h/ln | 1870 | 1585 | 1781 | 1870 | 1781 | 1585 |
| Q Serve(g_s), s | 62.5 | 0.0 | 8.0 | 29.4 | 31.0 | 8.5 |
| Cycle Q Clear(g_c), s | 62.5 | 0.0 | 8.0 | 29.4 | 31.0 | 8.5 |
| Prop In Lane | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Lane Grp Cap(c), veh/h | 974 | 825 | 209 | 1192 | 460 | 409 |
| V/C Ratio(X) | 1.25 | 0.25 | 0.86 | 0.44 | 1.01 | 0.34 |
| Avail Cap(c_a), veh/h | 974 | 825 | 223 | 1192 | 460 | 409 |
| HCM Platoon Ratio | 2.00 | 2.00 | 0.33 | 0.33 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.09 | 0.09 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 0.0 | 0.0 | 40.9 | 28.8 | 44.5 | 36.2 |
| Incr Delay (d2), s/veh | 112.0 | 0.1 | 26.2 | 1.2 | 45.7 | 0.5 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 39.4 | 0.0 | 11.4 | 21.4 | 26.8 | 6.0 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 112.0 | 0.1 | 67.1 | 30.0 | 90.2 | 36.6 |
| LnGrp LOS | F | A | E | C | F | D |
| Approach Vol, veh/h | 1422 | | | 707 | 605 | |
| Approach Delay, s/veh | 95.6 | | | 39.4 | 78.0 | |
| Approach LOS | F | | | D | E | |

| Timer - Assigned Phs | 2 | | | 5 | 6 | 8 |
|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 83.0 | | | 14.0 | 69.0 | 37.0 |
| Change Period (Y+Rc), s | 6.5 | | | 4.0 | 6.5 | 6.0 |
| Max Green Setting (Gmax), s | 76.5 | | | 11.0 | 61.5 | 31.0 |
| Max Q Clear Time (g_c+I1), s | 31.4 | | | 10.0 | 64.5 | 33.0 |
| Green Ext Time (p_c), s | 3.4 | | | 0.0 | 0.0 | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 77.2 |
| HCM 7th LOS | E |

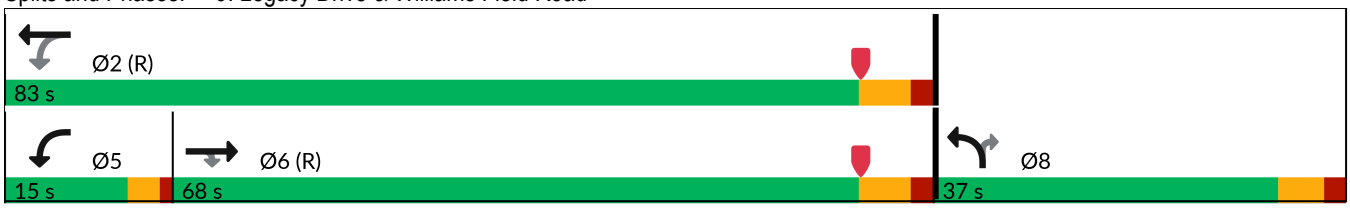
**Notes**

User approved pedestrian interval to be less than phase max green.

| Phase Number | 2 | 5 | 6 | 8 |
|---|---|---|---|---|
| Movement | WBTL | WBL | EBT | NBL |
| Lead/Lag | | Lead | Lag | |
| Lead-Lag Optimize | | Yes | Yes | |
| Recall Mode | C-Max | None | C-Max | None |
| Maximum Split (s) | 83 | 15 | 68 | 37 |
| Maximum Split (%) | 69.2% | 12.5% | 56.7% | 30.8% |
| Minimum Split (s) | 24.5 | 12.5 | 24.5 | 24 |
| Yellow Time (s) | 4.5 | 3 | 4.5 | 4 |
| All-Red Time (s) | 2 | 1 | 2 | 2 |
| Minimum Initial (s) | 15 | 8 | 15 | 10 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | | | 7 | |
| Flash Don't Walk (s) | | | 11 | |
| Dual Entry | Yes | No | Yes | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 43.5 | 43.5 | 58.5 | 6.5 |
| End Time (s) | 6.5 | 58.5 | 6.5 | 43.5 |
| Yield/Force Off (s) | 0 | 54.5 | 0 | 37.5 |
| Yield/Force Off 170(s) | 0 | 54.5 | 109 | 37.5 |
| Local Start Time (s) | 43.5 | 43.5 | 58.5 | 6.5 |
| Local Yield (s) | 0 | 54.5 | 0 | 37.5 |
| Local Yield 170(s) | 0 | 54.5 | 109 | 37.5 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 150 |
| Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBT, Start of Yellow | |

Splits and Phases: 9: Legacy Drive & Williams Field Road



| Intersection | |
|---|---|
| Int Delay, s/veh | 58.2 |

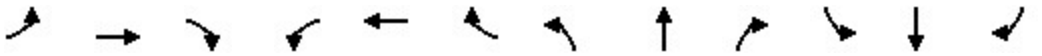
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | ↑ | ↱ | | ↑ | | ↱ |
| Traffic Vol, veh/h | 1023 | 247 | 81 | 626 | 27 | 334 |
| Future Vol, veh/h | 1023 | 247 | 81 | 626 | 27 | 334 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 150 | - | - | - | - |
| 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 | 1112 | 268 | 88 | 680 | 29 | 363 |

| Major/Minor | Major1 | | Major2 | | Minor1 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 0 | 0 | 1380 | 0 | 1968 | 1112 |
| Stage 1 | - | - | - | - | 1112 | - |
| Stage 2 | - | - | - | - | 857 | - |
| Critical Hdwy | - | - | 4.12 | - | 6.42 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | - | - | 2.218 | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | - | - | 256 | - | ~ 7 | ~ 214 |
| Stage 1 | - | - | - | - | 237 | - |
| Stage 2 | - | - | - | - | 392 | - |
| Platoon blocked, % | - | - | 1 | - | 1 | 1 |
| Mov Cap-1 Maneuver | - | - | 256 | - | ~ 3 | ~ 214 |
| Mov Cap-2 Maneuver | - | - | - | - | ~ 3 | - |
| Stage 1 | - | - | - | - | 237 | - |
| Stage 2 | - | - | - | - | 175 | - |

| Approach | EB | WB | NB |
|---|---|---|---|
| HCM Control Delay, s/v | 0 | 3.01 | $ 370.78 |
| HCM LOS | | | F |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT |
|---|---|---|---|---|---|
| Capacity (veh/h) | 214 | - | - | 256 | - |
| HCM Lane V/C Ratio | 1.694 | - | - | 0.344 | - |
| HCM Control Delay (s/veh) | $ 370.8 | - | - | 26.3 | - |
| HCM Lane LOS | F | - | - | D | - |
| HCM 95th %tile Q(veh) | 24.2 | - | - | 1.5 | - |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |



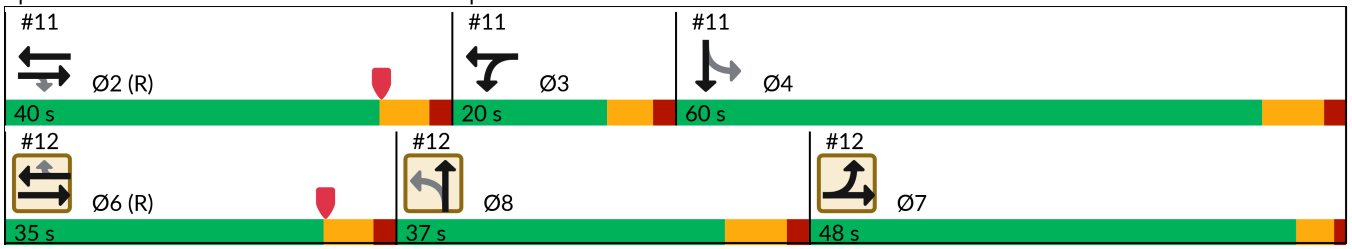
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 0 | 943 | 483 | 66 | 471 | 0 | 0 | 0 | 0 | 350 | 0 | 249 |
| Future Volume (vph) | 0 | 943 | 483 | 66 | 471 | 0 | 0 | 0 | 0 | 350 | 0 | 249 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 360 | | 285 | 290 | | 0 | 0 | | 0 | 400 | | 400 |
| Storage Lanes | 2 | | 1 | 0 | | 0 | 0 | | 0 | 2 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 1.00 | 0.86 | 1.00 | 0.97 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 0.91 | 0.91 | 0.95 |
| Frt | | | 0.850 | | | | | | | | 0.904 | |
| Flt Protected | | | | 0.950 | | | | | | 0.950 | 0.982 | |
| Satd. Flow (prot) | 0 | 6408 | 1583 | 3433 | 3539 | 0 | 0 | 0 | 0 | 1610 | 3010 | 0 |
| Flt Permitted | | | | 0.950 | | | | | | 0.950 | 0.982 | |
| Satd. Flow (perm) | 0 | 6408 | 1583 | 3433 | 3539 | 0 | 0 | 0 | 0 | 1610 | 3010 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 525 | | | | | | | | 244 | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 971 | | | 481 | | | 999 | | | 970 | |
| Travel Time (s) | | 22.1 | | | 10.9 | | | 22.7 | | | 22.0 | |
| 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 |
| Adj. Flow (vph) | 0 | 1025 | 525 | 72 | 512 | 0 | 0 | 0 | 0 | 380 | 0 | 271 |
| Shared Lane Traffic (%) | | | | | | | | | | 40% | | |
| Lane Group Flow (vph) | 0 | 1025 | 525 | 72 | 512 | 0 | 0 | 0 | 0 | 228 | 423 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 24 | | | 24 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | | 2 | 1 | 1 | 2 | | | | | 1 | 2 | |
| Detector Template | | Thru | Right | Left | Thru | | | | | Left | Thru | |
| Leading Detector (ft) | | 100 | 20 | 20 | 100 | | | | | 20 | 100 | |
| Trailing Detector (ft) | | 0 | 0 | 0 | 0 | | | | | 0 | 0 | |
| Detector 1 Position(ft) | | 0 | 0 | 0 | 0 | | | | | 0 | 0 | |
| Detector 1 Size(ft) | | 6 | 20 | 20 | 6 | | | | | 20 | 6 | |
| Detector 1 Type | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | | | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | | | | 0.0 | |
| Turn Type | | NA | Perm | Prot | NA | | | | | Perm | NA | |
| Protected Phases | | 2 | | 3 | 2 3 | | | | | | 4 | |
| Permitted Phases | | | 2 | | | | | | | 4 | | |

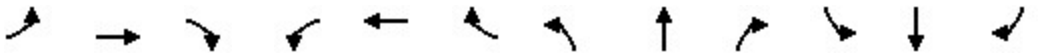
| Lane Group | Ø6 | Ø7 | Ø8 |
|---|---|---|---|
| Lane Configurations | | | |
| Traffic Volume (vph) | | | |
| Future Volume (vph) | | | |
| Ideal Flow (vphpl) | | | |
| Storage Length (ft) | | | |
| Storage Lanes | | | |
| Taper Length (ft) | | | |
| Lane Util. Factor | | | |
| Frt | | | |
| Flt Protected | | | |
| Satd. Flow (prot) | | | |
| Flt Permitted | | | |
| Satd. Flow (perm) | | | |
| Right Turn on Red | | | |
| Satd. Flow (RTOR) | | | |
| Link Speed (mph) | | | |
| Link Distance (ft) | | | |
| Travel Time (s) | | | |
| Peak Hour Factor | | | |
| Adj. Flow (vph) | | | |
| Shared Lane Traffic (%) | | | |
| Lane Group Flow (vph) | | | |
| Enter Blocked Intersection | | | |
| Lane Alignment | | | |
| Median Width(ft) | | | |
| Link Offset(ft) | | | |
| Crosswalk Width(ft) | | | |
| Two way Left Turn Lane | | | |
| Headway Factor | | | |
| Turning Speed (mph) | | | |
| Number of Detectors | | | |
| Detector Template | | | |
| Leading Detector (ft) | | | |
| Trailing Detector (ft) | | | |
| Detector 1 Position(ft) | | | |
| Detector 1 Size(ft) | | | |
| Detector 1 Type | | | |
| Detector 1 Channel | | | |
| Detector 1 Extend (s) | | | |
| Detector 1 Queue (s) | | | |
| Detector 1 Delay (s) | | | |
| Detector 2 Position(ft) | | | |
| Detector 2 Size(ft) | | | |
| Detector 2 Type | | | |
| Detector 2 Channel | | | |
| Detector 2 Extend (s) | | | |
| Turn Type | | | |
| Protected Phases | 6 | 7 | 8 |
| Permitted Phases | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | | 2 | 2 | 3 | 2 3 | | | | | 4 | 4 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | | 15.0 | 15.0 | 5.0 | | | | | | 10.0 | 10.0 | |
| Minimum Split (s) | | 25.5 | 25.5 | 11.0 | | | | | | 46.5 | 46.5 | |
| Total Split (s) | | 40.0 | 40.0 | 20.0 | | | | | | 60.0 | 60.0 | |
| Total Split (%) | | 33.3% | 33.3% | 16.7% | | | | | | 50.0% | 50.0% | |
| Maximum Green (s) | | 33.5 | 33.5 | 14.0 | | | | | | 52.5 | 52.5 | |
| Yellow Time (s) | | 4.5 | 4.5 | 4.0 | | | | | | 5.5 | 5.5 | |
| All-Red Time (s) | | 2.0 | 2.0 | 2.0 | | | | | | 2.0 | 2.0 | |
| Lost Time Adjust (s) | | 0.0 | 0.0 | 0.0 | | | | | | 0.0 | 0.0 | |
| Total Lost Time (s) | | 6.5 | 6.5 | 6.0 | | | | | | 7.5 | 7.5 | |
| Lead/Lag | | | | Lead | | | | | | Lag | Lag | |
| Lead-Lag Optimize? | | | | Yes | | | | | | Yes | Yes | |
| Vehicle Extension (s) | | 3.0 | 3.0 | 3.0 | | | | | | 3.0 | 3.0 | |
| Recall Mode | | C-Max | C-Max | Max | | | | | | None | None | |
| Walk Time (s) | | 4.0 | 4.0 | | | | | | | 4.0 | 4.0 | |
| Flash Don't Walk (s) | | 15.0 | 15.0 | | | | | | | 35.0 | 35.0 | |
| Pedestrian Calls (#/hr) | | 0 | 0 | | | | | | | 0 | 0 | |
| Act Effct Green (s) | | 33.5 | 33.5 | 14.0 | 53.5 | | | | | 52.5 | 52.5 | |
| Actuated g/C Ratio | | 0.28 | 0.28 | 0.12 | 0.45 | | | | | 0.44 | 0.44 | |
| v/c Ratio | | 0.57 | 0.64 | 0.18 | 0.32 | | | | | 0.32 | 0.29 | |
| Control Delay (s/veh) | | 50.8 | 15.5 | 48.0 | 22.4 | | | | | 23.8 | 9.3 | |
| Queue Delay | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | |
| Total Delay (s/veh) | | 50.8 | 15.5 | 48.0 | 22.4 | | | | | 23.8 | 9.3 | |
| LOS | | D | B | D | C | | | | | C | A | |
| Approach Delay (s/veh) | | 38.8 | | | 25.6 | | | | | | 14.4 | |
| Approach LOS | | D | | | C | | | | | | B | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 120 | | | |
| Actuated Cycle Length: 120 | | | |
| Offset: 0 (0%), Referenced to phase 2:EBWB and 6:, Start of Yellow | | | |
| Natural Cycle: 95 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.88 | | | |
| Intersection Signal Delay (s/veh): 30.3 | | Intersection LOS: C | |
| Intersection Capacity Utilization 85.7% | | ICU Level of Service E | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 11: SR24 Eastbound Ramps & Williams Field Road





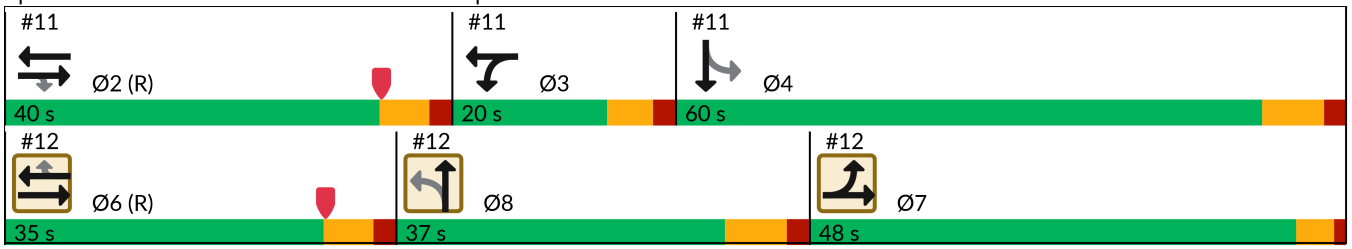
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 719 | 593 | 0 | 0 | 240 | 543 | 292 | 0 | 14 | 0 | 0 | 0 |
| Future Volume (vph) | 719 | 593 | 0 | 0 | 240 | 543 | 292 | 0 | 14 | 0 | 0 | 0 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 290 | | 0 | 365 | | 300 | 375 | | 375 | 0 | | 0 |
| Storage Lanes | 0 | | 0 | 2 | | 1 | 1 | | 1 | 0 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 0.97 | 0.95 | 1.00 | 1.00 | 0.86 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 |
| Frt | | | | | | 0.850 | | 0.850 | | | | |
| Flt Protected | 0.950 | | | | | | 0.950 | | | | | |
| Satd. Flow (prot) | 3433 | 3539 | 0 | 0 | 6408 | 1583 | 1770 | 3008 | 0 | 0 | 0 | 0 |
| Flt Permitted | 0.950 | | | | | | 0.950 | | | | | |
| Satd. Flow (perm) | 3433 | 3539 | 0 | 0 | 6408 | 1583 | 1770 | 3008 | 0 | 0 | 0 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | | | | 384 | | 293 | | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 481 | | | 694 | | | 897 | | | 1176 | |
| Travel Time (s) | | 10.9 | | | 15.8 | | | 20.4 | | | 26.7 | |
| 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 |
| Adj. Flow (vph) | 782 | 645 | 0 | 0 | 261 | 590 | 317 | 0 | 15 | 0 | 0 | 0 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 782 | 645 | 0 | 0 | 261 | 590 | 317 | 15 | 0 | 0 | 0 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 24 | | | 24 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | | 2 | 1 | 1 | 2 | | | | |
| Detector Template | Left | Thru | | | Thru | Right | Left | Thru | | | | |
| Leading Detector (ft) | 20 | 100 | | | 100 | 20 | 20 | 100 | | | | |
| Trailing Detector (ft) | 0 | 0 | | | 0 | 0 | 0 | 0 | | | | |
| Detector 1 Position(ft) | 0 | 0 | | | 0 | 0 | 0 | 0 | | | | |
| Detector 1 Size(ft) | 20 | 6 | | | 6 | 20 | 20 | 6 | | | | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | | | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | | |
| Turn Type | Prot | NA | | | NA | Perm | Perm | NA | | | | |
| Protected Phases | 7 | 6 7 | | | 6 | | | 8 | | | | |
| Permitted Phases | | | | | | 6 | 8 | | | | | |

| Lane Group | Ø2 | Ø3 | Ø4 |
|---|---|---|---|
| Lane Configurations | | | |
| Traffic Volume (vph) | | | |
| Future Volume (vph) | | | |
| Ideal Flow (vphpl) | | | |
| Storage Length (ft) | | | |
| Storage Lanes | | | |
| Taper Length (ft) | | | |
| Lane Util. Factor | | | |
| Frt | | | |
| Flt Protected | | | |
| Satd. Flow (prot) | | | |
| Flt Permitted | | | |
| Satd. Flow (perm) | | | |
| Right Turn on Red | | | |
| Satd. Flow (RTOR) | | | |
| Link Speed (mph) | | | |
| Link Distance (ft) | | | |
| Travel Time (s) | | | |
| Peak Hour Factor | | | |
| Adj. Flow (vph) | | | |
| Shared Lane Traffic (%) | | | |
| Lane Group Flow (vph) | | | |
| Enter Blocked Intersection | | | |
| Lane Alignment | | | |
| Median Width(ft) | | | |
| Link Offset(ft) | | | |
| Crosswalk Width(ft) | | | |
| Two way Left Turn Lane | | | |
| Headway Factor | | | |
| Turning Speed (mph) | | | |
| Number of Detectors | | | |
| Detector Template | | | |
| Leading Detector (ft) | | | |
| Trailing Detector (ft) | | | |
| Detector 1 Position(ft) | | | |
| Detector 1 Size(ft) | | | |
| Detector 1 Type | | | |
| Detector 1 Channel | | | |
| Detector 1 Extend (s) | | | |
| Detector 1 Queue (s) | | | |
| Detector 1 Delay (s) | | | |
| Detector 2 Position(ft) | | | |
| Detector 2 Size(ft) | | | |
| Detector 2 Type | | | |
| Detector 2 Channel | | | |
| Detector 2 Extend (s) | | | |
| Turn Type | | | |
| Protected Phases | 2 | 3 | 4 |
| Permitted Phases | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | 7 | 6 7 | | | 6 | 6 | 8 | 8 | | | | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | | | | 15.0 | 15.0 | 10.0 | 10.0 | | | | |
| Minimum Split (s) | 9.5 | | | | 26.5 | 26.5 | 45.5 | 45.5 | | | | |
| Total Split (s) | 48.0 | | | | 35.0 | 35.0 | 37.0 | 37.0 | | | | |
| Total Split (%) | 40.0% | | | | 29.2% | 29.2% | 30.8% | 30.8% | | | | |
| Maximum Green (s) | 43.5 | | | | 28.5 | 28.5 | 29.5 | 29.5 | | | | |
| Yellow Time (s) | 3.5 | | | | 4.5 | 4.5 | 5.5 | 5.5 | | | | |
| All-Red Time (s) | 1.0 | | | | 2.0 | 2.0 | 2.0 | 2.0 | | | | |
| Lost Time Adjust (s) | 0.0 | | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Total Lost Time (s) | 4.5 | | | | 6.5 | 6.5 | 7.5 | 7.5 | | | | |
| Lead/Lag | Lag | | | | | | Lead | Lead | | | | |
| Lead-Lag Optimize? | Yes | | | | | | Yes | Yes | | | | |
| Vehicle Extension (s) | 3.0 | | | | 3.0 | 3.0 | 3.0 | 3.0 | | | | |
| Recall Mode | Max | | | | C-Max | C-Max | Max | Max | | | | |
| Walk Time (s) | | | | | 4.0 | 4.0 | 4.0 | 4.0 | | | | |
| Flash Don't Walk (s) | | | | | 16.0 | 16.0 | 34.0 | 34.0 | | | | |
| Pedestrian Calls (#/hr) | | | | | 0 | 0 | 0 | 0 | | | | |
| Act Effct Green (s) | 43.5 | 76.5 | | | 28.5 | 28.5 | 29.5 | 29.5 | | | | |
| Actuated g/C Ratio | 0.36 | 0.64 | | | 0.24 | 0.24 | 0.25 | 0.25 | | | | |
| v/c Ratio | 0.63 | 0.29 | | | 0.17 | 0.88 | 0.73 | 0.02 | | | | |
| Control Delay (s/veh) | 52.6 | 5.8 | | | 36.7 | 31.4 | 52.6 | 0.0 | | | | |
| Queue Delay | 0.9 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Total Delay (s/veh) | 53.4 | 5.8 | | | 36.7 | 31.4 | 52.6 | 0.0 | | | | |
| LOS | D | A | | | D | C | D | A | | | | |
| Approach Delay (s/veh) | | 31.9 | | | 33.0 | | | 50.2 | | | | |
| Approach LOS | | C | | | C | | | D | | | | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 120 | | | |
| Actuated Cycle Length: 120 | | | |
| Offset: 0 (0%), Referenced to phase 2:EBWB and 6:, Start of Yellow | | | |
| Natural Cycle: 95 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.88 | | | |
| Intersection Signal Delay (s/veh): 34.6 | | Intersection LOS: C | |
| Intersection Capacity Utilization 85.7% | | ICU Level of Service E | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 12: SR24 Westbound Ramps & Williams Field Road



| Intersection | |
|---|---|
| Int Delay, s/veh | 0.2 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 0 | 68 | 0 | 2120 | 2686 | 122 |
| Future Vol, veh/h | 0 | 68 | 0 | 2120 | 2686 | 122 |
| 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 | 74 | 0 | 2304 | 2920 | 133 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | - | 1526 | - | 0 | - | 0 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | 7.14 | - | - | - | - |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | 3.92 | - | - | - | - |
| Pot Cap-1 Maneuver | 0 | *477 | 0 | - | - | - |
| Stage 1 | 0 | - | 0 | - | - | - |
| Stage 2 | 0 | - | 0 | - | - | - |
| Platoon blocked, % | | 0 | | - | - | - |
| Mov Cap-1 Maneuver | - | *477 | - | - | - | - |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 13.92 | 0 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|
| Capacity (veh/h) | - | 477 | - | - |
| HCM Lane V/C Ratio | - | 0.155 | - | - |
| HCM Control Delay (s/veh) | - | 13.9 | - | - |
| HCM Lane LOS | - | B | - | - |
| HCM 95th %tile Q(veh) | - | 0.5 | - | - |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 190 | 128 | 95 | 1988 | 2624 | 130 |
| Future Volume (veh/h) | 190 | 128 | 95 | 1988 | 2624 | 130 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | 1.00 | | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 207 | 139 | 103 | 2161 | 2852 | 141 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 334 | 297 | 139 | 3617 | 3166 | 154 |
| Arrive On Green | 0.19 | 0.19 | 0.03 | 0.47 | 0.43 | 0.43 |
| Sat Flow, veh/h | 1781 | 1585 | 1781 | 5274 | 5156 | 243 |
| Grp Volume(v), veh/h | 207 | 139 | 103 | 2161 | 1932 | 1061 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1585 | 1781 | 1702 | 1702 | 1827 |
| Q Serve(g_s), s | 12.8 | 9.4 | 2.3 | 37.2 | 63.1 | 65.6 |
| Cycle Q Clear(g_c), s | 12.8 | 9.4 | 2.3 | 37.2 | 63.1 | 65.6 |
| Prop In Lane | 1.00 | 1.00 | 1.00 | | | 0.13 |
| Lane Grp Cap(c), veh/h | 334 | 297 | 139 | 3617 | 2160 | 1159 |
| V/C Ratio(X) | 0.62 | 0.47 | 0.74 | 0.60 | 0.89 | 0.92 |
| Avail Cap(c_a), veh/h | 334 | 297 | 186 | 3617 | 2160 | 1159 |
| HCM Platoon Ratio | 1.00 | 1.00 | 0.67 | 0.67 | 0.67 | 0.67 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 44.8 | 43.4 | 32.0 | 19.0 | 30.7 | 31.5 |
| Incr Delay (d2), s/veh | 8.4 | 5.2 | 10.3 | 0.7 | 6.2 | 12.6 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 10.6 | 7.4 | 4.3 | 22.4 | 37.5 | 43.6 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 53.2 | 48.6 | 42.3 | 19.7 | 37.0 | 44.1 |
| LnGrp LOS | D | D | D | B | D | D |
| Approach Vol, veh/h | 346 | | | 2264 | 2993 | |
| Approach Delay, s/veh | 51.4 | | | 20.7 | 39.5 | |
| Approach LOS | D | | | C | D | |

| Timer - Assigned Phs | | 3 | 4 | | 6 | 8 |
|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 8.8 | 82.2 | | 29.0 | 91.0 |
| Change Period (Y+Rc), s | | 4.0 | 6.0 | | 6.5 | 6.0 |
| Max Green Setting (Gmax), s | | 8.0 | 73.0 | | 22.5 | 85.0 |
| Max Q Clear Time (g_c+I1), s | | 4.3 | 67.6 | | 14.8 | 39.2 |
| Green Ext Time (p_c), s | | 0.1 | 5.2 | | 0.7 | 28.8 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 32.6 |
| HCM 7th LOS | C |

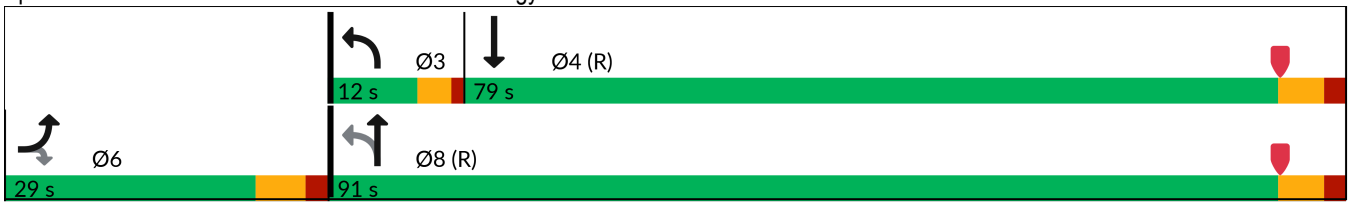
**Notes**

User approved pedestrian interval to be less than phase max green.

| Phase Number | 3 | 4 | 6 | 8 |
|---|---|---|---|---|
| Movement | NBL | SBT | EBL | NBTL |
| Lead/Lag | Lead | Lag | | |
| Lead-Lag Optimize | Yes | Yes | | |
| Recall Mode | None | C-Max | Max | C-Max |
| Maximum Split (s) | 12 | 79 | 29 | 91 |
| Maximum Split (%) | 10.0% | 65.8% | 24.2% | 75.8% |
| Minimum Split (s) | 9.5 | 24 | 24.5 | 24 |
| Yellow Time (s) | 3 | 4 | 4.5 | 4 |
| All-Red Time (s) | 1 | 2 | 2 | 2 |
| Minimum Initial (s) | 5 | 15 | 10 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 7 | 7 | 7 |
| Flash Don't Walk (s) | | 11 | 11 | 11 |
| Dual Entry | No | Yes | Yes | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 35 | 47 | 6 | 35 |
| End Time (s) | 47 | 6 | 35 | 6 |
| Yield/Force Off (s) | 43 | 0 | 28.5 | 0 |
| Yield/Force Off 170(s) | 43 | 109 | 17.5 | 109 |
| Local Start Time (s) | 35 | 47 | 6 | 35 |
| Local Yield (s) | 43 | 0 | 28.5 | 0 |
| Local Yield 170(s) | 43 | 109 | 17.5 | 109 |

| Intersection Summary | | |
|---|---|---|
| Cycle Length | 120 | |
| Control Type | Actuated-Coordinated | |
| Natural Cycle | 90 | |
| Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBTL, Start of Yellow | | |

Splits and Phases: 16: Ellsworth Road & Technology Avenue



| Intersection | |
|---|---|
| Int Delay, s/veh | 0.3 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 0 | 102 | 0 | 2023 | 2704 | 27 |
| Future Vol, veh/h | 0 | 102 | 0 | 2023 | 2704 | 27 |
| 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 | 111 | 0 | 2199 | 2939 | 29 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | - | 1484 | - | 0 | - | 0 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | 7.14 | - | - | - | - |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | 3.92 | - | - | - | - |
| Pot Cap-1 Maneuver | 0 | *477 | 0 | - | - | - |
| Stage 1 | 0 | - | 0 | - | - | - |
| Stage 2 | 0 | - | 0 | - | - | - |
| Platoon blocked, % | | 0 | | - | - | - |
| Mov Cap-1 Maneuver | - | *477 | - | - | - | - |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 14.81 | 0 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|
| Capacity (veh/h) | - | 477 | - | - |
| HCM Lane V/C Ratio | - | 0.232 | - | - |
| HCM Control Delay (s/veh) | - | 14.8 | - | - |
| HCM Lane LOS | - | B | - | - |
| HCM 95th %tile Q(veh) | - | 0.9 | - | - |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

# Appendix M – Year 2044 Build Capacity Analysis

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 190 | 10 | 1466 | 56 | 1 | 1363 |
| Future Volume (veh/h) | 190 | 10 | 1466 | 56 | 1 | 1363 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 207 | 11 | 1593 | 61 | 1 | 1482 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 265 | 236 | 3579 | 1111 | 331 | 3579 |
| Arrive On Green | 0.15 | 0.15 | 1.00 | 1.00 | 0.70 | 0.70 |
| Sat Flow, veh/h | 1781 | 1585 | 5274 | 1585 | 302 | 5274 |
| Grp Volume(v), veh/h | 207 | 11 | 1593 | 61 | 1 | 1482 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1585 | 1702 | 1585 | 302 | 1702 |
| Q Serve(g_s), s | 6.7 | 0.4 | 0.0 | 0.0 | 0.1 | 7.3 |
| Cycle Q Clear(g_c), s | 6.7 | 0.4 | 0.0 | 0.0 | 0.1 | 7.3 |
| Prop In Lane | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Lane Grp Cap(c), veh/h | 265 | 236 | 3579 | 1111 | 331 | 3579 |
| V/C Ratio(X) | 0.78 | 0.05 | 0.45 | 0.05 | 0.00 | 0.41 |
| Avail Cap(c_a), veh/h | 609 | 542 | 3579 | 1111 | 331 | 3579 |
| HCM Platoon Ratio | 1.00 | 1.00 | 2.00 | 2.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 0.79 | 0.79 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 24.6 | 21.9 | 0.0 | 0.0 | 2.7 | 3.8 |
| Incr Delay (d2), s/veh | 4.9 | 0.1 | 0.3 | 0.1 | 0.0 | 0.4 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 5.4 | 0.2 | 0.2 | 0.0 | 0.0 | 2.9 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 29.5 | 22.0 | 0.3 | 0.1 | 2.7 | 4.1 |
| LnGrp LOS | C | C | A | A | A | A |
| Approach Vol, veh/h | 218 | | 1654 | | | 1483 |
| Approach Delay, s/veh | 29.1 | | 0.3 | | | 4.1 |
| Approach LOS | C | | A | | | A |

| Timer - Assigned Phs | | 2 | | | 6 | 8 |
|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 46.6 | | | 46.6 | 13.4 |
| Change Period (Y+Rc), s | | 4.5 | | | 4.5 | 4.5 |
| Max Green Setting (Gmax), s | | 30.5 | | | 30.5 | 20.5 |
| Max Q Clear Time (g_c+I1), s | | 2.0 | | | 9.3 | 8.7 |
| Green Ext Time (p_c), s | | 15.0 | | | 11.5 | 0.5 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 3.9 |
| HCM 7th LOS | A |

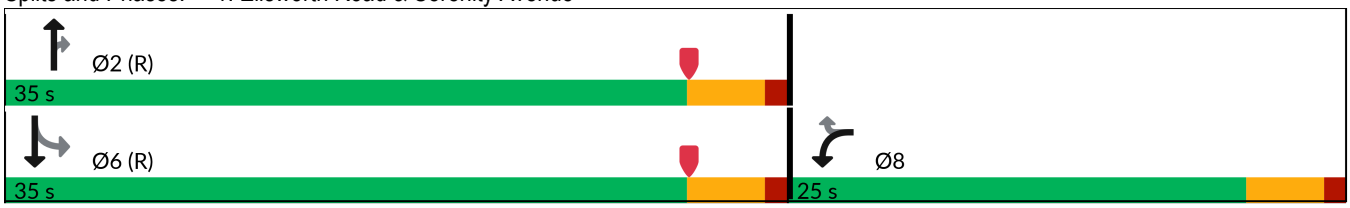
**Notes**

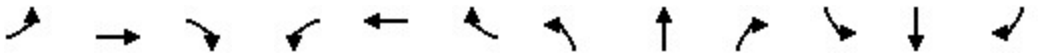
User approved pedestrian interval to be less than phase max green.

| Phase Number | 2 | 6 | 8 |
|---|---|---|---|
| Movement | NBT | SBTL | WBL |
| Lead/Lag | | | |
| Lead-Lag Optimize | | | |
| Recall Mode | C-Max | C-Max | None |
| Maximum Split (s) | 35 | 35 | 25 |
| Maximum Split (%) | 58.3% | 58.3% | 41.7% |
| Minimum Split (s) | 22.5 | 22.5 | 22.5 |
| Yellow Time (s) | 3.5 | 3.5 | 3.5 |
| All-Red Time (s) | 1 | 1 | 1 |
| Minimum Initial (s) | 5 | 5 | 5 |
| Vehicle Extension (s) | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 |
| Walk Time (s) | 7 | 7 | 7 |
| Flash Don't Walk (s) | 11 | 11 | 11 |
| Dual Entry | Yes | Yes | Yes |
| Inhibit Max | Yes | Yes | Yes |
| Start Time (s) | 29.5 | 29.5 | 4.5 |
| End Time (s) | 4.5 | 4.5 | 29.5 |
| Yield/Force Off (s) | 0 | 0 | 25 |
| Yield/Force Off 170(s) | 49 | 49 | 14 |
| Local Start Time (s) | 29.5 | 29.5 | 4.5 |
| Local Yield (s) | 0 | 0 | 25 |
| Local Yield 170(s) | 49 | 49 | 14 |

| Intersection Summary | |
|---|---|
| Cycle Length | 60 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 45 |
| Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Yellow | |

Splits and Phases: 1: Ellsworth Road & Serenity Avenue





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 194 | 90 | 175 | 548 | 210 | 192 | 607 | 1128 | 264 | 79 | 882 | 591 |
| Future Volume (veh/h) | 194 | 90 | 175 | 548 | 210 | 192 | 607 | 1128 | 264 | 79 | 882 | 591 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 211 | 98 | 190 | 596 | 228 | 209 | 660 | 1226 | 287 | 86 | 959 | 642 |
| 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 | 490 | 787 | 244 | 749 | 1170 | 363 | 860 | 1989 | 961 | 137 | 1213 | 601 |
| Arrive On Green | 0.14 | 0.15 | 0.15 | 0.22 | 0.23 | 0.23 | 0.07 | 0.13 | 0.13 | 0.08 | 0.47 | 0.47 |
| Sat Flow, veh/h | 3456 | 5106 | 1585 | 3456 | 5106 | 1585 | 3456 | 5106 | 1585 | 3456 | 5106 | 1585 |
| Grp Volume(v), veh/h | 211 | 98 | 190 | 596 | 228 | 209 | 660 | 1226 | 287 | 86 | 959 | 642 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1702 | 1585 | 1728 | 1702 | 1585 | 1728 | 1702 | 1585 | 1728 | 1702 | 1585 |
| Q Serve(g_s), s | 6.7 | 2.0 | 13.8 | 19.6 | 4.3 | 14.0 | 16.6 | 27.3 | 13.0 | 2.9 | 19.0 | 28.5 |
| Cycle Q Clear(g_c), s | 6.7 | 2.0 | 13.8 | 19.6 | 4.3 | 14.0 | 16.6 | 27.3 | 13.0 | 2.9 | 19.0 | 28.5 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 490 | 787 | 244 | 749 | 1170 | 363 | 860 | 1989 | 961 | 137 | 1213 | 601 |
| V/C Ratio(X) | 0.43 | 0.12 | 0.78 | 0.80 | 0.19 | 0.58 | 0.77 | 0.62 | 0.30 | 0.63 | 0.79 | 1.07 |
| Avail Cap(c_a), veh/h | 490 | 787 | 244 | 749 | 1170 | 363 | 860 | 1989 | 961 | 432 | 1213 | 601 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.33 | 0.33 | 0.33 | 2.00 | 2.00 | 2.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.57 | 0.57 | 0.57 | 0.88 | 0.88 | 0.88 |
| Uniform Delay (d), s/veh | 47.1 | 43.8 | 48.8 | 44.5 | 37.3 | 41.1 | 33.3 | 43.8 | 16.9 | 54.4 | 29.0 | 28.3 |
| Incr Delay (d2), s/veh | 2.8 | 0.3 | 21.2 | 8.6 | 0.4 | 6.5 | 3.8 | 0.8 | 0.5 | 4.1 | 4.7 | 54.1 |
| 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(95%),veh/ln | 5.5 | 1.6 | 11.2 | 14.2 | 3.3 | 10.2 | 11.6 | 17.0 | 8.5 | 2.4 | 10.4 | 37.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 49.8 | 44.1 | 70.0 | 53.1 | 37.7 | 47.6 | 37.1 | 44.6 | 17.4 | 58.5 | 33.7 | 82.4 |
| LnGrp LOS | D | D | E | D | D | D | D | D | B | E | C | F |
| Approach Vol, veh/h | | 499 | | | 1033 | | | 2173 | | | 1687 | |
| Approach Delay, s/veh | | 56.4 | | | 48.6 | | | 38.7 | | | 53.5 | |
| Approach LOS | | E | | | D | | | D | | | D | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 22.0 | 34.0 | 28.0 | 36.0 | 31.0 | 25.0 | 9.7 | 54.3 |
| Change Period (Y+Rc), s | 5.0 | 6.5 | 4.0 | 7.5 | 5.0 | 6.5 | 5.0 | 7.5 |
| Max Green Setting (Gmax), s | 17.0 | 27.5 | 24.0 | 28.5 | 26.0 | 18.5 | 15.0 | 36.5 |
| Max Q Clear Time (g_c+I1), s | 8.7 | 16.0 | 18.6 | 30.5 | 21.6 | 15.8 | 4.9 | 29.3 |
| Green Ext Time (p_c), s | 0.4 | 1.7 | 1.3 | 0.0 | 1.0 | 0.3 | 0.1 | 4.9 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 46.9 |
| HCM 7th LOS | D |

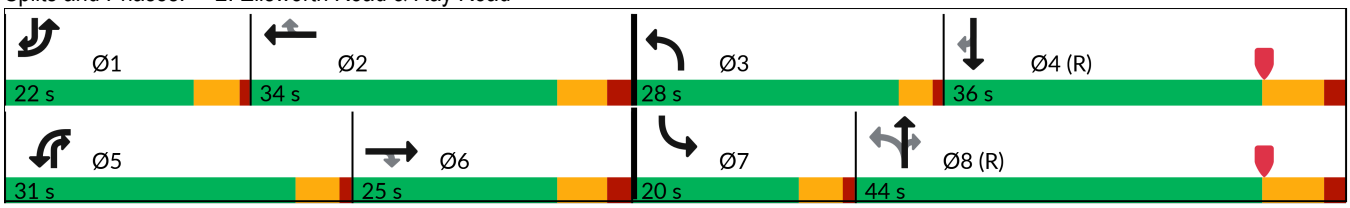
**Notes**

User approved pedestrian interval to be less than phase max green.

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | EBL | WBT | NBL | SBT | WBL | EBT | SBL | NBTL |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | Max | Max | Max | C-Max | Max | Max | None | C-Max |
| Maximum Split (s) | 22 | 34 | 28 | 36 | 31 | 25 | 20 | 44 |
| Maximum Split (%) | 18.3% | 28.3% | 23.3% | 30.0% | 25.8% | 20.8% | 16.7% | 36.7% |
| Minimum Split (s) | 10 | 34.5 | 12 | 37.5 | 10 | 35.5 | 12 | 37.5 |
| Yellow Time (s) | 4 | 4.5 | 3 | 5.5 | 4 | 4.5 | 4 | 5.5 |
| All-Red Time (s) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| Minimum Initial (s) | 5 | 10 | 5 | 15 | 5 | 10 | 5 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 4 | | 4 | | 4 | | 4 |
| Flash Don't Walk (s) | | 24 | | 26 | | 25 | | 26 |
| Dual Entry | No | Yes | No | Yes | No | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 63.5 | 85.5 | 119.5 | 27.5 | 63.5 | 94.5 | 119.5 | 19.5 |
| End Time (s) | 85.5 | 119.5 | 27.5 | 63.5 | 94.5 | 119.5 | 19.5 | 63.5 |
| Yield/Force Off (s) | 80.5 | 113 | 23.5 | 56 | 89.5 | 113 | 14.5 | 56 |
| Yield/Force Off 170(s) | 80.5 | 89 | 23.5 | 30 | 89.5 | 88 | 14.5 | 30 |
| Local Start Time (s) | 7.5 | 29.5 | 63.5 | 91.5 | 7.5 | 38.5 | 63.5 | 83.5 |
| Local Yield (s) | 24.5 | 57 | 87.5 | 0 | 33.5 | 57 | 78.5 | 0 |
| Local Yield 170(s) | 24.5 | 33 | 87.5 | 94 | 33.5 | 32 | 78.5 | 94 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 115 |
| Offset: 56 (47%), Referenced to phase 4:SBT and 8:NBTL, Start of Yellow | |

Splits and Phases: 2: Ellsworth Road & Ray Road



| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 292 | 266 | 1719 | 223 | 128 | 1476 |
| Future Volume (veh/h) | 292 | 266 | 1719 | 223 | 128 | 1476 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 317 | 289 | 1868 | 242 | 139 | 1604 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 878 | 403 | 2362 | 733 | 432 | 3213 |
| Arrive On Green | 0.25 | 0.25 | 0.93 | 0.93 | 0.13 | 0.63 |
| Sat Flow, veh/h | 3456 | 1585 | 5274 | 1585 | 3456 | 5274 |
| Grp Volume(v), veh/h | 317 | 289 | 1868 | 242 | 139 | 1604 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1585 | 1702 | 1585 | 1728 | 1702 |
| Q Serve(g_s), s | 9.0 | 20.0 | 12.3 | 2.0 | 4.4 | 20.4 |
| Cycle Q Clear(g_c), s | 9.0 | 20.0 | 12.3 | 2.0 | 4.4 | 20.4 |
| Prop In Lane | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Lane Grp Cap(c), veh/h | 878 | 403 | 2362 | 733 | 432 | 3213 |
| V/C Ratio(X) | 0.36 | 0.72 | 0.79 | 0.33 | 0.32 | 0.50 |
| Avail Cap(c_a), veh/h | 878 | 403 | 2362 | 733 | 432 | 3213 |
| HCM Platoon Ratio | 1.00 | 1.00 | 2.00 | 2.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 0.86 | 0.86 | 0.56 | 0.56 |
| Uniform Delay (d), s/veh | 36.7 | 40.8 | 2.9 | 2.5 | 47.9 | 12.0 |
| Incr Delay (d2), s/veh | 1.2 | 10.5 | 2.4 | 1.0 | 1.1 | 0.3 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 7.1 | 13.8 | 3.4 | 1.3 | 3.4 | 10.0 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 37.9 | 51.3 | 5.3 | 3.5 | 49.0 | 12.3 |
| LnGrp LOS | D | D | A | A | D | B |
| Approach Vol, veh/h | 606 | | 2110 | | | 1743 |
| Approach Delay, s/veh | 44.3 | | 5.1 | | | 15.3 |
| Approach LOS | D | | A | | | B |

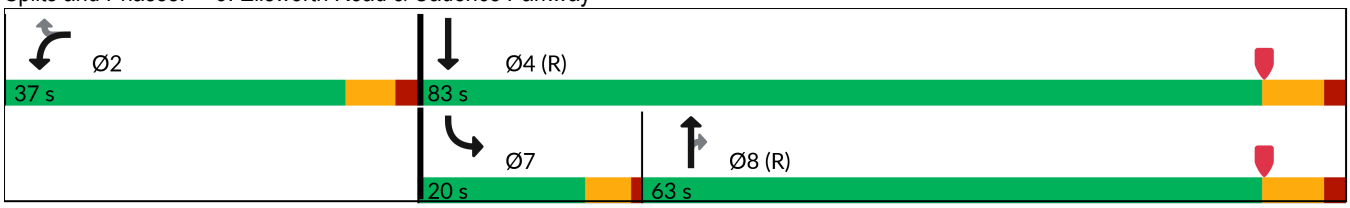
| Timer - Assigned Phs | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 37.0 | 83.0 | 20.0 | 63.0 |
| Change Period (Y+Rc), s | 6.5 | 7.5 | 5.0 | 7.5 |
| Max Green Setting (Gmax), s | 30.5 | 75.5 | 15.0 | 55.5 |
| Max Q Clear Time (g_c+I1), s | 22.0 | 22.4 | 6.4 | 14.3 |
| Green Ext Time (p_c), s | 1.5 | 15.8 | 0.2 | 23.8 |

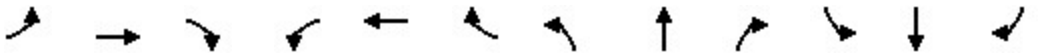
| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 14.4 |
| HCM 7th LOS | B |

| Phase Number | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Movement | WBL | SBT | SBL | NBT |
| Lead/Lag | | | Lead | Lag |
| Lead-Lag Optimize | | | Yes | Yes |
| Recall Mode | Max | C-Max | Max | C-Max |
| Maximum Split (s) | 37 | 83 | 20 | 63 |
| Maximum Split (%) | 30.8% | 69.2% | 16.7% | 52.5% |
| Minimum Split (s) | 35.5 | 25.5 | 13 | 32.5 |
| Yellow Time (s) | 4.5 | 5.5 | 4 | 5.5 |
| All-Red Time (s) | 2 | 2 | 1 | 2 |
| Minimum Initial (s) | 10 | 15 | 5 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | 4 | | | 7 |
| Flash Don't Walk (s) | 25 | | | 18 |
| Dual Entry | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 57.5 | 94.5 | 94.5 | 114.5 |
| End Time (s) | 94.5 | 57.5 | 114.5 | 57.5 |
| Yield/Force Off (s) | 88 | 50 | 109.5 | 50 |
| Yield/Force Off 170(s) | 63 | 50 | 109.5 | 32 |
| Local Start Time (s) | 7.5 | 44.5 | 44.5 | 64.5 |
| Local Yield (s) | 38 | 0 | 59.5 | 0 |
| Local Yield 170(s) | 13 | 0 | 59.5 | 102 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 85 |
| Offset: 50 (42%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow | |

Splits and Phases: 3: Ellsworth Road & Cadence Parkway





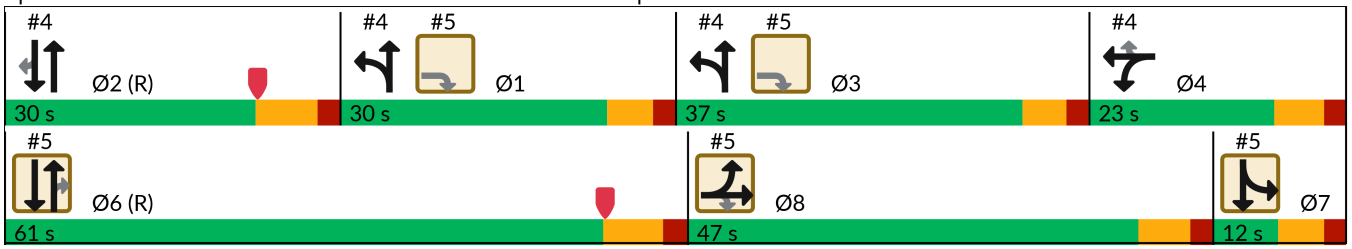
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 0 | 0 | 0 | 181 | 0 | 150 | 1916 | 1786 | 0 | 0 | 1224 | 540 |
| Future Volume (vph) | 0 | 0 | 0 | 181 | 0 | 150 | 1916 | 1786 | 0 | 0 | 1224 | 540 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | | 0 | 350 | | 350 | 525 | | 0 | 290 | | 285 |
| Storage Lanes | 0 | | 0 | 1 | | 1 | 0 | | 0 | 0 | | 2 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 0.91 | 0.86 | 0.91 | 0.97 | 0.91 | 1.00 | 1.00 | 0.86 | 0.88 |
| Frt | | | | | 0.933 | 0.850 | | | | | | 0.850 |
| Flt Protected | | | | 0.950 | 0.973 | | 0.950 | | | | | |
| Satd. Flow (prot) | 0 | 0 | 0 | 1610 | 2909 | 1441 | 3433 | 5085 | 0 | 0 | 6408 | 2787 |
| Flt Permitted | | | | 0.950 | 0.973 | | 0.950 | | | | | |
| Satd. Flow (perm) | 0 | 0 | 0 | 1610 | 2909 | 1441 | 3433 | 5085 | 0 | 0 | 6408 | 2787 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | | | 150 | 150 | | | | | | 305 |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 841 | | | 605 | | | 688 | | | 624 | |
| Travel Time (s) | | 19.1 | | | 13.8 | | | 15.6 | | | 14.2 | |
| 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 |
| Adj. Flow (vph) | 0 | 0 | 0 | 197 | 0 | 163 | 2083 | 1941 | 0 | 0 | 1330 | 587 |
| Shared Lane Traffic (%) | | | | 50% | | 49% | | | | | | |
| Lane Group Flow (vph) | 0 | 0 | 0 | 98 | 179 | 83 | 2083 | 1941 | 0 | 0 | 1330 | 587 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 24 | | | 24 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | | | | 1 | 2 | 1 | 1 | 2 | | | 2 | 1 |
| Detector Template | | | | Left | Thru | Right | Left | Thru | | | Thru | Right |
| Leading Detector (ft) | | | | 20 | 100 | 20 | 20 | 100 | | | 100 | 20 |
| Trailing Detector (ft) | | | | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 |
| Detector 1 Position(ft) | | | | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 |
| Detector 1 Size(ft) | | | | 20 | 6 | 20 | 20 | 6 | | | 6 | 20 |
| Detector 1 Type | | | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | | Cl+Ex | Cl+Ex |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Detector 1 Queue (s) | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Detector 1 Delay (s) | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Detector 2 Position(ft) | | | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | | | | Split | NA | Perm | Prot | NA | | | NA | Perm |
| Protected Phases | | | | 4 | 4 | | 1 3 | 1 2 3 | | | 2 | |
| Permitted Phases | | | | | | 4 | | | | | | 2 |

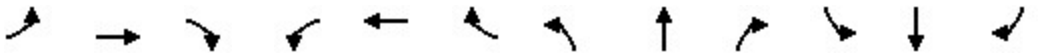
| Lane Group | Ø1 | Ø3 | Ø6 | Ø7 | Ø8 |
|---|---|---|---|---|---|
| Lane Configurations | | | | | |
| Traffic Volume (vph) | | | | | |
| Future Volume (vph) | | | | | |
| Ideal Flow (vphpl) | | | | | |
| Storage Length (ft) | | | | | |
| Storage Lanes | | | | | |
| Taper Length (ft) | | | | | |
| Lane Util. Factor | | | | | |
| Frt | | | | | |
| Flt Protected | | | | | |
| Satd. Flow (prot) | | | | | |
| Flt Permitted | | | | | |
| Satd. Flow (perm) | | | | | |
| Right Turn on Red | | | | | |
| Satd. Flow (RTOR) | | | | | |
| Link Speed (mph) | | | | | |
| Link Distance (ft) | | | | | |
| Travel Time (s) | | | | | |
| Peak Hour Factor | | | | | |
| Adj. Flow (vph) | | | | | |
| Shared Lane Traffic (%) | | | | | |
| Lane Group Flow (vph) | | | | | |
| Enter Blocked Intersection | | | | | |
| Lane Alignment | | | | | |
| Median Width(ft) | | | | | |
| Link Offset(ft) | | | | | |
| Crosswalk Width(ft) | | | | | |
| Two way Left Turn Lane | | | | | |
| Headway Factor | | | | | |
| Turning Speed (mph) | | | | | |
| Number of Detectors | | | | | |
| Detector Template | | | | | |
| Leading Detector (ft) | | | | | |
| Trailing Detector (ft) | | | | | |
| Detector 1 Position(ft) | | | | | |
| Detector 1 Size(ft) | | | | | |
| Detector 1 Type | | | | | |
| Detector 1 Channel | | | | | |
| Detector 1 Extend (s) | | | | | |
| Detector 1 Queue (s) | | | | | |
| Detector 1 Delay (s) | | | | | |
| Detector 2 Position(ft) | | | | | |
| Detector 2 Size(ft) | | | | | |
| Detector 2 Type | | | | | |
| Detector 2 Channel | | | | | |
| Detector 2 Extend (s) | | | | | |
| Turn Type | | | | | |
| Protected Phases | 1 | 3 | 6 | 7 | 8 |
| Permitted Phases | | | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | | | | 4 | 4 | 4 | 1 3 | 1 2 3 | | | 2 | 2 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | | | | 10.0 | 10.0 | 10.0 | | | | | 15.0 | 15.0 |
| Minimum Split (s) | | | | 48.5 | 48.5 | 48.5 | | | | | 25.5 | 25.5 |
| Total Split (s) | | | | 23.0 | 23.0 | 23.0 | | | | | 30.0 | 30.0 |
| Total Split (%) | | | | 19.2% | 19.2% | 19.2% | | | | | 25.0% | 25.0% |
| Maximum Green (s) | | | | 16.5 | 16.5 | 16.5 | | | | | 22.5 | 22.5 |
| Yellow Time (s) | | | | 4.5 | 4.5 | 4.5 | | | | | 5.5 | 5.5 |
| All-Red Time (s) | | | | 2.0 | 2.0 | 2.0 | | | | | 2.0 | 2.0 |
| Lost Time Adjust (s) | | | | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 |
| Total Lost Time (s) | | | | 6.5 | 6.5 | 6.5 | | | | | 7.5 | 7.5 |
| Lead/Lag | | | | Lag | Lag | Lag | | | | | Lead | Lead |
| Lead-Lag Optimize? | | | | Yes | Yes | Yes | | | | | Yes | Yes |
| Vehicle Extension (s) | | | | 3.0 | 3.0 | 3.0 | | | | | 3.0 | 3.0 |
| Recall Mode | | | | None | None | None | | | | | C-Max | C-Max |
| Walk Time (s) | | | | 4.0 | 4.0 | 4.0 | | | | | 4.0 | 4.0 |
| Flash Don't Walk (s) | | | | 38.0 | 38.0 | 38.0 | | | | | 13.0 | 13.0 |
| Pedestrian Calls (#/hr) | | | | 0 | 0 | 0 | | | | | 0 | 0 |
| Act Effct Green (s) | | | | 16.5 | 16.5 | 16.5 | 61.0 | 91.0 | | | 22.5 | 22.5 |
| Actuated g/C Ratio | | | | 0.14 | 0.14 | 0.14 | 0.51 | 0.76 | | | 0.19 | 0.19 |
| v/c Ratio | | | | 0.44 | 0.34 | 0.25 | 1.19 | 0.50 | | | 1.11 | 0.76 |
| Control Delay (s/veh) | | | | 54.6 | 13.0 | 1.9 | 107.7 | 0.4 | | | 103.4 | 30.0 |
| Queue Delay | | | | 0.0 | 0.0 | 0.0 | 0.4 | 0.3 | | | 0.0 | 0.0 |
| Total Delay (s/veh) | | | | 54.6 | 13.0 | 1.9 | 108.1 | 0.7 | | | 103.4 | 30.0 |
| LOS | | | | D | B | A | F | A | | | F | C |
| Approach Delay (s/veh) | | | | | 21.8 | | | 56.3 | | | 80.9 | |
| Approach LOS | | | | | C | | | E | | | F | |

| Intersection Summary | |
|---|---|
| Area Type: | Other |
| Cycle Length: 120 | |
| Actuated Cycle Length: 120 | |
| Offset: 0 (0%), Referenced to phase 2:NBSB and 6:, Start of Yellow | |
| Natural Cycle: 150 | |
| Control Type: Actuated-Coordinated | |
| Maximum v/c Ratio: 1.37 | |
| Intersection Signal Delay (s/veh): 61.8 | Intersection LOS: E |
| Intersection Capacity Utilization 113.0% | ICU Level of Service H |
| Analysis Period (min) 15 | |

Splits and Phases: 4: Ellsworth Road & SR24 Westbound Ramps





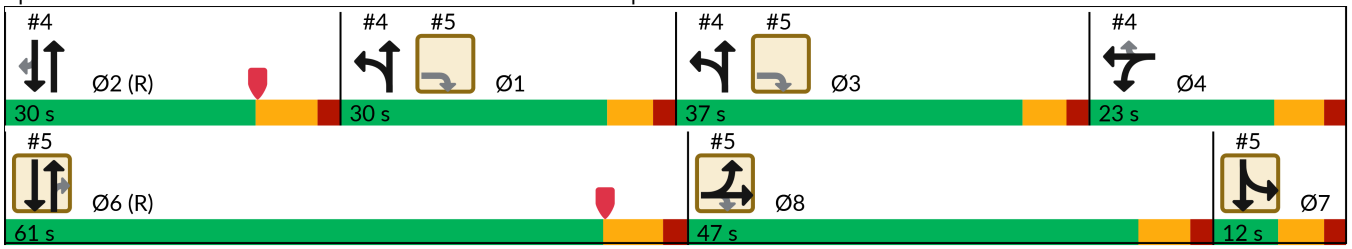
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 346 | 4 | 2156 | 0 | 0 | 0 | 0 | 3338 | 39 | 58 | 1361 | 0 |
| Future Volume (vph) | 346 | 4 | 2156 | 0 | 0 | 0 | 0 | 3338 | 39 | 58 | 1361 | 0 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 350 | | 350 | 0 | | 0 | 300 | | 300 | 550 | | 0 |
| Storage Lanes | 1 | | 2 | 0 | | 0 | 2 | | 1 | 0 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 0.95 | 0.95 | 0.88 | 1.00 | 1.00 | 1.00 | 1.00 | 0.81 | 1.00 | 0.97 | 0.91 | 1.00 |
| Frt | | | 0.850 | | | | | | 0.850 | | | |
| Flt Protected | 0.950 | 0.953 | | | | | | | | 0.950 | | |
| Satd. Flow (prot) | 1681 | 1686 | 2787 | 0 | 0 | 0 | 0 | 7544 | 1583 | 3433 | 5085 | 0 |
| Flt Permitted | 0.950 | 0.953 | | | | | | | | 0.950 | | |
| Satd. Flow (perm) | 1681 | 1686 | 2787 | 0 | 0 | 0 | 0 | 7544 | 1583 | 3433 | 5085 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 100 | | | | | | 145 | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 651 | | | 441 | | | 838 | | | 688 | |
| Travel Time (s) | | 14.8 | | | 10.0 | | | 19.0 | | | 15.6 | |
| 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 |
| Adj. Flow (vph) | 376 | 4 | 2343 | 0 | 0 | 0 | 0 | 3628 | 42 | 63 | 1479 | 0 |
| Shared Lane Traffic (%) | 49% | | | | | | | | | | | |
| Lane Group Flow (vph) | 192 | 188 | 2343 | 0 | 0 | 0 | 0 | 3628 | 42 | 63 | 1479 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 24 | | | 24 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | 1 | | | | | 2 | 1 | 1 | 2 | |
| Detector Template | Left | Thru | Right | | | | | Thru | Right | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | 20 | | | | | 100 | 20 | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | 0 | | | | | 0 | 0 | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | 0 | | | | | 0 | 0 | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | 20 | | | | | 6 | 20 | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | | | | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | | | | 0.0 | | | 0.0 | |
| Turn Type | Split | NA | custom | | | | | NA | Perm | Prot | NA | |
| Protected Phases | 8 | 8 | | | | | | 6 | | 7 | 6 7 | |
| Permitted Phases | | | 1 3 8 | | | | | | 6 | | | |

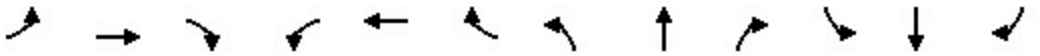
| Lane Group | Ø1 | Ø2 | Ø3 | Ø4 |
|---|---|---|---|---|
| Lane Configurations | | | | |
| Traffic Volume (vph) | | | | |
| Future Volume (vph) | | | | |
| Ideal Flow (vphpl) | | | | |
| Storage Length (ft) | | | | |
| Storage Lanes | | | | |
| Taper Length (ft) | | | | |
| Lane Util. Factor | | | | |
| Frt | | | | |
| Flt Protected | | | | |
| Satd. Flow (prot) | | | | |
| Flt Permitted | | | | |
| Satd. Flow (perm) | | | | |
| Right Turn on Red | | | | |
| Satd. Flow (RTOR) | | | | |
| Link Speed (mph) | | | | |
| Link Distance (ft) | | | | |
| Travel Time (s) | | | | |
| Peak Hour Factor | | | | |
| Adj. Flow (vph) | | | | |
| Shared Lane Traffic (%) | | | | |
| Lane Group Flow (vph) | | | | |
| Enter Blocked Intersection | | | | |
| Lane Alignment | | | | |
| Median Width(ft) | | | | |
| Link Offset(ft) | | | | |
| Crosswalk Width(ft) | | | | |
| Two way Left Turn Lane | | | | |
| Headway Factor | | | | |
| Turning Speed (mph) | | | | |
| Number of Detectors | | | | |
| Detector Template | | | | |
| Leading Detector (ft) | | | | |
| Trailing Detector (ft) | | | | |
| Detector 1 Position(ft) | | | | |
| Detector 1 Size(ft) | | | | |
| Detector 1 Type | | | | |
| Detector 1 Channel | | | | |
| Detector 1 Extend (s) | | | | |
| Detector 1 Queue (s) | | | | |
| Detector 1 Delay (s) | | | | |
| Detector 2 Position(ft) | | | | |
| Detector 2 Size(ft) | | | | |
| Detector 2 Type | | | | |
| Detector 2 Channel | | | | |
| Detector 2 Extend (s) | | | | |
| Turn Type | | | | |
| Protected Phases | 1 | 2 | 3 | 4 |
| Permitted Phases | | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | 8 | 8 | 1 3 8 | | | | | 6 | 6 | 7 | 6 7 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | | | | | 15.0 | 15.0 | 5.0 | | |
| Minimum Split (s) | 46.5 | 46.5 | | | | | | 26.5 | 26.5 | 11.0 | | |
| Total Split (s) | 47.0 | 47.0 | | | | | | 61.0 | 61.0 | 12.0 | | |
| Total Split (%) | 39.2% | 39.2% | | | | | | 50.8% | 50.8% | 10.0% | | |
| Maximum Green (s) | 40.5 | 40.5 | | | | | | 53.5 | 53.5 | 6.0 | | |
| Yellow Time (s) | 4.5 | 4.5 | | | | | | 5.5 | 5.5 | 4.0 | | |
| All-Red Time (s) | 2.0 | 2.0 | | | | | | 2.0 | 2.0 | 2.0 | | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | | | | | 0.0 | 0.0 | 0.0 | | |
| Total Lost Time (s) | 6.5 | 6.5 | | | | | | 7.5 | 7.5 | 6.0 | | |
| Lead/Lag | Lead | Lead | | | | | | | | Lag | | |
| Lead-Lag Optimize? | Yes | Yes | | | | | | | | Yes | | |
| Vehicle Extension (s) | 3.0 | 3.0 | | | | | | 3.0 | 3.0 | 3.0 | | |
| Recall Mode | None | None | | | | | | C-Max | C-Max | None | | |
| Walk Time (s) | 4.0 | 4.0 | | | | | | 4.0 | 4.0 | | | |
| Flash Don't Walk (s) | 36.0 | 36.0 | | | | | | 15.0 | 15.0 | | | |
| Pedestrian Calls (#/hr) | 0 | 0 | | | | | | 0 | 0 | | | |
| Act Effct Green (s) | 40.5 | 40.5 | 72.0 | | | | | 53.5 | 53.5 | 6.0 | 65.5 | |
| Actuated g/C Ratio | 0.34 | 0.34 | 0.60 | | | | | 0.45 | 0.45 | 0.05 | 0.55 | |
| v/c Ratio | 0.34 | 0.33 | 1.37 | | | | | 1.08 | 0.05 | 0.37 | 0.53 | |
| Control Delay (s/veh) | 31.9 | 31.7 | 193.5 | | | | | 79.4 | 0.5 | 82.6 | 4.7 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | | | | | 9.4 | 0.0 | 0.0 | 0.0 | |
| Total Delay (s/veh) | 31.9 | 31.7 | 193.5 | | | | | 88.8 | 0.5 | 82.6 | 4.7 | |
| LOS | C | C | F | | | | | F | A | F | A | |
| Approach Delay (s/veh) | | 171.0 | | | | | | 87.8 | | | 7.9 | |
| Approach LOS | | F | | | | | | F | | | A | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 120 | | | |
| Actuated Cycle Length: 120 | | | |
| Offset: 0 (0%), Referenced to phase 2:NBSB and 6:, Start of Yellow | | | |
| Natural Cycle: 150 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 1.37 | | | |
| Intersection Signal Delay (s/veh): 100.8 | | Intersection LOS: F | |
| Intersection Capacity Utilization 113.0% | | ICU Level of Service H | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 5: Ellsworth Road & SR24 Eastbound Ramps





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 224 | 406 | 69 | 246 | 536 | 393 | 167 | 3061 | 229 | 479 | 1825 | 213 |
| Future Volume (veh/h) | 224 | 406 | 69 | 246 | 536 | 393 | 167 | 3061 | 229 | 479 | 1825 | 213 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 243 | 441 | 75 | 267 | 583 | 427 | 182 | 3327 | 249 | 521 | 1984 | 232 |
| 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 | 719 | 321 | 337 | 888 | 515 | 202 | 2085 | 647 | 259 | 1992 | 231 |
| Arrive On Green | 0.05 | 0.20 | 0.20 | 0.03 | 0.08 | 0.08 | 0.04 | 0.27 | 0.27 | 0.02 | 0.14 | 0.14 |
| Sat Flow, veh/h | 3456 | 3554 | 1585 | 3456 | 3554 | 1585 | 3456 | 5106 | 1585 | 3456 | 4641 | 537 |
| Grp Volume(v), veh/h | 243 | 441 | 75 | 267 | 583 | 427 | 182 | 3327 | 249 | 521 | 1450 | 766 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1777 | 1585 | 1728 | 1777 | 1585 | 1728 | 1702 | 1585 | 1728 | 1702 | 1774 |
| Q Serve(g_s), s | 6.0 | 13.6 | 4.8 | 9.2 | 19.1 | 29.3 | 6.3 | 49.0 | 15.3 | 9.0 | 51.0 | 51.5 |
| Cycle Q Clear(g_c), s | 6.0 | 13.6 | 4.8 | 9.2 | 19.1 | 29.3 | 6.3 | 49.0 | 15.3 | 9.0 | 51.0 | 51.5 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.30 |
| Lane Grp Cap(c), veh/h | 173 | 719 | 321 | 337 | 888 | 515 | 202 | 2085 | 647 | 259 | 1461 | 761 |
| V/C Ratio(X) | 1.41 | 0.61 | 0.23 | 0.79 | 0.66 | 0.83 | 0.90 | 1.60 | 0.38 | 2.01 | 0.99 | 1.01 |
| Avail Cap(c_a), veh/h | 173 | 719 | 321 | 518 | 888 | 515 | 202 | 2085 | 647 | 259 | 1461 | 761 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 0.33 | 0.33 | 0.33 | 0.67 | 0.67 | 0.67 | 0.33 | 0.33 | 0.33 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.09 | 0.09 | 0.09 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 57.0 | 43.6 | 40.1 | 56.9 | 50.0 | 45.5 | 57.3 | 43.6 | 31.3 | 58.5 | 51.3 | 51.5 |
| Incr Delay (d2), s/veh | 213.7 | 1.5 | 0.4 | 4.6 | 3.8 | 14.3 | 5.6 | 268.3 | 0.2 | 468.0 | 21.8 | 34.2 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 13.4 | 10.2 | 3.4 | 7.9 | 14.7 | 20.7 | 3.8 | 102.9 | 7.5 | 33.7 | 36.4 | 41.2 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 270.7 | 45.1 | 40.4 | 61.5 | 53.8 | 59.8 | 62.9 | 311.9 | 31.5 | 526.5 | 73.1 | 85.7 |
| LnGrp LOS | F | D | D | E | D | E | E | F | C | F | E | F |
| Approach Vol, veh/h | | 759 | | | 1277 | | | 3758 | | | 2737 | |
| Approach Delay, s/veh | | 116.9 | | | 57.4 | | | 281.2 | | | 163.0 | |
| Approach LOS | | F | | | E | | | F | | | F | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 12.0 | 36.5 | 12.5 | 59.0 | 17.7 | 30.8 | 15.0 | 56.5 |
| Change Period (Y+Rc), s | 6.0 | 6.5 | 5.5 | 7.5 | 6.0 | * 6.5 | 6.0 | 7.5 |
| Max Green Setting (Gmax), s | 6.0 | 30.0 | 7.0 | 51.5 | 18.0 | * 19 | 9.0 | 49.0 |
| Max Q Clear Time (g_c+I1), s | 8.0 | 31.3 | 8.3 | 53.5 | 11.2 | 15.6 | 11.0 | 51.0 |
| Green Ext Time (p_c), s | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 1.0 | 0.0 | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 195.2 |
| HCM 7th LOS | F |

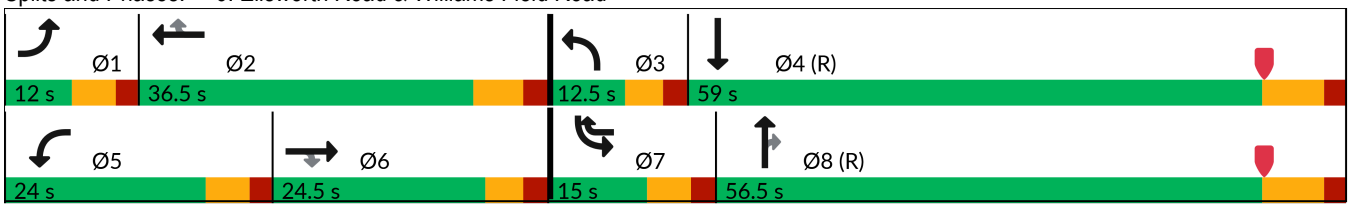
**Notes**

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | EBL | WBT | NBL | SBT | WBL | EBT | SBL | NBT |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | None | Max | None | C-Max | None | None | None | C-Max |
| Maximum Split (s) | 12 | 36.5 | 12.5 | 59 | 24 | 24.5 | 15 | 56.5 |
| Maximum Split (%) | 10.0% | 30.4% | 10.4% | 49.2% | 20.0% | 20.4% | 12.5% | 47.1% |
| Minimum Split (s) | 11 | 36.5 | 10.5 | 35.5 | 24 | 23.5 | 11 | 37.5 |
| Yellow Time (s) | 4 | 4.5 | 3.5 | 5.5 | 4 | 3.5 | 4 | 5.5 |
| All-Red Time (s) | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Minimum Initial (s) | 5 | 15 | 5 | 15 | 5 | 5 | 5 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 4 | | 7 | | 7 | | 7 |
| Flash Don't Walk (s) | | 26 | | 21 | | 11 | | 23 |
| Dual Entry | No | Yes | No | Yes | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 56.5 | 68.5 | 105 | 117.5 | 56.5 | 80.5 | 105 | 0 |
| End Time (s) | 68.5 | 105 | 117.5 | 56.5 | 80.5 | 105 | 0 | 56.5 |
| Yield/Force Off (s) | 62.5 | 98.5 | 112 | 49 | 74.5 | 99.5 | 114 | 49 |
| Yield/Force Off 170(s) | 62.5 | 72.5 | 112 | 28 | 74.5 | 88.5 | 114 | 26 |
| Local Start Time (s) | 7.5 | 19.5 | 56 | 68.5 | 7.5 | 31.5 | 56 | 71 |
| Local Yield (s) | 13.5 | 49.5 | 63 | 0 | 25.5 | 50.5 | 65 | 0 |
| Local Yield 170(s) | 13.5 | 23.5 | 63 | 99 | 25.5 | 39.5 | 65 | 97 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 150 |
| Offset: 49 (41%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow | |

Splits and Phases: 6: Ellsworth Road & Williams Field Road



| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 0 | 1 | 3496 | 17 | 11 | 2108 |
| Future Volume (veh/h) | 0 | 1 | 3496 | 17 | 11 | 2108 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 0 | 1 | 3800 | 18 | 12 | 2291 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 208 | 370 | 3653 | 1134 | 47 | 3936 |
| Arrive On Green | 0.00 | 0.12 | 1.00 | 1.00 | 0.03 | 1.00 |
| Sat Flow, veh/h | 1781 | 3170 | 5274 | 1585 | 3456 | 5274 |
| Grp Volume(v), veh/h | 0 | 1 | 3800 | 18 | 12 | 2291 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1585 | 1702 | 1585 | 1728 | 1702 |
| Q Serve(g_s), s | 0.0 | 0.0 | 85.9 | 0.0 | 0.4 | 0.0 |
| Cycle Q Clear(g_c), s | 0.0 | 0.0 | 85.9 | 0.0 | 0.4 | 0.0 |
| Prop In Lane | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Lane Grp Cap(c), veh/h | 208 | 370 | 3653 | 1134 | 47 | 3936 |
| V/C Ratio(X) | 0.00 | 0.00 | 1.04 | 0.02 | 0.25 | 0.58 |
| Avail Cap(c_a), veh/h | 208 | 370 | 3653 | 1134 | 432 | 3936 |
| HCM Platoon Ratio | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Upstream Filter(I) | 0.00 | 1.00 | 0.09 | 0.09 | 0.18 | 0.18 |
| Uniform Delay (d), s/veh | 0.0 | 46.8 | 0.0 | 0.0 | 57.7 | 0.0 |
| Incr Delay (d2), s/veh | 0.0 | 0.0 | 19.2 | 0.0 | 0.5 | 0.1 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 0.0 | 0.0 | 8.0 | 0.0 | 0.3 | 0.1 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 0.0 | 46.8 | 19.2 | 0.0 | 58.2 | 0.1 |
| LnGrp LOS | | D | F | A | E | A |
| Approach Vol, veh/h | 1 | | 3818 | | | 2303 |
| Approach Delay, s/veh | 46.8 | | 19.1 | | | 0.4 |
| Approach LOS | D | | B | | | A |

| Timer - Assigned Phs | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 20.0 | 100.0 | 6.6 | 93.4 |
| Change Period (Y+Rc), s | 6.0 | 7.5 | 5.0 | 7.5 |
| Max Green Setting (Gmax), s | 14.0 | 92.5 | 15.0 | 72.5 |
| Max Q Clear Time (g_c+I1), s | 2.0 | 2.0 | 2.4 | 87.9 |
| Green Ext Time (p_c), s | 0.0 | 37.0 | 0.0 | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 12.1 |
| HCM 7th LOS | B |

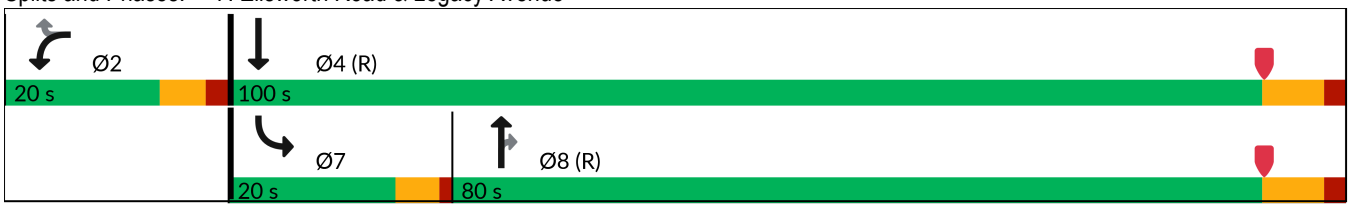
**Notes**

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

| Phase Number | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Movement | WBL | SBT | SBL | NBT |
| Lead/Lag | | | Lead | Lag |
| Lead-Lag Optimize | | | Yes | Yes |
| Recall Mode | Max | C-Max | None | C-Max |
| Maximum Split (s) | 20 | 100 | 20 | 80 |
| Maximum Split (%) | 16.7% | 83.3% | 16.7% | 66.7% |
| Minimum Split (s) | 35 | 39.5 | 10 | 26.5 |
| Yellow Time (s) | 4 | 5.5 | 4 | 5.5 |
| All-Red Time (s) | 2 | 2 | 1 | 2 |
| Minimum Initial (s) | 10 | 15 | 5 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | 4 | 4 | | 7 |
| Flash Don't Walk (s) | 25 | 28 | | 12 |
| Dual Entry | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 7.5 | 27.5 | 27.5 | 47.5 |
| End Time (s) | 27.5 | 7.5 | 47.5 | 7.5 |
| Yield/Force Off (s) | 21.5 | 0 | 42.5 | 0 |
| Yield/Force Off 170(s) | 116.5 | 92 | 42.5 | 108 |
| Local Start Time (s) | 7.5 | 27.5 | 27.5 | 47.5 |
| Local Yield (s) | 21.5 | 0 | 42.5 | 0 |
| Local Yield 170(s) | 116.5 | 92 | 42.5 | 108 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 150 |
| Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow | |

Splits and Phases: 7: Ellsworth Road & Legacy Avenue



| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 116 | 295 | 3247 | 73 | 111 | 1975 |
| Future Volume (veh/h) | 116 | 295 | 3247 | 73 | 111 | 1975 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 126 | 321 | 3529 | 79 | 121 | 2147 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 438 | 390 | 2810 | 872 | 149 | 3255 |
| Arrive On Green | 0.25 | 0.25 | 0.55 | 0.55 | 0.05 | 0.64 |
| Sat Flow, veh/h | 1781 | 1585 | 5274 | 1585 | 1781 | 5274 |
| Grp Volume(v), veh/h | 126 | 321 | 3529 | 79 | 121 | 2147 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1585 | 1702 | 1585 | 1781 | 1702 |
| Q Serve(g_s), s | 6.9 | 23.0 | 66.0 | 2.8 | 4.0 | 31.6 |
| Cycle Q Clear(g_c), s | 6.9 | 23.0 | 66.0 | 2.8 | 4.0 | 31.6 |
| Prop In Lane | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Lane Grp Cap(c), veh/h | 438 | 390 | 2810 | 872 | 149 | 3255 |
| V/C Ratio(X) | 0.29 | 0.82 | 1.26 | 0.09 | 0.81 | 0.66 |
| Avail Cap(c_a), veh/h | 438 | 390 | 2810 | 872 | 216 | 3255 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 0.78 | 0.78 |
| Uniform Delay (d), s/veh | 36.7 | 42.8 | 27.0 | 12.8 | 32.3 | 13.6 |
| Incr Delay (d2), s/veh | 1.7 | 17.7 | 118.3 | 0.2 | 11.3 | 0.8 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 5.8 | 16.3 | 80.7 | 1.9 | 4.3 | 16.5 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 38.4 | 60.5 | 145.3 | 13.0 | 43.6 | 14.4 |
| LnGrp LOS | D | E | F | B | D | B |
| Approach Vol, veh/h | 447 | | 3608 | | | 2268 |
| Approach Delay, s/veh | 54.2 | | 142.4 | | | 16.0 |
| Approach LOS | D | | F | | | B |

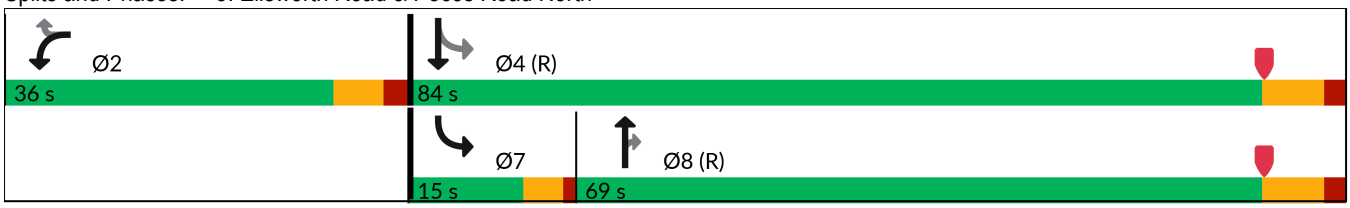
| Timer - Assigned Phs | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 36.0 | 84.0 | 10.5 | 73.5 |
| Change Period (Y+Rc), s | 6.5 | 7.5 | 4.5 | 7.5 |
| Max Green Setting (Gmax), s | 29.5 | 76.5 | 10.5 | 61.5 |
| Max Q Clear Time (g_c+I1), s | 25.0 | 33.6 | 6.0 | 68.0 |
| Green Ext Time (p_c), s | 0.7 | 27.4 | 0.1 | 0.0 |

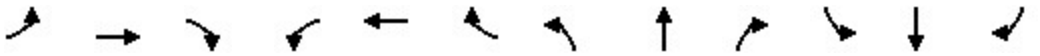
| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 90.8 |
| HCM 7th LOS | F |

| Phase Number | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Movement | WBL | SBTL | SBL | NBT |
| Lead/Lag | | | Lead | Lag |
| Lead-Lag Optimize | | | Yes | Yes |
| Recall Mode | Max | C-Max | None | C-Max |
| Maximum Split (s) | 36 | 84 | 15 | 69 |
| Maximum Split (%) | 30.0% | 70.0% | 12.5% | 57.5% |
| Minimum Split (s) | 22.5 | 22.5 | 10.5 | 22.5 |
| Yellow Time (s) | 4.5 | 5.5 | 3.5 | 5.5 |
| All-Red Time (s) | 2 | 2 | 1 | 2 |
| Minimum Initial (s) | 5 | 15 | 5 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | | | | |
| Flash Don't Walk (s) | | | | |
| Dual Entry | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 4.5 | 40.5 | 40.5 | 55.5 |
| End Time (s) | 40.5 | 4.5 | 55.5 | 4.5 |
| Yield/Force Off (s) | 34 | 117 | 51 | 117 |
| Yield/Force Off 170(s) | 34 | 117 | 51 | 117 |
| Local Start Time (s) | 7.5 | 43.5 | 43.5 | 58.5 |
| Local Yield (s) | 37 | 0 | 54 | 0 |
| Local Yield 170(s) | 37 | 0 | 54 | 0 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 150 |
| Offset: 117 (98%), Referenced to phase 4:SBTL and 8:NBT, Start of Yellow | |

Splits and Phases: 8: Ellsworth Road & Pecos Road North





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 135 | 882 | 19 | 27 | 1097 | 367 | 3 | 0 | 2 | 117 | 0 | 47 |
| Future Volume (veh/h) | 135 | 882 | 19 | 27 | 1097 | 367 | 3 | 0 | 2 | 117 | 0 | 47 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 147 | 959 | 21 | 29 | 1192 | 399 | 3 | 0 | 2 | 127 | 0 | 51 |
| 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 | 233 | 1767 | 548 | 317 | 1872 | 581 | 1051 | 0 | 485 | 323 | 0 | 132 |
| Arrive On Green | 0.14 | 0.69 | 0.69 | 0.03 | 0.12 | 0.12 | 0.30 | 0.00 | 0.31 | 0.08 | 0.00 | 0.08 |
| Sat Flow, veh/h | 1781 | 5106 | 1585 | 3456 | 5106 | 1585 | 3456 | 0 | 1585 | 1781 | 0 | 1585 |
| Grp Volume(v), veh/h | 147 | 959 | 21 | 29 | 1192 | 399 | 3 | 0 | 2 | 127 | 0 | 51 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1702 | 1585 | 1728 | 1702 | 1585 | 1728 | 0 | 1585 | 1781 | 0 | 1585 |
| Q Serve(g_s), s | 6.4 | 11.1 | 0.5 | 1.0 | 26.7 | 29.0 | 0.1 | 0.0 | 0.1 | 7.7 | 0.0 | 3.7 |
| Cycle Q Clear(g_c), s | 6.4 | 11.1 | 0.5 | 1.0 | 26.7 | 29.0 | 0.1 | 0.0 | 0.1 | 7.7 | 0.0 | 3.7 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 233 | 1767 | 548 | 317 | 1872 | 581 | 1051 | 0 | 485 | 323 | 0 | 132 |
| V/C Ratio(X) | 0.63 | 0.54 | 0.04 | 0.09 | 0.64 | 0.69 | 0.00 | 0.00 | 0.00 | 0.39 | 0.00 | 0.39 |
| Avail Cap(c_a), veh/h | 344 | 1767 | 548 | 317 | 1872 | 581 | 1051 | 0 | 485 | 482 | 0 | 238 |
| HCM Platoon Ratio | 2.00 | 2.00 | 2.00 | 0.33 | 0.33 | 0.33 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 24.5 | 13.8 | 12.2 | 53.3 | 45.1 | 46.1 | 29.1 | 0.0 | 28.9 | 45.1 | 0.0 | 52.1 |
| Incr Delay (d2), s/veh | 2.8 | 1.2 | 0.1 | 0.6 | 1.7 | 6.5 | 0.0 | 0.0 | 0.0 | 0.8 | 0.0 | 1.9 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 4.5 | 5.8 | 0.4 | 0.8 | 18.2 | 19.4 | 0.1 | 0.0 | 0.1 | 6.3 | 0.0 | 2.7 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 27.3 | 15.0 | 12.3 | 53.9 | 46.8 | 52.6 | 29.1 | 0.0 | 29.0 | 45.9 | 0.0 | 54.0 |
| LnGrp LOS | C | B | B | D | D | D | C | | C | D | | D |
| Approach Vol, veh/h | | 1127 | | | 1620 | | | 5 | | | 178 | |
| Approach Delay, s/veh | | 16.5 | | | 48.4 | | | 29.0 | | | 48.2 | |
| Approach LOS | | B | | | D | | | C | | | D | |

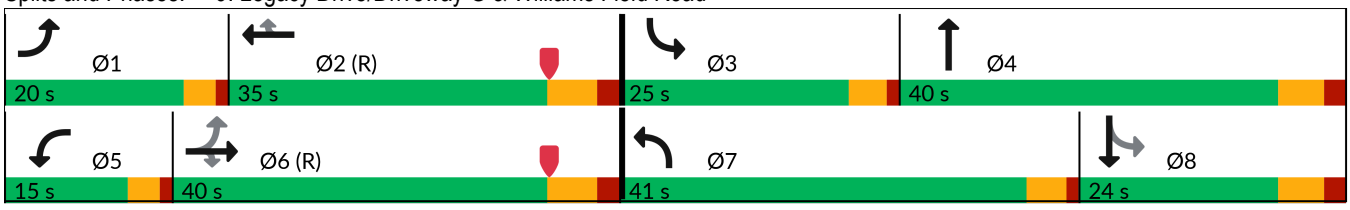
| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 12.5 | 50.5 | 14.3 | 42.7 | 15.0 | 48.0 | 41.0 | 16.0 |
| Change Period (Y+Rc), s | 4.0 | 6.5 | 4.5 | 6.0 | 4.0 | 6.5 | 4.5 | 6.0 |
| Max Green Setting (Gmax), s | 16.0 | 28.5 | 20.5 | 34.0 | 11.0 | 33.5 | 36.5 | 18.0 |
| Max Q Clear Time (g_c+I1), s | 8.4 | 31.0 | 9.7 | 2.1 | 3.0 | 13.1 | 2.1 | 5.7 |
| Green Ext Time (p_c), s | 0.2 | 0.0 | 0.2 | 0.0 | 0.0 | 6.2 | 0.0 | 0.1 |

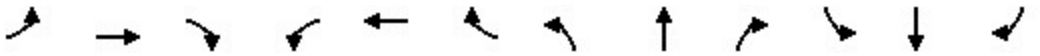
| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 36.1 |
| HCM 7th LOS | D |

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | EBL | WBT | SBL | NBT | WBL | EBTL | NBL | SBTL |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | None | C-Max | None | None | Max | C-Max | Max | None |
| Maximum Split (s) | 20 | 35 | 25 | 40 | 15 | 40 | 41 | 24 |
| Maximum Split (%) | 16.7% | 29.2% | 20.8% | 33.3% | 12.5% | 33.3% | 34.2% | 20.0% |
| Minimum Split (s) | 9.5 | 24.5 | 9.5 | 24 | 12.5 | 24.5 | 24 | 24 |
| Yellow Time (s) | 3 | 4.5 | 3.5 | 4 | 3 | 4.5 | 3.5 | 4 |
| All-Red Time (s) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| Minimum Initial (s) | 5 | 15 | 5 | 10 | 5 | 15 | 5 | 10 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | | | | | 7 | | |
| Flash Don't Walk (s) | | | | | | 11 | | |
| Dual Entry | No | Yes | No | Yes | No | Yes | Yes | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 71.5 | 91.5 | 6.5 | 31.5 | 71.5 | 86.5 | 6.5 | 47.5 |
| End Time (s) | 91.5 | 6.5 | 31.5 | 71.5 | 86.5 | 6.5 | 47.5 | 71.5 |
| Yield/Force Off (s) | 87.5 | 0 | 27 | 65.5 | 82.5 | 0 | 43 | 65.5 |
| Yield/Force Off 170(s) | 87.5 | 0 | 27 | 65.5 | 82.5 | 109 | 43 | 65.5 |
| Local Start Time (s) | 71.5 | 91.5 | 6.5 | 31.5 | 71.5 | 86.5 | 6.5 | 47.5 |
| Local Yield (s) | 87.5 | 0 | 27 | 65.5 | 82.5 | 0 | 43 | 65.5 |
| Local Yield 170(s) | 87.5 | 0 | 27 | 65.5 | 82.5 | 109 | 43 | 65.5 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 85 |
| Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBTL, Start of Yellow | |

Splits and Phases: 9: Legacy Drive/Driveway G & Williams Field Road





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 368 | 472 | 52 | 249 | 1270 | 1071 | 160 | 0 | 161 | 155 | 0 | 79 |
| Future Volume (veh/h) | 368 | 472 | 52 | 249 | 1270 | 1071 | 160 | 0 | 161 | 155 | 0 | 79 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 400 | 513 | 57 | 271 | 1380 | 0 | 174 | 0 | 175 | 168 | 0 | 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 | 806 | 2234 | 694 | 345 | 1553 | | 420 | 0 | 806 | 461 | 0 | 310 |
| Arrive On Green | 0.16 | 0.29 | 0.29 | 0.17 | 0.51 | 0.00 | 0.09 | 0.00 | 0.15 | 0.13 | 0.00 | 0.20 |
| Sat Flow, veh/h | 3456 | 5106 | 1585 | 3456 | 5106 | 1585 | 1781 | 0 | 3170 | 3456 | 0 | 1585 |
| Grp Volume(v), veh/h | 400 | 513 | 57 | 271 | 1380 | 0 | 174 | 0 | 175 | 168 | 0 | 86 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1702 | 1585 | 1728 | 1702 | 1585 | 1781 | 0 | 1585 | 1728 | 0 | 1585 |
| Q Serve(g_s), s | 12.7 | 9.1 | 3.1 | 9.0 | 29.1 | 0.0 | 9.8 | 0.0 | 5.2 | 5.3 | 0.0 | 5.5 |
| Cycle Q Clear(g_c), s | 12.7 | 9.1 | 3.1 | 9.0 | 29.1 | 0.0 | 9.8 | 0.0 | 5.2 | 5.3 | 0.0 | 5.5 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 806 | 2234 | 694 | 345 | 1553 | | 420 | 0 | 806 | 461 | 0 | 310 |
| V/C Ratio(X) | 0.50 | 0.23 | 0.08 | 0.78 | 0.89 | | 0.41 | 0.00 | 0.22 | 0.36 | 0.00 | 0.28 |
| Avail Cap(c_a), veh/h | 806 | 2234 | 694 | 1353 | 1553 | | 420 | 0 | 806 | 461 | 0 | 310 |
| HCM Platoon Ratio | 0.67 | 0.67 | 0.67 | 1.67 | 1.67 | 1.67 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 0.23 | 0.23 | 0.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 44.2 | 27.1 | 25.0 | 48.7 | 27.7 | 0.0 | 37.8 | 0.0 | 35.3 | 47.4 | 0.0 | 41.0 |
| Incr Delay (d2), s/veh | 2.2 | 0.2 | 0.2 | 0.9 | 2.0 | 0.0 | 0.7 | 0.0 | 0.6 | 2.2 | 0.0 | 2.2 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 9.9 | 7.1 | 2.2 | 5.2 | 12.5 | 0.0 | 7.8 | 0.0 | 3.8 | 4.4 | 0.0 | 4.3 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 46.3 | 27.3 | 25.2 | 49.7 | 29.7 | 0.0 | 38.5 | 0.0 | 36.0 | 49.6 | 0.0 | 43.2 |
| LnGrp LOS | D | C | C | D | C | | D | | D | D | | D |
| Approach Vol, veh/h | | 970 | | | 1651 | | | 349 | | | 254 | |
| Approach Delay, s/veh | | 35.0 | | | 33.0 | | | 37.2 | | | 47.4 | |
| Approach LOS | | D | | | C | | | D | | | D | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 20.0 | 25.0 | 16.0 | 59.0 | 15.0 | 30.0 | 32.0 | 43.0 |
| Change Period (Y+Rc), s | 4.0 | 6.5 | 4.0 | 6.5 | 4.0 | 6.5 | 4.0 | 6.5 |
| Max Green Setting (Gmax), s | 16.0 | 18.5 | 47.0 | 17.5 | 11.0 | 23.5 | 28.0 | 36.5 |
| Max Q Clear Time (g_c+I1), s | 7.3 | 7.2 | 11.0 | 11.1 | 11.8 | 7.5 | 14.7 | 31.1 |
| Green Ext Time (p_c), s | 0.3 | 0.4 | 1.0 | 1.9 | 0.0 | 0.3 | 1.2 | 3.9 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 35.2 |
| HCM 7th LOS | D |

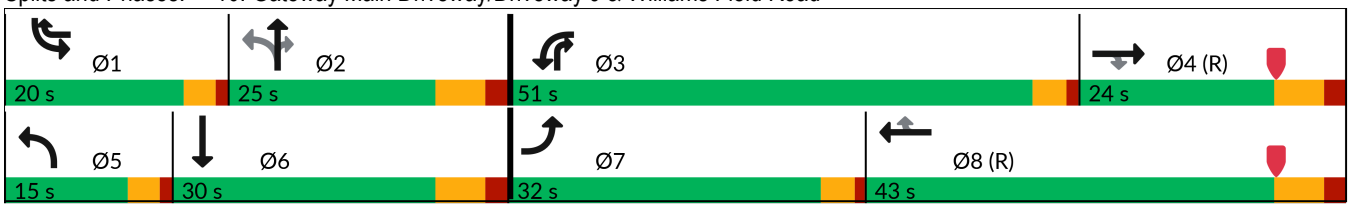
**Notes**

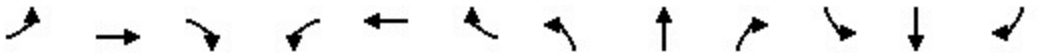
User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | SBL | NBTL | WBL | EBT | NBL | SBT | EBL | WBT |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | Max | Max | None | C-Max | None | Max | Max | C-Max |
| Maximum Split (s) | 20 | 25 | 51 | 24 | 15 | 30 | 32 | 43 |
| Maximum Split (%) | 16.7% | 20.8% | 42.5% | 20.0% | 12.5% | 25.0% | 26.7% | 35.8% |
| Minimum Split (s) | 9.5 | 24.5 | 9.5 | 24.5 | 9.5 | 24.5 | 9.5 | 24.5 |
| Yellow Time (s) | 3 | 4.5 | 3 | 4.5 | 3 | 4.5 | 3 | 4.5 |
| All-Red Time (s) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| Minimum Initial (s) | 5 | 10 | 5 | 15 | 5 | 10 | 5 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 7 | | 7 | | 7 | | 7 |
| Flash Don't Walk (s) | | 11 | | 11 | | 11 | | 11 |
| Dual Entry | No | Yes | No | Yes | No | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 37.5 | 57.5 | 82.5 | 13.5 | 37.5 | 52.5 | 82.5 | 114.5 |
| End Time (s) | 57.5 | 82.5 | 13.5 | 37.5 | 52.5 | 82.5 | 114.5 | 37.5 |
| Yield/Force Off (s) | 53.5 | 76 | 9.5 | 31 | 48.5 | 76 | 110.5 | 31 |
| Yield/Force Off 170(s) | 53.5 | 65 | 9.5 | 20 | 48.5 | 65 | 110.5 | 20 |
| Local Start Time (s) | 6.5 | 26.5 | 51.5 | 102.5 | 6.5 | 21.5 | 51.5 | 83.5 |
| Local Yield (s) | 22.5 | 45 | 98.5 | 0 | 17.5 | 45 | 79.5 | 0 |
| Local Yield 170(s) | 22.5 | 34 | 98.5 | 109 | 17.5 | 34 | 79.5 | 109 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 75 |
| Offset: 31 (26%), Referenced to phase 4:EBT and 8:WBT, Start of Yellow | |

Splits and Phases: 10: Gateway Main Driveway/Driveway J & Williams Field Road





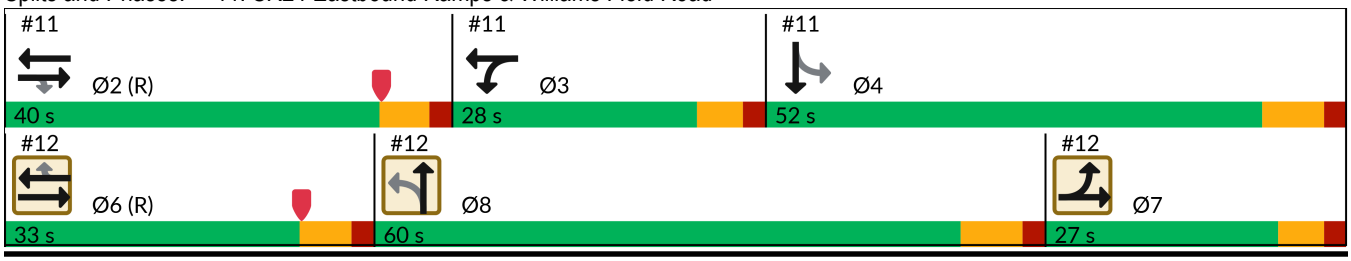
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 0 | 474 | 302 | 54 | 1564 | 0 | 0 | 0 | 0 | 273 | 0 | 1014 |
| Future Volume (vph) | 0 | 474 | 302 | 54 | 1564 | 0 | 0 | 0 | 0 | 273 | 0 | 1014 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 360 | | 285 | 290 | | 0 | 0 | | 0 | 400 | | 400 |
| Storage Lanes | 2 | | 1 | 0 | | 0 | 0 | | 0 | 2 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 1.00 | 0.86 | 1.00 | 0.97 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 0.91 | 0.91 | 0.95 |
| Frt | | | 0.850 | | | | | | | | 0.854 | |
| Flt Protected | | | | 0.950 | | | | | | 0.950 | 0.999 | |
| Satd. Flow (prot) | 0 | 6408 | 1583 | 3433 | 3539 | 0 | 0 | 0 | 0 | 1610 | 2892 | 0 |
| Flt Permitted | | | | 0.950 | | | | | | 0.950 | 0.999 | |
| Satd. Flow (perm) | 0 | 6408 | 1583 | 3433 | 3539 | 0 | 0 | 0 | 0 | 1610 | 2892 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 328 | | | | | | | | 145 | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 971 | | | 481 | | | 999 | | | 970 | |
| Travel Time (s) | | 22.1 | | | 10.9 | | | 22.7 | | | 22.0 | |
| 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 |
| Adj. Flow (vph) | 0 | 515 | 328 | 59 | 1700 | 0 | 0 | 0 | 0 | 297 | 0 | 1102 |
| Shared Lane Traffic (%) | | | | | | | | | | 10% | | |
| Lane Group Flow (vph) | 0 | 515 | 328 | 59 | 1700 | 0 | 0 | 0 | 0 | 267 | 1132 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 24 | | | 24 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | | 2 | 1 | 1 | 2 | | | | | 1 | 2 | |
| Detector Template | | Thru | Right | Left | Thru | | | | | Left | Thru | |
| Leading Detector (ft) | | 100 | 20 | 20 | 100 | | | | | 20 | 100 | |
| Trailing Detector (ft) | | 0 | 0 | 0 | 0 | | | | | 0 | 0 | |
| Detector 1 Position(ft) | | 0 | 0 | 0 | 0 | | | | | 0 | 0 | |
| Detector 1 Size(ft) | | 6 | 20 | 20 | 6 | | | | | 20 | 6 | |
| Detector 1 Type | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | | | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | | | | 0.0 | |
| Turn Type | | NA | Perm | Prot | NA | | | | | Perm | NA | |
| Protected Phases | | 2 | | 3 | 2 3 | | | | | | 4 | |
| Permitted Phases | | | 2 | | | | | | | 4 | | |

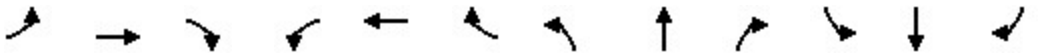
| Lane Group | Ø6 | Ø7 | Ø8 |
|---|---|---|---|
| Lane Configurations | | | |
| Traffic Volume (vph) | | | |
| Future Volume (vph) | | | |
| Ideal Flow (vphpl) | | | |
| Storage Length (ft) | | | |
| Storage Lanes | | | |
| Taper Length (ft) | | | |
| Lane Util. Factor | | | |
| Frt | | | |
| Flt Protected | | | |
| Satd. Flow (prot) | | | |
| Flt Permitted | | | |
| Satd. Flow (perm) | | | |
| Right Turn on Red | | | |
| Satd. Flow (RTOR) | | | |
| Link Speed (mph) | | | |
| Link Distance (ft) | | | |
| Travel Time (s) | | | |
| Peak Hour Factor | | | |
| Adj. Flow (vph) | | | |
| Shared Lane Traffic (%) | | | |
| Lane Group Flow (vph) | | | |
| Enter Blocked Intersection | | | |
| Lane Alignment | | | |
| Median Width(ft) | | | |
| Link Offset(ft) | | | |
| Crosswalk Width(ft) | | | |
| Two way Left Turn Lane | | | |
| Headway Factor | | | |
| Turning Speed (mph) | | | |
| Number of Detectors | | | |
| Detector Template | | | |
| Leading Detector (ft) | | | |
| Trailing Detector (ft) | | | |
| Detector 1 Position(ft) | | | |
| Detector 1 Size(ft) | | | |
| Detector 1 Type | | | |
| Detector 1 Channel | | | |
| Detector 1 Extend (s) | | | |
| Detector 1 Queue (s) | | | |
| Detector 1 Delay (s) | | | |
| Detector 2 Position(ft) | | | |
| Detector 2 Size(ft) | | | |
| Detector 2 Type | | | |
| Detector 2 Channel | | | |
| Detector 2 Extend (s) | | | |
| Turn Type | | | |
| Protected Phases | 6 | 7 | 8 |
| Permitted Phases | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | | 2 | 2 | 3 | 2 3 | | | | | 4 | 4 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | | 15.0 | 15.0 | 5.0 | | | | | | 10.0 | 10.0 | |
| Minimum Split (s) | | 25.5 | 25.5 | 11.0 | | | | | | 46.5 | 46.5 | |
| Total Split (s) | | 40.0 | 40.0 | 28.0 | | | | | | 52.0 | 52.0 | |
| Total Split (%) | | 33.3% | 33.3% | 23.3% | | | | | | 43.3% | 43.3% | |
| Maximum Green (s) | | 33.5 | 33.5 | 22.0 | | | | | | 44.5 | 44.5 | |
| Yellow Time (s) | | 4.5 | 4.5 | 4.0 | | | | | | 5.5 | 5.5 | |
| All-Red Time (s) | | 2.0 | 2.0 | 2.0 | | | | | | 2.0 | 2.0 | |
| Lost Time Adjust (s) | | 0.0 | 0.0 | 0.0 | | | | | | 0.0 | 0.0 | |
| Total Lost Time (s) | | 6.5 | 6.5 | 6.0 | | | | | | 7.5 | 7.5 | |
| Lead/Lag | | | | Lead | | | | | | Lag | Lag | |
| Lead-Lag Optimize? | | | | Yes | | | | | | Yes | Yes | |
| Vehicle Extension (s) | | 3.0 | 3.0 | 3.0 | | | | | | 3.0 | 3.0 | |
| Recall Mode | | C-Max | C-Max | None | | | | | | None | None | |
| Walk Time (s) | | 4.0 | 4.0 | | | | | | | 4.0 | 4.0 | |
| Flash Don't Walk (s) | | 15.0 | 15.0 | | | | | | | 35.0 | 35.0 | |
| Pedestrian Calls (#/hr) | | 0 | 0 | | | | | | | 0 | 0 | |
| Act Effct Green (s) | | 33.5 | 33.5 | 22.0 | 61.5 | | | | | 44.5 | 44.5 | |
| Actuated g/C Ratio | | 0.28 | 0.28 | 0.18 | 0.51 | | | | | 0.37 | 0.37 | |
| v/c Ratio | | 0.29 | 0.48 | 0.09 | 0.94 | | | | | 0.45 | 1.70dr | |
| Control Delay (s/veh) | | 48.9 | 23.9 | 23.4 | 21.5 | | | | | 31.5 | 53.5 | |
| Queue Delay | | 0.0 | 0.0 | 0.0 | 31.8 | | | | | 0.0 | 0.1 | |
| Total Delay (s/veh) | | 48.9 | 23.9 | 23.4 | 53.3 | | | | | 31.5 | 53.6 | |
| LOS | | D | C | C | D | | | | | C | D | |
| Approach Delay (s/veh) | | 39.2 | | | 52.3 | | | | | | 49.4 | |
| Approach LOS | | D | | | D | | | | | | D | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 120 | | | |
| Actuated Cycle Length: 120 | | | |
| Offset: 0 (0%), Referenced to phase 2:EBWB and 6:, Start of Yellow | | | |
| Natural Cycle: 105 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.97 | | | |
| Intersection Signal Delay (s/veh): 48.5 | | Intersection LOS: D | |
| Intersection Capacity Utilization 82.1% | | ICU Level of Service E | |
| Analysis Period (min) 15 | | | |
| dr Defacto Right Lane. Recode with 1 though lane as a right lane. | | | |

Splits and Phases: 11: SR24 Eastbound Ramps & Williams Field Road





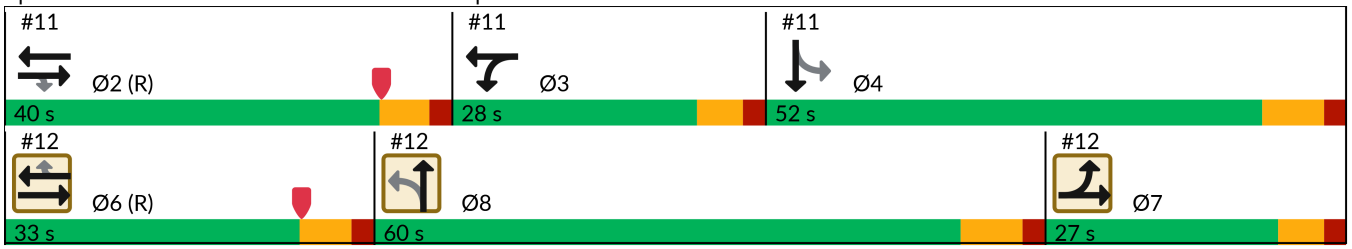
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 137 | 613 | 0 | 0 | 961 | 695 | 656 | 0 | 55 | 0 | 0 | 0 |
| Future Volume (vph) | 137 | 613 | 0 | 0 | 961 | 695 | 656 | 0 | 55 | 0 | 0 | 0 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 290 | | 0 | 365 | | 300 | 375 | | 375 | 0 | | 0 |
| Storage Lanes | 0 | | 0 | 2 | | 1 | 1 | | 1 | 0 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 0.97 | 0.95 | 1.00 | 1.00 | 0.86 | 1.00 | 0.91 | 0.91 | 0.95 | 1.00 | 1.00 | 1.00 |
| Frt | | | | | | 0.850 | | 0.978 | | | | |
| Flt Protected | 0.950 | | | | | | 0.950 | 0.959 | | | | |
| Satd. Flow (prot) | 3433 | 3539 | 0 | 0 | 6408 | 1583 | 1610 | 3180 | 0 | 0 | 0 | 0 |
| Flt Permitted | 0.950 | | | | | | 0.950 | 0.959 | | | | |
| Satd. Flow (perm) | 3433 | 3539 | 0 | 0 | 6408 | 1583 | 1610 | 3180 | 0 | 0 | 0 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | | | | 755 | | 100 | | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 481 | | | 1418 | | | 897 | | | 1176 | |
| Travel Time (s) | | 10.9 | | | 32.2 | | | 20.4 | | | 26.7 | |
| 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 |
| Adj. Flow (vph) | 149 | 666 | 0 | 0 | 1045 | 755 | 713 | 0 | 60 | 0 | 0 | 0 |
| Shared Lane Traffic (%) | | | | | | | 50% | | | | | |
| Lane Group Flow (vph) | 149 | 666 | 0 | 0 | 1045 | 755 | 356 | 417 | 0 | 0 | 0 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 24 | | | 24 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | | 2 | 1 | 1 | 2 | | | | |
| Detector Template | Left | Thru | | | Thru | Right | Left | Thru | | | | |
| Leading Detector (ft) | 20 | 100 | | | 100 | 20 | 20 | 100 | | | | |
| Trailing Detector (ft) | 0 | 0 | | | 0 | 0 | 0 | 0 | | | | |
| Detector 1 Position(ft) | 0 | 0 | | | 0 | 0 | 0 | 0 | | | | |
| Detector 1 Size(ft) | 20 | 6 | | | 6 | 20 | 20 | 6 | | | | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | | | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | | |
| Turn Type | Prot | NA | | | NA | Perm | Perm | NA | | | | |
| Protected Phases | 7 | 6 7 | | | 6 | | | 8 | | | | |
| Permitted Phases | | | | | | 6 | 8 | | | | | |

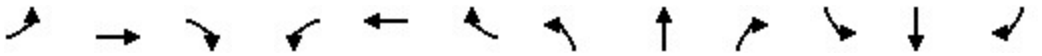
| Lane Group | Ø2 | Ø3 | Ø4 |
|---|---|---|---|
| Lane Configurations | | | |
| Traffic Volume (vph) | | | |
| Future Volume (vph) | | | |
| Ideal Flow (vphpl) | | | |
| Storage Length (ft) | | | |
| Storage Lanes | | | |
| Taper Length (ft) | | | |
| Lane Util. Factor | | | |
| Frt | | | |
| Flt Protected | | | |
| Satd. Flow (prot) | | | |
| Flt Permitted | | | |
| Satd. Flow (perm) | | | |
| Right Turn on Red | | | |
| Satd. Flow (RTOR) | | | |
| Link Speed (mph) | | | |
| Link Distance (ft) | | | |
| Travel Time (s) | | | |
| Peak Hour Factor | | | |
| Adj. Flow (vph) | | | |
| Shared Lane Traffic (%) | | | |
| Lane Group Flow (vph) | | | |
| Enter Blocked Intersection | | | |
| Lane Alignment | | | |
| Median Width(ft) | | | |
| Link Offset(ft) | | | |
| Crosswalk Width(ft) | | | |
| Two way Left Turn Lane | | | |
| Headway Factor | | | |
| Turning Speed (mph) | | | |
| Number of Detectors | | | |
| Detector Template | | | |
| Leading Detector (ft) | | | |
| Trailing Detector (ft) | | | |
| Detector 1 Position(ft) | | | |
| Detector 1 Size(ft) | | | |
| Detector 1 Type | | | |
| Detector 1 Channel | | | |
| Detector 1 Extend (s) | | | |
| Detector 1 Queue (s) | | | |
| Detector 1 Delay (s) | | | |
| Detector 2 Position(ft) | | | |
| Detector 2 Size(ft) | | | |
| Detector 2 Type | | | |
| Detector 2 Channel | | | |
| Detector 2 Extend (s) | | | |
| Turn Type | | | |
| Protected Phases | 2 | 3 | 4 |
| Permitted Phases | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | 7 | 6 7 | | | 6 | 6 | 8 | 8 | | | | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | | | | 15.0 | 15.0 | 10.0 | 10.0 | | | | |
| Minimum Split (s) | 11.0 | | | | 26.5 | 26.5 | 45.5 | 45.5 | | | | |
| Total Split (s) | 27.0 | | | | 33.0 | 33.0 | 60.0 | 60.0 | | | | |
| Total Split (%) | 22.5% | | | | 27.5% | 27.5% | 50.0% | 50.0% | | | | |
| Maximum Green (s) | 21.0 | | | | 26.5 | 26.5 | 52.5 | 52.5 | | | | |
| Yellow Time (s) | 4.0 | | | | 4.5 | 4.5 | 5.5 | 5.5 | | | | |
| All-Red Time (s) | 2.0 | | | | 2.0 | 2.0 | 2.0 | 2.0 | | | | |
| Lost Time Adjust (s) | 0.0 | | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Total Lost Time (s) | 6.0 | | | | 6.5 | 6.5 | 7.5 | 7.5 | | | | |
| Lead/Lag | Lag | | | | | | Lead | Lead | | | | |
| Lead-Lag Optimize? | Yes | | | | | | Yes | Yes | | | | |
| Vehicle Extension (s) | 3.0 | | | | 3.0 | 3.0 | 3.0 | 3.0 | | | | |
| Recall Mode | None | | | | C-Max | C-Max | None | None | | | | |
| Walk Time (s) | | | | | 4.0 | 4.0 | 4.0 | 4.0 | | | | |
| Flash Don't Walk (s) | | | | | 16.0 | 16.0 | 34.0 | 34.0 | | | | |
| Pedestrian Calls (#/hr) | | | | | 0 | 0 | 0 | 0 | | | | |
| Act Effct Green (s) | 38.8 | 71.3 | | | 26.5 | 26.5 | 34.7 | 34.7 | | | | |
| Actuated g/C Ratio | 0.32 | 0.59 | | | 0.22 | 0.22 | 0.29 | 0.29 | | | | |
| v/c Ratio | 0.13 | 0.32 | | | 0.74 | 0.81 | 0.77 | 0.42 | | | | |
| Control Delay (s/veh) | 43.0 | 5.2 | | | 40.2 | 15.8 | 49.4 | 26.0 | | | | |
| Queue Delay | 0.0 | 0.0 | | | 0.4 | 0.0 | 0.0 | 0.0 | | | | |
| Total Delay (s/veh) | 43.0 | 5.2 | | | 40.6 | 15.8 | 49.4 | 26.0 | | | | |
| LOS | D | A | | | D | B | D | C | | | | |
| Approach Delay (s/veh) | | 12.1 | | | 30.2 | | | 36.8 | | | | |
| Approach LOS | | B | | | C | | | D | | | | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 120 | | | |
| Actuated Cycle Length: 120 | | | |
| Offset: 0 (0%), Referenced to phase 2:EBWB and 6:, Start of Yellow | | | |
| Natural Cycle: 105 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.97 | | | |
| Intersection Signal Delay (s/veh): 27.3 | | Intersection LOS: C | |
| Intersection Capacity Utilization 82.1% | | ICU Level of Service E | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 12: SR24 Westbound Ramps & Williams Field Road





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 131 | 300 | 68 | 0 | 831 | 69 | 339 | 0 | 0 | 59 | 0 | 482 |
| Future Volume (veh/h) | 131 | 300 | 68 | 0 | 831 | 69 | 339 | 0 | 0 | 59 | 0 | 482 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 142 | 326 | 74 | 0 | 903 | 75 | 368 | 0 | 0 | 64 | 0 | 524 |
| 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 | 208 | 1377 | 614 | 341 | 1008 | 449 | 547 | 1464 | 653 | 608 | 1111 | 607 |
| Arrive On Green | 0.02 | 0.13 | 0.13 | 0.00 | 0.28 | 0.28 | 0.16 | 0.00 | 0.00 | 0.06 | 0.00 | 0.31 |
| Sat Flow, veh/h | 1781 | 3554 | 1585 | 1781 | 3554 | 1585 | 3456 | 3554 | 1585 | 1781 | 3554 | 1585 |
| Grp Volume(v), veh/h | 142 | 326 | 74 | 0 | 903 | 75 | 368 | 0 | 0 | 64 | 0 | 524 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1777 | 1585 | 1781 | 1777 | 1585 | 1728 | 1777 | 1585 | 1781 | 1777 | 1585 |
| Q Serve(g_s), s | 6.5 | 9.9 | 5.0 | 0.0 | 29.3 | 4.3 | 12.0 | 0.0 | 0.0 | 2.8 | 0.0 | 36.6 |
| Cycle Q Clear(g_c), s | 6.5 | 9.9 | 5.0 | 0.0 | 29.3 | 4.3 | 12.0 | 0.0 | 0.0 | 2.8 | 0.0 | 36.6 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 208 | 1377 | 614 | 341 | 1008 | 449 | 547 | 1464 | 653 | 608 | 1111 | 607 |
| V/C Ratio(X) | 0.68 | 0.24 | 0.12 | 0.00 | 0.90 | 0.17 | 0.67 | 0.00 | 0.00 | 0.11 | 0.00 | 0.86 |
| Avail Cap(c_a), veh/h | 231 | 1377 | 614 | 458 | 1008 | 449 | 547 | 1464 | 653 | 651 | 1111 | 607 |
| HCM Platoon Ratio | 0.33 | 0.33 | 0.33 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.96 | 0.96 | 0.96 | 0.00 | 0.89 | 0.89 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 32.4 | 36.4 | 34.2 | 0.0 | 41.3 | 32.3 | 47.6 | 0.0 | 0.0 | 24.6 | 0.0 | 34.1 |
| Incr Delay (d2), s/veh | 6.7 | 0.4 | 0.4 | 0.0 | 11.1 | 0.7 | 6.5 | 0.0 | 0.0 | 0.1 | 0.0 | 15.0 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 6.0 | 8.2 | 3.7 | 0.0 | 20.1 | 3.1 | 9.6 | 0.0 | 0.0 | 2.2 | 0.0 | 23.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 39.1 | 36.8 | 34.6 | 0.0 | 52.4 | 33.0 | 54.0 | 0.0 | 0.0 | 24.7 | 0.0 | 49.1 |
| LnGrp LOS | D | D | C | | D | C | D | | | C | | D |
| Approach Vol, veh/h | | 542 | | | 978 | | | 368 | | | 588 | |
| Approach Delay, s/veh | | 37.1 | | | 50.9 | | | 54.0 | | | 46.5 | |
| Approach LOS | | D | | | D | | | D | | | D | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 12.5 | 40.5 | 23.0 | 44.0 | 0.0 | 53.0 | 11.1 | 55.9 |
| Change Period (Y+Rc), s | 4.0 | 6.5 | 4.0 | 6.5 | 4.0 | 6.5 | 4.0 | 6.5 |
| Max Green Setting (Gmax), s | 10.0 | 32.5 | 19.0 | 37.5 | 8.0 | 34.5 | 10.0 | 46.5 |
| Max Q Clear Time (g_c+I1), s | 8.5 | 31.3 | 14.0 | 38.6 | 0.0 | 11.9 | 4.8 | 0.0 |
| Green Ext Time (p_c), s | 0.0 | 0.8 | 0.6 | 0.0 | 0.0 | 2.3 | 0.0 | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 47.3 |
| HCM 7th LOS | D |

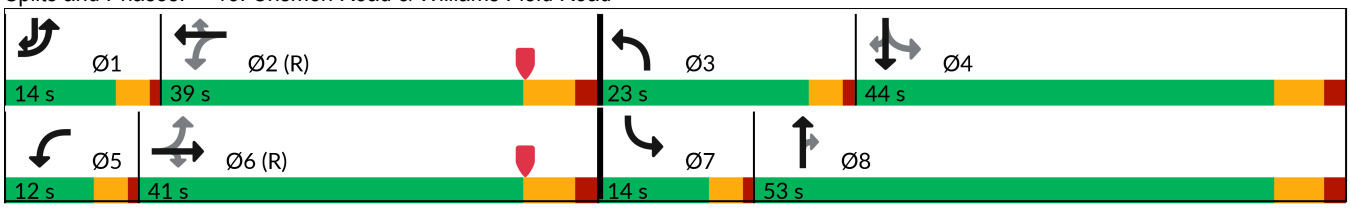
**Notes**

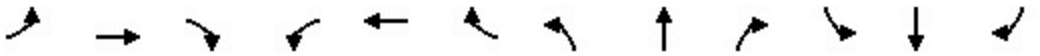
User approved pedestrian interval to be less than phase max green.

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | EBL | WBTL | NBL | SBTL | WBL | EBTL | SBL | NBT |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | None | C-Max | Max | Max | None | C-Max | None | None |
| Maximum Split (s) | 14 | 39 | 23 | 44 | 12 | 41 | 14 | 53 |
| Maximum Split (%) | 11.7% | 32.5% | 19.2% | 36.7% | 10.0% | 34.2% | 11.7% | 44.2% |
| Minimum Split (s) | 12.5 | 38.5 | 12.5 | 35.5 | 12.5 | 40.5 | 12 | 36.5 |
| Yellow Time (s) | 3 | 4.5 | 3 | 4.5 | 3 | 4.5 | 3 | 4.5 |
| All-Red Time (s) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| Minimum Initial (s) | 8 | 15 | 8 | 15 | 8 | 15 | 8 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 7 | | 7 | | 7 | | 7 |
| Flash Don't Walk (s) | | 25 | | 22 | | 27 | | 23 |
| Dual Entry | No | Yes | No | Yes | No | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 6.7 | 20.7 | 59.7 | 82.7 | 6.7 | 18.7 | 59.7 | 73.7 |
| End Time (s) | 20.7 | 59.7 | 82.7 | 6.7 | 18.7 | 59.7 | 73.7 | 6.7 |
| Yield/Force Off (s) | 16.7 | 53.2 | 78.7 | 0.2 | 14.7 | 53.2 | 69.7 | 0.2 |
| Yield/Force Off 170(s) | 16.7 | 28.2 | 78.7 | 98.2 | 14.7 | 26.2 | 69.7 | 97.2 |
| Local Start Time (s) | 73.5 | 87.5 | 6.5 | 29.5 | 73.5 | 85.5 | 6.5 | 20.5 |
| Local Yield (s) | 83.5 | 0 | 25.5 | 67 | 81.5 | 0 | 16.5 | 67 |
| Local Yield 170(s) | 83.5 | 95 | 25.5 | 45 | 81.5 | 93 | 16.5 | 44 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 105 |
| Offset: 53.2 (44%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow | |

Splits and Phases: 13: Crismon Road & Williams Field Road





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 117 | 156 | 77 | 8 | 364 | 54 | 157 | 639 | 10 | 29 | 362 | 361 |
| Future Volume (veh/h) | 117 | 156 | 77 | 8 | 364 | 54 | 157 | 639 | 10 | 29 | 362 | 361 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 127 | 170 | 84 | 9 | 396 | 59 | 171 | 695 | 11 | 32 | 393 | 392 |
| 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 | 477 | 1579 | 704 | 536 | 1407 | 628 | 340 | 1144 | 18 | 253 | 993 | 443 |
| Arrive On Green | 0.07 | 0.44 | 0.44 | 0.02 | 0.40 | 0.40 | 0.08 | 0.32 | 0.32 | 0.04 | 0.28 | 0.28 |
| Sat Flow, veh/h | 1781 | 3554 | 1585 | 1781 | 3554 | 1585 | 1781 | 3580 | 57 | 1781 | 3554 | 1585 |
| Grp Volume(v), veh/h | 127 | 170 | 84 | 9 | 396 | 59 | 171 | 345 | 361 | 32 | 393 | 392 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1777 | 1585 | 1781 | 1777 | 1585 | 1781 | 1777 | 1860 | 1781 | 1777 | 1585 |
| Q Serve(g_s), s | 4.8 | 3.3 | 3.7 | 0.4 | 9.1 | 2.8 | 7.9 | 19.7 | 19.7 | 1.5 | 10.7 | 28.4 |
| Cycle Q Clear(g_c), s | 4.8 | 3.3 | 3.7 | 0.4 | 9.1 | 2.8 | 7.9 | 19.7 | 19.7 | 1.5 | 10.7 | 28.4 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.03 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 477 | 1579 | 704 | 536 | 1407 | 628 | 340 | 568 | 595 | 253 | 993 | 443 |
| V/C Ratio(X) | 0.27 | 0.11 | 0.12 | 0.02 | 0.28 | 0.09 | 0.50 | 0.61 | 0.61 | 0.13 | 0.40 | 0.88 |
| Avail Cap(c_a), veh/h | 597 | 1579 | 704 | 624 | 1407 | 628 | 414 | 718 | 752 | 294 | 1229 | 548 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.99 | 0.99 | 0.99 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 18.2 | 19.5 | 19.6 | 20.8 | 24.6 | 22.7 | 26.4 | 34.5 | 34.5 | 28.9 | 35.0 | 41.4 |
| Incr Delay (d2), s/veh | 0.3 | 0.1 | 0.3 | 0.0 | 0.5 | 0.3 | 1.1 | 1.1 | 1.0 | 0.2 | 0.3 | 13.7 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 3.6 | 2.6 | 2.6 | 0.3 | 7.1 | 2.0 | 6.2 | 13.5 | 14.0 | 1.2 | 8.3 | 18.5 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 18.5 | 19.6 | 19.9 | 20.8 | 25.1 | 23.0 | 27.6 | 35.5 | 35.5 | 29.2 | 35.3 | 55.0 |
| LnGrp LOS | B | B | B | C | C | C | C | D | D | C | D | E |
| Approach Vol, veh/h | | 381 | | | 464 | | | 877 | | | 817 | |
| Approach Delay, s/veh | | 19.3 | | | 24.8 | | | 33.9 | | | 44.5 | |
| Approach LOS | | B | | | C | | | C | | | D | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 11.9 | 54.0 | 14.1 | 40.0 | 6.1 | 59.8 | 9.2 | 44.9 |
| Change Period (Y+Rc), s | 4.0 | 6.5 | 4.0 | 6.5 | 4.0 | 6.5 | 4.0 | 6.5 |
| Max Green Setting (Gmax), s | 16.0 | 26.5 | 15.0 | 41.5 | 8.0 | 34.5 | 8.0 | 48.5 |
| Max Q Clear Time (g_c+I1), s | 6.8 | 11.1 | 9.9 | 30.4 | 2.4 | 5.7 | 3.5 | 21.7 |
| Green Ext Time (p_c), s | 0.2 | 2.5 | 0.2 | 3.1 | 0.0 | 1.4 | 0.0 | 4.7 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 33.5 |
| HCM 7th LOS | C |

**Notes**

User approved pedestrian interval to be less than phase max green.

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | EBL | WBTL | NBL | SBTL | WBL | EBTL | SBL | NBTL |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | None | C-Max | None | None | None | C-Max | None | None |
| Maximum Split (s) | 20 | 33 | 19 | 48 | 12 | 41 | 12 | 55 |
| Maximum Split (%) | 16.7% | 27.5% | 15.8% | 40.0% | 10.0% | 34.2% | 10.0% | 45.8% |
| Minimum Split (s) | 12.5 | 38.5 | 12.5 | 35.5 | 12.5 | 40.5 | 12.5 | 36.5 |
| Yellow Time (s) | 3 | 4.5 | 3 | 4.5 | 3 | 4.5 | 3 | 4.5 |
| All-Red Time (s) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| Minimum Initial (s) | 8 | 15 | 8 | 15 | 8 | 15 | 8 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 7 | | 7 | | 7 | | 7 |
| Flash Don't Walk (s) | | 25 | | 22 | | 27 | | 23 |
| Dual Entry | No | Yes | No | Yes | No | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 101 | 1 | 34 | 53 | 101 | 113 | 34 | 46 |
| End Time (s) | 1 | 34 | 53 | 101 | 113 | 34 | 46 | 101 |
| Yield/Force Off (s) | 117 | 27.5 | 49 | 94.5 | 109 | 27.5 | 42 | 94.5 |
| Yield/Force Off 170(s) | 117 | 2.5 | 49 | 72.5 | 109 | 0.5 | 42 | 71.5 |
| Local Start Time (s) | 73.5 | 93.5 | 6.5 | 25.5 | 73.5 | 85.5 | 6.5 | 18.5 |
| Local Yield (s) | 89.5 | 0 | 21.5 | 67 | 81.5 | 0 | 14.5 | 67 |
| Local Yield 170(s) | 89.5 | 95 | 21.5 | 45 | 81.5 | 93 | 14.5 | 44 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 105 |
| Offset: 27.5 (23%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow | |

Splits and Phases: 14: Signal Butte Road & Williams Field Road

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.2 |

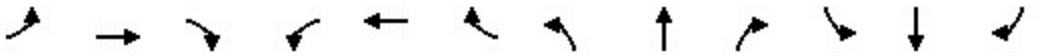
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 0 | 0 | 55 | 0 | 0 | 50 | 0 | 3262 | 53 | 0 | 3415 | 128 |
| Future Vol, veh/h | 0 | 0 | 55 | 0 | 0 | 50 | 0 | 3262 | 53 | 0 | 3415 | 128 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | 0 | - | - | 0 | - | - | 200 | - | - | - |
| 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 | 0 | 0 | 60 | 0 | 0 | 54 | 0 | 3546 | 58 | 0 | 3712 | 139 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | - | - | 1926 | - | - | 1773 | - | 0 | 0 | - | - | 0 |
| Stage 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - | - | - | - | - | - | - |
| Critical Hdwy | - | - | 7.14 | - | - | 7.14 | - | - | - | - | - | - |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | 3.92 | - | - | 3.92 | - | - | - | - | - | - |
| Pot Cap-1 Maneuver | 0 | 0 | *357 | 0 | 0 | *387 | 0 | - | - | 0 | - | - |
| Stage 1 | 0 | 0 | - | 0 | 0 | - | 0 | - | - | 0 | - | - |
| Stage 2 | 0 | 0 | - | 0 | 0 | - | 0 | - | - | 0 | - | - |
| Platoon blocked, % | | | 1 | | | 1 | | - | - | | - | - |
| Mov Cap-1 Maneuver | - | - | *357 | - | - | *387 | - | - | - | - | - | - |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s/v | 17.11 | 15.82 | 0 | 0 |
| HCM LOS | C | C | | |

| Minor Lane/Major Mvmt | NBT | NBR | EBLn1 | WBLn1 | SBT | SBR |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 357 | 387 | - | - |
| HCM Lane V/C Ratio | - | - | 0.168 | 0.14 | - | - |
| HCM Control Delay (s/veh) | - | - | 17.1 | 15.8 | - | - |
| HCM Lane LOS | - | - | C | C | - | - |
| HCM 95th %tile Q(veh) | - | - | 0.6 | 0.5 | - | - |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 180 | 0 | 87 | 115 | 0 | 152 | 117 | 3071 | 406 | 823 | 2511 | 141 |
| Future Volume (veh/h) | 180 | 0 | 87 | 115 | 0 | 152 | 117 | 3071 | 406 | 823 | 2511 | 141 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 196 | 0 | 95 | 125 | 0 | 165 | 127 | 3338 | 441 | 895 | 2729 | 153 |
| 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 | 333 | 242 | 205 | 281 | 0 | 304 | 475 | 2638 | 819 | 403 | 2456 | 135 |
| Arrive On Green | 0.09 | 0.00 | 0.13 | 0.05 | 0.00 | 0.10 | 0.14 | 0.52 | 0.52 | 0.23 | 0.99 | 0.99 |
| Sat Flow, veh/h | 1781 | 1870 | 1585 | 1781 | 0 | 3170 | 3456 | 5106 | 1585 | 3456 | 4952 | 273 |
| Grp Volume(v), veh/h | 196 | 0 | 95 | 125 | 0 | 165 | 127 | 3338 | 441 | 895 | 1861 | 1021 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1870 | 1585 | 1781 | 0 | 1585 | 1728 | 1702 | 1585 | 1728 | 1702 | 1821 |
| Q Serve(g_s), s | 10.5 | 0.0 | 6.7 | 6.5 | 0.0 | 6.0 | 3.9 | 62.0 | 22.4 | 14.0 | 59.5 | 59.5 |
| Cycle Q Clear(g_c), s | 10.5 | 0.0 | 6.7 | 6.5 | 0.0 | 6.0 | 3.9 | 62.0 | 22.4 | 14.0 | 59.5 | 59.5 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.15 |
| Lane Grp Cap(c), veh/h | 333 | 242 | 205 | 281 | 0 | 304 | 475 | 2638 | 819 | 403 | 1688 | 903 |
| V/C Ratio(X) | 0.59 | 0.00 | 0.46 | 0.44 | 0.00 | 0.54 | 0.27 | 1.27 | 0.54 | 2.22 | 1.10 | 1.13 |
| Avail Cap(c_a), veh/h | 333 | 242 | 205 | 281 | 0 | 304 | 475 | 2638 | 819 | 403 | 1688 | 903 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 44.6 | 0.0 | 48.4 | 46.7 | 0.0 | 51.7 | 46.3 | 29.0 | 19.4 | 46.0 | 0.5 | 0.5 |
| Incr Delay (d2), s/veh | 7.4 | 0.0 | 1.6 | 1.1 | 0.0 | 6.8 | 1.4 | 122.5 | 2.5 | 557.0 | 55.6 | 72.8 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 10.1 | 0.0 | 4.9 | 6.3 | 0.0 | 4.8 | 3.2 | 78.1 | 13.5 | 57.3 | 20.5 | 27.8 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 52.1 | 0.0 | 50.0 | 47.8 | 0.0 | 58.6 | 47.7 | 151.5 | 22.0 | 603.0 | 56.1 | 73.3 |
| LnGrp LOS | D | | D | D | | E | D | F | C | F | F | F |
| Approach Vol, veh/h | | 291 | | | 290 | | | 3906 | | | 3777 | |
| Approach Delay, s/veh | | 51.4 | | | 53.9 | | | 133.5 | | | 190.4 | |
| Approach LOS | | D | | | D | | | F | | | F | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 12.0 | 22.0 | 20.5 | 65.5 | 16.0 | 18.0 | 18.0 | 68.0 |
| Change Period (Y+Rc), s | 5.5 | 6.5 | 4.0 | 6.0 | 5.5 | 6.5 | 4.0 | 6.0 |
| Max Green Setting (Gmax), s | 6.5 | 15.5 | 16.5 | 59.5 | 10.5 | 11.5 | 14.0 | 62.0 |
| Max Q Clear Time (g_c+I1), s | 8.5 | 8.7 | 5.9 | 61.5 | 12.5 | 8.0 | 16.0 | 64.0 |
| Green Ext Time (p_c), s | 0.0 | 0.1 | 0.2 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 153.8 |
| HCM 7th LOS | F |

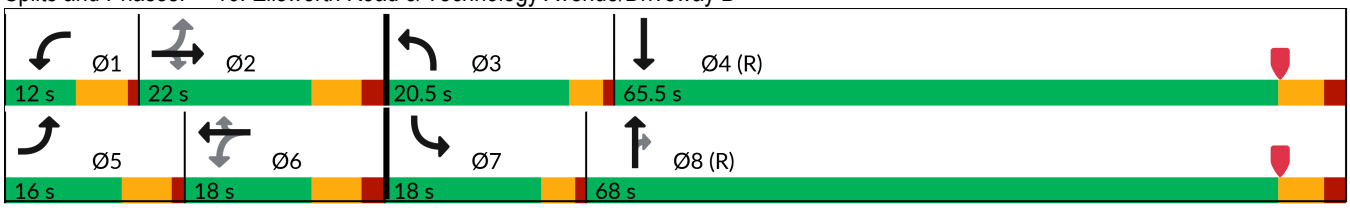
**Notes**

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | WBL | EBTL | NBL | SBT | EBL | WBTL | SBL | NBT |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | None | None | Max | C-Max | Max | Max | None | C-Max |
| Maximum Split (s) | 12 | 22 | 20.5 | 65.5 | 16 | 18 | 18 | 68 |
| Maximum Split (%) | 10.0% | 18.3% | 17.1% | 54.6% | 13.3% | 15.0% | 15.0% | 56.7% |
| Minimum Split (s) | 10.5 | 24.5 | 9.5 | 24 | 23.5 | 24.5 | 9.5 | 24 |
| Yellow Time (s) | 4.5 | 4.5 | 3 | 4 | 4.5 | 4.5 | 3 | 4 |
| All-Red Time (s) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| Minimum Initial (s) | 5 | 10 | 5 | 15 | 5 | 10 | 5 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 7 | | 7 | | 7 | | 7 |
| Flash Don't Walk (s) | | 11 | | 11 | | 11 | | 11 |
| Dual Entry | No | Yes | No | Yes | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 53 | 65 | 87 | 107.5 | 53 | 69 | 87 | 105 |
| End Time (s) | 65 | 87 | 107.5 | 53 | 69 | 87 | 105 | 53 |
| Yield/Force Off (s) | 59.5 | 80.5 | 103.5 | 47 | 63.5 | 80.5 | 101 | 47 |
| Yield/Force Off 170(s) | 59.5 | 69.5 | 103.5 | 36 | 63.5 | 69.5 | 101 | 36 |
| Local Start Time (s) | 6 | 18 | 40 | 60.5 | 6 | 22 | 40 | 58 |
| Local Yield (s) | 12.5 | 33.5 | 56.5 | 0 | 16.5 | 33.5 | 54 | 0 |
| Local Yield 170(s) | 12.5 | 22.5 | 56.5 | 109 | 16.5 | 22.5 | 54 | 109 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 145 |
| Offset: 47 (39%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow | |

Splits and Phases: 16: Ellsworth Road & Technology Avenue/Driveway B



| Intersection | |
|---|---|
| Int Delay, s/veh | 0.2 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 0 | 70 | 3524 | 173 | 0 | 2713 |
| Future Vol, veh/h | 0 | 70 | 3524 | 173 | 0 | 2713 |
| 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 | - | 100 | - | - |
| 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 | 76 | 3830 | 188 | 0 | 2949 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | - | 1915 | 0 | 0 | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | 7.14 | - | - | - | - |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | 3.92 | - | - | - | - |
| Pot Cap-1 Maneuver | 0 | *342 | - | - | 0 | - |
| Stage 1 | 0 | - | - | - | 0 | - |
| Stage 2 | 0 | - | - | - | 0 | - |
| Platoon blocked, % | | 1 | - | - | | - |
| Mov Cap-1 Maneuver | - | *342 | - | - | - | - |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 18.53 | 0 | 0 |
| HCM LOS | C | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | SBT |
|---|---|---|---|---|
| Capacity (veh/h) | - | - | 342 | - |
| HCM Lane V/C Ratio | - | - | 0.223 | - |
| HCM Control Delay (s/veh) | - | - | 18.5 | - |
| HCM Lane LOS | - | - | C | - |
| HCM 95th %tile Q(veh) | - | - | 0.8 | - |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 59 | 78 | 3618 | 69 | 199 | 2513 |
| Future Volume (veh/h) | 59 | 78 | 3618 | 69 | 199 | 2513 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 64 | 85 | 3933 | 75 | 216 | 2732 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 221 | 197 | 3281 | 1018 | 231 | 3962 |
| Arrive On Green | 0.12 | 0.12 | 0.85 | 0.85 | 0.10 | 0.78 |
| Sat Flow, veh/h | 1781 | 1585 | 5274 | 1585 | 1781 | 5274 |
| Grp Volume(v), veh/h | 64 | 85 | 3933 | 75 | 216 | 2732 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1585 | 1702 | 1585 | 1781 | 1702 |
| Q Serve(g_s), s | 3.9 | 6.0 | 77.1 | 0.9 | 10.4 | 31.0 |
| Cycle Q Clear(g_c), s | 3.9 | 6.0 | 77.1 | 0.9 | 10.4 | 31.0 |
| Prop In Lane | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Lane Grp Cap(c), veh/h | 221 | 197 | 3281 | 1018 | 231 | 3962 |
| V/C Ratio(X) | 0.29 | 0.43 | 1.20 | 0.07 | 0.94 | 0.69 |
| Avail Cap(c_a), veh/h | 223 | 198 | 3281 | 1018 | 231 | 3962 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.33 | 1.33 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 47.7 | 48.6 | 8.7 | 3.2 | 44.1 | 6.5 |
| Incr Delay (d2), s/veh | 0.7 | 1.5 | 92.6 | 0.1 | 41.9 | 1.0 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 3.2 | 4.4 | 52.3 | 0.6 | 14.1 | 14.3 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 48.5 | 50.1 | 101.4 | 3.3 | 86.0 | 7.5 |
| LnGrp LOS | D | D | F | A | F | A |
| Approach Vol, veh/h | 149 | | 4008 | | | 2948 |
| Approach Delay, s/veh | 49.4 | | 99.5 | | | 13.2 |
| Approach LOS | D | | F | | | B |

| Timer - Assigned Phs | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 20.9 | 99.1 | 16.0 | 83.1 |
| Change Period (Y+Rc), s | 6.0 | 6.0 | 4.5 | 6.0 |
| Max Green Setting (Gmax), s | 15.0 | 93.0 | 11.5 | 77.0 |
| Max Q Clear Time (g_c+I1), s | 8.0 | 33.0 | 12.4 | 79.1 |
| Green Ext Time (p_c), s | 0.2 | 47.2 | 0.0 | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 62.7 |
| HCM 7th LOS | E |

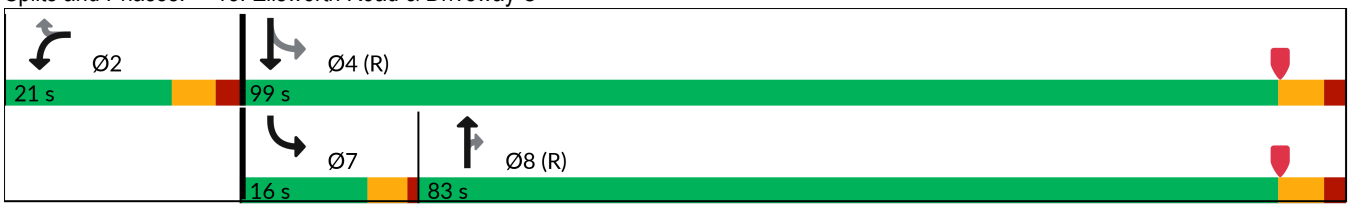
**Notes**

User approved pedestrian interval to be less than phase max green.

| Phase Number | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Movement | WBL | SBTL | SBL | NBT |
| Lead/Lag | | | Lead | Lag |
| Lead-Lag Optimize | | | Yes | Yes |
| Recall Mode | None | C-Max | None | C-Max |
| Maximum Split (s) | 21 | 99 | 16 | 83 |
| Maximum Split (%) | 17.5% | 82.5% | 13.3% | 69.2% |
| Minimum Split (s) | 24 | 24 | 9.5 | 24 |
| Yellow Time (s) | 4 | 4 | 3.5 | 4 |
| All-Red Time (s) | 2 | 2 | 1 | 2 |
| Minimum Initial (s) | 15 | 15 | 5 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | 7 | 7 | | 7 |
| Flash Don't Walk (s) | 11 | 11 | | 11 |
| Dual Entry | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 6 | 27 | 27 | 43 |
| End Time (s) | 27 | 6 | 43 | 6 |
| Yield/Force Off (s) | 21 | 0 | 38.5 | 0 |
| Yield/Force Off 170(s) | 10 | 109 | 38.5 | 109 |
| Local Start Time (s) | 6 | 27 | 27 | 43 |
| Local Yield (s) | 21 | 0 | 38.5 | 0 |
| Local Yield 170(s) | 10 | 109 | 38.5 | 109 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 150 |
| Offset: 0 (0%), Referenced to phase 4:SBTL and 8:NBT, Start of Yellow | |

Splits and Phases: 18: Ellsworth Road & Driveway C



| Intersection | |
|---|---|
| Int Delay, s/veh | 6.2 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 0 | 0 | 39 | 0 | 0 | 109 | 0 | 3489 | 149 | 30 | 2436 | 78 |
| Future Vol, veh/h | 0 | 0 | 39 | 0 | 0 | 109 | 0 | 3489 | 149 | 30 | 2436 | 78 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | 0 | - | - | 0 | - | - | 200 | 150 | - | - |
| 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 | 0 | 0 | 42 | 0 | 0 | 118 | 0 | 3792 | 162 | 33 | 2648 | 85 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | - | - | 1366 | - | - | 1896 | - | 0 | 0 | 3954 | 0 | 0 |
| Stage 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - | - | - | - | - | - | - |
| Critical Hdwy | - | - | 7.14 | - | - | 7.14 | - | - | - | 5.34 | - | - |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | 3.92 | - | - | 3.92 | - | - | - | 3.12 | - | - |
| Pot Cap-1 Maneuver | 0 | 0 | *522 | 0 | 0 | *342 | 0 | - | - | ~ 14 | - | - |
| Stage 1 | 0 | 0 | - | 0 | 0 | - | 0 | - | - | - | - | - |
| Stage 2 | 0 | 0 | - | 0 | 0 | - | 0 | - | - | - | - | - |
| Platoon blocked, % | | | 0 | | | 1 | | - | - | 1 | - | - |
| Mov Cap-1 Maneuver | - | - | *522 | - | - | *342 | - | - | - | ~ 14 | - | - |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s/v | 12.5 | 21.03 | 0 | 14.31 |
| HCM LOS | B | C | | |

| Minor Lane/Major Mvmt | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 522 | 342 | ~ 14 | - | - |
| HCM Lane V/C Ratio | - | - | 0.081 | 0.347 | 2.412 | - | - |
| HCM Control Delay (s/veh) | - | - | 12.5 | 21 | $ 1213.4 | - | - |
| HCM Lane LOS | - | - | B | C | F | - | - |
| HCM 95th %tile Q(veh) | - | - | 0.3 | 1.5 | 4.9 | - | - |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.2 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | ↑↑↑ | ↑↑↑ | ↱ | | ↱ |
| Traffic Vol, veh/h | 0 | 1012 | 1135 | 13 | 0 | 44 |
| Future Vol, veh/h | 0 | 1012 | 1135 | 13 | 0 | 44 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | 200 | - | 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 | 1100 | 1234 | 14 | 0 | 48 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | - | 0 | - | 0 | - | 617 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | - | - | - | - | 7.14 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | - | - | - | 3.92 |
| Pot Cap-1 Maneuver | 0 | - | - | - | 0 | *733 |
| Stage 1 | 0 | - | - | - | 0 | - |
| Stage 2 | 0 | - | - | - | 0 | - |
| Platoon blocked, % | | - | - | - | | 0 |
| Mov Cap-1 Maneuver | - | - | - | - | - | *733 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 0 | 0 | 10.25 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|
| Capacity (veh/h) | - | - | - | 733 |
| HCM Lane V/C Ratio | - | - | - | 0.065 |
| HCM Control Delay (s/veh) | - | - | - | 10.3 |
| HCM Lane LOS | - | - | - | B |
| HCM 95th %tile Q(veh) | - | - | - | 0.2 |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | ↑↑↑ | ↑↑↑ | ↱ | | ↱ |
| Traffic Vol, veh/h | 0 | 1012 | 1141 | 5 | 0 | 6 |
| Future Vol, veh/h | 0 | 1012 | 1141 | 5 | 0 | 6 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | 200 | - | 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 | 1100 | 1240 | 5 | 0 | 7 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | - | 0 | - | 0 | - | 620 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | - | - | - | - | 7.14 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | - | - | - | 3.92 |
| Pot Cap-1 Maneuver | 0 | - | - | - | 0 | *733 |
| Stage 1 | 0 | - | - | - | 0 | - |
| Stage 2 | 0 | - | - | - | 0 | - |
| Platoon blocked, % | | - | - | - | | 0 |
| Mov Cap-1 Maneuver | - | - | - | - | - | *733 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 0 | 0 | 9.95 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|
| Capacity (veh/h) | - | - | - | 733 |
| HCM Lane V/C Ratio | - | - | - | 0.009 |
| HCM Control Delay (s/veh) | - | - | - | 10 |
| HCM Lane LOS | - | - | - | A |
| HCM 95th %tile Q(veh) | - | - | - | 0 |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.2 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 27 | 974 | 1475 | 19 | 0 | 20 |
| Future Vol, veh/h | 27 | 974 | 1475 | 19 | 0 | 20 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 100 | - | - | 200 | - | 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 | 29 | 1059 | 1603 | 21 | 0 | 22 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 1624 | 0 | - | 0 | - | 802 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | 5.34 | - | - | - | - | 7.14 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | 3.12 | - | - | - | - | 3.92 |
| Pot Cap-1 Maneuver | 414 | - | - | - | 0 | *694 |
| Stage 1 | - | - | - | - | 0 | - |
| Stage 2 | - | - | - | - | 0 | - |
| Platoon blocked, % | 0 | - | - | - | | 0 |
| Mov Cap-1 Maneuver | 414 | - | - | - | - | *694 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 0.39 | 0 | 10.35 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 414 | - | - | - | 694 |
| HCM Lane V/C Ratio | 0.071 | - | - | - | 0.031 |
| HCM Control Delay (s/veh) | 14.3 | - | - | - | 10.4 |
| HCM Lane LOS | B | - | - | - | B |
| HCM 95th %tile Q(veh) | 0.2 | - | - | - | 0.1 |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.1 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | ↑↑↑ | ↑↑↑ | ↱ | | ↱ |
| Traffic Vol, veh/h | 0 | 974 | 1476 | 26 | 0 | 18 |
| Future Vol, veh/h | 0 | 974 | 1476 | 26 | 0 | 18 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | 0 | - | 0 |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 1059 | 1604 | 28 | 0 | 20 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | - | 0 | - | 0 | - | 802 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | - | - | - | - | 7.14 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | - | - | - | 3.92 |
| Pot Cap-1 Maneuver | 0 | - | - | - | 0 | *694 |
| Stage 1 | 0 | - | - | - | 0 | - |
| Stage 2 | 0 | - | - | - | 0 | - |
| Platoon blocked, % | | - | - | - | | 0 |
| Mov Cap-1 Maneuver | - | - | - | - | - | *694 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 0 | 0 | 10.34 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|
| Capacity (veh/h) | - | - | - | 694 |
| HCM Lane V/C Ratio | - | - | - | 0.028 |
| HCM Control Delay (s/veh) | - | - | - | 10.3 |
| HCM Lane LOS | - | - | - | B |
| HCM 95th %tile Q(veh) | - | - | - | 0.1 |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.2 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 20 | 955 | 1473 | 34 | 0 | 29 |
| Future Vol, veh/h | 20 | 955 | 1473 | 34 | 0 | 29 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 200 | - | - | 200 | - | 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 | 22 | 1038 | 1601 | 37 | 0 | 32 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 1638 | 0 | - | 0 | - | 801 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | 5.34 | - | - | - | - | 7.14 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | 3.12 | - | - | - | - | 3.92 |
| Pot Cap-1 Maneuver | 384 | - | - | - | 0 | *706 |
| Stage 1 | - | - | - | - | 0 | - |
| Stage 2 | - | - | - | - | 0 | - |
| Platoon blocked, % | 0 | - | - | - | | 0 |
| Mov Cap-1 Maneuver | 384 | - | - | - | - | *706 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 0.31 | 0 | 10.33 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 384 | - | - | - | 706 |
| HCM Lane V/C Ratio | 0.057 | - | - | - | 0.045 |
| HCM Control Delay (s/veh) | 14.9 | - | - | - | 10.3 |
| HCM Lane LOS | B | - | - | - | B |
| HCM 95th %tile Q(veh) | 0.2 | - | - | - | 0.1 |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.1 |

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | ↑↑↑ | ↱ | | ↑↑↑ | | ↱ |
| Traffic Vol, veh/h | 858 | 97 | 0 | 1507 | 0 | 24 |
| Future Vol, veh/h | 858 | 97 | 0 | 1507 | 0 | 24 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 0 | - | - | - | 0 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 933 | 105 | 0 | 1638 | 0 | 26 |

| Major/Minor | Major1 | | Major2 | | Minor1 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 0 | 0 | - | - | - | 466 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | - | - | - | - | 7.14 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | - | - | - | 3.92 |
| Pot Cap-1 Maneuver | - | - | 0 | - | 0 | *778 |
| Stage 1 | - | - | 0 | - | 0 | - |
| Stage 2 | - | - | 0 | - | 0 | - |
| Platoon blocked, % | - | - | | - | | 0 |
| Mov Cap-1 Maneuver | - | - | - | - | - | *778 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | WB | NB |
|---|---|---|---|
| HCM Control Delay, s/v | 0 | 0 | 9.78 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBT |
|---|---|---|---|---|
| Capacity (veh/h) | 778 | - | - | - |
| HCM Lane V/C Ratio | 0.034 | - | - | - |
| HCM Control Delay (s/veh) | 9.8 | - | - | - |
| HCM Lane LOS | A | - | - | - |
| HCM 95th %tile Q(veh) | 0.1 | - | - | - |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 5.9 |
| Intersection LOS | A |

| Approach | WB | SB | NE |
|---|---|---|---|
| Entry Lanes | 2 | 2 | 1 |
| Conflicting Circle Lanes | 2 | 2 | 2 |
| Adj Approach Flow, veh/h | 79 | 458 | 410 |
| Demand Flow Rate, veh/h | 81 | 467 | 418 |
| Vehicles Circulating, veh/h | 215 | 0 | 415 |
| Vehicles Exiting, veh/h | 618 | 296 | 52 |
| Ped Vol Crossing Leg, #/h | 0 | 0 | 0 |
| Ped Cap Adj | 1.000 | 1.000 | 1.000 |
| Approach Delay, s/veh | 3.7 | 4.1 | 8.4 |
| Approach LOS | A | A | A |

| Lane | Left | Right | Left | Right | Left |
|---|---|---|---|---|---|
| Designated Moves | L | TR | L | LTR | LR |
| Assumed Moves | L | TR | L | LTR | LR |
| RT Channelized | | | | | |
| Lane Util | 0.000 | 1.000 | 0.531 | 0.469 | 1.000 |
| Follow-Up Headway, s | 2.667 | 2.535 | 2.667 | 2.535 | 2.535 |
| Critical Headway, s | 4.645 | 4.328 | 4.645 | 4.328 | 4.328 |
| A (Intercept) | 1350 | 1420 | 1350 | 1420 | 1420 |
| B (Slope) | 9.199e-4 | 8.501e-4 | 9.199e-4 | 8.501e-4 | 8.501e-4 |
| Entry Flow, veh/h | 0 | 81 | 248 | 219 | 418 |
| Cap Entry Lane, veh/h | 1108 | 1183 | 1350 | 1420 | 998 |
| Entry HV Adj Factor | 1.000 | 0.975 | 0.979 | 0.983 | 0.981 |
| Flow Entry, veh/h | 0 | 79 | 243 | 215 | 410 |
| Cap Entry, veh/h | 1108 | 1154 | 1321 | 1396 | 979 |
| V/C Ratio | 0.000 | 0.068 | 0.184 | 0.154 | 0.419 |
| Control Delay, s/veh | 3.3 | 3.7 | 4.3 | 3.8 | 8.4 |
| LOS | A | A | A | A | A |
| 95th %tile Queue, veh | 0 | 0 | 1 | 1 | 2 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 6 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 159 | 14 | 70 | 218 | 47 | 0 |
| Future Vol, veh/h | 159 | 14 | 70 | 218 | 47 | 0 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | - | - |
| 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 | 173 | 15 | 76 | 237 | 51 | 0 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 440 | 51 | 51 | 0 | - | 0 |
| Stage 1 | 51 | - | - | - | - | - |
| Stage 2 | 389 | - | - | - | - | - |
| 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 | 574 | 1017 | 1555 | - | - | - |
| Stage 1 | 971 | - | - | - | - | - |
| Stage 2 | 685 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 542 | 1017 | 1555 | - | - | - |
| Mov Cap-2 Maneuver | 542 | - | - | - | - | - |
| Stage 1 | 917 | - | - | - | - | - |
| Stage 2 | 685 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 14.56 | 1.81 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 438 | - | 563 | - | - |
| HCM Lane V/C Ratio | 0.049 | - | 0.334 | - | - |
| HCM Control Delay (s/veh) | 7.4 | 0 | 14.6 | - | - |
| HCM Lane LOS | A | A | B | - | - |
| HCM 95th %tile Q(veh) | 0.2 | - | 1.5 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 7 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 94 | 172 | 81 | 100 | 30 | 56 |
| Future Vol, veh/h | 94 | 172 | 81 | 100 | 30 | 56 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | - | - |
| 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 | 102 | 187 | 88 | 109 | 33 | 61 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 348 | 63 | 93 | 0 | - | 0 |
| Stage 1 | 63 | - | - | - | - | - |
| Stage 2 | 285 | - | - | - | - | - |
| 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 | 649 | 1002 | 1501 | - | - | - |
| Stage 1 | 960 | - | - | - | - | - |
| Stage 2 | 764 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 609 | 1002 | 1501 | - | - | - |
| Mov Cap-2 Maneuver | 609 | - | - | - | - | - |
| Stage 1 | 900 | - | - | - | - | - |
| Stage 2 | 764 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 11.82 | 3.38 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 806 | - | 815 | - | - |
| HCM Lane V/C Ratio | 0.059 | - | 0.355 | - | - |
| HCM Control Delay (s/veh) | 7.5 | 0 | 11.8 | - | - |
| HCM Lane LOS | A | A | B | - | - |
| HCM 95th %tile Q(veh) | 0.2 | - | 1.6 | - | - |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 9.5 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 16 | 150 | 14 | 0 | 62 | 42 | 33 | 90 | 17 | 107 | 57 | 14 |
| Future Vol, veh/h | 16 | 150 | 14 | 0 | 62 | 42 | 33 | 90 | 17 | 107 | 57 | 14 |
| 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 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 17 | 163 | 15 | 0 | 67 | 46 | 36 | 98 | 18 | 116 | 62 | 15 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay, s/veh | 9.7 | 8.7 | 9.3 | 9.8 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 24% | 9% | 0% | 60% |
| Vol Thru, % | 64% | 83% | 60% | 32% |
| Vol Right, % | 12% | 8% | 40% | 8% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 140 | 180 | 104 | 178 |
| LT Vol | 33 | 16 | 0 | 107 |
| Through Vol | 90 | 150 | 62 | 57 |
| RT Vol | 17 | 14 | 42 | 14 |
| Lane Flow Rate | 152 | 196 | 113 | 193 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.207 | 0.266 | 0.151 | 0.266 |
| Departure Headway (Hd) | 4.907 | 4.894 | 4.795 | 4.947 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 726 | 730 | 742 | 720 |
| Service Time | 2.978 | 2.959 | 2.869 | 3.016 |
| HCM Lane V/C Ratio | 0.209 | 0.268 | 0.152 | 0.268 |
| HCM Control Delay, s/veh | 9.3 | 9.7 | 8.7 | 9.8 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.8 | 1.1 | 0.5 | 1.1 |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 7.2 |
| Intersection LOS | A |

| Approach | EB | WB | NB |
|---|---|---|---|
| Entry Lanes | 1 | 1 | 1 |
| Conflicting Circle Lanes | 1 | 1 | 1 |
| Adj Approach Flow, veh/h | 395 | 74 | 454 |
| Demand Flow Rate, veh/h | 403 | 76 | 463 |
| Vehicles Circulating, veh/h | 28 | 67 | 335 |
| Vehicles Exiting, veh/h | 115 | 731 | 96 |
| Ped Vol Crossing Leg, #/h | 0 | 0 | 0 |
| Ped Cap Adj | 1.000 | 1.000 | 1.000 |
| Approach Delay, s/veh | 5.4 | 3.3 | 9.4 |
| Approach LOS | A | A | A |

| Lane | Left | Left | Left |
|---|---|---|---|
| Designated Moves | TR | LT | LR |
| Assumed Moves | TR | LT | LR |
| RT Channelized | | | |
| Lane Util | 1.000 | 1.000 | 1.000 |
| Follow-Up Headway, s | 2.609 | 2.609 | 2.609 |
| Critical Headway, s | 4.976 | 4.976 | 4.976 |
| A (Intercept) | 1380 | 1380 | 1380 |
| B (Slope) | 1.02e-3 | 1.02e-3 | 1.02e-3 |
| Entry Flow, veh/h | 403 | 76 | 463 |
| Cap Entry Lane, veh/h | 1341 | 1289 | 981 |
| Entry HV Adj Factor | 0.981 | 0.974 | 0.981 |
| Flow Entry, veh/h | 395 | 74 | 454 |
| Cap Entry, veh/h | 1316 | 1256 | 961 |
| V/C Ratio | 0.301 | 0.059 | 0.472 |
| Control Delay, s/veh | 5.4 | 3.3 | 9.4 |
| LOS | A | A | A |
| 95th %tile Queue, veh | 1 | 0 | 3 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 9.9 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 321 | 199 | 0 | 278 | 27 | 8 |
| Future Vol, veh/h | 321 | 199 | 0 | 278 | 27 | 8 |
| 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 | - | 150 | - | - | - |
| Veh in Median Storage, # | 2 | - | - | 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 | 349 | 216 | 0 | 302 | 29 | 9 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 185 | 19 | 38 | 0 | - | 0 |
| Stage 1 | 34 | - | - | - | - | - |
| Stage 2 | 151 | - | - | - | - | - |
| Critical Hdwy | 6.84 | 6.94 | 4.14 | - | - | - |
| Critical Hdwy Stg 1 | 5.84 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.84 | - | - | - | - | - |
| Follow-up Hdwy | 3.52 | 3.32 | 2.22 | - | - | - |
| Pot Cap-1 Maneuver | 787 | 1054 | 1570 | - | - | - |
| Stage 1 | 984 | - | - | - | - | - |
| Stage 2 | 861 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 787 | 1054 | 1570 | - | - | - |
| Mov Cap-2 Maneuver | 811 | - | - | - | - | - |
| Stage 1 | 984 | - | - | - | - | - |
| Stage 2 | 861 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 15.83 | 0 | 0 |
| HCM LOS | C | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1570 | - | 889 | - | - |
| HCM Lane V/C Ratio | - | - | 0.636 | - | - |
| HCM Control Delay (s/veh) | 0 | - | 15.8 | - | - |
| HCM Lane LOS | A | - | C | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 4.7 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 1.3 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 10 | 89 | 16 | 639 | 58 | 6 |
| Future Vol, veh/h | 10 | 89 | 16 | 639 | 58 | 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 | - | - | 150 | - | - | - |
| 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 | 11 | 97 | 17 | 695 | 63 | 7 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 448 | 35 | 70 | 0 | - | 0 |
| Stage 1 | 66 | - | - | - | - | - |
| Stage 2 | 382 | - | - | - | - | - |
| Critical Hdwy | 6.84 | 6.94 | 4.14 | - | - | - |
| Critical Hdwy Stg 1 | 5.84 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.84 | - | - | - | - | - |
| Follow-up Hdwy | 3.52 | 3.32 | 2.22 | - | - | - |
| Pot Cap-1 Maneuver | 539 | 1030 | 1529 | - | - | - |
| Stage 1 | 949 | - | - | - | - | - |
| Stage 2 | 659 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 533 | 1030 | 1529 | - | - | - |
| Mov Cap-2 Maneuver | 533 | - | - | - | - | - |
| Stage 1 | 938 | - | - | - | - | - |
| Stage 2 | 659 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 9.32 | 0.18 | 0 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1529 | - | 942 | - | - |
| HCM Lane V/C Ratio | 0.011 | - | 0.114 | - | - |
| HCM Control Delay (s/veh) | 7.4 | - | 9.3 | - | - |
| HCM Lane LOS | A | - | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 0.4 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 6.7 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 26 | 24 | 0 | 32 | 97 | 0 |
| Future Vol, veh/h | 26 | 24 | 0 | 32 | 97 | 0 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | 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 | 28 | 26 | 0 | 35 | 105 | 0 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 228 | 17 | 0 | 0 | 35 | 0 |
| Stage 1 | 17 | - | - | - | - | - |
| Stage 2 | 211 | - | - | - | - | - |
| 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 | 760 | 1061 | - | - | 1577 | - |
| Stage 1 | 1005 | - | - | - | - | - |
| Stage 2 | 824 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | 709 | 1061 | - | - | 1577 | - |
| Mov Cap-2 Maneuver | 709 | - | - | - | - | - |
| Stage 1 | 1005 | - | - | - | - | - |
| Stage 2 | 769 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 9.42 | 0 | 7.45 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | WBLn2 | SBL | SBT |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 709 | 1061 | 1577 | - |
| HCM Lane V/C Ratio | - | - | 0.04 | 0.025 | 0.067 | - |
| HCM Control Delay (s/veh) | - | - | 10.3 | 8.5 | 7.4 | - |
| HCM Lane LOS | - | - | B | A | A | - |
| HCM 95th %tile Q(veh) | - | - | 0.1 | 0.1 | 0.2 | - |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 10.3 |
| Intersection LOS | B |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 162 | 49 | 15 | 158 | 173 | 128 |
| Future Vol, veh/h | 162 | 49 | 15 | 158 | 173 | 128 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 176 | 53 | 16 | 172 | 188 | 139 |
| Number of Lanes | 1 | 1 | 1 | 1 | 1 | 1 |

| Approach | EB | WB | SB |
|---|---|---|---|
| Opposing Approach | WB | EB | |
| Opposing Lanes | 2 | 2 | 0 |
| Conflicting Approach Left | SB | | WB |
| Conflicting Lanes Left | 2 | 0 | 2 |
| Conflicting Approach Right | | SB | EB |
| Conflicting Lanes Right | 0 | 2 | 2 |
| HCM Control Delay, s/veh | 10.9 | 9.2 | 10.5 |
| HCM LOS | B | A | B |

| Lane | EBLn1 | EBLn2 | WBLn1 | WBLn2 | SBLn1 | SBLn2 |
|---|---|---|---|---|---|---|
| Vol Left, % | 100% | 0% | 0% | 0% | 100% | 0% |
| Vol Thru, % | 0% | 100% | 100% | 0% | 0% | 0% |
| Vol Right, % | 0% | 0% | 0% | 100% | 0% | 100% |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 162 | 49 | 15 | 158 | 173 | 128 |
| LT Vol | 162 | 0 | 0 | 0 | 173 | 0 |
| Through Vol | 0 | 49 | 15 | 0 | 0 | 0 |
| RT Vol | 0 | 0 | 0 | 158 | 0 | 128 |
| Lane Flow Rate | 176 | 53 | 16 | 172 | 188 | 139 |
| Geometry Grp | 5 | 5 | 5 | 5 | 5 | 5 |
| Degree of Util (X) | 0.299 | 0.083 | 0.026 | 0.238 | 0.318 | 0.189 |
| Departure Headway (Hd) | 6.105 | 5.6 | 5.695 | 4.987 | 6.093 | 4.887 |
| Convergence, Y/N | Yes | Yes | Yes | Yes | Yes | Yes |
| Cap | 585 | 634 | 623 | 713 | 587 | 726 |
| Service Time | 3.888 | 3.382 | 3.48 | 2.772 | 3.875 | 2.668 |
| HCM Lane V/C Ratio | 0.301 | 0.084 | 0.026 | 0.241 | 0.32 | 0.191 |
| HCM Control Delay, s/veh | 11.5 | 8.9 | 8.6 | 9.3 | 11.7 | 8.8 |
| HCM Lane LOS | B | A | A | A | B | A |
| HCM 95th-tile Q | 1.2 | 0.3 | 0.1 | 0.9 | 1.4 | 0.7 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 15 | 0 | 1473 | 41 | 4 | 1336 |
| Future Volume (veh/h) | 15 | 0 | 1473 | 41 | 4 | 1336 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 16 | 0 | 1601 | 45 | 4 | 1452 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 35 | 31 | 4241 | 1316 | 349 | 4241 |
| Arrive On Green | 0.02 | 0.00 | 0.83 | 0.83 | 0.83 | 0.83 |
| Sat Flow, veh/h | 1781 | 1585 | 5274 | 1585 | 304 | 5274 |
| Grp Volume(v), veh/h | 16 | 0 | 1601 | 45 | 4 | 1452 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1585 | 1702 | 1585 | 304 | 1702 |
| Q Serve(g_s), s | 0.5 | 0.0 | 4.6 | 0.3 | 0.2 | 4.0 |
| Cycle Q Clear(g_c), s | 0.5 | 0.0 | 4.6 | 0.3 | 4.8 | 4.0 |
| Prop In Lane | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Lane Grp Cap(c), veh/h | 35 | 31 | 4241 | 1316 | 349 | 4241 |
| V/C Ratio(X) | 0.46 | 0.00 | 0.38 | 0.03 | 0.01 | 0.34 |
| Avail Cap(c_a), veh/h | 549 | 489 | 4241 | 1316 | 349 | 4241 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 0.55 | 0.55 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 29.1 | 0.0 | 1.3 | 0.9 | 1.9 | 1.2 |
| Incr Delay (d2), s/veh | 9.2 | 0.0 | 0.1 | 0.0 | 0.1 | 0.2 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 0.6 | 0.0 | 0.1 | 0.0 | 0.0 | 0.2 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 38.3 | 0.0 | 1.4 | 0.9 | 1.9 | 1.4 |
| LnGrp LOS | D | | A | A | A | A |
| Approach Vol, veh/h | 16 | | 1646 | | | 1456 |
| Approach Delay, s/veh | 38.3 | | 1.4 | | | 1.4 |
| Approach LOS | D | | A | | | A |

| Timer - Assigned Phs | 2 | | | 6 | 8 |
|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 54.3 | | | 54.3 | 5.7 |
| Change Period (Y+Rc), s | 4.5 | | | 4.5 | 4.5 |
| Max Green Setting (Gmax), s | 32.5 | | | 32.5 | 18.5 |
| Max Q Clear Time (g_c+I1), s | 6.6 | | | 6.8 | 2.5 |
| Green Ext Time (p_c), s | 14.2 | | | 12.5 | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 1.6 |
| HCM 7th LOS | A |

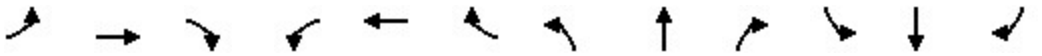
**Notes**

User approved pedestrian interval to be less than phase max green.

| Phase Number | 2 | 6 | 8 |
|---|---|---|---|
| Movement | NBT | SBTL | WBL |
| Lead/Lag | | | |
| Lead-Lag Optimize | | | |
| Recall Mode | C-Max | C-Max | None |
| Maximum Split (s) | 37 | 37 | 23 |
| Maximum Split (%) | 61.7% | 61.7% | 38.3% |
| Minimum Split (s) | 22.5 | 22.5 | 22.5 |
| Yellow Time (s) | 3.5 | 3.5 | 3.5 |
| All-Red Time (s) | 1 | 1 | 1 |
| Minimum Initial (s) | 5 | 5 | 5 |
| Vehicle Extension (s) | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 |
| Walk Time (s) | 7 | 7 | 7 |
| Flash Don't Walk (s) | 11 | 11 | 11 |
| Dual Entry | Yes | Yes | Yes |
| Inhibit Max | Yes | Yes | Yes |
| Start Time (s) | 0 | 0 | 37 |
| End Time (s) | 37 | 37 | 0 |
| Yield/Force Off (s) | 32.5 | 32.5 | 55.5 |
| Yield/Force Off 170(s) | 21.5 | 21.5 | 44.5 |
| Local Start Time (s) | 27.5 | 27.5 | 4.5 |
| Local Yield (s) | 0 | 0 | 23 |
| Local Yield 170(s) | 49 | 49 | 12 |

| Intersection Summary | |
|---|---|
| Cycle Length | 60 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 45 |
| Offset: 32.5 (54%), Referenced to phase 2:NBT and 6:SBTL, Start of Yellow | |

Splits and Phases: 1: Ellsworth Road & Serenity Avenue



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 410 | 299 | 300 | 432 | 128 | 115 | 265 | 989 | 565 | 226 | 888 | 242 |
| Future Volume (veh/h) | 410 | 299 | 300 | 432 | 128 | 115 | 265 | 989 | 565 | 226 | 888 | 242 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 446 | 325 | 326 | 470 | 139 | 125 | 288 | 1075 | 614 | 246 | 965 | 263 |
| 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 | 528 | 1298 | 403 | 552 | 1333 | 414 | 514 | 1298 | 656 | 456 | 1255 | 632 |
| Arrive On Green | 0.15 | 0.25 | 0.25 | 0.16 | 0.26 | 0.26 | 0.10 | 0.17 | 0.17 | 0.09 | 0.16 | 0.16 |
| Sat Flow, veh/h | 3456 | 5106 | 1585 | 3456 | 5106 | 1585 | 3456 | 5106 | 1585 | 3456 | 5106 | 1585 |
| Grp Volume(v), veh/h | 446 | 325 | 326 | 470 | 139 | 125 | 288 | 1075 | 614 | 246 | 965 | 263 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1702 | 1585 | 1728 | 1702 | 1585 | 1728 | 1702 | 1585 | 1728 | 1702 | 1585 |
| Q Serve(g_s), s | 15.1 | 6.1 | 23.2 | 15.9 | 2.5 | 7.6 | 9.5 | 24.4 | 30.5 | 8.2 | 21.7 | 14.9 |
| Cycle Q Clear(g_c), s | 15.1 | 6.1 | 23.2 | 15.9 | 2.5 | 7.6 | 9.5 | 24.4 | 30.5 | 8.2 | 21.7 | 14.9 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 528 | 1298 | 403 | 552 | 1333 | 414 | 514 | 1298 | 656 | 456 | 1255 | 632 |
| V/C Ratio(X) | 0.84 | 0.25 | 0.81 | 0.85 | 0.10 | 0.30 | 0.56 | 0.83 | 0.94 | 0.54 | 0.77 | 0.42 |
| Avail Cap(c_a), veh/h | 806 | 1298 | 403 | 806 | 1333 | 414 | 514 | 1298 | 656 | 456 | 1255 | 632 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.62 | 0.62 | 0.62 | 0.96 | 0.96 | 0.96 |
| Uniform Delay (d), s/veh | 49.5 | 35.6 | 42.0 | 49.0 | 33.7 | 35.6 | 50.3 | 47.3 | 36.5 | 51.2 | 46.9 | 29.0 |
| Incr Delay (d2), s/veh | 5.2 | 0.5 | 16.0 | 5.9 | 0.2 | 1.9 | 0.9 | 2.9 | 14.8 | 1.2 | 2.8 | 0.4 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 11.2 | 4.7 | 16.2 | 11.7 | 1.9 | 5.7 | 7.0 | 15.4 | 24.7 | 6.7 | 14.9 | 10.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 54.6 | 36.1 | 58.0 | 55.0 | 33.8 | 37.4 | 51.2 | 50.2 | 51.3 | 52.4 | 49.7 | 29.4 |
| LnGrp LOS | D | D | E | D | C | D | D | D | D | D | D | C |
| Approach Vol, veh/h | | 1097 | | | 734 | | | 1977 | | | 1474 | |
| Approach Delay, s/veh | | 50.1 | | | 48.0 | | | 50.7 | | | 46.5 | |
| Approach LOS | | D | | | D | | | D | | | D | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 23.3 | 37.8 | 21.8 | 37.0 | 24.2 | 37.0 | 20.8 | 38.0 |
| Change Period (Y+Rc), s | 5.0 | 6.5 | 4.0 | 7.5 | 5.0 | 6.5 | 5.0 | 7.5 |
| Max Green Setting (Gmax), s | 28.0 | 30.5 | 9.0 | 29.5 | 28.0 | 30.5 | 7.0 | 30.5 |
| Max Q Clear Time (g_c+I1), s | 17.1 | 9.6 | 11.5 | 23.7 | 17.9 | 25.2 | 10.2 | 32.5 |
| Green Ext Time (p_c), s | 1.3 | 1.2 | 0.0 | 3.5 | 1.3 | 1.6 | 0.0 | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 49.0 |
| HCM 7th LOS | D |

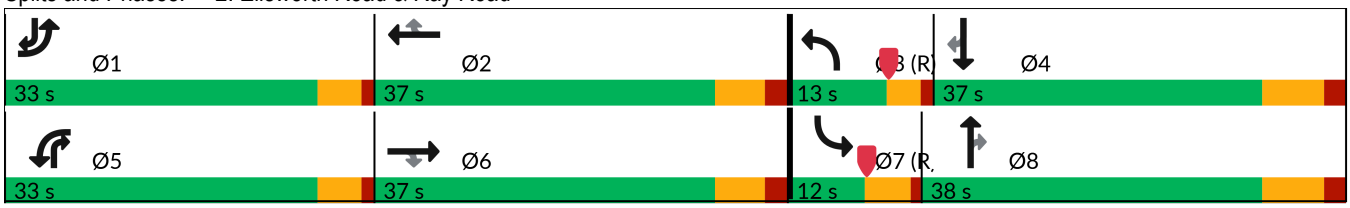
**Notes**

User approved pedestrian interval to be less than phase max green.

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | EBL | WBT | NBL | SBT | WBL | EBT | SBL | NBT |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | None | Max | C-Max | None | None | Max | C-Max | None |
| Maximum Split (s) | 33 | 37 | 13 | 37 | 33 | 37 | 12 | 38 |
| Maximum Split (%) | 27.5% | 30.8% | 10.8% | 30.8% | 27.5% | 30.8% | 10.0% | 31.7% |
| Minimum Split (s) | 10 | 34.5 | 12 | 37.5 | 10 | 35.5 | 12 | 37.5 |
| Yellow Time (s) | 4 | 4.5 | 3 | 5.5 | 4 | 4.5 | 4 | 5.5 |
| All-Red Time (s) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| Minimum Initial (s) | 5 | 10 | 5 | 15 | 5 | 10 | 5 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 4 | | 4 | | 4 | | 4 |
| Flash Don't Walk (s) | | 24 | | 26 | | 25 | | 26 |
| Dual Entry | No | Yes | No | Yes | No | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 59.5 | 92.5 | 9.5 | 22.5 | 59.5 | 92.5 | 9.5 | 21.5 |
| End Time (s) | 92.5 | 9.5 | 22.5 | 59.5 | 92.5 | 9.5 | 21.5 | 59.5 |
| Yield/Force Off (s) | 87.5 | 3 | 18.5 | 52 | 87.5 | 3 | 16.5 | 52 |
| Yield/Force Off 170(s) | 87.5 | 99 | 18.5 | 26 | 87.5 | 98 | 16.5 | 26 |
| Local Start Time (s) | 43 | 76 | 113 | 6 | 43 | 76 | 113 | 5 |
| Local Yield (s) | 71 | 106.5 | 2 | 35.5 | 71 | 106.5 | 0 | 35.5 |
| Local Yield 170(s) | 71 | 82.5 | 2 | 9.5 | 71 | 81.5 | 0 | 9.5 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 95 |
| Offset: 16.5 (14%), Referenced to phase 3:NBL and 7:SBL, Start of Yellow | |

Splits and Phases: 2: Ellsworth Road & Ray Road



| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 303 | 162 | 1668 | 336 | 191 | 1423 |
| Future Volume (veh/h) | 303 | 162 | 1668 | 336 | 191 | 1423 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 329 | 176 | 1813 | 365 | 208 | 1547 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 878 | 403 | 2404 | 746 | 403 | 3213 |
| Arrive On Green | 0.25 | 0.25 | 0.16 | 0.16 | 0.12 | 0.63 |
| Sat Flow, veh/h | 3456 | 1585 | 5274 | 1585 | 3456 | 5274 |
| Grp Volume(v), veh/h | 329 | 176 | 1813 | 365 | 208 | 1547 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1585 | 1702 | 1585 | 1728 | 1702 |
| Q Serve(g_s), s | 9.4 | 11.2 | 40.8 | 25.3 | 6.8 | 19.3 |
| Cycle Q Clear(g_c), s | 9.4 | 11.2 | 40.8 | 25.3 | 6.8 | 19.3 |
| Prop In Lane | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Lane Grp Cap(c), veh/h | 878 | 403 | 2404 | 746 | 403 | 3213 |
| V/C Ratio(X) | 0.37 | 0.44 | 0.75 | 0.49 | 0.52 | 0.48 |
| Avail Cap(c_a), veh/h | 878 | 403 | 2404 | 746 | 403 | 3213 |
| HCM Platoon Ratio | 1.00 | 1.00 | 0.33 | 0.33 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 0.86 | 0.86 | 0.61 | 0.61 |
| Uniform Delay (d), s/veh | 36.9 | 37.5 | 44.0 | 37.5 | 49.8 | 11.8 |
| Incr Delay (d2), s/veh | 1.2 | 3.4 | 1.9 | 2.0 | 2.9 | 0.3 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 7.5 | 8.3 | 25.7 | 16.2 | 5.2 | 9.7 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 38.1 | 41.0 | 46.0 | 39.5 | 52.7 | 12.2 |
| LnGrp LOS | D | D | D | D | D | B |
| Approach Vol, veh/h | 505 | | 2178 | | | 1755 |
| Approach Delay, s/veh | 39.1 | | 44.9 | | | 17.0 |
| Approach LOS | D | | D | | | B |

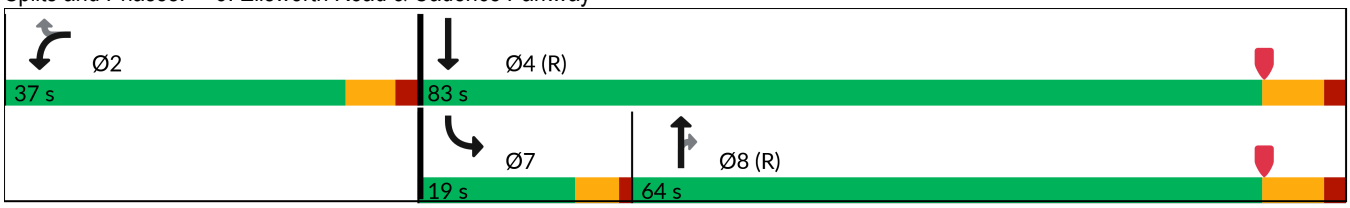
| Timer - Assigned Phs | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 37.0 | 83.0 | 19.0 | 64.0 |
| Change Period (Y+Rc), s | 6.5 | 7.5 | 5.0 | 7.5 |
| Max Green Setting (Gmax), s | 30.5 | 75.5 | 14.0 | 56.5 |
| Max Q Clear Time (g_c+I1), s | 13.2 | 21.3 | 8.8 | 42.8 |
| Green Ext Time (p_c), s | 1.7 | 14.9 | 0.3 | 10.9 |

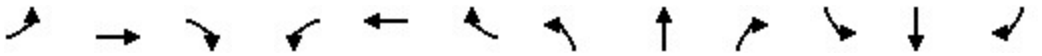
| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 33.2 |
| HCM 7th LOS | C |

| Phase Number | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Movement | WBL | SBT | SBL | NBT |
| Lead/Lag | | | Lead | Lag |
| Lead-Lag Optimize | | | Yes | Yes |
| Recall Mode | Max | C-Max | Max | C-Max |
| Maximum Split (s) | 37 | 83 | 19 | 64 |
| Maximum Split (%) | 30.8% | 69.2% | 15.8% | 53.3% |
| Minimum Split (s) | 35.5 | 25.5 | 13 | 32.5 |
| Yellow Time (s) | 4.5 | 5.5 | 4 | 5.5 |
| All-Red Time (s) | 2 | 2 | 1 | 2 |
| Minimum Initial (s) | 10 | 15 | 5 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | 4 | | | 7 |
| Flash Don't Walk (s) | 25 | | | 18 |
| Dual Entry | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 119 | 36 | 36 | 55 |
| End Time (s) | 36 | 119 | 55 | 119 |
| Yield/Force Off (s) | 29.5 | 111.5 | 50 | 111.5 |
| Yield/Force Off 170(s) | 4.5 | 111.5 | 50 | 93.5 |
| Local Start Time (s) | 7.5 | 44.5 | 44.5 | 63.5 |
| Local Yield (s) | 38 | 0 | 58.5 | 0 |
| Local Yield 170(s) | 13 | 0 | 58.5 | 102 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 85 |
| Offset: 111.5 (93%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow | |

Splits and Phases: 3: Ellsworth Road & Cadence Parkway





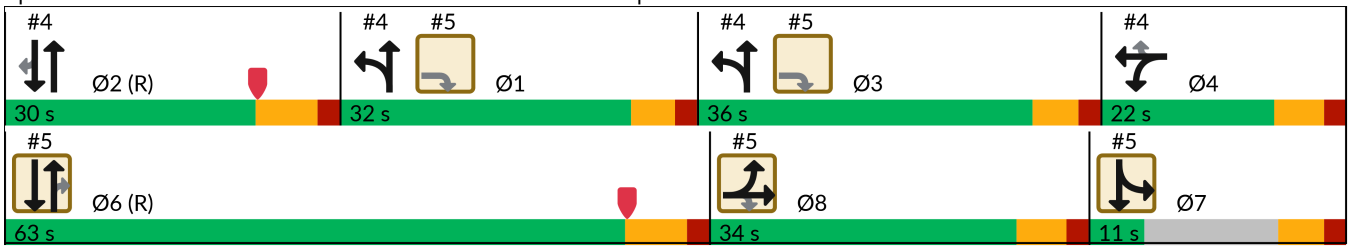
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 0 | 0 | 0 | 45 | 0 | 108 | 2567 | 1910 | 0 | 0 | 1096 | 609 |
| Future Volume (vph) | 0 | 0 | 0 | 45 | 0 | 108 | 2567 | 1910 | 0 | 0 | 1096 | 609 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | | 0 | 350 | | 350 | 525 | | 0 | 290 | | 285 |
| Storage Lanes | 0 | | 0 | 1 | | 1 | 0 | | 0 | 0 | | 2 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 0.91 | 0.86 | 0.91 | 0.97 | 0.91 | 1.00 | 1.00 | 0.86 | 0.88 |
| Frt | | | | | 0.874 | 0.850 | | | | | | 0.850 |
| Flt Protected | | | | 0.950 | 0.992 | | 0.950 | | | | | |
| Satd. Flow (prot) | 0 | 0 | 0 | 1610 | 2778 | 1441 | 3433 | 5085 | 0 | 0 | 6408 | 2787 |
| Flt Permitted | | | | 0.950 | 0.992 | | 0.950 | | | | | |
| Satd. Flow (perm) | 0 | 0 | 0 | 1610 | 2778 | 1441 | 3433 | 5085 | 0 | 0 | 6408 | 2787 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | | | 155 | 155 | | | | | | 432 |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 841 | | | 605 | | | 688 | | | 624 | |
| Travel Time (s) | | 19.1 | | | 13.8 | | | 15.6 | | | 14.2 | |
| 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 |
| Adj. Flow (vph) | 0 | 0 | 0 | 49 | 0 | 117 | 2790 | 2076 | 0 | 0 | 1191 | 662 |
| Shared Lane Traffic (%) | | | | 22% | | 50% | | | | | | |
| Lane Group Flow (vph) | 0 | 0 | 0 | 38 | 70 | 58 | 2790 | 2076 | 0 | 0 | 1191 | 662 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 24 | | | 24 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | | | | 1 | 2 | 1 | 1 | 2 | | | 2 | 1 |
| Detector Template | | | | Left | Thru | Right | Left | Thru | | | Thru | Right |
| Leading Detector (ft) | | | | 20 | 100 | 20 | 20 | 100 | | | 100 | 20 |
| Trailing Detector (ft) | | | | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 |
| Detector 1 Position(ft) | | | | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 |
| Detector 1 Size(ft) | | | | 20 | 6 | 20 | 20 | 6 | | | 6 | 20 |
| Detector 1 Type | | | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | | Cl+Ex | Cl+Ex |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Detector 1 Queue (s) | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Detector 1 Delay (s) | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Detector 2 Position(ft) | | | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | | | | Split | NA | Perm | Prot | NA | | | NA | Perm |
| Protected Phases | | | | 4 | 4 | | 1 3 | 1 2 3 | | | 2 | |
| Permitted Phases | | | | | | 4 | | | | | | 2 |

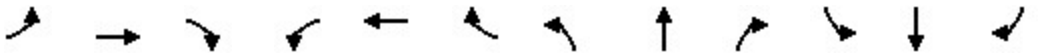
| Lane Group | Ø1 | Ø3 | Ø6 | Ø7 | Ø8 |
|---|---|---|---|---|---|
| Lane Configurations | | | | | |
| Traffic Volume (vph) | | | | | |
| Future Volume (vph) | | | | | |
| Ideal Flow (vphpl) | | | | | |
| Storage Length (ft) | | | | | |
| Storage Lanes | | | | | |
| Taper Length (ft) | | | | | |
| Lane Util. Factor | | | | | |
| Frt | | | | | |
| Flt Protected | | | | | |
| Satd. Flow (prot) | | | | | |
| Flt Permitted | | | | | |
| Satd. Flow (perm) | | | | | |
| Right Turn on Red | | | | | |
| Satd. Flow (RTOR) | | | | | |
| Link Speed (mph) | | | | | |
| Link Distance (ft) | | | | | |
| Travel Time (s) | | | | | |
| Peak Hour Factor | | | | | |
| Adj. Flow (vph) | | | | | |
| Shared Lane Traffic (%) | | | | | |
| Lane Group Flow (vph) | | | | | |
| Enter Blocked Intersection | | | | | |
| Lane Alignment | | | | | |
| Median Width(ft) | | | | | |
| Link Offset(ft) | | | | | |
| Crosswalk Width(ft) | | | | | |
| Two way Left Turn Lane | | | | | |
| Headway Factor | | | | | |
| Turning Speed (mph) | | | | | |
| Number of Detectors | | | | | |
| Detector Template | | | | | |
| Leading Detector (ft) | | | | | |
| Trailing Detector (ft) | | | | | |
| Detector 1 Position(ft) | | | | | |
| Detector 1 Size(ft) | | | | | |
| Detector 1 Type | | | | | |
| Detector 1 Channel | | | | | |
| Detector 1 Extend (s) | | | | | |
| Detector 1 Queue (s) | | | | | |
| Detector 1 Delay (s) | | | | | |
| Detector 2 Position(ft) | | | | | |
| Detector 2 Size(ft) | | | | | |
| Detector 2 Type | | | | | |
| Detector 2 Channel | | | | | |
| Detector 2 Extend (s) | | | | | |
| Turn Type | | | | | |
| Protected Phases | 1 | 3 | 6 | 7 | 8 |
| Permitted Phases | | | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | | | | 4 | 4 | 4 | 1 3 | 1 2 3 | | | 2 | 2 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | | | | 10.0 | 10.0 | 10.0 | | | | | 15.0 | 15.0 |
| Minimum Split (s) | | | | 48.5 | 48.5 | 48.5 | | | | | 25.5 | 25.5 |
| Total Split (s) | | | | 22.0 | 22.0 | 22.0 | | | | | 30.0 | 30.0 |
| Total Split (%) | | | | 18.3% | 18.3% | 18.3% | | | | | 25.0% | 25.0% |
| Maximum Green (s) | | | | 15.5 | 15.5 | 15.5 | | | | | 22.5 | 22.5 |
| Yellow Time (s) | | | | 4.5 | 4.5 | 4.5 | | | | | 5.5 | 5.5 |
| All-Red Time (s) | | | | 2.0 | 2.0 | 2.0 | | | | | 2.0 | 2.0 |
| Lost Time Adjust (s) | | | | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 |
| Total Lost Time (s) | | | | 6.5 | 6.5 | 6.5 | | | | | 7.5 | 7.5 |
| Lead/Lag | | | | Lag | Lag | Lag | | | | | Lead | Lead |
| Lead-Lag Optimize? | | | | Yes | Yes | Yes | | | | | Yes | Yes |
| Vehicle Extension (s) | | | | 3.0 | 3.0 | 3.0 | | | | | 3.0 | 3.0 |
| Recall Mode | | | | None | None | None | | | | | C-Max | C-Max |
| Walk Time (s) | | | | 4.0 | 4.0 | 4.0 | | | | | 4.0 | 4.0 |
| Flash Don't Walk (s) | | | | 38.0 | 38.0 | 38.0 | | | | | 13.0 | 13.0 |
| Pedestrian Calls (#/hr) | | | | 0 | 0 | 0 | | | | | 0 | 0 |
| Act Effct Green (s) | | | | 14.4 | 14.4 | 14.4 | 66.4 | 97.6 | | | 22.5 | 22.5 |
| Actuated g/C Ratio | | | | 0.12 | 0.12 | 0.12 | 0.55 | 0.81 | | | 0.19 | 0.19 |
| v/c Ratio | | | | 0.20 | 0.15 | 0.19 | 1.47 | 0.50 | | | 0.99 | 0.76 |
| Control Delay (s/veh) | | | | 49.5 | 0.7 | 1.3 | 233.6 | 1.3 | | | 73.9 | 32.3 |
| Queue Delay | | | | 0.0 | 0.0 | 0.0 | 0.3 | 0.2 | | | 0.0 | 0.0 |
| Total Delay (s/veh) | | | | 49.5 | 0.7 | 1.4 | 233.8 | 1.6 | | | 73.9 | 32.3 |
| LOS | | | | D | A | A | F | A | | | E | C |
| Approach Delay (s/veh) | | | | | 12.1 | | | 134.7 | | | 59.0 | |
| Approach LOS | | | | | B | | | F | | | E | |

| Intersection Summary | |
|---|---|
| Area Type: | Other |
| Cycle Length: 120 | |
| Actuated Cycle Length: 120 | |
| Offset: 20 (17%), Referenced to phase 2:NBSB and 6:, Start of Yellow | |
| Natural Cycle: 150 | |
| Control Type: Actuated-Coordinated | |
| Maximum v/c Ratio: 1.66 | |
| Intersection Signal Delay (s/veh): 111.4 | Intersection LOS: F |
| Intersection Capacity Utilization 119.5% | ICU Level of Service H |
| Analysis Period (min) 15 | |

Splits and Phases: 4: Ellsworth Road & SR24 Westbound Ramps





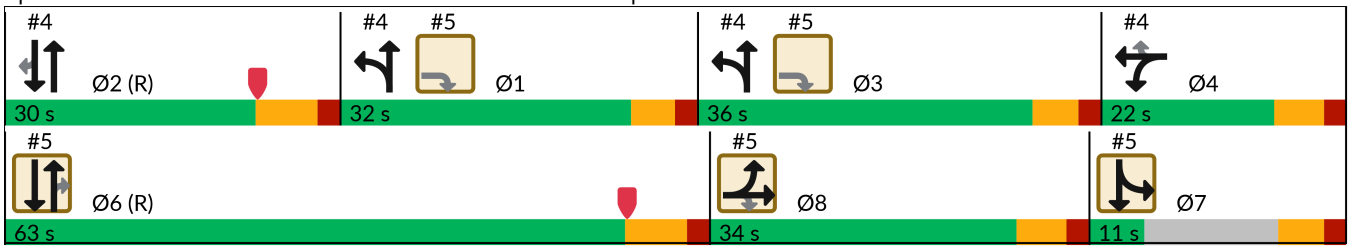
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 640 | 2 | 2495 | 0 | 0 | 0 | 0 | 3884 | 127 | 122 | 1035 | 0 |
| Future Volume (vph) | 640 | 2 | 2495 | 0 | 0 | 0 | 0 | 3884 | 127 | 122 | 1035 | 0 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 350 | | 350 | 0 | | 0 | 300 | | 300 | 550 | | 0 |
| Storage Lanes | 1 | | 2 | 0 | | 0 | 2 | | 1 | 0 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 0.95 | 0.95 | 0.88 | 1.00 | 1.00 | 1.00 | 1.00 | 0.81 | 1.00 | 0.97 | 0.91 | 1.00 |
| Frt | | | 0.850 | | | | | | 0.850 | | | |
| Flt Protected | 0.950 | 0.953 | | | | | | | | 0.950 | | |
| Satd. Flow (prot) | 1681 | 1686 | 2787 | 0 | 0 | 0 | 0 | 7544 | 1583 | 3433 | 5085 | 0 |
| Flt Permitted | 0.950 | 0.953 | | | | | | | | 0.950 | | |
| Satd. Flow (perm) | 1681 | 1686 | 2787 | 0 | 0 | 0 | 0 | 7544 | 1583 | 3433 | 5085 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 197 | | | | | | 96 | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 651 | | | 441 | | | 838 | | | 688 | |
| Travel Time (s) | | 14.8 | | | 10.0 | | | 19.0 | | | 15.6 | |
| 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 |
| Adj. Flow (vph) | 696 | 2 | 2712 | 0 | 0 | 0 | 0 | 4222 | 138 | 133 | 1125 | 0 |
| Shared Lane Traffic (%) | 50% | | | | | | | | | | | |
| Lane Group Flow (vph) | 348 | 350 | 2712 | 0 | 0 | 0 | 0 | 4222 | 138 | 133 | 1125 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 24 | | | 24 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | 1 | | | | | 2 | 1 | 1 | 2 | |
| Detector Template | Left | Thru | Right | | | | | Thru | Right | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | 20 | | | | | 100 | 20 | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | 0 | | | | | 0 | 0 | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | 0 | | | | | 0 | 0 | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | 20 | | | | | 6 | 20 | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | | | | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | | | | 0.0 | | | 0.0 | |
| Turn Type | Split | NA | custom | | | | | NA | Perm | Prot | NA | |
| Protected Phases | 8 | 8 | | | | | | 6 | | 7 | 6 7 | |
| Permitted Phases | | | 1 3 8 | | | | | | 6 | | | |

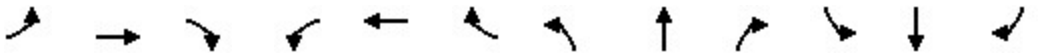
| Lane Group | Ø1 | Ø2 | Ø3 | Ø4 |
|---|---|---|---|---|
| Lane Configurations | | | | |
| Traffic Volume (vph) | | | | |
| Future Volume (vph) | | | | |
| Ideal Flow (vphpl) | | | | |
| Storage Length (ft) | | | | |
| Storage Lanes | | | | |
| Taper Length (ft) | | | | |
| Lane Util. Factor | | | | |
| Frt | | | | |
| Flt Protected | | | | |
| Satd. Flow (prot) | | | | |
| Flt Permitted | | | | |
| Satd. Flow (perm) | | | | |
| Right Turn on Red | | | | |
| Satd. Flow (RTOR) | | | | |
| Link Speed (mph) | | | | |
| Link Distance (ft) | | | | |
| Travel Time (s) | | | | |
| Peak Hour Factor | | | | |
| Adj. Flow (vph) | | | | |
| Shared Lane Traffic (%) | | | | |
| Lane Group Flow (vph) | | | | |
| Enter Blocked Intersection | | | | |
| Lane Alignment | | | | |
| Median Width(ft) | | | | |
| Link Offset(ft) | | | | |
| Crosswalk Width(ft) | | | | |
| Two way Left Turn Lane | | | | |
| Headway Factor | | | | |
| Turning Speed (mph) | | | | |
| Number of Detectors | | | | |
| Detector Template | | | | |
| Leading Detector (ft) | | | | |
| Trailing Detector (ft) | | | | |
| Detector 1 Position(ft) | | | | |
| Detector 1 Size(ft) | | | | |
| Detector 1 Type | | | | |
| Detector 1 Channel | | | | |
| Detector 1 Extend (s) | | | | |
| Detector 1 Queue (s) | | | | |
| Detector 1 Delay (s) | | | | |
| Detector 2 Position(ft) | | | | |
| Detector 2 Size(ft) | | | | |
| Detector 2 Type | | | | |
| Detector 2 Channel | | | | |
| Detector 2 Extend (s) | | | | |
| Turn Type | | | | |
| Protected Phases | 1 | 2 | 3 | 4 |
| Permitted Phases | | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | 8 | 8 | 1 3 8 | | | | | 6 | 6 | 7 | 6 7 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | | | | | 15.0 | 15.0 | 5.0 | | |
| Minimum Split (s) | 46.5 | 46.5 | | | | | | 26.5 | 26.5 | 11.0 | | |
| Total Split (s) | 34.0 | 34.0 | | | | | | 63.0 | 63.0 | 11.0 | | |
| Total Split (%) | 28.3% | 28.3% | | | | | | 52.5% | 52.5% | 9.2% | | |
| Maximum Green (s) | 27.5 | 27.5 | | | | | | 55.5 | 55.5 | 5.0 | | |
| Yellow Time (s) | 4.5 | 4.5 | | | | | | 5.5 | 5.5 | 4.0 | | |
| All-Red Time (s) | 2.0 | 2.0 | | | | | | 2.0 | 2.0 | 2.0 | | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | | | | | 0.0 | 0.0 | 0.0 | | |
| Total Lost Time (s) | 6.5 | 6.5 | | | | | | 7.5 | 7.5 | 6.0 | | |
| Lead/Lag | Lead | Lead | | | | | | | | Lag | | |
| Lead-Lag Optimize? | Yes | Yes | | | | | | | | Yes | | |
| Vehicle Extension (s) | 3.0 | 3.0 | | | | | | 3.0 | 3.0 | 3.0 | | |
| Recall Mode | None | None | | | | | | C-Max | C-Max | None | | |
| Walk Time (s) | 4.0 | 4.0 | | | | | | 4.0 | 4.0 | | | |
| Flash Don't Walk (s) | 36.0 | 36.0 | | | | | | 15.0 | 15.0 | | | |
| Pedestrian Calls (#/hr) | 0 | 0 | | | | | | 0 | 0 | | | |
| Act Effct Green (s) | 27.5 | 27.5 | 66.4 | | | | | 55.5 | 55.5 | 17.0 | 78.5 | |
| Actuated g/C Ratio | 0.23 | 0.23 | 0.55 | | | | | 0.46 | 0.46 | 0.14 | 0.65 | |
| v/c Ratio | 0.90 | 0.91 | 1.66 | | | | | 1.21 | 0.18 | 0.27 | 0.34 | |
| Control Delay (s/veh) | 72.7 | 73.1 | 324.2 | | | | | 128.4 | 12.8 | 73.6 | 2.4 | |
| Queue Delay | 2.3 | 2.4 | 0.0 | | | | | 0.4 | 0.0 | 0.0 | 0.0 | |
| Total Delay (s/veh) | 75.0 | 75.5 | 324.2 | | | | | 128.8 | 12.8 | 73.6 | 2.4 | |
| LOS | E | E | F | | | | | F | B | E | A | |
| Approach Delay (s/veh) | | 273.2 | | | | | | 125.1 | | | 9.9 | |
| Approach LOS | | F | | | | | | F | | | A | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 120 | | | |
| Actuated Cycle Length: 120 | | | |
| Offset: 20 (17%), Referenced to phase 2:NBSB and 6:, Start of Yellow | | | |
| Natural Cycle: 150 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 1.66 | | | |
| Intersection Signal Delay (s/veh): 165.0 | | Intersection LOS: F | |
| Intersection Capacity Utilization 119.5% | | ICU Level of Service H | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 5: Ellsworth Road & SR24 Eastbound Ramps





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 325 | 436 | 192 | 529 | 614 | 355 | 167 | 1937 | 214 | 709 | 2756 | 175 |
| Future Volume (veh/h) | 325 | 436 | 192 | 529 | 614 | 355 | 167 | 1937 | 214 | 709 | 2756 | 175 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 353 | 474 | 209 | 575 | 667 | 386 | 182 | 2105 | 233 | 771 | 2996 | 190 |
| 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 | 230 | 528 | 236 | 605 | 913 | 606 | 158 | 2936 | 911 | 432 | 3235 | 201 |
| Arrive On Green | 0.07 | 0.15 | 0.15 | 0.06 | 0.08 | 0.08 | 0.02 | 0.19 | 0.19 | 0.17 | 0.88 | 0.88 |
| Sat Flow, veh/h | 3456 | 3554 | 1585 | 3456 | 3554 | 1585 | 3456 | 5106 | 1585 | 3456 | 4914 | 305 |
| Grp Volume(v), veh/h | 353 | 474 | 209 | 575 | 667 | 386 | 182 | 2105 | 233 | 771 | 2056 | 1130 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1777 | 1585 | 1728 | 1777 | 1585 | 1728 | 1702 | 1585 | 1728 | 1702 | 1815 |
| Q Serve(g_s), s | 8.0 | 15.7 | 15.5 | 19.9 | 22.0 | 24.2 | 5.5 | 46.4 | 15.0 | 15.0 | 45.8 | 53.9 |
| Cycle Q Clear(g_c), s | 8.0 | 15.7 | 15.5 | 19.9 | 22.0 | 24.2 | 5.5 | 46.4 | 15.0 | 15.0 | 45.8 | 53.9 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.17 |
| Lane Grp Cap(c), veh/h | 230 | 528 | 236 | 605 | 913 | 606 | 158 | 2936 | 911 | 432 | 2241 | 1195 |
| V/C Ratio(X) | 1.53 | 0.90 | 0.89 | 0.95 | 0.73 | 0.64 | 1.15 | 0.72 | 0.26 | 1.78 | 0.92 | 0.95 |
| Avail Cap(c_a), veh/h | 230 | 533 | 238 | 605 | 913 | 606 | 158 | 2936 | 911 | 432 | 2241 | 1195 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 1.33 | 1.33 | 1.33 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.50 | 0.50 | 0.50 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 56.0 | 50.2 | 50.1 | 56.0 | 50.9 | 37.4 | 59.1 | 39.5 | 26.7 | 50.0 | 5.4 | 5.9 |
| Incr Delay (d2), s/veh | 260.2 | 17.7 | 30.4 | 25.0 | 5.1 | 5.1 | 97.3 | 0.8 | 0.3 | 362.4 | 7.4 | 15.8 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 19.6 | 13.0 | 12.8 | 16.9 | 16.6 | 16.6 | 7.4 | 26.7 | 9.4 | 44.1 | 10.5 | 14.9 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 316.2 | 67.9 | 80.4 | 81.0 | 56.0 | 42.5 | 156.4 | 40.2 | 27.1 | 412.5 | 12.8 | 21.7 |
| LnGrp LOS | F | E | F | F | E | D | F | D | C | F | B | C |
| Approach Vol, veh/h | | 1036 | | | 1628 | | | 2520 | | | 3957 | |
| Approach Delay, s/veh | | 155.0 | | | 61.6 | | | 47.4 | | | 93.2 | |
| Approach LOS | | F | | | E | | | D | | | F | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 14.0 | 37.3 | 11.0 | 87.4 | 27.0 | 24.3 | 21.0 | 77.4 |
| Change Period (Y+Rc), s | 6.0 | 6.5 | 5.5 | 7.5 | 6.0 | * 6.5 | 6.0 | 7.5 |
| Max Green Setting (Gmax), s | 8.0 | 30.0 | 5.5 | 51.0 | 21.0 | * 18 | 15.0 | 41.0 |
| Max Q Clear Time (g_c+I1), s | 10.0 | 26.2 | 7.5 | 55.9 | 21.9 | 17.7 | 17.0 | 48.4 |
| Green Ext Time (p_c), s | 0.0 | 2.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 82.0 |
| HCM 7th LOS | F |

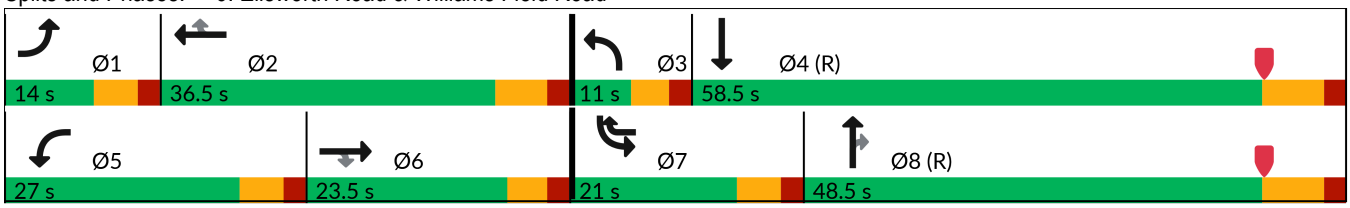
**Notes**

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | EBL | WBT | NBL | SBT | WBL | EBT | SBL | NBT |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | None | Max | None | C-Max | None | None | None | C-Max |
| Maximum Split (s) | 14 | 36.5 | 11 | 58.5 | 27 | 23.5 | 21 | 48.5 |
| Maximum Split (%) | 11.7% | 30.4% | 9.2% | 48.8% | 22.5% | 19.6% | 17.5% | 40.4% |
| Minimum Split (s) | 11 | 36.5 | 10.5 | 35.5 | 24 | 23.5 | 11 | 37.5 |
| Yellow Time (s) | 4 | 4.5 | 3.5 | 5.5 | 4 | 3.5 | 4 | 5.5 |
| All-Red Time (s) | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Minimum Initial (s) | 5 | 15 | 5 | 15 | 5 | 5 | 5 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 4 | | 7 | | 7 | | 7 |
| Flash Don't Walk (s) | | 26 | | 21 | | 11 | | 23 |
| Dual Entry | No | Yes | No | Yes | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 48.5 | 62.5 | 99 | 110 | 48.5 | 75.5 | 99 | 0 |
| End Time (s) | 62.5 | 99 | 110 | 48.5 | 75.5 | 99 | 0 | 48.5 |
| Yield/Force Off (s) | 56.5 | 92.5 | 104.5 | 41 | 69.5 | 93.5 | 114 | 41 |
| Yield/Force Off 170(s) | 56.5 | 66.5 | 104.5 | 20 | 69.5 | 82.5 | 114 | 18 |
| Local Start Time (s) | 7.5 | 21.5 | 58 | 69 | 7.5 | 34.5 | 58 | 79 |
| Local Yield (s) | 15.5 | 51.5 | 63.5 | 0 | 28.5 | 52.5 | 73 | 0 |
| Local Yield 170(s) | 15.5 | 25.5 | 63.5 | 99 | 28.5 | 41.5 | 73 | 97 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 150 |
| Offset: 41 (34%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow | |

Splits and Phases: 6: Ellsworth Road & Williams Field Road



| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 48 | 20 | 2247 | 278 | 32 | 3429 |
| Future Volume (veh/h) | 48 | 20 | 2247 | 278 | 32 | 3429 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 52 | 22 | 2442 | 302 | 35 | 3727 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 861 | 383 | 2938 | 912 | 99 | 3298 |
| Arrive On Green | 0.24 | 0.24 | 1.00 | 1.00 | 0.06 | 1.00 |
| Sat Flow, veh/h | 3563 | 1585 | 5274 | 1585 | 3456 | 5274 |
| Grp Volume(v), veh/h | 52 | 22 | 2442 | 302 | 35 | 3727 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1585 | 1702 | 1585 | 1728 | 1702 |
| Q Serve(g_s), s | 1.3 | 1.3 | 0.0 | 0.0 | 1.2 | 0.0 |
| Cycle Q Clear(g_c), s | 1.3 | 1.3 | 0.0 | 0.0 | 1.2 | 0.0 |
| Prop In Lane | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Lane Grp Cap(c), veh/h | 861 | 383 | 2938 | 912 | 99 | 3298 |
| V/C Ratio(X) | 0.06 | 0.06 | 0.83 | 0.33 | 0.35 | 1.13 |
| Avail Cap(c_a), veh/h | 861 | 383 | 2938 | 912 | 144 | 3298 |
| HCM Platoon Ratio | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 0.15 | 0.15 | 0.09 | 0.09 |
| Uniform Delay (d), s/veh | 35.0 | 35.0 | 0.0 | 0.0 | 55.5 | 0.0 |
| Incr Delay (d2), s/veh | 0.1 | 0.3 | 0.4 | 0.1 | 0.2 | 59.0 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 1.1 | 1.0 | 0.2 | 0.1 | 0.8 | 22.5 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 35.1 | 35.3 | 0.4 | 0.1 | 55.7 | 59.0 |
| LnGrp LOS | D | D | A | A | E | F |
| Approach Vol, veh/h | 74 | | 2744 | | | 3762 |
| Approach Delay, s/veh | 35.2 | | 0.4 | | | 59.0 |
| Approach LOS | D | | A | | | E |

| Timer - Assigned Phs | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 35.0 | 85.0 | 8.4 | 76.6 |
| Change Period (Y+Rc), s | 6.0 | 7.5 | 5.0 | 7.5 |
| Max Green Setting (Gmax), s | 29.0 | 77.5 | 5.0 | 67.5 |
| Max Q Clear Time (g_c+I1), s | 3.3 | 2.0 | 3.2 | 2.0 |
| Green Ext Time (p_c), s | 0.2 | 71.2 | 0.0 | 40.5 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 34.3 |
| HCM 7th LOS | C |

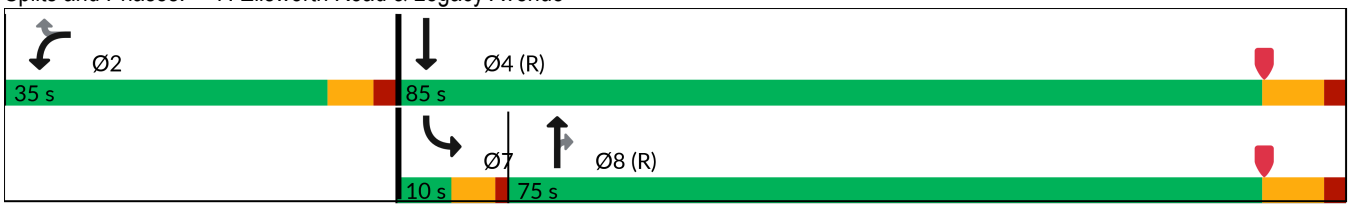
**Notes**

User approved volume balancing among the lanes for turning movement.

| Phase Number | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Movement | WBL | SBT | SBL | NBT |
| Lead/Lag | | | Lead | Lag |
| Lead-Lag Optimize | | | Yes | Yes |
| Recall Mode | Max | C-Max | None | C-Max |
| Maximum Split (s) | 35 | 85 | 10 | 75 |
| Maximum Split (%) | 29.2% | 70.8% | 8.3% | 62.5% |
| Minimum Split (s) | 35 | 39.5 | 10 | 26.5 |
| Yellow Time (s) | 4 | 5.5 | 4 | 5.5 |
| All-Red Time (s) | 2 | 2 | 1 | 2 |
| Minimum Initial (s) | 10 | 15 | 5 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | 4 | 4 | | 7 |
| Flash Don't Walk (s) | 25 | 28 | | 12 |
| Dual Entry | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 7.5 | 42.5 | 42.5 | 52.5 |
| End Time (s) | 42.5 | 7.5 | 52.5 | 7.5 |
| Yield/Force Off (s) | 36.5 | 0 | 47.5 | 0 |
| Yield/Force Off 170(s) | 11.5 | 92 | 47.5 | 108 |
| Local Start Time (s) | 7.5 | 42.5 | 42.5 | 52.5 |
| Local Yield (s) | 36.5 | 0 | 47.5 | 0 |
| Local Yield 170(s) | 11.5 | 92 | 47.5 | 108 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 150 |
| Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow | |

Splits and Phases: 7: Ellsworth Road & Legacy Avenue



| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 69 | 153 | 2429 | 67 | 394 | 3101 |
| Future Volume (veh/h) | 69 | 153 | 2429 | 67 | 394 | 3101 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 75 | 166 | 2640 | 73 | 428 | 3371 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 238 | 211 | 2638 | 819 | 409 | 3830 |
| Arrive On Green | 0.13 | 0.13 | 0.52 | 0.52 | 0.13 | 0.50 |
| Sat Flow, veh/h | 1781 | 1585 | 5274 | 1585 | 1781 | 5274 |
| Grp Volume(v), veh/h | 75 | 166 | 2640 | 73 | 428 | 3371 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1585 | 1702 | 1585 | 1781 | 1702 |
| Q Serve(g_s), s | 4.6 | 12.2 | 62.0 | 2.8 | 23.5 | 70.7 |
| Cycle Q Clear(g_c), s | 4.6 | 12.2 | 62.0 | 2.8 | 23.5 | 70.7 |
| Prop In Lane | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Lane Grp Cap(c), veh/h | 238 | 211 | 2638 | 819 | 409 | 3830 |
| V/C Ratio(X) | 0.32 | 0.79 | 1.00 | 0.09 | 1.05 | 0.88 |
| Avail Cap(c_a), veh/h | 238 | 211 | 2638 | 819 | 409 | 3830 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 0.67 | 0.67 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 0.09 | 0.09 |
| Uniform Delay (d), s/veh | 47.0 | 50.3 | 29.0 | 14.7 | 45.6 | 25.0 |
| Incr Delay (d2), s/veh | 3.5 | 24.8 | 17.7 | 0.2 | 27.8 | 0.3 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 4.1 | 10.4 | 37.1 | 1.9 | 18.0 | 32.3 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 50.5 | 75.1 | 46.7 | 14.9 | 73.4 | 25.4 |
| LnGrp LOS | D | E | F | B | F | C |
| Approach Vol, veh/h | 241 | | 2713 | | | 3799 |
| Approach Delay, s/veh | 67.5 | | 45.8 | | | 30.8 |
| Approach LOS | E | | D | | | C |

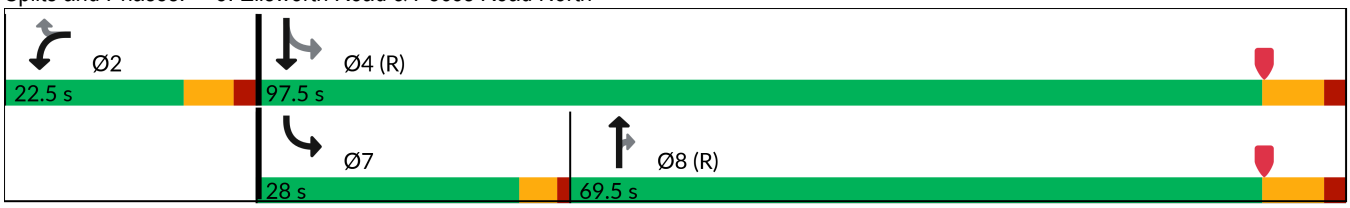
| Timer - Assigned Phs | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 22.5 | 97.5 | 28.0 | 69.5 |
| Change Period (Y+Rc), s | 6.5 | 7.5 | 4.5 | 7.5 |
| Max Green Setting (Gmax), s | 16.0 | 90.0 | 23.5 | 62.0 |
| Max Q Clear Time (g_c+I1), s | 14.2 | 72.7 | 25.5 | 64.0 |
| Green Ext Time (p_c), s | 0.1 | 17.0 | 0.0 | 0.0 |

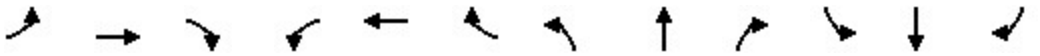
| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 38.1 |
| HCM 7th LOS | D |

| Phase Number | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Movement | WBL | SBTL | SBL | NBT |
| Lead/Lag | | | Lead | Lag |
| Lead-Lag Optimize | | | Yes | Yes |
| Recall Mode | Max | C-Max | None | C-Max |
| Maximum Split (s) | 22.5 | 97.5 | 28 | 69.5 |
| Maximum Split (%) | 18.8% | 81.3% | 23.3% | 57.9% |
| Minimum Split (s) | 22.5 | 22.5 | 9.5 | 22.5 |
| Yellow Time (s) | 4.5 | 5.5 | 3.5 | 5.5 |
| All-Red Time (s) | 2 | 2 | 1 | 2 |
| Minimum Initial (s) | 5 | 15 | 5 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | | | | |
| Flash Don't Walk (s) | | | | |
| Dual Entry | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 7.5 | 30 | 30 | 58 |
| End Time (s) | 30 | 7.5 | 58 | 7.5 |
| Yield/Force Off (s) | 23.5 | 0 | 53.5 | 0 |
| Yield/Force Off 170(s) | 23.5 | 0 | 53.5 | 0 |
| Local Start Time (s) | 7.5 | 30 | 30 | 58 |
| Local Yield (s) | 23.5 | 0 | 53.5 | 0 |
| Local Yield 170(s) | 23.5 | 0 | 53.5 | 0 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 130 |
| Offset: 0 (0%), Referenced to phase 4:SBTL and 8:NBT, Start of Yellow | |

Splits and Phases: 8: Ellsworth Road & Pecos Road North





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 133 | 1083 | 101 | 142 | 946 | 44 | 50 | 11 | 18 | 264 | 8 | 487 |
| Future Volume (veh/h) | 133 | 1083 | 101 | 142 | 946 | 44 | 50 | 11 | 18 | 264 | 8 | 487 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 145 | 1177 | 110 | 154 | 1028 | 48 | 54 | 12 | 20 | 287 | 9 | 529 |
| 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 | 277 | 1574 | 489 | 346 | 1716 | 533 | 144 | 181 | 302 | 667 | 10 | 586 |
| Arrive On Green | 0.14 | 0.62 | 0.62 | 0.10 | 0.34 | 0.34 | 0.04 | 0.29 | 0.29 | 0.13 | 0.38 | 0.38 |
| Sat Flow, veh/h | 1781 | 5106 | 1585 | 3456 | 5106 | 1585 | 3456 | 630 | 1051 | 1781 | 27 | 1563 |
| Grp Volume(v), veh/h | 145 | 1177 | 110 | 154 | 1028 | 48 | 54 | 0 | 32 | 287 | 0 | 538 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1702 | 1585 | 1728 | 1702 | 1585 | 1728 | 0 | 1681 | 1781 | 0 | 1589 |
| Q Serve(g_s), s | 6.7 | 19.7 | 3.7 | 5.0 | 20.1 | 2.5 | 1.8 | 0.0 | 1.7 | 13.1 | 0.0 | 38.4 |
| Cycle Q Clear(g_c), s | 6.7 | 19.7 | 3.7 | 5.0 | 20.1 | 2.5 | 1.8 | 0.0 | 1.7 | 13.1 | 0.0 | 38.4 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.63 | 1.00 | | 0.98 |
| Lane Grp Cap(c), veh/h | 277 | 1574 | 489 | 346 | 1716 | 533 | 144 | 0 | 484 | 667 | 0 | 596 |
| V/C Ratio(X) | 0.52 | 0.75 | 0.23 | 0.45 | 0.60 | 0.09 | 0.38 | 0.00 | 0.07 | 0.43 | 0.00 | 0.90 |
| Avail Cap(c_a), veh/h | 312 | 1574 | 489 | 346 | 1716 | 533 | 418 | 0 | 548 | 740 | 0 | 596 |
| HCM Platoon Ratio | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 24.6 | 19.7 | 16.6 | 50.9 | 33.1 | 27.3 | 56.0 | 0.0 | 31.0 | 23.0 | 0.0 | 35.4 |
| Incr Delay (d2), s/veh | 1.5 | 3.3 | 1.1 | 4.1 | 1.6 | 0.3 | 1.6 | 0.0 | 0.1 | 0.4 | 0.0 | 19.4 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 4.6 | 9.1 | 2.6 | 4.2 | 12.9 | 1.8 | 1.5 | 0.0 | 1.2 | 9.4 | 0.0 | 24.7 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 26.1 | 23.0 | 17.7 | 55.0 | 34.7 | 27.6 | 57.6 | 0.0 | 31.1 | 23.5 | 0.0 | 54.9 |
| LnGrp LOS | C | C | B | D | C | C | E | | C | C | | D |
| Approach Vol, veh/h | | 1432 | | | 1230 | | | 86 | | | 825 | |
| Approach Delay, s/veh | | 22.9 | | | 36.9 | | | 47.7 | | | 43.9 | |
| Approach LOS | | C | | | D | | | D | | | D | |

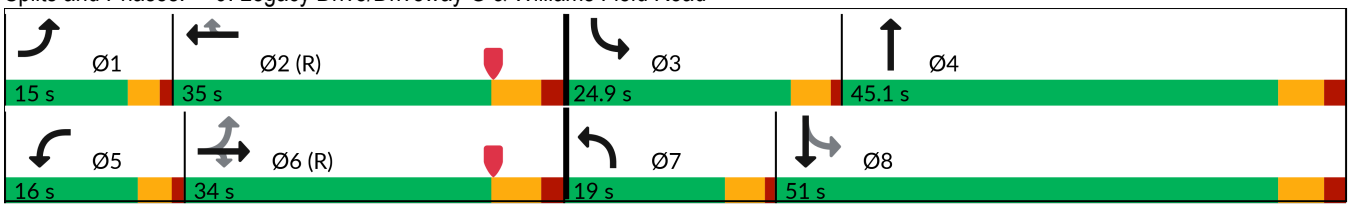
| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 12.7 | 46.8 | 20.0 | 40.5 | 16.0 | 43.5 | 9.5 | 51.0 |
| Change Period (Y+Rc), s | 4.0 | 6.5 | 4.5 | 6.0 | 4.0 | 6.5 | 4.5 | 6.0 |
| Max Green Setting (Gmax), s | 11.0 | 28.5 | 20.4 | 39.1 | 12.0 | 27.5 | 14.5 | 45.0 |
| Max Q Clear Time (g_c+I1), s | 8.7 | 22.1 | 15.1 | 3.7 | 7.0 | 21.7 | 3.8 | 40.4 |
| Green Ext Time (p_c), s | 0.1 | 3.4 | 0.4 | 0.1 | 0.2 | 3.6 | 0.1 | 1.6 |

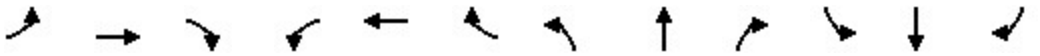
| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 33.2 |
| HCM 7th LOS | C |

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | EBL | WBT | SBL | NBT | WBL | EBTL | NBL | SBTL |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | None | C-Max | None | None | Max | C-Max | None | Max |
| Maximum Split (s) | 15 | 35 | 24.9 | 45.1 | 16 | 34 | 19 | 51 |
| Maximum Split (%) | 12.5% | 29.2% | 20.8% | 37.6% | 13.3% | 28.3% | 15.8% | 42.5% |
| Minimum Split (s) | 9.5 | 24.5 | 9.5 | 24 | 12.5 | 24.5 | 24 | 24 |
| Yellow Time (s) | 3 | 4.5 | 3.5 | 4 | 3 | 4.5 | 3.5 | 4 |
| All-Red Time (s) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| Minimum Initial (s) | 5 | 15 | 5 | 10 | 5 | 15 | 5 | 10 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | | | | | 7 | | |
| Flash Don't Walk (s) | | | | | | 11 | | |
| Dual Entry | No | Yes | No | Yes | No | Yes | Yes | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 76.5 | 91.5 | 6.5 | 31.4 | 76.5 | 92.5 | 6.5 | 25.5 |
| End Time (s) | 91.5 | 6.5 | 31.4 | 76.5 | 92.5 | 6.5 | 25.5 | 76.5 |
| Yield/Force Off (s) | 87.5 | 0 | 26.9 | 70.5 | 88.5 | 0 | 21 | 70.5 |
| Yield/Force Off 170(s) | 87.5 | 0 | 26.9 | 70.5 | 88.5 | 109 | 21 | 70.5 |
| Local Start Time (s) | 76.5 | 91.5 | 6.5 | 31.4 | 76.5 | 92.5 | 6.5 | 25.5 |
| Local Yield (s) | 87.5 | 0 | 26.9 | 70.5 | 88.5 | 0 | 21 | 70.5 |
| Local Yield 170(s) | 87.5 | 0 | 26.9 | 70.5 | 88.5 | 109 | 21 | 70.5 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 85 |
| Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBTL, Start of Yellow | |

Splits and Phases: 9: Legacy Drive/Driveway G & Williams Field Road





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 78 | 947 | 119 | 295 | 797 | 200 | 228 | 46 | 277 | 531 | 169 | 214 |
| Future Volume (veh/h) | 78 | 947 | 119 | 295 | 797 | 200 | 228 | 46 | 277 | 531 | 169 | 214 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 85 | 1029 | 129 | 321 | 866 | 0 | 248 | 0 | 334 | 577 | 184 | 233 |
| 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 | 136 | 1383 | 429 | 490 | 1905 | | 333 | 0 | 1017 | 806 | 222 | 281 |
| Arrive On Green | 0.01 | 0.09 | 0.09 | 0.28 | 0.75 | 0.00 | 0.12 | 0.00 | 0.18 | 0.23 | 0.30 | 0.30 |
| Sat Flow, veh/h | 3456 | 5106 | 1585 | 3456 | 5106 | 1585 | 1781 | 0 | 3170 | 3456 | 750 | 950 |
| Grp Volume(v), veh/h | 85 | 1029 | 129 | 321 | 866 | 0 | 248 | 0 | 334 | 577 | 0 | 417 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1702 | 1585 | 1728 | 1702 | 1585 | 1781 | 0 | 1585 | 1728 | 0 | 1699 |
| Q Serve(g_s), s | 2.9 | 23.6 | 9.1 | 9.8 | 7.8 | 0.0 | 13.7 | 0.0 | 9.6 | 18.4 | 0.0 | 27.5 |
| Cycle Q Clear(g_c), s | 2.9 | 23.6 | 9.1 | 9.8 | 7.8 | 0.0 | 13.7 | 0.0 | 9.6 | 18.4 | 0.0 | 27.5 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.56 |
| Lane Grp Cap(c), veh/h | 136 | 1383 | 429 | 490 | 1905 | | 333 | 0 | 1017 | 806 | 0 | 503 |
| V/C Ratio(X) | 0.62 | 0.74 | 0.30 | 0.66 | 0.45 | | 0.75 | 0.00 | 0.33 | 0.72 | 0.00 | 0.83 |
| Avail Cap(c_a), veh/h | 317 | 1383 | 429 | 490 | 1905 | | 333 | 0 | 1017 | 806 | 0 | 503 |
| HCM Platoon Ratio | 0.33 | 0.33 | 0.33 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 0.84 | 0.84 | 0.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 58.3 | 50.6 | 44.0 | 40.4 | 10.5 | 0.0 | 35.6 | 0.0 | 30.9 | 42.3 | 0.0 | 39.4 |
| Incr Delay (d2), s/veh | 4.6 | 3.7 | 1.8 | 5.7 | 0.7 | 0.0 | 8.8 | 0.0 | 0.9 | 5.4 | 0.0 | 14.6 |
| 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(95%),veh/ln | 2.5 | 16.8 | 7.3 | 7.2 | 4.3 | 0.0 | 11.0 | 0.0 | 6.8 | 13.2 | 0.0 | 19.4 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 62.9 | 54.2 | 45.8 | 46.1 | 11.2 | 0.0 | 44.4 | 0.0 | 31.8 | 47.7 | 0.0 | 54.0 |
| LnGrp LOS | E | D | D | D | B | | D | | C | D | | D |
| Approach Vol, veh/h | | 1243 | | | 1187 | | | 582 | | | 994 | |
| Approach Delay, s/veh | | 54.0 | | | 20.6 | | | 37.2 | | | 50.4 | |
| Approach LOS | | D | | | C | | | D | | | D | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 32.0 | 28.0 | 21.0 | 39.0 | 18.0 | 42.0 | 8.7 | 51.3 |
| Change Period (Y+Rc), s | 4.0 | 6.5 | 4.0 | 6.5 | 4.0 | 6.5 | 4.0 | 6.5 |
| Max Green Setting (Gmax), s | 28.0 | 21.5 | 17.0 | 32.5 | 14.0 | 35.5 | 11.0 | 38.5 |
| Max Q Clear Time (g_c+I1), s | 20.4 | 11.6 | 11.8 | 25.6 | 15.7 | 29.5 | 4.9 | 9.8 |
| Green Ext Time (p_c), s | 1.4 | 0.9 | 0.5 | 4.0 | 0.0 | 1.4 | 0.1 | 6.9 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 40.8 |
| HCM 7th LOS | D |

**Notes**

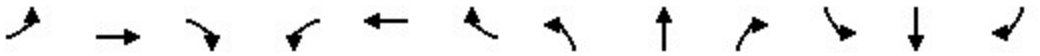
User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | SBL | NBTL | WBL | EBT | NBL | SBT | EBL | WBT |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | Max | Max | Max | C-Max | None | Max | None | C-Max |
| Maximum Split (s) | 32 | 28 | 21 | 39 | 18 | 42 | 15 | 45 |
| Maximum Split (%) | 26.7% | 23.3% | 17.5% | 32.5% | 15.0% | 35.0% | 12.5% | 37.5% |
| Minimum Split (s) | 9.5 | 24.5 | 9.5 | 24.5 | 9.5 | 24.5 | 9 | 24.5 |
| Yellow Time (s) | 3 | 4.5 | 3 | 4.5 | 3 | 4.5 | 3 | 4.5 |
| All-Red Time (s) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| Minimum Initial (s) | 5 | 10 | 5 | 15 | 5 | 10 | 5 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 7 | | 7 | | 7 | | 7 |
| Flash Don't Walk (s) | | 11 | | 11 | | 11 | | 11 |
| Dual Entry | No | Yes | No | Yes | No | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 6.5 | 38.5 | 66.5 | 87.5 | 6.5 | 24.5 | 66.5 | 81.5 |
| End Time (s) | 38.5 | 66.5 | 87.5 | 6.5 | 24.5 | 66.5 | 81.5 | 6.5 |
| Yield/Force Off (s) | 34.5 | 60 | 83.5 | 0 | 20.5 | 60 | 77.5 | 0 |
| Yield/Force Off 170(s) | 34.5 | 49 | 83.5 | 109 | 20.5 | 49 | 77.5 | 109 |
| Local Start Time (s) | 6.5 | 38.5 | 66.5 | 87.5 | 6.5 | 24.5 | 66.5 | 81.5 |
| Local Yield (s) | 34.5 | 60 | 83.5 | 0 | 20.5 | 60 | 77.5 | 0 |
| Local Yield 170(s) | 34.5 | 49 | 83.5 | 109 | 20.5 | 49 | 77.5 | 109 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 80 |
| Offset: 0 (0%), Referenced to phase 4:EBT and 8:WBT, Start of Yellow | |

Splits and Phases: 10: Gateway Main Driveway/Driveway J & Williams Field Road



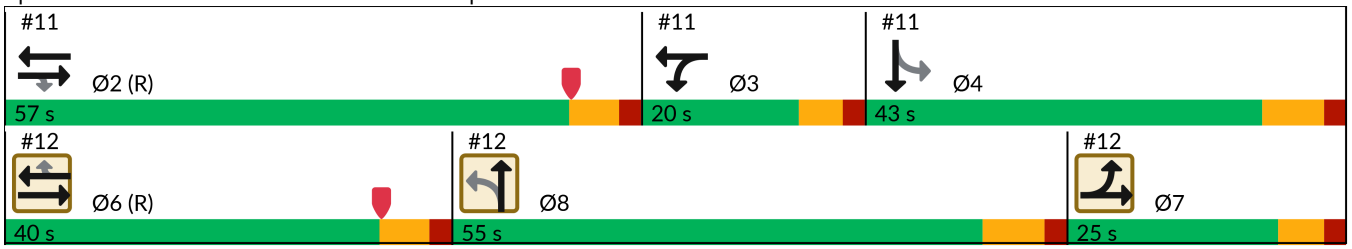
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 0 | 1064 | 633 | 59 | 980 | 0 | 0 | 0 | 0 | 473 | 0 | 330 |
| Future Volume (vph) | 0 | 1064 | 633 | 59 | 980 | 0 | 0 | 0 | 0 | 473 | 0 | 330 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 360 | | 285 | 290 | | 0 | 0 | | 0 | 400 | | 400 |
| Storage Lanes | 2 | | 1 | 0 | | 0 | 0 | | 0 | 2 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 1.00 | 0.86 | 1.00 | 0.97 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 0.91 | 0.91 | 0.95 |
| Frt | | | 0.850 | | | | | | | | 0.906 | |
| Flt Protected | | | | 0.950 | | | | | | 0.950 | 0.982 | |
| Satd. Flow (prot) | 0 | 6408 | 1583 | 3433 | 3539 | 0 | 0 | 0 | 0 | 1610 | 3016 | 0 |
| Flt Permitted | | | | 0.950 | | | | | | 0.950 | 0.982 | |
| Satd. Flow (perm) | 0 | 6408 | 1583 | 3433 | 3539 | 0 | 0 | 0 | 0 | 1610 | 3016 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 688 | | | | | | | | 145 | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 971 | | | 481 | | | 999 | | | 970 | |
| Travel Time (s) | | 22.1 | | | 10.9 | | | 22.7 | | | 22.0 | |
| 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 |
| Adj. Flow (vph) | 0 | 1157 | 688 | 64 | 1065 | 0 | 0 | 0 | 0 | 514 | 0 | 359 |
| Shared Lane Traffic (%) | | | | | | | | | | 41% | | |
| Lane Group Flow (vph) | 0 | 1157 | 688 | 64 | 1065 | 0 | 0 | 0 | 0 | 303 | 570 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 24 | | | 24 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | | 2 | 1 | 1 | 2 | | | | | 1 | 2 | |
| Detector Template | | Thru | Right | Left | Thru | | | | | Left | Thru | |
| Leading Detector (ft) | | 100 | 20 | 20 | 100 | | | | | 20 | 100 | |
| Trailing Detector (ft) | | 0 | 0 | 0 | 0 | | | | | 0 | 0 | |
| Detector 1 Position(ft) | | 0 | 0 | 0 | 0 | | | | | 0 | 0 | |
| Detector 1 Size(ft) | | 6 | 20 | 20 | 6 | | | | | 20 | 6 | |
| Detector 1 Type | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | | | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | | | | 0.0 | |
| Turn Type | | NA | Perm | Prot | NA | | | | | Perm | NA | |
| Protected Phases | | 2 | | 3 | 2 3 | | | | | | 4 | |
| Permitted Phases | | | 2 | | | | | | | 4 | | |

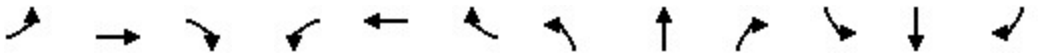
| Lane Group | Ø6 | Ø7 | Ø8 |
|---|---|---|---|
| Lane Configurations | | | |
| Traffic Volume (vph) | | | |
| Future Volume (vph) | | | |
| Ideal Flow (vphpl) | | | |
| Storage Length (ft) | | | |
| Storage Lanes | | | |
| Taper Length (ft) | | | |
| Lane Util. Factor | | | |
| Frt | | | |
| Flt Protected | | | |
| Satd. Flow (prot) | | | |
| Flt Permitted | | | |
| Satd. Flow (perm) | | | |
| Right Turn on Red | | | |
| Satd. Flow (RTOR) | | | |
| Link Speed (mph) | | | |
| Link Distance (ft) | | | |
| Travel Time (s) | | | |
| Peak Hour Factor | | | |
| Adj. Flow (vph) | | | |
| Shared Lane Traffic (%) | | | |
| Lane Group Flow (vph) | | | |
| Enter Blocked Intersection | | | |
| Lane Alignment | | | |
| Median Width(ft) | | | |
| Link Offset(ft) | | | |
| Crosswalk Width(ft) | | | |
| Two way Left Turn Lane | | | |
| Headway Factor | | | |
| Turning Speed (mph) | | | |
| Number of Detectors | | | |
| Detector Template | | | |
| Leading Detector (ft) | | | |
| Trailing Detector (ft) | | | |
| Detector 1 Position(ft) | | | |
| Detector 1 Size(ft) | | | |
| Detector 1 Type | | | |
| Detector 1 Channel | | | |
| Detector 1 Extend (s) | | | |
| Detector 1 Queue (s) | | | |
| Detector 1 Delay (s) | | | |
| Detector 2 Position(ft) | | | |
| Detector 2 Size(ft) | | | |
| Detector 2 Type | | | |
| Detector 2 Channel | | | |
| Detector 2 Extend (s) | | | |
| Turn Type | | | |
| Protected Phases | 6 | 7 | 8 |
| Permitted Phases | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | | 2 | 2 | 3 | 2 3 | | | | | 4 | 4 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | | 15.0 | 15.0 | 5.0 | | | | | | 10.0 | 10.0 | |
| Minimum Split (s) | | 25.5 | 25.5 | 11.0 | | | | | | 46.5 | 46.5 | |
| Total Split (s) | | 57.0 | 57.0 | 20.0 | | | | | | 43.0 | 43.0 | |
| Total Split (%) | | 47.5% | 47.5% | 16.7% | | | | | | 35.8% | 35.8% | |
| Maximum Green (s) | | 50.5 | 50.5 | 14.0 | | | | | | 35.5 | 35.5 | |
| Yellow Time (s) | | 4.5 | 4.5 | 4.0 | | | | | | 5.5 | 5.5 | |
| All-Red Time (s) | | 2.0 | 2.0 | 2.0 | | | | | | 2.0 | 2.0 | |
| Lost Time Adjust (s) | | 0.0 | 0.0 | 0.0 | | | | | | 0.0 | 0.0 | |
| Total Lost Time (s) | | 6.5 | 6.5 | 6.0 | | | | | | 7.5 | 7.5 | |
| Lead/Lag | | | | Lead | | | | | | Lag | Lag | |
| Lead-Lag Optimize? | | | | Yes | | | | | | Yes | Yes | |
| Vehicle Extension (s) | | 3.0 | 3.0 | 3.0 | | | | | | 3.0 | 3.0 | |
| Recall Mode | | C-Max | C-Max | None | | | | | | None | None | |
| Walk Time (s) | | 4.0 | 4.0 | | | | | | | 4.0 | 4.0 | |
| Flash Don't Walk (s) | | 15.0 | 15.0 | | | | | | | 35.0 | 35.0 | |
| Pedestrian Calls (#/hr) | | 0 | 0 | | | | | | | 0 | 0 | |
| Act Effct Green (s) | | 50.5 | 50.5 | 13.1 | 69.6 | | | | | 36.4 | 36.4 | |
| Actuated g/C Ratio | | 0.42 | 0.42 | 0.11 | 0.58 | | | | | 0.30 | 0.30 | |
| v/c Ratio | | 0.43 | 0.65 | 0.17 | 0.52 | | | | | 0.62 | 0.56 | |
| Control Delay (s/veh) | | 22.7 | 10.3 | 34.9 | 6.3 | | | | | 42.8 | 28.3 | |
| Queue Delay | | 0.0 | 0.0 | 0.0 | 0.4 | | | | | 0.3 | 0.1 | |
| Total Delay (s/veh) | | 22.7 | 10.3 | 34.9 | 6.6 | | | | | 43.1 | 28.4 | |
| LOS | | C | B | C | A | | | | | D | C | |
| Approach Delay (s/veh) | | 18.1 | | | 8.2 | | | | | | 33.5 | |
| Approach LOS | | B | | | A | | | | | | C | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 120 | | | |
| Actuated Cycle Length: 120 | | | |
| Offset: 115 (96%), Referenced to phase 2:EBWB and 6:, Start of Yellow | | | |
| Natural Cycle: 85 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.83 | | | |
| Intersection Signal Delay (s/veh): 18.7 | | Intersection LOS: B | |
| Intersection Capacity Utilization 76.3% | | ICU Level of Service D | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 11: SR24 Eastbound Ramps & Williams Field Road





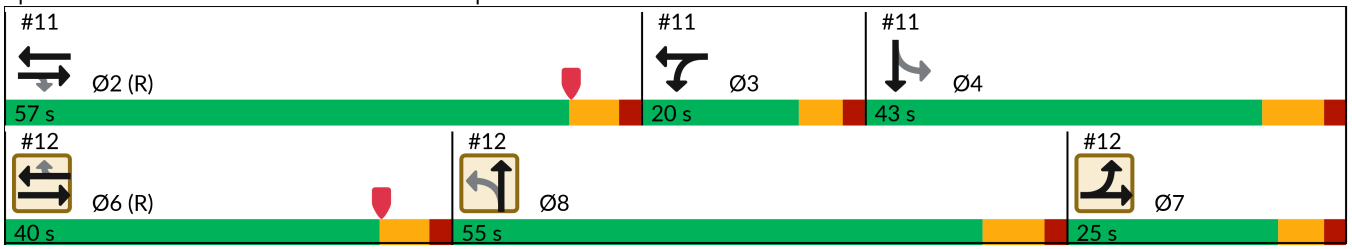
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 220 | 1318 | 0 | 0 | 639 | 548 | 398 | 0 | 14 | 0 | 0 | 0 |
| Future Volume (vph) | 220 | 1318 | 0 | 0 | 639 | 548 | 398 | 0 | 14 | 0 | 0 | 0 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 290 | | 0 | 365 | | 300 | 375 | | 375 | 0 | | 0 |
| Storage Lanes | 0 | | 0 | 2 | | 1 | 1 | | 1 | 0 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 0.97 | 0.95 | 1.00 | 1.00 | 0.86 | 1.00 | 0.91 | 0.91 | 0.95 | 1.00 | 1.00 | 1.00 |
| Frt | | | | | | 0.850 | | 0.990 | | | | |
| Flt Protected | 0.950 | | | | | | 0.950 | 0.955 | | | | |
| Satd. Flow (prot) | 3433 | 3539 | 0 | 0 | 6408 | 1583 | 1610 | 3205 | 0 | 0 | 0 | 0 |
| Flt Permitted | 0.950 | | | | | | 0.950 | 0.955 | | | | |
| Satd. Flow (perm) | 3433 | 3539 | 0 | 0 | 6408 | 1583 | 1610 | 3205 | 0 | 0 | 0 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | | | | 596 | | 100 | | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 481 | | | 1418 | | | 897 | | | 1176 | |
| Travel Time (s) | | 10.9 | | | 32.2 | | | 20.4 | | | 26.7 | |
| 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 |
| Adj. Flow (vph) | 239 | 1433 | 0 | 0 | 695 | 596 | 433 | 0 | 15 | 0 | 0 | 0 |
| Shared Lane Traffic (%) | | | | | | | 50% | | | | | |
| Lane Group Flow (vph) | 239 | 1433 | 0 | 0 | 695 | 596 | 216 | 232 | 0 | 0 | 0 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 24 | | | 24 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | | 2 | 1 | 1 | 2 | | | | |
| Detector Template | Left | Thru | | | Thru | Right | Left | Thru | | | | |
| Leading Detector (ft) | 20 | 100 | | | 100 | 20 | 20 | 100 | | | | |
| Trailing Detector (ft) | 0 | 0 | | | 0 | 0 | 0 | 0 | | | | |
| Detector 1 Position(ft) | 0 | 0 | | | 0 | 0 | 0 | 0 | | | | |
| Detector 1 Size(ft) | 20 | 6 | | | 6 | 20 | 20 | 6 | | | | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | | | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | | |
| Turn Type | Prot | NA | | | NA | Perm | Perm | NA | | | | |
| Protected Phases | 7 | 6 7 | | | 6 | | | 8 | | | | |
| Permitted Phases | | | | | | 6 | 8 | | | | | |

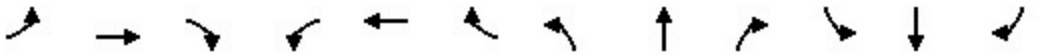
| Lane Group | Ø2 | Ø3 | Ø4 |
|---|---|---|---|
| Lane Configurations | | | |
| Traffic Volume (vph) | | | |
| Future Volume (vph) | | | |
| Ideal Flow (vphpl) | | | |
| Storage Length (ft) | | | |
| Storage Lanes | | | |
| Taper Length (ft) | | | |
| Lane Util. Factor | | | |
| Frt | | | |
| Flt Protected | | | |
| Satd. Flow (prot) | | | |
| Flt Permitted | | | |
| Satd. Flow (perm) | | | |
| Right Turn on Red | | | |
| Satd. Flow (RTOR) | | | |
| Link Speed (mph) | | | |
| Link Distance (ft) | | | |
| Travel Time (s) | | | |
| Peak Hour Factor | | | |
| Adj. Flow (vph) | | | |
| Shared Lane Traffic (%) | | | |
| Lane Group Flow (vph) | | | |
| Enter Blocked Intersection | | | |
| Lane Alignment | | | |
| Median Width(ft) | | | |
| Link Offset(ft) | | | |
| Crosswalk Width(ft) | | | |
| Two way Left Turn Lane | | | |
| Headway Factor | | | |
| Turning Speed (mph) | | | |
| Number of Detectors | | | |
| Detector Template | | | |
| Leading Detector (ft) | | | |
| Trailing Detector (ft) | | | |
| Detector 1 Position(ft) | | | |
| Detector 1 Size(ft) | | | |
| Detector 1 Type | | | |
| Detector 1 Channel | | | |
| Detector 1 Extend (s) | | | |
| Detector 1 Queue (s) | | | |
| Detector 1 Delay (s) | | | |
| Detector 2 Position(ft) | | | |
| Detector 2 Size(ft) | | | |
| Detector 2 Type | | | |
| Detector 2 Channel | | | |
| Detector 2 Extend (s) | | | |
| Turn Type | | | |
| Protected Phases | 2 | 3 | 4 |
| Permitted Phases | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | 7 | 6 7 | | | 6 | 6 | 8 | 8 | | | | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | | | | 15.0 | 15.0 | 10.0 | 10.0 | | | | |
| Minimum Split (s) | 11.0 | | | | 26.5 | 26.5 | 45.5 | 45.5 | | | | |
| Total Split (s) | 25.0 | | | | 40.0 | 40.0 | 55.0 | 55.0 | | | | |
| Total Split (%) | 20.8% | | | | 33.3% | 33.3% | 45.8% | 45.8% | | | | |
| Maximum Green (s) | 19.0 | | | | 33.5 | 33.5 | 47.5 | 47.5 | | | | |
| Yellow Time (s) | 4.0 | | | | 4.5 | 4.5 | 5.5 | 5.5 | | | | |
| All-Red Time (s) | 2.0 | | | | 2.0 | 2.0 | 2.0 | 2.0 | | | | |
| Lost Time Adjust (s) | 0.0 | | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Total Lost Time (s) | 6.0 | | | | 6.5 | 6.5 | 7.5 | 7.5 | | | | |
| Lead/Lag | Lag | | | | | | Lead | Lead | | | | |
| Lead-Lag Optimize? | Yes | | | | | | Yes | Yes | | | | |
| Vehicle Extension (s) | 3.0 | | | | 3.0 | 3.0 | 3.0 | 3.0 | | | | |
| Recall Mode | None | | | | C-Max | C-Max | Max | Max | | | | |
| Walk Time (s) | | | | | 4.0 | 4.0 | 4.0 | 4.0 | | | | |
| Flash Don't Walk (s) | | | | | 16.0 | 16.0 | 34.0 | 34.0 | | | | |
| Pedestrian Calls (#/hr) | | | | | 0 | 0 | 0 | 0 | | | | |
| Act Effct Green (s) | 19.0 | 58.5 | | | 33.5 | 33.5 | 47.5 | 47.5 | | | | |
| Actuated g/C Ratio | 0.16 | 0.49 | | | 0.28 | 0.28 | 0.40 | 0.40 | | | | |
| v/c Ratio | 0.44 | 0.83 | | | 0.39 | 0.68 | 0.34 | 0.17 | | | | |
| Control Delay (s/veh) | 53.2 | 30.9 | | | 24.6 | 8.9 | 27.2 | 13.5 | | | | |
| Queue Delay | 0.0 | 0.8 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Total Delay (s/veh) | 53.2 | 31.7 | | | 24.6 | 8.9 | 27.2 | 13.5 | | | | |
| LOS | D | C | | | C | A | C | B | | | | |
| Approach Delay (s/veh) | | 34.8 | | | 17.4 | | | 20.1 | | | | |
| Approach LOS | | C | | | B | | | C | | | | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 120 | | | |
| Actuated Cycle Length: 120 | | | |
| Offset: 115 (96%), Referenced to phase 2:EBWB and 6:, Start of Yellow | | | |
| Natural Cycle: 85 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.83 | | | |
| Intersection Signal Delay (s/veh): 26.3 | | Intersection LOS: C | |
| Intersection Capacity Utilization 76.3% | | ICU Level of Service D | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 12: SR24 Westbound Ramps & Williams Field Road





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 295 | 658 | 351 | 0 | 528 | 39 | 334 | 0 | 0 | 42 | 0 | 326 |
| Future Volume (veh/h) | 295 | 658 | 351 | 0 | 528 | 39 | 334 | 0 | 0 | 42 | 0 | 326 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 321 | 715 | 382 | 0 | 574 | 42 | 363 | 0 | 0 | 46 | 0 | 354 |
| 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 | 411 | 1558 | 695 | 192 | 933 | 416 | 605 | 1307 | 583 | 500 | 871 | 614 |
| Arrive On Green | 0.05 | 0.14 | 0.14 | 0.00 | 0.26 | 0.26 | 0.17 | 0.00 | 0.00 | 0.05 | 0.00 | 0.24 |
| Sat Flow, veh/h | 1781 | 3554 | 1585 | 1781 | 3554 | 1585 | 3456 | 3554 | 1585 | 1781 | 3554 | 1585 |
| Grp Volume(v), veh/h | 321 | 715 | 382 | 0 | 574 | 42 | 363 | 0 | 0 | 46 | 0 | 354 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1777 | 1585 | 1781 | 1777 | 1585 | 1728 | 1777 | 1585 | 1781 | 1777 | 1585 |
| Q Serve(g_s), s | 14.8 | 22.1 | 26.9 | 0.0 | 17.0 | 2.4 | 11.6 | 0.0 | 0.0 | 2.2 | 0.0 | 21.1 |
| Cycle Q Clear(g_c), s | 14.8 | 22.1 | 26.9 | 0.0 | 17.0 | 2.4 | 11.6 | 0.0 | 0.0 | 2.2 | 0.0 | 21.1 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 411 | 1558 | 695 | 192 | 933 | 416 | 605 | 1307 | 583 | 500 | 871 | 614 |
| V/C Ratio(X) | 0.78 | 0.46 | 0.55 | 0.00 | 0.62 | 0.10 | 0.60 | 0.00 | 0.00 | 0.09 | 0.00 | 0.58 |
| Avail Cap(c_a), veh/h | 454 | 1558 | 695 | 309 | 933 | 416 | 605 | 1307 | 583 | 541 | 871 | 614 |
| HCM Platoon Ratio | 0.33 | 0.33 | 0.33 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.45 | 0.45 | 0.45 | 0.00 | 0.96 | 0.96 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 30.1 | 38.3 | 40.3 | 0.0 | 38.9 | 33.5 | 45.6 | 0.0 | 0.0 | 30.4 | 0.0 | 29.0 |
| Incr Delay (d2), s/veh | 3.7 | 0.4 | 1.4 | 0.0 | 2.9 | 0.5 | 4.4 | 0.0 | 0.0 | 0.1 | 0.0 | 3.9 |
| 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(95%),veh/ln | 10.4 | 14.2 | 15.5 | 0.0 | 12.3 | 1.8 | 9.1 | 0.0 | 0.0 | 1.8 | 0.0 | 13.5 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 33.7 | 38.7 | 41.7 | 0.0 | 41.8 | 34.0 | 50.0 | 0.0 | 0.0 | 30.5 | 0.0 | 32.9 |
| LnGrp LOS | C | D | D | | D | C | D | | | C | | C |
| Approach Vol, veh/h | | 1418 | | | 616 | | | 363 | | | 400 | |
| Approach Delay, s/veh | | 38.4 | | | 41.3 | | | 50.0 | | | 32.6 | |
| Approach LOS | | D | | | D | | | D | | | C | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 21.1 | 38.0 | 25.0 | 35.9 | 0.0 | 59.1 | 10.3 | 50.6 |
| Change Period (Y+Rc), s | 4.0 | 6.5 | 4.0 | 6.5 | 4.0 | 6.5 | 4.0 | 6.5 |
| Max Green Setting (Gmax), s | 20.0 | 31.5 | 21.0 | 26.5 | 8.0 | 43.5 | 9.0 | 38.5 |
| Max Q Clear Time (g_c+I1), s | 16.8 | 19.0 | 13.6 | 23.1 | 0.0 | 28.9 | 4.2 | 0.0 |
| Green Ext Time (p_c), s | 0.3 | 3.2 | 0.8 | 0.4 | 0.0 | 5.6 | 0.0 | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 39.7 |
| HCM 7th LOS | D |

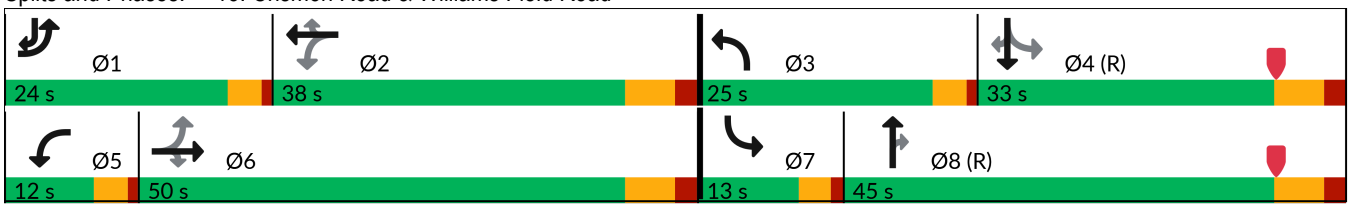
**Notes**

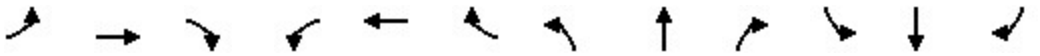
User approved pedestrian interval to be less than phase max green.

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | EBL | WBTL | NBL | SBTL | WBL | EBTL | SBL | NBT |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | None | Max | Max | C-Max | None | Max | None | C-Max |
| Maximum Split (s) | 24 | 38 | 25 | 33 | 12 | 50 | 13 | 45 |
| Maximum Split (%) | 20.0% | 31.7% | 20.8% | 27.5% | 10.0% | 41.7% | 10.8% | 37.5% |
| Minimum Split (s) | 12.5 | 38.5 | 12.5 | 35.5 | 12 | 40.5 | 12.5 | 36.5 |
| Yellow Time (s) | 3 | 4.5 | 3 | 4.5 | 3 | 4.5 | 3 | 4.5 |
| All-Red Time (s) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| Minimum Initial (s) | 8 | 15 | 8 | 15 | 8 | 15 | 8 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 7 | | 7 | | 7 | | 7 |
| Flash Don't Walk (s) | | 25 | | 22 | | 27 | | 23 |
| Dual Entry | No | Yes | No | Yes | No | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 6.5 | 30.5 | 68.5 | 93.5 | 6.5 | 18.5 | 68.5 | 81.5 |
| End Time (s) | 30.5 | 68.5 | 93.5 | 6.5 | 18.5 | 68.5 | 81.5 | 6.5 |
| Yield/Force Off (s) | 26.5 | 62 | 89.5 | 0 | 14.5 | 62 | 77.5 | 0 |
| Yield/Force Off 170(s) | 26.5 | 37 | 89.5 | 98 | 14.5 | 35 | 77.5 | 97 |
| Local Start Time (s) | 6.5 | 30.5 | 68.5 | 93.5 | 6.5 | 18.5 | 68.5 | 81.5 |
| Local Yield (s) | 26.5 | 62 | 89.5 | 0 | 14.5 | 62 | 77.5 | 0 |
| Local Yield 170(s) | 26.5 | 37 | 89.5 | 98 | 14.5 | 35 | 77.5 | 97 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 105 |
| Offset: 0 (0%), Referenced to phase 4:SBTL and 8:NBT, Start of Yellow | |

Splits and Phases: 13: Crismon Road & Williams Field Road





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 246 | 322 | 136 | 5 | 255 | 30 | 71 | 339 | 5 | 33 | 518 | 224 |
| Future Volume (veh/h) | 246 | 322 | 136 | 5 | 255 | 30 | 71 | 339 | 5 | 33 | 518 | 224 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 267 | 350 | 148 | 5 | 277 | 33 | 77 | 368 | 5 | 36 | 563 | 243 |
| 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 | 599 | 1377 | 614 | 475 | 1111 | 495 | 305 | 1032 | 14 | 402 | 992 | 442 |
| Arrive On Green | 0.15 | 0.39 | 0.39 | 0.08 | 0.31 | 0.31 | 0.08 | 0.29 | 0.29 | 0.08 | 0.28 | 0.28 |
| Sat Flow, veh/h | 1781 | 3554 | 1585 | 1781 | 3554 | 1585 | 1781 | 3590 | 49 | 1781 | 3554 | 1585 |
| Grp Volume(v), veh/h | 267 | 350 | 148 | 5 | 277 | 33 | 77 | 182 | 191 | 36 | 563 | 243 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1777 | 1585 | 1781 | 1777 | 1585 | 1781 | 1777 | 1862 | 1781 | 1777 | 1585 |
| Q Serve(g_s), s | 11.0 | 8.0 | 7.6 | 0.2 | 7.0 | 1.8 | 3.5 | 9.8 | 9.8 | 1.6 | 16.3 | 15.7 |
| Cycle Q Clear(g_c), s | 11.0 | 8.0 | 7.6 | 0.2 | 7.0 | 1.8 | 3.5 | 9.8 | 9.8 | 1.6 | 16.3 | 15.7 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.03 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 599 | 1377 | 614 | 475 | 1111 | 495 | 305 | 511 | 535 | 402 | 992 | 442 |
| V/C Ratio(X) | 0.45 | 0.25 | 0.24 | 0.01 | 0.25 | 0.07 | 0.25 | 0.36 | 0.36 | 0.09 | 0.57 | 0.55 |
| Avail Cap(c_a), veh/h | 599 | 1377 | 614 | 475 | 1111 | 495 | 305 | 511 | 535 | 402 | 992 | 442 |
| 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 | 19.6 | 25.0 | 24.8 | 22.6 | 30.8 | 29.0 | 26.7 | 33.9 | 33.9 | 25.9 | 37.0 | 36.8 |
| Incr Delay (d2), s/veh | 2.4 | 0.4 | 0.9 | 0.0 | 0.5 | 0.3 | 2.0 | 1.9 | 1.9 | 0.4 | 2.4 | 4.8 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 8.6 | 6.3 | 5.4 | 0.2 | 5.6 | 1.3 | 3.0 | 8.0 | 8.3 | 1.3 | 11.9 | 10.9 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 22.0 | 25.4 | 25.8 | 22.6 | 31.3 | 29.2 | 28.7 | 35.9 | 35.8 | 26.3 | 39.4 | 41.7 |
| LnGrp LOS | C | C | C | C | C | C | C | D | D | C | D | D |
| Approach Vol, veh/h | | 765 | | | 315 | | | 450 | | | 842 | |
| Approach Delay, s/veh | | 24.3 | | | 30.9 | | | 34.6 | | | 39.5 | |
| Approach LOS | | C | | | C | | | C | | | D | |

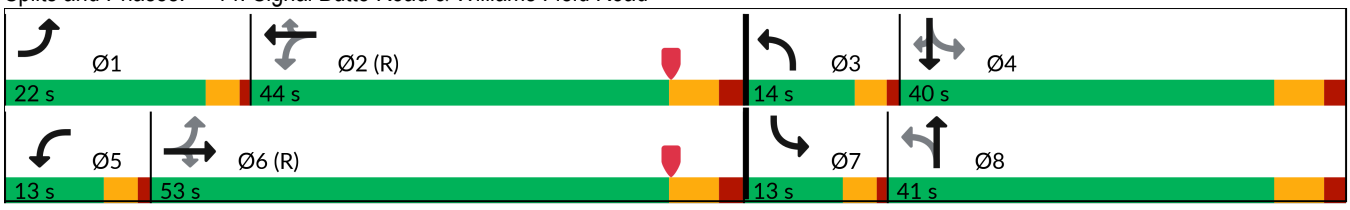
| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 22.0 | 44.0 | 14.0 | 40.0 | 13.0 | 53.0 | 13.0 | 41.0 |
| Change Period (Y+Rc), s | 4.0 | 6.5 | 4.0 | 6.5 | 4.0 | 6.5 | 4.0 | 6.5 |
| Max Green Setting (Gmax), s | 18.0 | 37.5 | 10.0 | 33.5 | 9.0 | 46.5 | 9.0 | 34.5 |
| Max Q Clear Time (g_c+I1), s | 13.0 | 9.0 | 5.5 | 18.3 | 2.2 | 10.0 | 3.6 | 11.8 |
| Green Ext Time (p_c), s | 0.4 | 2.0 | 0.1 | 4.2 | 0.0 | 3.0 | 0.0 | 2.1 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 32.5 |
| HCM 7th LOS | C |

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | EBL | WBTL | NBL | SBTL | WBL | EBTL | SBL | NBTL |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | Max | Max | Max | Max | Max | Max | Max | Max |
| Maximum Split (s) | 22 | 44 | 14 | 40 | 13 | 53 | 13 | 41 |
| Maximum Split (%) | 18.3% | 36.7% | 11.7% | 33.3% | 10.8% | 44.2% | 10.8% | 34.2% |
| Minimum Split (s) | 12.5 | 38.5 | 12.5 | 35.5 | 12.5 | 40.5 | 12.5 | 36.5 |
| Yellow Time (s) | 3 | 4.5 | 3 | 4.5 | 3 | 4.5 | 3 | 4.5 |
| All-Red Time (s) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| Minimum Initial (s) | 8 | 15 | 8 | 15 | 8 | 15 | 8 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 7 | | 7 | | 7 | | 7 |
| Flash Don't Walk (s) | | 25 | | 22 | | 27 | | 23 |
| Dual Entry | No | Yes | No | Yes | No | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 80.5 | 102.5 | 26.5 | 40.5 | 80.5 | 93.5 | 26.5 | 39.5 |
| End Time (s) | 102.5 | 26.5 | 40.5 | 80.5 | 93.5 | 26.5 | 39.5 | 80.5 |
| Yield/Force Off (s) | 98.5 | 20 | 36.5 | 74 | 89.5 | 20 | 35.5 | 74 |
| Yield/Force Off 170(s) | 98.5 | 115 | 36.5 | 52 | 89.5 | 113 | 35.5 | 51 |
| Local Start Time (s) | 60.5 | 82.5 | 6.5 | 20.5 | 60.5 | 73.5 | 6.5 | 19.5 |
| Local Yield (s) | 78.5 | 0 | 16.5 | 54 | 69.5 | 0 | 15.5 | 54 |
| Local Yield 170(s) | 78.5 | 95 | 16.5 | 32 | 69.5 | 93 | 15.5 | 31 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Pretimed |
| Natural Cycle | 105 |
| Offset: 20 (17%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow | |

Splits and Phases: 14: Signal Butte Road & Williams Field Road



| Intersection | |
|---|---|
| Int Delay, s/veh | 7.2 |

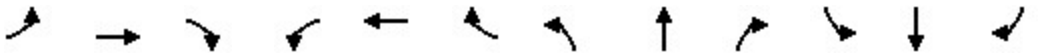
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 0 | 0 | 68 | 0 | 0 | 346 | 0 | 3674 | 8 | 0 | 3434 | 122 |
| Future Vol, veh/h | 0 | 0 | 68 | 0 | 0 | 346 | 0 | 3674 | 8 | 0 | 3434 | 122 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | 0 | - | - | 0 | - | - | 200 | - | - | - |
| 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 | 0 | 0 | 74 | 0 | 0 | 376 | 0 | 3993 | 9 | 0 | 3733 | 133 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | - | - | 1933 | - | - | 1997 | - | 0 | 0 | - | - | 0 |
| Stage 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - | - | - | - | - | - | - |
| Critical Hdwy | - | - | 7.14 | - | - | 7.14 | - | - | - | - | - | - |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | 3.92 | - | - | 3.92 | - | - | - | - | - | - |
| Pot Cap-1 Maneuver | 0 | 0 | *357 | 0 | 0 | *~ 312 | 0 | - | - | 0 | - | - |
| Stage 1 | 0 | 0 | - | 0 | 0 | - | 0 | - | - | 0 | - | - |
| Stage 2 | 0 | 0 | - | 0 | 0 | - | 0 | - | - | 0 | - | - |
| Platoon blocked, % | | | 1 | | | 1 | | - | - | | - | - |
| Mov Cap-1 Maneuver | - | - | *357 | - | - | *~ 312 | - | - | - | - | - | - |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s/v | 17.71 | 155.14 | 0 | 0 |
| HCM LOS | C | F | | |

| Minor Lane/Major Mvmt | NBT | NBR | EBLn1 | WBLn1 | SBT | SBR |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 357 | 312 | - | - |
| HCM Lane V/C Ratio | - | - | 0.207 | 1.207 | - | - |
| HCM Control Delay (s/veh) | - | - | 17.7 | 155.1 | - | - |
| HCM Lane LOS | - | - | C | F | - | - |
| HCM 95th %tile Q(veh) | - | - | 0.8 | 16.6 | - | - |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 190 | 0 | 128 | 237 | 0 | 604 | 95 | 2946 | 64 | 243 | 3128 | 130 |
| Future Volume (veh/h) | 190 | 0 | 128 | 237 | 0 | 604 | 95 | 2946 | 64 | 243 | 3128 | 130 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 207 | 0 | 139 | 258 | 0 | 657 | 103 | 3202 | 70 | 264 | 3400 | 141 |
| 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 | 416 | 256 | 217 | 473 | 0 | 423 | 155 | 2425 | 753 | 230 | 2500 | 102 |
| Arrive On Green | 0.14 | 0.00 | 0.14 | 0.14 | 0.00 | 0.13 | 0.01 | 0.16 | 0.16 | 0.07 | 0.50 | 0.50 |
| Sat Flow, veh/h | 1781 | 1870 | 1585 | 1781 | 0 | 3170 | 3456 | 5106 | 1585 | 3456 | 5031 | 206 |
| Grp Volume(v), veh/h | 207 | 0 | 139 | 258 | 0 | 657 | 103 | 3202 | 70 | 264 | 2285 | 1256 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1870 | 1585 | 1781 | 0 | 1585 | 1728 | 1702 | 1585 | 1728 | 1702 | 1833 |
| Q Serve(g_s), s | 11.4 | 0.0 | 10.0 | 14.8 | 0.0 | 16.0 | 3.6 | 57.0 | 4.5 | 8.0 | 59.6 | 59.6 |
| Cycle Q Clear(g_c), s | 11.4 | 0.0 | 10.0 | 14.8 | 0.0 | 16.0 | 3.6 | 57.0 | 4.5 | 8.0 | 59.6 | 59.6 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.11 |
| Lane Grp Cap(c), veh/h | 416 | 256 | 217 | 473 | 0 | 423 | 155 | 2425 | 753 | 230 | 1691 | 911 |
| V/C Ratio(X) | 0.50 | 0.00 | 0.64 | 0.55 | 0.00 | 1.55 | 0.66 | 1.32 | 0.09 | 1.15 | 1.35 | 1.38 |
| Avail Cap(c_a), veh/h | 416 | 256 | 217 | 473 | 0 | 423 | 158 | 2425 | 753 | 230 | 1691 | 911 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.33 | 0.33 | 0.33 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 35.7 | 0.0 | 49.0 | 37.2 | 0.0 | 52.0 | 58.2 | 50.6 | 28.5 | 56.0 | 30.2 | 30.2 |
| Incr Delay (d2), s/veh | 4.2 | 0.0 | 6.3 | 1.3 | 0.0 | 260.9 | 9.8 | 147.1 | 0.2 | 104.3 | 162.1 | 177.3 |
| 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(95%),veh/ln | 9.3 | 0.0 | 7.7 | 10.8 | 0.0 | 34.3 | 3.2 | 86.4 | 3.3 | 11.6 | 90.9 | 103.6 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 39.9 | 0.0 | 55.3 | 38.5 | 0.0 | 312.9 | 68.0 | 197.7 | 28.7 | 160.3 | 192.2 | 207.5 |
| LnGrp LOS | D | | E | D | | F | E | F | C | F | F | F |
| Approach Vol, veh/h | | 346 | | | 915 | | | 3375 | | | 3805 | |
| Approach Delay, s/veh | | 46.1 | | | 235.5 | | | 190.2 | | | 195.0 | |
| Approach LOS | | D | | | F | | | F | | | F | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 22.1 | 22.9 | 9.4 | 65.6 | 22.5 | 22.5 | 12.0 | 63.0 |
| Change Period (Y+Rc), s | 5.5 | 6.5 | 4.0 | 6.0 | 5.5 | 6.5 | 4.0 | 6.0 |
| Max Green Setting (Gmax), s | 16.6 | 16.4 | 5.5 | 59.5 | 17.0 | 16.0 | 8.0 | 57.0 |
| Max Q Clear Time (g_c+I1), s | 16.8 | 12.0 | 5.6 | 61.6 | 13.4 | 18.0 | 10.0 | 59.0 |
| Green Ext Time (p_c), s | 0.0 | 0.1 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 |

| Intersection Summary | | |
|---|---|---|
| HCM 7th Control Delay, s/veh | | 191.4 |
| HCM 7th LOS | | F |

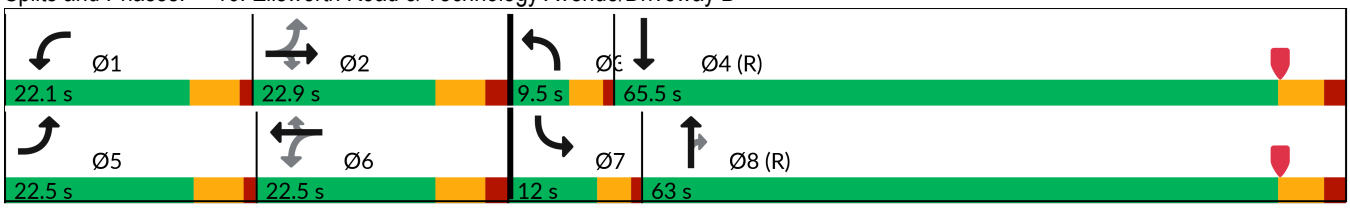
**Notes**

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | WBL | EBTL | NBL | SBT | EBL | WBTL | SBL | NBT |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | None | None | None | C-Max | Max | Max | None | C-Max |
| Maximum Split (s) | 22.1 | 22.9 | 9.5 | 65.5 | 22.5 | 22.5 | 12 | 63 |
| Maximum Split (%) | 18.4% | 19.1% | 7.9% | 54.6% | 18.8% | 18.8% | 10.0% | 52.5% |
| Minimum Split (s) | 10.5 | 24.5 | 9.5 | 24 | 23.5 | 24.5 | 9.5 | 24 |
| Yellow Time (s) | 4.5 | 4.5 | 3 | 4 | 4.5 | 4.5 | 3 | 4 |
| All-Red Time (s) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| Minimum Initial (s) | 5 | 10 | 5 | 15 | 5 | 10 | 5 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 7 | | 7 | | 7 | | 7 |
| Flash Don't Walk (s) | | 11 | | 11 | | 11 | | 11 |
| Dual Entry | No | Yes | No | Yes | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 63 | 85.1 | 108 | 117.5 | 63 | 85.5 | 108 | 0 |
| End Time (s) | 85.1 | 108 | 117.5 | 63 | 85.5 | 108 | 0 | 63 |
| Yield/Force Off (s) | 79.6 | 101.5 | 113.5 | 57 | 80 | 101.5 | 116 | 57 |
| Yield/Force Off 170(s) | 79.6 | 90.5 | 113.5 | 46 | 80 | 90.5 | 116 | 46 |
| Local Start Time (s) | 6 | 28.1 | 51 | 60.5 | 6 | 28.5 | 51 | 63 |
| Local Yield (s) | 22.6 | 44.5 | 56.5 | 0 | 23 | 44.5 | 59 | 0 |
| Local Yield 170(s) | 22.6 | 33.5 | 56.5 | 109 | 23 | 33.5 | 59 | 109 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 145 |
| Offset: 57 (48%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow | |

Splits and Phases: 16: Ellsworth Road & Technology Avenue/Driveway B



| Intersection | |
|---|---|
| Int Delay, s/veh | 0.1 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 0 | 21 | 3949 | 48 | 0 | 3494 |
| Future Vol, veh/h | 0 | 21 | 3949 | 48 | 0 | 3494 |
| 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 | - | 100 | - | - |
| 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 | 23 | 4292 | 52 | 0 | 3798 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | - | 2146 | 0 | 0 | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | 7.14 | - | - | - | - |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | 3.92 | - | - | - | - |
| Pot Cap-1 Maneuver | 0 | *266 | - | - | 0 | - |
| Stage 1 | 0 | - | - | - | 0 | - |
| Stage 2 | 0 | - | - | - | 0 | - |
| Platoon blocked, % | | 1 | - | - | | - |
| Mov Cap-1 Maneuver | - | *266 | - | - | - | - |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 19.78 | 0 | 0 |
| HCM LOS | C | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | SBT |
|---|---|---|---|---|
| Capacity (veh/h) | - | - | 266 | - |
| HCM Lane V/C Ratio | - | - | 0.086 | - |
| HCM Control Delay (s/veh) | - | - | 19.8 | - |
| HCM Lane LOS | - | - | C | - |
| HCM 95th %tile Q(veh) | - | - | 0.3 | - |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 105 | 294 | 3703 | 33 | 116 | 3377 |
| Future Volume (veh/h) | 105 | 294 | 3703 | 33 | 116 | 3377 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 114 | 320 | 4025 | 36 | 126 | 3671 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 282 | 251 | 3354 | 1041 | 152 | 3787 |
| Arrive On Green | 0.16 | 0.16 | 0.66 | 0.66 | 0.10 | 1.00 |
| Sat Flow, veh/h | 1781 | 1585 | 5274 | 1585 | 1781 | 5274 |
| Grp Volume(v), veh/h | 114 | 320 | 4025 | 36 | 126 | 3671 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1585 | 1702 | 1585 | 1781 | 1702 |
| Q Serve(g_s), s | 6.9 | 19.0 | 78.8 | 1.0 | 4.2 | 0.0 |
| Cycle Q Clear(g_c), s | 6.9 | 19.0 | 78.8 | 1.0 | 4.2 | 0.0 |
| Prop In Lane | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Lane Grp Cap(c), veh/h | 282 | 251 | 3354 | 1041 | 152 | 3787 |
| V/C Ratio(X) | 0.40 | 1.28 | 1.20 | 0.03 | 0.83 | 0.97 |
| Avail Cap(c_a), veh/h | 282 | 251 | 3354 | 1041 | 223 | 3787 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 45.4 | 50.5 | 20.6 | 7.2 | 36.2 | 0.0 |
| Incr Delay (d2), s/veh | 4.3 | 151.0 | 93.2 | 0.1 | 15.3 | 9.1 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 6.1 | 27.8 | 80.2 | 0.6 | 7.5 | 5.7 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 49.7 | 201.5 | 113.8 | 7.3 | 51.5 | 9.1 |
| LnGrp LOS | D | F | F | A | D | A |
| Approach Vol, veh/h | 434 | | 4061 | | | 3797 |
| Approach Delay, s/veh | 161.6 | | 112.8 | | | 10.5 |
| Approach LOS | F | | F | | | B |

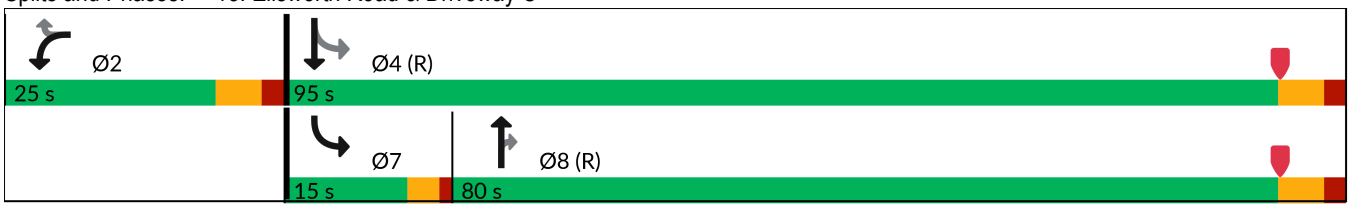
| Timer - Assigned Phs | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 25.0 | 95.0 | 10.2 | 84.8 |
| Change Period (Y+Rc), s | 6.0 | 6.0 | 4.0 | 6.0 |
| Max Green Setting (Gmax), s | 19.0 | 89.0 | 11.0 | 74.0 |
| Max Q Clear Time (g_c+I1), s | 21.0 | 2.0 | 6.2 | 80.8 |
| Green Ext Time (p_c), s | 0.0 | 83.3 | 0.1 | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 68.5 |
| HCM 7th LOS | E |

| Phase Number | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Movement | WBL | SBTL | SBL | NBT |
| Lead/Lag | | | Lead | Lag |
| Lead-Lag Optimize | | | Yes | Yes |
| Recall Mode | Max | C-Max | None | C-Max |
| Maximum Split (s) | 25 | 95 | 15 | 80 |
| Maximum Split (%) | 20.8% | 79.2% | 12.5% | 66.7% |
| Minimum Split (s) | 24 | 24 | 9.5 | 24 |
| Yellow Time (s) | 4 | 4 | 3 | 4 |
| All-Red Time (s) | 2 | 2 | 1 | 2 |
| Minimum Initial (s) | 15 | 15 | 5 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | 7 | 7 | | 7 |
| Flash Don't Walk (s) | 11 | 11 | | 11 |
| Dual Entry | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 6 | 31 | 31 | 46 |
| End Time (s) | 31 | 6 | 46 | 6 |
| Yield/Force Off (s) | 25 | 0 | 42 | 0 |
| Yield/Force Off 170(s) | 14 | 109 | 42 | 109 |
| Local Start Time (s) | 6 | 31 | 31 | 46 |
| Local Yield (s) | 25 | 0 | 42 | 0 |
| Local Yield 170(s) | 14 | 109 | 42 | 109 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 150 |
| Offset: 0 (0%), Referenced to phase 4:SBTL and 8:NBT, Start of Yellow | |

Splits and Phases: 18: Ellsworth Road & Driveway C



| Intersection | |
|---|---|
| Int Delay, s/veh | 2.3 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 0 | 0 | 102 | 0 | 0 | 369 | 0 | 2444 | 84 | 33 | 3401 | 27 |
| Future Vol, veh/h | 0 | 0 | 102 | 0 | 0 | 369 | 0 | 2444 | 84 | 33 | 3401 | 27 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | 0 | - | - | 0 | - | - | 200 | 150 | - | - |
| 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 | 0 | 0 | 111 | 0 | 0 | 401 | 0 | 2657 | 91 | 36 | 3697 | 29 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | - | - | 1863 | - | - | 1328 | - | 0 | 0 | 2748 | 0 | 0 |
| Stage 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - | - | - | - | - | - | - |
| Critical Hdwy | - | - | 7.14 | - | - | 7.14 | - | - | - | 5.34 | - | - |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | 3.92 | - | - | 3.92 | - | - | - | 3.12 | - | - |
| Pot Cap-1 Maneuver | 0 | 0 | *357 | 0 | 0 | *522 | 0 | - | - | 139 | - | - |
| Stage 1 | 0 | 0 | - | 0 | 0 | - | 0 | - | - | - | - | - |
| Stage 2 | 0 | 0 | - | 0 | 0 | - | 0 | - | - | - | - | - |
| Platoon blocked, % | | | 1 | | | 0 | | - | - | 0 | - | - |
| Mov Cap-1 Maneuver | - | - | *357 | - | - | *522 | - | - | - | 139 | - | - |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s/v | 19.58 | 31.13 | 0 | 0.38 |
| HCM LOS | C | D | | |

| Minor Lane/Major Mvmt | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 357 | 522 | 139 | - | - |
| HCM Lane V/C Ratio | - | - | 0.311 | 0.768 | 0.258 | - | - |
| HCM Control Delay (s/veh) | - | - | 19.6 | 31.1 | 39.7 | - | - |
| HCM Lane LOS | - | - | C | D | E | - | - |
| HCM 95th %tile Q(veh) | - | - | 1.3 | 6.8 | 1 | - | - |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.1 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | ↑↑↑ | ↑↑↑ | ↱ | | ↱ |
| Traffic Vol, veh/h | 0 | 1347 | 1466 | 34 | 0 | 39 |
| Future Vol, veh/h | 0 | 1347 | 1466 | 34 | 0 | 39 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | 200 | - | 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 | 1464 | 1593 | 37 | 0 | 42 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | - | 0 | - | 0 | - | 797 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | - | - | - | - | 7.14 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | - | - | - | 3.92 |
| Pot Cap-1 Maneuver | 0 | - | - | - | 0 | *688 |
| Stage 1 | 0 | - | - | - | 0 | - |
| Stage 2 | 0 | - | - | - | 0 | - |
| Platoon blocked, % | | - | - | - | | 0 |
| Mov Cap-1 Maneuver | - | - | - | - | - | *688 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 0 | 0 | 10.58 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|
| Capacity (veh/h) | - | - | - | 688 |
| HCM Lane V/C Ratio | - | - | - | 0.062 |
| HCM Control Delay (s/veh) | - | - | - | 10.6 |
| HCM Lane LOS | - | - | - | B |
| HCM 95th %tile Q(veh) | - | - | - | 0.2 |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.1 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | ↑↑↑ | ↑↑↑ | ↱ | | ↱ |
| Traffic Vol, veh/h | 0 | 1347 | 1474 | 19 | 0 | 25 |
| Future Vol, veh/h | 0 | 1347 | 1474 | 19 | 0 | 25 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | 200 | - | 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 | 1464 | 1602 | 21 | 0 | 27 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | - | 0 | - | 0 | - | 801 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | - | - | - | - | 7.14 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | - | - | - | 3.92 |
| Pot Cap-1 Maneuver | 0 | - | - | - | 0 | *688 |
| Stage 1 | 0 | - | - | - | 0 | - |
| Stage 2 | 0 | - | - | - | 0 | - |
| Platoon blocked, % | | - | - | - | | 0 |
| Mov Cap-1 Maneuver | - | - | - | - | - | *688 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 0 | 0 | 10.45 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|
| Capacity (veh/h) | - | - | - | 688 |
| HCM Lane V/C Ratio | - | - | - | 0.039 |
| HCM Control Delay (s/veh) | - | - | - | 10.4 |
| HCM Lane LOS | - | - | - | B |
| HCM 95th %tile Q(veh) | - | - | - | 0.1 |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.6 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 89 | 1263 | 1119 | 41 | 0 | 34 |
| Future Vol, veh/h | 89 | 1263 | 1119 | 41 | 0 | 34 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 100 | - | - | 200 | - | 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 | 97 | 1373 | 1216 | 45 | 0 | 37 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 1261 | 0 | - | 0 | - | 608 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | 5.34 | - | - | - | - | 7.14 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | 3.12 | - | - | - | - | 3.92 |
| Pot Cap-1 Maneuver | 526 | - | - | - | 0 | *753 |
| Stage 1 | - | - | - | - | 0 | - |
| Stage 2 | - | - | - | - | 0 | - |
| Platoon blocked, % | 0 | - | - | - | | 0 |
| Mov Cap-1 Maneuver | 526 | - | - | - | - | *753 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 0.88 | 0 | 10.03 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 526 | - | - | - | 753 |
| HCM Lane V/C Ratio | 0.184 | - | - | - | 0.049 |
| HCM Control Delay (s/veh) | 13.4 | - | - | - | 10 |
| HCM Lane LOS | B | - | - | - | B |
| HCM 95th %tile Q(veh) | 0.7 | - | - | - | 0.2 |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.1 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | ↑↑↑ | ↑↑↑ | ↱ | | ↱ |
| Traffic Vol, veh/h | 0 | 1281 | 1132 | 61 | 0 | 27 |
| Future Vol, veh/h | 0 | 1281 | 1132 | 61 | 0 | 27 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | 0 | - | 0 |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 1392 | 1230 | 66 | 0 | 29 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | - | 0 | - | 0 | - | 615 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | - | - | - | - | 7.14 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | - | - | - | 3.92 |
| Pot Cap-1 Maneuver | 0 | - | - | - | 0 | *738 |
| Stage 1 | 0 | - | - | - | 0 | - |
| Stage 2 | 0 | - | - | - | 0 | - |
| Platoon blocked, % | | - | - | - | | 0 |
| Mov Cap-1 Maneuver | - | - | - | - | - | *738 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 0 | 0 | 10.08 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|
| Capacity (veh/h) | - | - | - | 738 |
| HCM Lane V/C Ratio | - | - | - | 0.04 |
| HCM Control Delay (s/veh) | - | - | - | 10.1 |
| HCM Lane LOS | - | - | - | B |
| HCM 95th %tile Q(veh) | - | - | - | 0.1 |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.5 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 69 | 1212 | 1159 | 77 | 0 | 33 |
| Future Vol, veh/h | 69 | 1212 | 1159 | 77 | 0 | 33 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 200 | - | - | 200 | - | 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 | 75 | 1317 | 1260 | 84 | 0 | 36 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 1343 | 0 | - | 0 | - | 630 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | 5.34 | - | - | - | - | 7.14 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | 3.12 | - | - | - | - | 3.92 |
| Pot Cap-1 Maneuver | 481 | - | - | - | 0 | *748 |
| Stage 1 | - | - | - | - | 0 | - |
| Stage 2 | - | - | - | - | 0 | - |
| Platoon blocked, % | 0 | - | - | - | | 0 |
| Mov Cap-1 Maneuver | 481 | - | - | - | - | *748 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 0.75 | 0 | 10.05 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 481 | - | - | - | 748 |
| HCM Lane V/C Ratio | 0.156 | - | - | - | 0.048 |
| HCM Control Delay (s/veh) | 13.9 | - | - | - | 10.1 |
| HCM Lane LOS | B | - | - | - | B |
| HCM 95th %tile Q(veh) | 0.5 | - | - | - | 0.2 |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.8 |

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | ↑↑↑ | ↱ | | ↑↑↑ | | ↱ |
| Traffic Vol, veh/h | 988 | 301 | 0 | 1236 | 0 | 195 |
| Future Vol, veh/h | 988 | 301 | 0 | 1236 | 0 | 195 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 0 | - | - | - | 0 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 1074 | 327 | 0 | 1343 | 0 | 212 |

| Major/Minor | Major1 | | Major2 | | Minor1 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 0 | 0 | - | - | - | 537 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | - | - | - | - | 7.14 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | - | - | - | 3.92 |
| Pot Cap-1 Maneuver | - | - | 0 | - | 0 | *763 |
| Stage 1 | - | - | 0 | - | 0 | - |
| Stage 2 | - | - | 0 | - | 0 | - |
| Platoon blocked, % | - | - | | - | | 0 |
| Mov Cap-1 Maneuver | - | - | - | - | - | *763 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | WB | NB |
|---|---|---|---|
| HCM Control Delay, s/v | 0 | 0 | 11.52 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBT |
|---|---|---|---|---|
| Capacity (veh/h) | 763 | - | - | - |
| HCM Lane V/C Ratio | 0.278 | - | - | - |
| HCM Control Delay (s/veh) | 11.5 | - | - | - |
| HCM Lane LOS | B | - | - | - |
| HCM 95th %tile Q(veh) | 1.1 | - | - | - |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 4.4 |
| Intersection LOS | A |

| Approach | WB | SB | NE |
|---|---|---|---|
| Entry Lanes | 2 | 2 | 1 |
| Conflicting Circle Lanes | 2 | 2 | 2 |
| Adj Approach Flow, veh/h | 447 | 300 | 70 |
| Demand Flow Rate, veh/h | 456 | 306 | 72 |
| Vehicles Circulating, veh/h | 38 | 50 | 131 |
| Vehicles Exiting, veh/h | 165 | 444 | 225 |
| Ped Vol Crossing Leg, #/h | 0 | 0 | 0 |
| Ped Cap Adj | 1.000 | 1.000 | 1.000 |
| Approach Delay, s/veh | 5.0 | 3.7 | 3.4 |
| Approach LOS | A | A | A |

| Lane | Left | Right | Left | Right | Left |
|---|---|---|---|---|---|
| Designated Moves | L | TR | L | LTR | LR |
| Assumed Moves | L | TR | L | TR | LR |
| RT Channelized | | | | | |
| Lane Util | 0.110 | 0.890 | 0.428 | 0.572 | 1.000 |
| Follow-Up Headway, s | 2.667 | 2.535 | 2.667 | 2.535 | 2.535 |
| Critical Headway, s | 4.645 | 4.328 | 4.645 | 4.328 | 4.328 |
| A (Intercept) | 1350 | 1420 | 1350 | 1420 | 1420 |
| B (Slope) | 9.199e-4 | 8.501e-4 | 9.199e-4 | 8.501e-4 | 8.501e-4 |
| Entry Flow, veh/h | 50 | 406 | 131 | 175 | 72 |
| Cap Entry Lane, veh/h | 1303 | 1375 | 1289 | 1361 | 1270 |
| Entry HV Adj Factor | 0.980 | 0.980 | 0.977 | 0.983 | 0.972 |
| Flow Entry, veh/h | 49 | 398 | 128 | 172 | 70 |
| Cap Entry, veh/h | 1277 | 1348 | 1260 | 1338 | 1235 |
| V/C Ratio | 0.038 | 0.295 | 0.102 | 0.129 | 0.057 |
| Control Delay, s/veh | 3.1 | 5.3 | 3.7 | 3.7 | 3.4 |
| LOS | A | A | A | A | A |
| 95th %tile Queue, veh | 0 | 1 | 0 | 0 | 0 |

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

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 25 | 23 | 21 | 39 | 203 | 0 |
| Future Vol, veh/h | 25 | 23 | 21 | 39 | 203 | 0 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | - | - |
| 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 | 27 | 25 | 23 | 42 | 221 | 0 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 309 | 221 | 221 | 0 | - | 0 |
| Stage 1 | 221 | - | - | - | - | - |
| Stage 2 | 88 | - | - | - | - | - |
| 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 | 684 | 819 | 1349 | - | - | - |
| Stage 1 | 816 | - | - | - | - | - |
| Stage 2 | 935 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 672 | 819 | 1349 | - | - | - |
| Mov Cap-2 Maneuver | 672 | - | - | - | - | - |
| Stage 1 | 802 | - | - | - | - | - |
| Stage 2 | 935 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 10.27 | 2.7 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 630 | - | 735 | - | - |
| HCM Lane V/C Ratio | 0.017 | - | 0.071 | - | - |
| HCM Control Delay (s/veh) | 7.7 | 0 | 10.3 | - | - |
| HCM Lane LOS | A | A | B | - | - |
| HCM 95th %tile Q(veh) | 0.1 | - | 0.2 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 8.9 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 71 | 76 | 333 | 34 | 129 | 66 |
| Future Vol, veh/h | 71 | 76 | 333 | 34 | 129 | 66 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | - | - |
| 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 | 77 | 83 | 362 | 37 | 140 | 72 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 937 | 176 | 212 | 0 | - | 0 |
| Stage 1 | 176 | - | - | - | - | - |
| Stage 2 | 761 | - | - | - | - | - |
| 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 | 294 | 867 | 1358 | - | - | - |
| Stage 1 | 854 | - | - | - | - | - |
| Stage 2 | 461 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 214 | 867 | 1358 | - | - | - |
| Mov Cap-2 Maneuver | 214 | - | - | - | - | - |
| Stage 1 | 622 | - | - | - | - | - |
| Stage 2 | 461 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 23.61 | 7.81 | 0 |
| HCM LOS | C | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1331 | - | 350 | - | - |
| HCM Lane V/C Ratio | 0.266 | - | 0.456 | - | - |
| HCM Control Delay (s/veh) | 8.6 | 0 | 23.6 | - | - |
| HCM Lane LOS | A | A | C | - | - |
| HCM 95th %tile Q(veh) | 1.1 | - | 2.3 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 9.6 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 24 | 56 | 37 | 0 | 256 | 288 | 6 | 69 | 5 | 147 | 65 | 4 |
| Future Vol, veh/h | 24 | 56 | 37 | 0 | 256 | 288 | 6 | 69 | 5 | 147 | 65 | 4 |
| 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 | - | - | - | - | - | - | - | - | - | - | - | - |
| 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 | 26 | 61 | 40 | 0 | 278 | 313 | 7 | 75 | 5 | 160 | 71 | 4 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 591 | 0 | 0 | 101 | 0 | 0 | 447 | 724 | 81 | 585 | 588 | 435 |
| Stage 1 | - | - | - | - | - | - | 133 | 133 | - | 435 | 435 | - |
| Stage 2 | - | - | - | - | - | - | 314 | 591 | - | 151 | 153 | - |
| Critical Hdwy | 4.12 | - | - | 4.12 | - | - | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Follow-up Hdwy | 2.218 | - | - | 2.218 | - | - | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 |
| Pot Cap-1 Maneuver | 984 | - | - | 1491 | - | - | 522 | 352 | 979 | 422 | 421 | 621 |
| Stage 1 | - | - | - | - | - | - | 870 | 786 | - | 600 | 581 | - |
| Stage 2 | - | - | - | - | - | - | 697 | 494 | - | 852 | 771 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 984 | - | - | 1491 | - | - | 419 | 342 | 979 | 321 | 409 | 621 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 419 | 342 | - | 321 | 409 | - |
| Stage 1 | - | - | - | - | - | - | 846 | 764 | - | 600 | 581 | - |
| Stage 2 | - | - | - | - | - | - | 608 | 494 | - | 742 | 749 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s/v | 1.8 | 0 | 18.08 | 34.73 |
| HCM LOS | | | C | D |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 362 | 342 | - | - | 1491 | - | - | 346 |
| HCM Lane V/C Ratio | 0.241 | 0.027 | - | - | - | - | - | 0.678 |
| HCM Control Delay (s/veh) | 18.1 | 8.8 | 0 | - | 0 | - | - | 34.7 |
| HCM Lane LOS | C | A | A | - | A | - | - | D |
| HCM 95th %tile Q(veh) | 0.9 | 0.1 | - | - | 0 | - | - | 4.7 |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 12.6 |
| Intersection LOS | B |

| Approach | EB | WB | NB |
|---|---|---|---|
| Entry Lanes | 1 | 1 | 1 |
| Conflicting Circle Lanes | 1 | 1 | 1 |
| Adj Approach Flow, veh/h | 226 | 973 | 109 |
| Demand Flow Rate, veh/h | 230 | 993 | 111 |
| Vehicles Circulating, veh/h | 444 | 55 | 69 |
| Vehicles Exiting, veh/h | 604 | 125 | 605 |
| Ped Vol Crossing Leg, #/h | 0 | 0 | 0 |
| Ped Cap Adj | 1.000 | 1.000 | 1.000 |
| Approach Delay, s/veh | 7.0 | 14.9 | 3.6 |
| Approach LOS | A | B | A |

| Lane | Left | Left | Left |
|---|---|---|---|
| Designated Moves | TR | LT | LR |
| Assumed Moves | TR | LT | LR |
| RT Channelized | | | |
| Lane Util | 1.000 | 1.000 | 1.000 |
| Follow-Up Headway, s | 2.609 | 2.609 | 2.609 |
| Critical Headway, s | 4.976 | 4.976 | 4.976 |
| A (Intercept) | 1380 | 1380 | 1380 |
| B (Slope) | 1.02e-3 | 1.02e-3 | 1.02e-3 |
| Entry Flow, veh/h | 230 | 993 | 111 |
| Cap Entry Lane, veh/h | 877 | 1305 | 1286 |
| Entry HV Adj Factor | 0.981 | 0.980 | 0.982 |
| Flow Entry, veh/h | 226 | 973 | 109 |
| Cap Entry, veh/h | 861 | 1279 | 1263 |
| V/C Ratio | 0.262 | 0.761 | 0.086 |
| Control Delay, s/veh | 7.0 | 14.9 | 3.6 |
| LOS | A | B | A |
| 95th %tile Queue, veh | 1 | 8 | 0 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 1.1 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 31 | 10 | 3 | 75 | 187 | 130 |
| Future Vol, veh/h | 31 | 10 | 3 | 75 | 187 | 130 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | 150 | - | - | - |
| 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 | 34 | 11 | 3 | 82 | 203 | 141 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 321 | 172 | 345 | 0 | - | 0 |
| Stage 1 | 274 | - | - | - | - | - |
| Stage 2 | 47 | - | - | - | - | - |
| Critical Hdwy | 6.84 | 6.94 | 4.14 | - | - | - |
| Critical Hdwy Stg 1 | 5.84 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.84 | - | - | - | - | - |
| Follow-up Hdwy | 3.52 | 3.32 | 2.22 | - | - | - |
| Pot Cap-1 Maneuver | 647 | 841 | 1211 | - | - | - |
| Stage 1 | 748 | - | - | - | - | - |
| Stage 2 | 969 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 646 | 841 | 1211 | - | - | - |
| Mov Cap-2 Maneuver | 646 | - | - | - | - | - |
| Stage 1 | 746 | - | - | - | - | - |
| Stage 2 | 969 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 10.63 | 0.31 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1211 | - | 684 | - | - |
| HCM Lane V/C Ratio | 0.003 | - | 0.065 | - | - |
| HCM Control Delay (s/veh) | 8 | - | 10.6 | - | - |
| HCM Lane LOS | A | - | B | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 0.2 | - | - |

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

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 3 | 116 | 47 | 136 | 356 | 14 |
| Future Vol, veh/h | 3 | 116 | 47 | 136 | 356 | 14 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | 150 | - | - | - |
| 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 | 3 | 126 | 51 | 148 | 387 | 15 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 571 | 201 | 402 | 0 | - | 0 |
| Stage 1 | 395 | - | - | - | - | - |
| Stage 2 | 176 | - | - | - | - | - |
| Critical Hdwy | 6.84 | 6.94 | 4.14 | - | - | - |
| Critical Hdwy Stg 1 | 5.84 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.84 | - | - | - | - | - |
| Follow-up Hdwy | 3.52 | 3.32 | 2.22 | - | - | - |
| Pot Cap-1 Maneuver | 451 | 806 | 1153 | - | - | - |
| Stage 1 | 650 | - | - | - | - | - |
| Stage 2 | 837 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 431 | 806 | 1153 | - | - | - |
| Mov Cap-2 Maneuver | 431 | - | - | - | - | - |
| Stage 1 | 621 | - | - | - | - | - |
| Stage 2 | 837 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 10.46 | 2.12 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1153 | - | 789 | - | - |
| HCM Lane V/C Ratio | 0.044 | - | 0.164 | - | - |
| HCM Control Delay (s/veh) | 8.3 | - | 10.5 | - | - |
| HCM Lane LOS | A | - | B | - | - |
| HCM 95th %tile Q(veh) | 0.1 | - | 0.6 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 13.1 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 212 | 149 | 46 | 98 | 230 | 71 |
| Future Vol, veh/h | 212 | 149 | 46 | 98 | 230 | 71 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | 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 | 230 | 162 | 50 | 107 | 250 | 77 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 680 | 103 | 0 | 0 | 157 | 0 |
| Stage 1 | 103 | - | - | - | - | - |
| Stage 2 | 577 | - | - | - | - | - |
| 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 | 416 | 952 | - | - | 1423 | - |
| Stage 1 | 921 | - | - | - | - | - |
| Stage 2 | 562 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | 343 | 952 | - | - | 1423 | - |
| Mov Cap-2 Maneuver | 343 | - | - | - | - | - |
| Stage 1 | 921 | - | - | - | - | - |
| Stage 2 | 463 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 24.2 | 0 | 6.16 |
| HCM LOS | C | | |

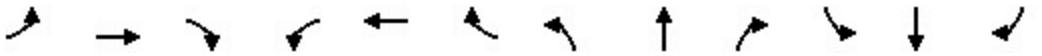
| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | WBLn2 | SBL | SBT |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 343 | 952 | 1423 | - |
| HCM Lane V/C Ratio | - | - | 0.671 | 0.17 | 0.176 | - |
| HCM Control Delay (s/veh) | - | - | 34.5 | 9.6 | 8.1 | - |
| HCM Lane LOS | - | - | D | A | A | - |
| HCM 95th %tile Q(veh) | - | - | 4.6 | 0.6 | 0.6 | - |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 17.8 |
| Intersection LOS | C |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 194 | 60 | 27 | 357 | 294 | 289 |
| Future Vol, veh/h | 194 | 60 | 27 | 357 | 294 | 289 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 211 | 65 | 29 | 388 | 320 | 314 |
| Number of Lanes | 1 | 1 | 1 | 1 | 1 | 1 |

| Approach | EB | WB | SB |
|---|---|---|---|
| Opposing Approach | WB | EB | |
| Opposing Lanes | 2 | 2 | 0 |
| Conflicting Approach Left | SB | | WB |
| Conflicting Lanes Left | 2 | 0 | 2 |
| Conflicting Approach Right | | SB | EB |
| Conflicting Lanes Right | 0 | 2 | 2 |
| HCM Control Delay, s/veh | 14.8 | 19.6 | 18 |
| HCM LOS | B | C | C |

| Lane | EBLn1 | EBLn2 | WBLn1 | WBLn2 | SBLn1 | SBLn2 |
|---|---|---|---|---|---|---|
| Vol Left, % | 100% | 0% | 0% | 0% | 100% | 0% |
| Vol Thru, % | 0% | 100% | 100% | 0% | 0% | 0% |
| Vol Right, % | 0% | 0% | 0% | 100% | 0% | 100% |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 194 | 60 | 27 | 357 | 294 | 289 |
| LT Vol | 194 | 0 | 0 | 0 | 294 | 0 |
| Through Vol | 0 | 60 | 27 | 0 | 0 | 0 |
| RT Vol | 0 | 0 | 0 | 357 | 0 | 289 |
| Lane Flow Rate | 211 | 65 | 29 | 388 | 320 | 314 |
| Geometry Grp | 5 | 5 | 5 | 5 | 5 | 5 |
| Degree of Util (X) | 0.44 | 0.127 | 0.056 | 0.663 | 0.629 | 0.512 |
| Departure Headway (Hd) | 7.52 | 7.007 | 6.864 | 6.148 | 7.088 | 5.872 |
| Convergence, Y/N | Yes | Yes | Yes | Yes | Yes | Yes |
| Cap | 477 | 509 | 519 | 586 | 508 | 609 |
| Service Time | 5.302 | 4.789 | 4.637 | 3.921 | 4.856 | 3.639 |
| HCM Lane V/C Ratio | 0.442 | 0.128 | 0.056 | 0.662 | 0.63 | 0.516 |
| HCM Control Delay, s/veh | 16.1 | 10.8 | 10 | 20.3 | 21.2 | 14.7 |
| HCM Lane LOS | C | B | A | C | C | B |
| HCM 95th-tile Q | 2.2 | 0.4 | 0.2 | 4.9 | 4.3 | 2.9 |



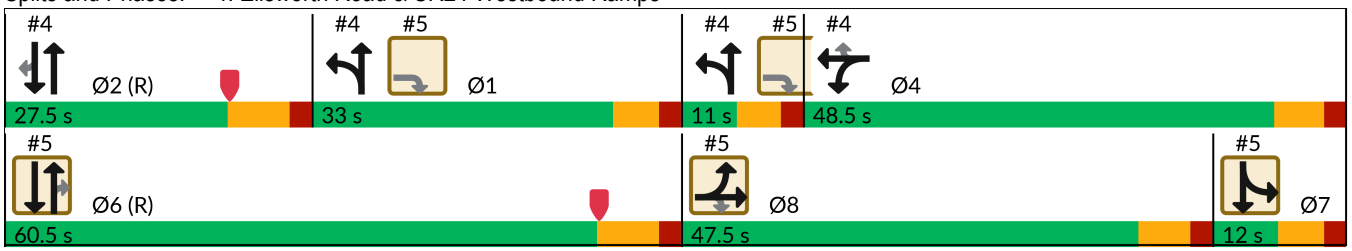
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 0 | 0 | 0 | 72 | 0 | 226 | 1792 | 1616 | 0 | 0 | 1137 | 624 |
| Future Volume (vph) | 0 | 0 | 0 | 72 | 0 | 226 | 1792 | 1616 | 0 | 0 | 1137 | 624 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | | 0 | 350 | | 350 | 525 | | 0 | 290 | | 285 |
| Storage Lanes | 0 | | 0 | 1 | | 1 | 0 | | 0 | 0 | | 2 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 0.91 | 0.86 | 0.91 | 0.97 | 0.91 | 1.00 | 1.00 | 0.86 | 0.88 |
| Frt | | | | | 0.859 | 0.850 | | | | | | 0.850 |
| Flt Protected | | | | 0.950 | 0.997 | | 0.950 | | | | | |
| Satd. Flow (prot) | 0 | 0 | 0 | 1610 | 2744 | 1441 | 3433 | 5085 | 0 | 0 | 6408 | 2787 |
| Flt Permitted | | | | 0.950 | 0.997 | | 0.950 | | | | | |
| Satd. Flow (perm) | 0 | 0 | 0 | 1610 | 2744 | 1441 | 3433 | 5085 | 0 | 0 | 6408 | 2787 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | | | 164 | 164 | | | | | | 678 |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 841 | | | 605 | | | 688 | | | 312 | |
| Travel Time (s) | | 19.1 | | | 13.8 | | | 15.6 | | | 7.1 | |
| 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 |
| Adj. Flow (vph) | 0 | 0 | 0 | 78 | 0 | 246 | 1948 | 1757 | 0 | 0 | 1236 | 678 |
| Shared Lane Traffic (%) | | | | 10% | | 50% | | | | | | |
| Lane Group Flow (vph) | 0 | 0 | 0 | 70 | 131 | 123 | 1948 | 1757 | 0 | 0 | 1236 | 678 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 24 | | | 24 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | | | | 1 | 2 | 1 | 1 | 2 | | | 2 | 1 |
| Detector Template | | | | Left | Thru | Right | Left | Thru | | | Thru | Right |
| Leading Detector (ft) | | | | 20 | 100 | 20 | 20 | 100 | | | 100 | 20 |
| Trailing Detector (ft) | | | | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 |
| Detector 1 Position(ft) | | | | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 |
| Detector 1 Size(ft) | | | | 20 | 6 | 20 | 20 | 6 | | | 6 | 20 |
| Detector 1 Type | | | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | | Cl+Ex | Cl+Ex |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Detector 1 Queue (s) | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Detector 1 Delay (s) | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Detector 2 Position(ft) | | | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | | | | Split | NA | Perm | Prot | NA | | | NA | Perm |
| Protected Phases | | | | 4 | 4 | | 1 3 | 1 2 3 | | | 2 | |
| Permitted Phases | | | | | | 4 | | | | | | 2 |

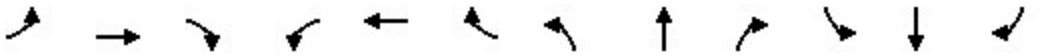
| Lane Group | Ø1 | Ø3 | Ø6 | Ø7 | Ø8 |
|---|---|---|---|---|---|
| Lane Configurations | | | | | |
| Traffic Volume (vph) | | | | | |
| Future Volume (vph) | | | | | |
| Ideal Flow (vphpl) | | | | | |
| Storage Length (ft) | | | | | |
| Storage Lanes | | | | | |
| Taper Length (ft) | | | | | |
| Lane Util. Factor | | | | | |
| Frt | | | | | |
| Flt Protected | | | | | |
| Satd. Flow (prot) | | | | | |
| Flt Permitted | | | | | |
| Satd. Flow (perm) | | | | | |
| Right Turn on Red | | | | | |
| Satd. Flow (RTOR) | | | | | |
| Link Speed (mph) | | | | | |
| Link Distance (ft) | | | | | |
| Travel Time (s) | | | | | |
| Peak Hour Factor | | | | | |
| Adj. Flow (vph) | | | | | |
| Shared Lane Traffic (%) | | | | | |
| Lane Group Flow (vph) | | | | | |
| Enter Blocked Intersection | | | | | |
| Lane Alignment | | | | | |
| Median Width(ft) | | | | | |
| Link Offset(ft) | | | | | |
| Crosswalk Width(ft) | | | | | |
| Two way Left Turn Lane | | | | | |
| Headway Factor | | | | | |
| Turning Speed (mph) | | | | | |
| Number of Detectors | | | | | |
| Detector Template | | | | | |
| Leading Detector (ft) | | | | | |
| Trailing Detector (ft) | | | | | |
| Detector 1 Position(ft) | | | | | |
| Detector 1 Size(ft) | | | | | |
| Detector 1 Type | | | | | |
| Detector 1 Channel | | | | | |
| Detector 1 Extend (s) | | | | | |
| Detector 1 Queue (s) | | | | | |
| Detector 1 Delay (s) | | | | | |
| Detector 2 Position(ft) | | | | | |
| Detector 2 Size(ft) | | | | | |
| Detector 2 Type | | | | | |
| Detector 2 Channel | | | | | |
| Detector 2 Extend (s) | | | | | |
| Turn Type | | | | | |
| Protected Phases | 1 | 3 | 6 | 7 | 8 |
| Permitted Phases | | | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | | | | 4 | 4 | 4 | 1 3 | 1 2 3 | | | 2 | 2 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | | | | 10.0 | 10.0 | 10.0 | | | | | 15.0 | 15.0 |
| Minimum Split (s) | | | | 48.5 | 48.5 | 48.5 | | | | | 25.5 | 25.5 |
| Total Split (s) | | | | 48.5 | 48.5 | 48.5 | | | | | 27.5 | 27.5 |
| Total Split (%) | | | | 40.4% | 40.4% | 40.4% | | | | | 22.9% | 22.9% |
| Maximum Green (s) | | | | 42.0 | 42.0 | 42.0 | | | | | 20.0 | 20.0 |
| Yellow Time (s) | | | | 4.5 | 4.5 | 4.5 | | | | | 5.5 | 5.5 |
| All-Red Time (s) | | | | 2.0 | 2.0 | 2.0 | | | | | 2.0 | 2.0 |
| Lost Time Adjust (s) | | | | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 |
| Total Lost Time (s) | | | | 6.5 | 6.5 | 6.5 | | | | | 7.5 | 7.5 |
| Lead/Lag | | | | Lag | Lag | Lag | | | | | Lead | Lead |
| Lead-Lag Optimize? | | | | Yes | Yes | Yes | | | | | Yes | Yes |
| Vehicle Extension (s) | | | | 3.0 | 3.0 | 3.0 | | | | | 3.0 | 3.0 |
| Recall Mode | | | | None | None | None | | | | | C-Max | C-Max |
| Walk Time (s) | | | | 4.0 | 4.0 | 4.0 | | | | | 4.0 | 4.0 |
| Flash Don't Walk (s) | | | | 38.0 | 38.0 | 38.0 | | | | | 13.0 | 13.0 |
| Pedestrian Calls (#/hr) | | | | 0 | 0 | 0 | | | | | 0 | 0 |
| Act Effct Green (s) | | | | 42.0 | 42.0 | 42.0 | 38.0 | 65.5 | | | 20.0 | 20.0 |
| Actuated g/C Ratio | | | | 0.35 | 0.35 | 0.35 | 0.32 | 0.55 | | | 0.17 | 0.17 |
| v/c Ratio | | | | 0.12 | 0.12 | 0.20 | 1.79 | 0.63 | | | 1.16 | 0.66 |
| Control Delay (s/veh) | | | | 27.4 | 2.1 | 2.3 | 379.7 | 8.0 | | | 125.9 | 6.7 |
| Queue Delay | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Total Delay (s/veh) | | | | 27.4 | 2.1 | 2.3 | 379.7 | 8.0 | | | 125.9 | 6.7 |
| LOS | | | | C | A | A | F | A | | | F | A |
| Approach Delay (s/veh) | | | | | 7.6 | | | 203.4 | | | 83.7 | |
| Approach LOS | | | | | A | | | F | | | F | |

| Intersection Summary | |
|---|---|
| Area Type: | Other |
| Cycle Length: 120 | |
| Actuated Cycle Length: 120 | |
| Offset: 0 (0%), Referenced to phase 2:NBSB and 6:, Start of Yellow | |
| Natural Cycle: 150 | |
| Control Type: Actuated-Coordinated | |
| Maximum v/c Ratio: 1.79 | |
| Intersection Signal Delay (s/veh): 154.2 | Intersection LOS: F |
| Intersection Capacity Utilization 110.5% | ICU Level of Service H |
| Analysis Period (min) 15 | |

Splits and Phases: 4: Ellsworth Road & SR24 Westbound Ramps





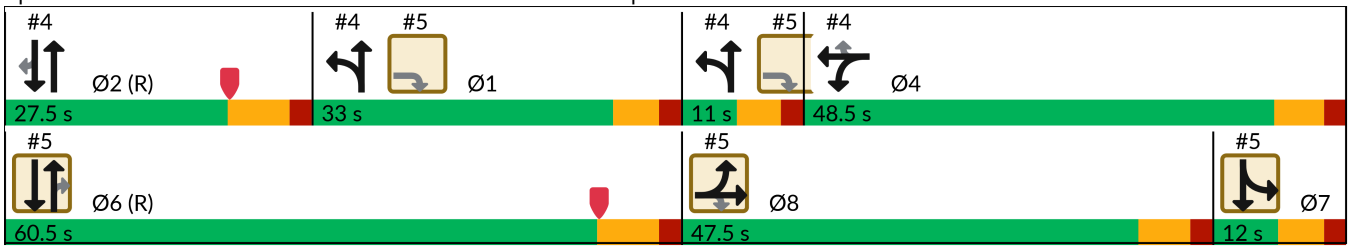
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 639 | 11 | 2205 | 0 | 0 | 0 | 0 | 2772 | 74 | 73 | 1146 | 0 |
| Future Volume (vph) | 639 | 11 | 2205 | 0 | 0 | 0 | 0 | 2772 | 74 | 73 | 1146 | 0 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 350 | | 350 | 0 | | 0 | 300 | | 300 | 550 | | 0 |
| Storage Lanes | 1 | | 2 | 0 | | 0 | 2 | | 1 | 0 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 0.95 | 0.95 | 0.88 | 1.00 | 1.00 | 1.00 | 1.00 | 0.81 | 1.00 | 0.97 | 0.91 | 1.00 |
| Frt | | | 0.850 | | | | | | 0.850 | | | |
| Flt Protected | 0.950 | 0.954 | | | | | | | | 0.950 | | |
| Satd. Flow (prot) | 1681 | 1688 | 2787 | 0 | 0 | 0 | 0 | 7544 | 1583 | 3433 | 5085 | 0 |
| Flt Permitted | 0.950 | 0.954 | | | | | | | | 0.950 | | |
| Satd. Flow (perm) | 1681 | 1688 | 2787 | 0 | 0 | 0 | 0 | 7544 | 1583 | 3433 | 5085 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 100 | | | | | | 145 | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 651 | | | 441 | | | 838 | | | 688 | |
| Travel Time (s) | | 14.8 | | | 10.0 | | | 19.0 | | | 15.6 | |
| 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 |
| Adj. Flow (vph) | 695 | 12 | 2397 | 0 | 0 | 0 | 0 | 3013 | 80 | 79 | 1246 | 0 |
| Shared Lane Traffic (%) | 49% | | | | | | | | | | | |
| Lane Group Flow (vph) | 354 | 353 | 2397 | 0 | 0 | 0 | 0 | 3013 | 80 | 79 | 1246 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 24 | | | 24 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | 1 | | | | | 2 | 1 | 1 | 2 | |
| Detector Template | Left | Thru | Right | | | | | Thru | Right | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | 20 | | | | | 100 | 20 | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | 0 | | | | | 0 | 0 | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | 0 | | | | | 0 | 0 | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | 20 | | | | | 6 | 20 | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | | | | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | | | | 0.0 | | | 0.0 | |
| Turn Type | Split | NA | custom | | | | | NA | Perm | Prot | NA | |
| Protected Phases | 8 | 8 | | | | | | 6 | | 7 | 6 7 | |
| Permitted Phases | | | 1 3 8 | | | | | | 6 | | | |

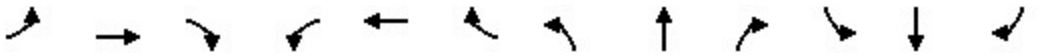
| Lane Group | Ø1 | Ø2 | Ø3 | Ø4 |
|---|---|---|---|---|
| Lane Configurations | | | | |
| Traffic Volume (vph) | | | | |
| Future Volume (vph) | | | | |
| Ideal Flow (vphpl) | | | | |
| Storage Length (ft) | | | | |
| Storage Lanes | | | | |
| Taper Length (ft) | | | | |
| Lane Util. Factor | | | | |
| Frt | | | | |
| Flt Protected | | | | |
| Satd. Flow (prot) | | | | |
| Flt Permitted | | | | |
| Satd. Flow (perm) | | | | |
| Right Turn on Red | | | | |
| Satd. Flow (RTOR) | | | | |
| Link Speed (mph) | | | | |
| Link Distance (ft) | | | | |
| Travel Time (s) | | | | |
| Peak Hour Factor | | | | |
| Adj. Flow (vph) | | | | |
| Shared Lane Traffic (%) | | | | |
| Lane Group Flow (vph) | | | | |
| Enter Blocked Intersection | | | | |
| Lane Alignment | | | | |
| Median Width(ft) | | | | |
| Link Offset(ft) | | | | |
| Crosswalk Width(ft) | | | | |
| Two way Left Turn Lane | | | | |
| Headway Factor | | | | |
| Turning Speed (mph) | | | | |
| Number of Detectors | | | | |
| Detector Template | | | | |
| Leading Detector (ft) | | | | |
| Trailing Detector (ft) | | | | |
| Detector 1 Position(ft) | | | | |
| Detector 1 Size(ft) | | | | |
| Detector 1 Type | | | | |
| Detector 1 Channel | | | | |
| Detector 1 Extend (s) | | | | |
| Detector 1 Queue (s) | | | | |
| Detector 1 Delay (s) | | | | |
| Detector 2 Position(ft) | | | | |
| Detector 2 Size(ft) | | | | |
| Detector 2 Type | | | | |
| Detector 2 Channel | | | | |
| Detector 2 Extend (s) | | | | |
| Turn Type | | | | |
| Protected Phases | 1 | 2 | 3 | 4 |
| Permitted Phases | | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | 8 | 8 | 1 3 8 | | | | | 6 | 6 | 7 | 6 7 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | | | | | 15.0 | 15.0 | 5.0 | | |
| Minimum Split (s) | 46.5 | 46.5 | | | | | | 26.5 | 26.5 | 11.0 | | |
| Total Split (s) | 47.5 | 47.5 | | | | | | 60.5 | 60.5 | 12.0 | | |
| Total Split (%) | 39.6% | 39.6% | | | | | | 50.4% | 50.4% | 10.0% | | |
| Maximum Green (s) | 41.0 | 41.0 | | | | | | 53.0 | 53.0 | 6.0 | | |
| Yellow Time (s) | 4.5 | 4.5 | | | | | | 5.5 | 5.5 | 4.0 | | |
| All-Red Time (s) | 2.0 | 2.0 | | | | | | 2.0 | 2.0 | 2.0 | | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | | | | | 0.0 | 0.0 | 0.0 | | |
| Total Lost Time (s) | 6.5 | 6.5 | | | | | | 7.5 | 7.5 | 6.0 | | |
| Lead/Lag | Lead | Lead | | | | | | | | Lag | | |
| Lead-Lag Optimize? | Yes | Yes | | | | | | | | Yes | | |
| Vehicle Extension (s) | 3.0 | 3.0 | | | | | | 3.0 | 3.0 | 3.0 | | |
| Recall Mode | None | None | | | | | | C-Max | C-Max | None | | |
| Walk Time (s) | 4.0 | 4.0 | | | | | | 4.0 | 4.0 | | | |
| Flash Don't Walk (s) | 36.0 | 36.0 | | | | | | 15.0 | 15.0 | | | |
| Pedestrian Calls (#/hr) | 0 | 0 | | | | | | 0 | 0 | | | |
| Act Effct Green (s) | 41.0 | 41.0 | 74.5 | | | | | 53.0 | 53.0 | 6.0 | 65.0 | |
| Actuated g/C Ratio | 0.34 | 0.34 | 0.62 | | | | | 0.44 | 0.44 | 0.05 | 0.54 | |
| v/c Ratio | 0.62 | 0.61 | 1.36 | | | | | 0.90 | 0.10 | 0.46 | 0.45 | |
| Control Delay (s/veh) | 38.6 | 38.4 | 187.2 | | | | | 7.2 | 0.0 | 82.2 | 4.9 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Delay (s/veh) | 38.6 | 38.4 | 187.2 | | | | | 7.2 | 0.0 | 82.2 | 4.9 | |
| LOS | D | D | F | | | | | A | A | F | A | |
| Approach Delay (s/veh) | | 153.3 | | | | | | 7.0 | | | 9.5 | |
| Approach LOS | | F | | | | | | A | | | A | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 120 | | | |
| Actuated Cycle Length: 120 | | | |
| Offset: 0 (0%), Referenced to phase 2:NBSB and 6:, Start of Yellow | | | |
| Natural Cycle: 150 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 1.79 | | | |
| Intersection Signal Delay (s/veh): 67.8 | | Intersection LOS: E | |
| Intersection Capacity Utilization 110.5% | | ICU Level of Service H | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 5: Ellsworth Road & SR24 Eastbound Ramps





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 344 | 468 | 196 | 419 | 419 | 742 | 174 | 1545 | 265 | 1012 | 2144 | 175 |
| Future Volume (veh/h) | 344 | 468 | 196 | 419 | 419 | 742 | 174 | 1545 | 265 | 1012 | 2144 | 175 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 374 | 509 | 213 | 455 | 455 | 807 | 189 | 1679 | 288 | 1100 | 2330 | 190 |
| 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 | 403 | 599 | 267 | 512 | 711 | 634 | 158 | 1362 | 423 | 691 | 2047 | 165 |
| Arrive On Green | 0.12 | 0.17 | 0.17 | 0.05 | 0.07 | 0.07 | 0.02 | 0.09 | 0.09 | 0.20 | 0.43 | 0.43 |
| Sat Flow, veh/h | 3456 | 3554 | 1585 | 3456 | 3554 | 1585 | 3456 | 5106 | 1585 | 3456 | 4817 | 387 |
| Grp Volume(v), veh/h | 374 | 509 | 213 | 455 | 455 | 807 | 189 | 1679 | 288 | 1100 | 1637 | 883 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1777 | 1585 | 1728 | 1777 | 1585 | 1728 | 1702 | 1585 | 1728 | 1702 | 1801 |
| Q Serve(g_s), s | 12.9 | 16.7 | 15.5 | 15.7 | 15.0 | 24.0 | 5.5 | 32.0 | 21.2 | 24.0 | 51.0 | 51.0 |
| Cycle Q Clear(g_c), s | 12.9 | 16.7 | 15.5 | 15.7 | 15.0 | 24.0 | 5.5 | 32.0 | 21.2 | 24.0 | 51.0 | 51.0 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.22 |
| Lane Grp Cap(c), veh/h | 403 | 599 | 267 | 512 | 711 | 634 | 158 | 1362 | 423 | 691 | 1447 | 765 |
| V/C Ratio(X) | 0.93 | 0.85 | 0.80 | 0.89 | 0.64 | 1.27 | 1.19 | 1.23 | 0.68 | 1.59 | 1.13 | 1.15 |
| Avail Cap(c_a), veh/h | 403 | 622 | 277 | 518 | 711 | 634 | 158 | 1362 | 423 | 691 | 1447 | 765 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.61 | 0.61 | 0.61 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 52.5 | 48.4 | 47.9 | 56.1 | 51.8 | 40.0 | 59.1 | 54.7 | 49.8 | 48.0 | 34.5 | 34.5 |
| Incr Delay (d2), s/veh | 27.5 | 10.5 | 14.5 | 17.0 | 4.4 | 134.8 | 118.4 | 109.0 | 5.4 | 273.0 | 68.4 | 83.9 |
| 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(95%),veh/ln | 11.5 | 13.0 | 11.6 | 13.3 | 12.1 | 58.2 | 8.4 | 39.8 | 13.6 | 56.4 | 47.8 | 55.1 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 80.0 | 58.9 | 62.4 | 73.1 | 56.2 | 174.9 | 177.5 | 163.7 | 55.1 | 321.0 | 102.9 | 118.4 |
| LnGrp LOS | F | E | E | E | E | F | F | F | E | F | F | F |
| Approach Vol, veh/h | | 1096 | | | 1717 | | | 2156 | | | 3620 | |
| Approach Delay, s/veh | | 66.8 | | | 116.4 | | | 150.4 | | | 173.0 | |
| Approach LOS | | E | | | F | | | F | | | F | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 20.0 | 30.5 | 11.0 | 58.5 | 23.8 | 26.7 | 30.0 | 39.5 |
| Change Period (Y+Rc), s | 6.0 | 6.5 | 5.5 | 7.5 | 6.0 | * 6.5 | 6.0 | 7.5 |
| Max Green Setting (Gmax), s | 14.0 | 24.0 | 5.5 | 51.0 | 18.0 | * 21 | 24.0 | 32.0 |
| Max Q Clear Time (g_c+I1), s | 14.9 | 26.0 | 7.5 | 53.0 | 17.7 | 18.7 | 26.0 | 34.0 |
| Green Ext Time (p_c), s | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 1.0 | 0.0 | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 142.5 |
| HCM 7th LOS | F |

**Notes**

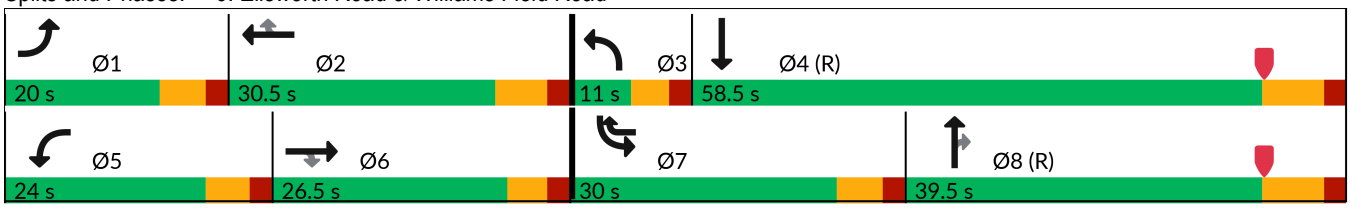
User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | EBL | WBT | NBL | SBT | WBL | EBT | SBL | NBT |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | None | Max | None | C-Max | None | None | None | C-Max |
| Maximum Split (s) | 20 | 30.5 | 11 | 58.5 | 24 | 26.5 | 30 | 39.5 |
| Maximum Split (%) | 16.7% | 25.4% | 9.2% | 48.8% | 20.0% | 22.1% | 25.0% | 32.9% |
| Minimum Split (s) | 11 | 36.5 | 10.5 | 35.5 | 24 | 23.5 | 11 | 37.5 |
| Yellow Time (s) | 4 | 4.5 | 3.5 | 5.5 | 4 | 3.5 | 4 | 5.5 |
| All-Red Time (s) | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Minimum Initial (s) | 5 | 15 | 5 | 15 | 5 | 5 | 5 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 4 | | 7 | | 7 | | 7 |
| Flash Don't Walk (s) | | 26 | | 21 | | 11 | | 23 |
| Dual Entry | No | Yes | No | Yes | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 42.5 | 62.5 | 93 | 104 | 42.5 | 66.5 | 93 | 3 |
| End Time (s) | 62.5 | 93 | 104 | 42.5 | 66.5 | 93 | 3 | 42.5 |
| Yield/Force Off (s) | 56.5 | 86.5 | 98.5 | 35 | 60.5 | 87.5 | 117 | 35 |
| Yield/Force Off 170(s) | 56.5 | 60.5 | 98.5 | 14 | 60.5 | 76.5 | 117 | 12 |
| Local Start Time (s) | 7.5 | 27.5 | 58 | 69 | 7.5 | 31.5 | 58 | 88 |
| Local Yield (s) | 21.5 | 51.5 | 63.5 | 0 | 25.5 | 52.5 | 82 | 0 |
| Local Yield 170(s) | 21.5 | 25.5 | 63.5 | 99 | 25.5 | 41.5 | 82 | 97 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 150 |
| Offset: 35 (29%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow | |

Splits and Phases: 6: Ellsworth Road & Williams Field Road



| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 169 | 238 | 1628 | 204 | 356 | 2304 |
| Future Volume (veh/h) | 169 | 238 | 1628 | 204 | 356 | 2304 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 148 | 298 | 1770 | 222 | 387 | 2504 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 430 | 766 | 2426 | 753 | 446 | 3298 |
| Arrive On Green | 0.24 | 0.24 | 0.48 | 0.48 | 0.26 | 1.00 |
| Sat Flow, veh/h | 1781 | 3170 | 5274 | 1585 | 3456 | 5274 |
| Grp Volume(v), veh/h | 148 | 298 | 1770 | 222 | 387 | 2504 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1585 | 1702 | 1585 | 1728 | 1702 |
| Q Serve(g_s), s | 8.2 | 9.4 | 33.4 | 10.3 | 12.8 | 0.0 |
| Cycle Q Clear(g_c), s | 8.2 | 9.4 | 33.4 | 10.3 | 12.8 | 0.0 |
| Prop In Lane | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Lane Grp Cap(c), veh/h | 430 | 766 | 2426 | 753 | 446 | 3298 |
| V/C Ratio(X) | 0.34 | 0.39 | 0.73 | 0.29 | 0.87 | 0.76 |
| Avail Cap(c_a), veh/h | 430 | 766 | 2426 | 753 | 576 | 3298 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 0.09 | 0.09 |
| Uniform Delay (d), s/veh | 37.6 | 38.1 | 25.3 | 19.2 | 43.5 | 0.0 |
| Incr Delay (d2), s/veh | 2.2 | 1.5 | 2.0 | 1.0 | 1.1 | 0.2 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 7.0 | 6.9 | 18.7 | 6.7 | 5.7 | 0.1 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 39.8 | 39.6 | 27.3 | 20.2 | 44.7 | 0.2 |
| LnGrp LOS | D | D | C | C | D | A |
| Approach Vol, veh/h | 446 | | 1992 | | | 2891 |
| Approach Delay, s/veh | 39.6 | | 26.5 | | | 6.1 |
| Approach LOS | D | | C | | | A |

| Timer - Assigned Phs | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 35.0 | 85.0 | 20.5 | 64.5 |
| Change Period (Y+Rc), s | 6.0 | 7.5 | 5.0 | 7.5 |
| Max Green Setting (Gmax), s | 29.0 | 77.5 | 20.0 | 52.5 |
| Max Q Clear Time (g_c+I1), s | 11.4 | 2.0 | 14.8 | 35.4 |
| Green Ext Time (p_c), s | 1.5 | 41.8 | 0.6 | 11.4 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 16.5 |
| HCM 7th LOS | B |

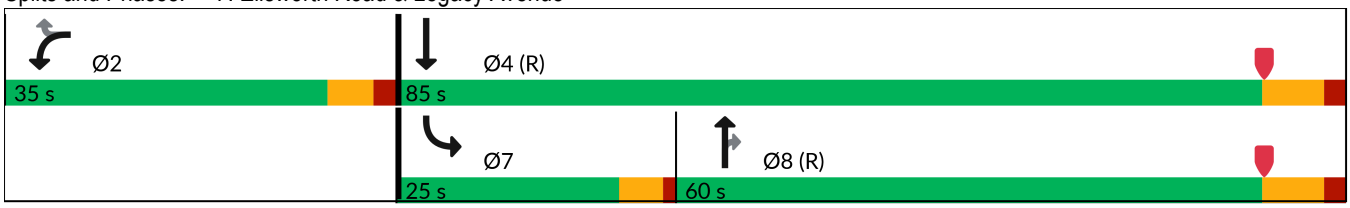
**Notes**

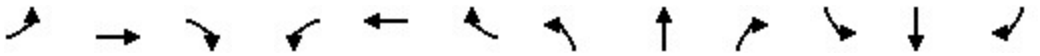
User approved volume balancing among the lanes for turning movement.

| Phase Number | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Movement | WBL | SBT | SBL | NBT |
| Lead/Lag | | | Lead | Lag |
| Lead-Lag Optimize | | | Yes | Yes |
| Recall Mode | Max | C-Max | None | C-Max |
| Maximum Split (s) | 35 | 85 | 25 | 60 |
| Maximum Split (%) | 29.2% | 70.8% | 20.8% | 50.0% |
| Minimum Split (s) | 35 | 39.5 | 10 | 26.5 |
| Yellow Time (s) | 4 | 5.5 | 4 | 5.5 |
| All-Red Time (s) | 2 | 2 | 1 | 2 |
| Minimum Initial (s) | 10 | 15 | 5 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | 4 | 4 | | 7 |
| Flash Don't Walk (s) | 25 | 28 | | 12 |
| Dual Entry | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 7.5 | 42.5 | 42.5 | 67.5 |
| End Time (s) | 42.5 | 7.5 | 67.5 | 7.5 |
| Yield/Force Off (s) | 36.5 | 0 | 62.5 | 0 |
| Yield/Force Off 170(s) | 11.5 | 92 | 62.5 | 108 |
| Local Start Time (s) | 7.5 | 42.5 | 42.5 | 67.5 |
| Local Yield (s) | 36.5 | 0 | 62.5 | 0 |
| Local Yield 170(s) | 11.5 | 92 | 62.5 | 108 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 90 |
| Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow | |

Splits and Phases: 7: Ellsworth Road & Legacy Avenue





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 163 | 1315 | 183 | 158 | 981 | 73 | 411 | 10 | 121 | 234 | 10 | 95 |
| Future Volume (veh/h) | 163 | 1315 | 183 | 158 | 981 | 73 | 411 | 10 | 121 | 234 | 10 | 95 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 185 | 1494 | 208 | 180 | 1115 | 83 | 467 | 11 | 138 | 266 | 11 | 108 |
| Peak Hour Factor | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 394 | 2101 | 652 | 518 | 2461 | 764 | 552 | 13 | 167 | 356 | 15 | 151 |
| Arrive On Green | 0.16 | 0.82 | 0.82 | 0.30 | 0.96 | 0.96 | 0.16 | 0.11 | 0.11 | 0.15 | 0.10 | 0.10 |
| Sat Flow, veh/h | 1781 | 5106 | 1585 | 3456 | 5106 | 1585 | 3456 | 118 | 1485 | 1781 | 149 | 1459 |
| Grp Volume(v), veh/h | 185 | 1494 | 208 | 180 | 1115 | 83 | 467 | 0 | 149 | 266 | 0 | 119 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1702 | 1585 | 1728 | 1702 | 1585 | 1728 | 0 | 1603 | 1781 | 0 | 1608 |
| Q Serve(g_s), s | 7.3 | 15.0 | 3.8 | 4.9 | 1.7 | 0.3 | 15.8 | 0.0 | 10.9 | 15.7 | 0.0 | 8.6 |
| Cycle Q Clear(g_c), s | 7.3 | 15.0 | 3.8 | 4.9 | 1.7 | 0.3 | 15.8 | 0.0 | 10.9 | 15.7 | 0.0 | 8.6 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.93 | 1.00 | | 0.91 |
| Lane Grp Cap(c), veh/h | 394 | 2101 | 652 | 518 | 2461 | 764 | 552 | 0 | 180 | 356 | 0 | 167 |
| V/C Ratio(X) | 0.47 | 0.71 | 0.32 | 0.35 | 0.45 | 0.11 | 0.85 | 0.00 | 0.83 | 0.75 | 0.00 | 0.71 |
| Avail Cap(c_a), veh/h | 490 | 2101 | 652 | 518 | 2461 | 764 | 878 | 0 | 310 | 462 | 0 | 241 |
| HCM Platoon Ratio | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 15.9 | 7.6 | 6.6 | 37.4 | 1.2 | 1.1 | 49.0 | 0.0 | 52.1 | 39.7 | 0.0 | 52.1 |
| Incr Delay (d2), s/veh | 0.9 | 2.1 | 1.3 | 1.8 | 0.6 | 0.3 | 4.5 | 0.0 | 9.3 | 4.8 | 0.0 | 5.6 |
| 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(95%),veh/ln | 4.7 | 5.5 | 2.4 | 3.7 | 0.9 | 0.3 | 11.5 | 0.0 | 8.5 | 11.8 | 0.0 | 6.7 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 16.8 | 9.7 | 7.9 | 39.2 | 1.8 | 1.4 | 53.4 | 0.0 | 61.5 | 44.5 | 0.0 | 57.6 |
| LnGrp LOS | B | A | A | D | A | A | D | | E | D | | E |
| Approach Vol, veh/h | | 1887 | | | 1378 | | | 616 | | | 385 | |
| Approach Delay, s/veh | | 10.2 | | | 6.6 | | | 55.4 | | | 48.5 | |
| Approach LOS | | B | | | A | | | E | | | D | |

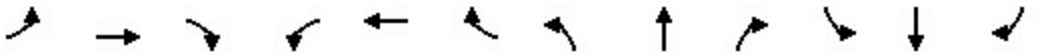
| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 13.5 | 64.3 | 22.7 | 19.5 | 22.0 | 55.9 | 23.7 | 18.4 |
| Change Period (Y+Rc), s | 4.0 | 6.5 | 4.5 | 6.0 | 4.0 | 6.5 | 4.5 | 6.0 |
| Max Green Setting (Gmax), s | 16.0 | 34.5 | 25.3 | 23.2 | 18.0 | 32.5 | 30.5 | 18.0 |
| Max Q Clear Time (g_c+I1), s | 9.3 | 3.7 | 17.7 | 12.9 | 6.9 | 17.0 | 17.8 | 10.6 |
| Green Ext Time (p_c), s | 0.2 | 8.8 | 0.5 | 0.5 | 0.4 | 9.3 | 1.4 | 0.3 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 19.0 |
| HCM 7th LOS | B |

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | EBL | WBT | SBL | NBT | WBL | EBTL | NBL | SBTL |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | None | C-Max | None | None | Max | C-Max | None | None |
| Maximum Split (s) | 20 | 41 | 29.8 | 29.2 | 22 | 39 | 35 | 24 |
| Maximum Split (%) | 16.7% | 34.2% | 24.8% | 24.3% | 18.3% | 32.5% | 29.2% | 20.0% |
| Minimum Split (s) | 9.5 | 24.5 | 9.5 | 24 | 12.5 | 24.5 | 24 | 24 |
| Yellow Time (s) | 3 | 4.5 | 3.5 | 4 | 3 | 4.5 | 3.5 | 4 |
| All-Red Time (s) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| Minimum Initial (s) | 5 | 15 | 5 | 10 | 5 | 15 | 5 | 10 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | | | | | 7 | | |
| Flash Don't Walk (s) | | | | | | 11 | | |
| Dual Entry | No | Yes | No | Yes | No | Yes | Yes | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 65.5 | 85.5 | 6.5 | 36.3 | 65.5 | 87.5 | 6.5 | 41.5 |
| End Time (s) | 85.5 | 6.5 | 36.3 | 65.5 | 87.5 | 6.5 | 41.5 | 65.5 |
| Yield/Force Off (s) | 81.5 | 0 | 31.8 | 59.5 | 83.5 | 0 | 37 | 59.5 |
| Yield/Force Off 170(s) | 81.5 | 0 | 31.8 | 59.5 | 83.5 | 109 | 37 | 59.5 |
| Local Start Time (s) | 65.5 | 85.5 | 6.5 | 36.3 | 65.5 | 87.5 | 6.5 | 41.5 |
| Local Yield (s) | 81.5 | 0 | 31.8 | 59.5 | 83.5 | 0 | 37 | 59.5 |
| Local Yield 170(s) | 81.5 | 0 | 31.8 | 59.5 | 83.5 | 109 | 37 | 59.5 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 95 |
| Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBTL, Start of Yellow | |

Splits and Phases: 9: Legacy Drive/Driveway G & Williams Field Road



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 128 | 1288 | 134 | 333 | 890 | 308 | 250 | 68 | 332 | 301 | 23 | 148 |
| Future Volume (veh/h) | 128 | 1288 | 134 | 333 | 890 | 308 | 250 | 68 | 332 | 301 | 23 | 148 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 139 | 1400 | 146 | 362 | 967 | 0 | 272 | 0 | 410 | 327 | 25 | 161 |
| 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 | 197 | 1851 | 575 | 547 | 2368 | | 378 | 0 | 991 | 518 | 35 | 224 |
| Arrive On Green | 0.02 | 0.12 | 0.12 | 0.16 | 0.46 | 0.00 | 0.14 | 0.00 | 0.15 | 0.15 | 0.16 | 0.16 |
| Sat Flow, veh/h | 3456 | 5106 | 1585 | 3456 | 5106 | 1585 | 1781 | 0 | 3170 | 3456 | 218 | 1401 |
| Grp Volume(v), veh/h | 139 | 1400 | 146 | 362 | 967 | 0 | 272 | 0 | 410 | 327 | 0 | 186 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1702 | 1585 | 1728 | 1702 | 1585 | 1781 | 0 | 1585 | 1728 | 0 | 1618 |
| Q Serve(g_s), s | 4.8 | 31.8 | 10.0 | 11.8 | 15.0 | 0.0 | 15.2 | 0.0 | 12.3 | 10.7 | 0.0 | 13.1 |
| Cycle Q Clear(g_c), s | 4.8 | 31.8 | 10.0 | 11.8 | 15.0 | 0.0 | 15.2 | 0.0 | 12.3 | 10.7 | 0.0 | 13.1 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.87 |
| Lane Grp Cap(c), veh/h | 197 | 1851 | 575 | 547 | 2368 | | 378 | 0 | 991 | 518 | 0 | 259 |
| V/C Ratio(X) | 0.71 | 0.76 | 0.25 | 0.66 | 0.41 | | 0.72 | 0.00 | 0.41 | 0.63 | 0.00 | 0.72 |
| Avail Cap(c_a), veh/h | 288 | 1851 | 575 | 547 | 2368 | | 403 | 0 | 991 | 518 | 0 | 259 |
| HCM Platoon Ratio | 0.33 | 0.33 | 0.33 | 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 | 0.81 | 0.81 | 0.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 57.9 | 47.7 | 38.1 | 47.5 | 21.3 | 0.0 | 35.7 | 0.0 | 32.6 | 47.9 | 0.0 | 47.9 |
| Incr Delay (d2), s/veh | 4.6 | 2.9 | 1.1 | 5.0 | 0.4 | 0.0 | 5.7 | 0.0 | 1.3 | 5.7 | 0.0 | 15.9 |
| 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(95%),veh/ln | 4.1 | 21.4 | 7.9 | 8.9 | 9.7 | 0.0 | 11.6 | 0.0 | 8.5 | 8.7 | 0.0 | 10.6 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 62.4 | 50.6 | 39.2 | 52.5 | 21.7 | 0.0 | 41.4 | 0.0 | 33.8 | 53.6 | 0.0 | 63.7 |
| LnGrp LOS | E | D | D | D | C | | D | | C | D | | E |
| Approach Vol, veh/h | | 1685 | | | 1329 | | | 682 | | | 513 | |
| Approach Delay, s/veh | | 50.6 | | | 30.1 | | | 36.9 | | | 57.3 | |
| Approach LOS | | D | | | C | | | D | | | E | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 22.0 | 25.0 | 23.0 | 50.0 | 21.3 | 25.7 | 10.8 | 62.2 |
| Change Period (Y+Rc), s | 4.0 | 6.5 | 4.0 | 6.5 | 4.0 | 6.5 | 4.0 | 6.5 |
| Max Green Setting (Gmax), s | 18.0 | 18.5 | 19.0 | 43.5 | 19.0 | 17.5 | 10.0 | 52.5 |
| Max Q Clear Time (g_c+I1), s | 12.7 | 14.3 | 13.8 | 33.8 | 17.2 | 15.1 | 6.8 | 17.0 |
| Green Ext Time (p_c), s | 0.6 | 0.7 | 0.6 | 6.6 | 0.2 | 0.2 | 0.1 | 8.3 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 42.7 |
| HCM 7th LOS | D |

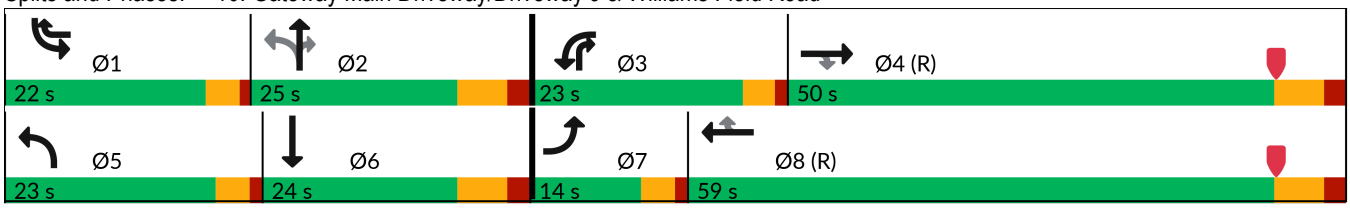
**Notes**

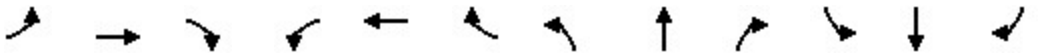
User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | SBL | NBTL | WBL | EBT | NBL | SBT | EBL | WBT |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | Max | Max | Max | C-Max | None | Max | None | C-Max |
| Maximum Split (s) | 22 | 25 | 23 | 50 | 23 | 24 | 14 | 59 |
| Maximum Split (%) | 18.3% | 20.8% | 19.2% | 41.7% | 19.2% | 20.0% | 11.7% | 49.2% |
| Minimum Split (s) | 9.5 | 24.5 | 9.5 | 24.5 | 9.5 | 24.5 | 9.5 | 24.5 |
| Yellow Time (s) | 3 | 4.5 | 3 | 4.5 | 3 | 4.5 | 3 | 4.5 |
| All-Red Time (s) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| Minimum Initial (s) | 5 | 10 | 5 | 15 | 5 | 10 | 5 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 7 | | 7 | | 7 | | 7 |
| Flash Don't Walk (s) | | 11 | | 11 | | 11 | | 11 |
| Dual Entry | No | Yes | No | Yes | No | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 6.5 | 28.5 | 53.5 | 76.5 | 6.5 | 29.5 | 53.5 | 67.5 |
| End Time (s) | 28.5 | 53.5 | 76.5 | 6.5 | 29.5 | 53.5 | 67.5 | 6.5 |
| Yield/Force Off (s) | 24.5 | 47 | 72.5 | 0 | 25.5 | 47 | 63.5 | 0 |
| Yield/Force Off 170(s) | 24.5 | 36 | 72.5 | 109 | 25.5 | 36 | 63.5 | 109 |
| Local Start Time (s) | 6.5 | 28.5 | 53.5 | 76.5 | 6.5 | 29.5 | 53.5 | 67.5 |
| Local Yield (s) | 24.5 | 47 | 72.5 | 0 | 25.5 | 47 | 63.5 | 0 |
| Local Yield 170(s) | 24.5 | 36 | 72.5 | 109 | 25.5 | 36 | 63.5 | 109 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 90 |
| Offset: 0 (0%), Referenced to phase 4:EBT and 8:WBT, Start of Yellow | |

Splits and Phases: 10: Gateway Main Driveway/Driveway J & Williams Field Road





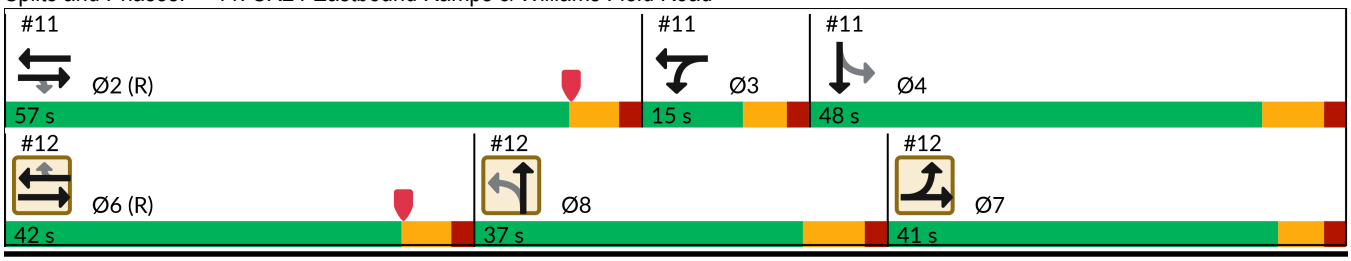
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 0 | 1289 | 631 | 66 | 997 | 0 | 0 | 0 | 0 | 584 | 0 | 541 |
| Future Volume (vph) | 0 | 1289 | 631 | 66 | 997 | 0 | 0 | 0 | 0 | 584 | 0 | 541 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 360 | | 285 | 290 | | 0 | 0 | | 0 | 400 | | 400 |
| Storage Lanes | 2 | | 1 | 0 | | 0 | 0 | | 0 | 2 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 1.00 | 0.86 | 1.00 | 0.97 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 0.91 | 0.91 | 0.95 |
| Frt | | | 0.850 | | | | | | | | 0.888 | |
| Flt Protected | | | | 0.950 | | | | | | 0.950 | 0.987 | |
| Satd. Flow (prot) | 0 | 6408 | 1583 | 3433 | 3539 | 0 | 0 | 0 | 0 | 1610 | 2971 | 0 |
| Flt Permitted | | | | 0.950 | | | | | | 0.950 | 0.987 | |
| Satd. Flow (perm) | 0 | 6408 | 1583 | 3433 | 3539 | 0 | 0 | 0 | 0 | 1610 | 2971 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 686 | | | | | | | | 145 | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 971 | | | 481 | | | 999 | | | 970 | |
| Travel Time (s) | | 22.1 | | | 10.9 | | | 22.7 | | | 22.0 | |
| 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 |
| Adj. Flow (vph) | 0 | 1401 | 686 | 72 | 1084 | 0 | 0 | 0 | 0 | 635 | 0 | 588 |
| Shared Lane Traffic (%) | | | | | | | | | | 32% | | |
| Lane Group Flow (vph) | 0 | 1401 | 686 | 72 | 1084 | 0 | 0 | 0 | 0 | 432 | 791 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 24 | | | 24 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | | 2 | 1 | 1 | 2 | | | | | 1 | 2 | |
| Detector Template | | Thru | Right | Left | Thru | | | | | Left | Thru | |
| Leading Detector (ft) | | 100 | 20 | 20 | 100 | | | | | 20 | 100 | |
| Trailing Detector (ft) | | 0 | 0 | 0 | 0 | | | | | 0 | 0 | |
| Detector 1 Position(ft) | | 0 | 0 | 0 | 0 | | | | | 0 | 0 | |
| Detector 1 Size(ft) | | 6 | 20 | 20 | 6 | | | | | 20 | 6 | |
| Detector 1 Type | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | | | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | | | | 0.0 | |
| Turn Type | | NA | Perm | Prot | NA | | | | | Perm | NA | |
| Protected Phases | | 2 | | 3 | 2 3 | | | | | | 4 | |
| Permitted Phases | | | 2 | | | | | | | 4 | | |

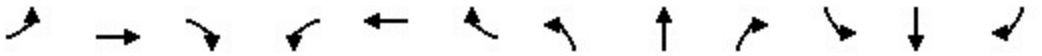
| Lane Group | Ø6 | Ø7 | Ø8 |
|---|---|---|---|
| Lane Configurations | | | |
| Traffic Volume (vph) | | | |
| Future Volume (vph) | | | |
| Ideal Flow (vphpl) | | | |
| Storage Length (ft) | | | |
| Storage Lanes | | | |
| Taper Length (ft) | | | |
| Lane Util. Factor | | | |
| Frt | | | |
| Flt Protected | | | |
| Satd. Flow (prot) | | | |
| Flt Permitted | | | |
| Satd. Flow (perm) | | | |
| Right Turn on Red | | | |
| Satd. Flow (RTOR) | | | |
| Link Speed (mph) | | | |
| Link Distance (ft) | | | |
| Travel Time (s) | | | |
| Peak Hour Factor | | | |
| Adj. Flow (vph) | | | |
| Shared Lane Traffic (%) | | | |
| Lane Group Flow (vph) | | | |
| Enter Blocked Intersection | | | |
| Lane Alignment | | | |
| Median Width(ft) | | | |
| Link Offset(ft) | | | |
| Crosswalk Width(ft) | | | |
| Two way Left Turn Lane | | | |
| Headway Factor | | | |
| Turning Speed (mph) | | | |
| Number of Detectors | | | |
| Detector Template | | | |
| Leading Detector (ft) | | | |
| Trailing Detector (ft) | | | |
| Detector 1 Position(ft) | | | |
| Detector 1 Size(ft) | | | |
| Detector 1 Type | | | |
| Detector 1 Channel | | | |
| Detector 1 Extend (s) | | | |
| Detector 1 Queue (s) | | | |
| Detector 1 Delay (s) | | | |
| Detector 2 Position(ft) | | | |
| Detector 2 Size(ft) | | | |
| Detector 2 Type | | | |
| Detector 2 Channel | | | |
| Detector 2 Extend (s) | | | |
| Turn Type | | | |
| Protected Phases | 6 | 7 | 8 |
| Permitted Phases | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | | 2 | 2 | 3 | 2 3 | | | | | 4 | 4 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | | 15.0 | 15.0 | 5.0 | | | | | | 10.0 | 10.0 | |
| Minimum Split (s) | | 25.5 | 25.5 | 11.0 | | | | | | 46.5 | 46.5 | |
| Total Split (s) | | 57.0 | 57.0 | 15.0 | | | | | | 48.0 | 48.0 | |
| Total Split (%) | | 47.5% | 47.5% | 12.5% | | | | | | 40.0% | 40.0% | |
| Maximum Green (s) | | 50.5 | 50.5 | 9.0 | | | | | | 40.5 | 40.5 | |
| Yellow Time (s) | | 4.5 | 4.5 | 4.0 | | | | | | 5.5 | 5.5 | |
| All-Red Time (s) | | 2.0 | 2.0 | 2.0 | | | | | | 2.0 | 2.0 | |
| Lost Time Adjust (s) | | 0.0 | 0.0 | 0.0 | | | | | | 0.0 | 0.0 | |
| Total Lost Time (s) | | 6.5 | 6.5 | 6.0 | | | | | | 7.5 | 7.5 | |
| Lead/Lag | | | | Lead | | | | | | Lag | Lag | |
| Lead-Lag Optimize? | | | | Yes | | | | | | Yes | Yes | |
| Vehicle Extension (s) | | 3.0 | 3.0 | 3.0 | | | | | | 3.0 | 3.0 | |
| Recall Mode | | C-Max | C-Max | None | | | | | | None | None | |
| Walk Time (s) | | 4.0 | 4.0 | | | | | | | 4.0 | 4.0 | |
| Flash Don't Walk (s) | | 15.0 | 15.0 | | | | | | | 35.0 | 35.0 | |
| Pedestrian Calls (#/hr) | | 0 | 0 | | | | | | | 0 | 0 | |
| Act Effct Green (s) | | 50.5 | 50.5 | 9.0 | 65.5 | | | | | 40.5 | 40.5 | |
| Actuated g/C Ratio | | 0.42 | 0.42 | 0.08 | 0.55 | | | | | 0.34 | 0.34 | |
| v/c Ratio | | 0.52 | 0.65 | 0.28 | 0.56 | | | | | 0.80 | 0.98dr | |
| Control Delay (s/veh) | | 16.6 | 4.0 | 39.5 | 8.5 | | | | | 48.4 | 32.4 | |
| Queue Delay | | 0.0 | 0.0 | 0.0 | 0.2 | | | | | 0.0 | 0.0 | |
| Total Delay (s/veh) | | 16.6 | 4.0 | 39.5 | 8.7 | | | | | 48.4 | 32.4 | |
| LOS | | B | A | D | A | | | | | D | C | |
| Approach Delay (s/veh) | | 12.5 | | | 10.6 | | | | | | 38.1 | |
| Approach LOS | | B | | | B | | | | | | D | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 120 | | | |
| Actuated Cycle Length: 120 | | | |
| Offset: 10 (8%), Referenced to phase 2:EBWB and 6:, Start of Yellow | | | |
| Natural Cycle: 115 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 1.14 | | | |
| Intersection Signal Delay (s/veh): 19.0 | | Intersection LOS: B | |
| Intersection Capacity Utilization 94.0% | | ICU Level of Service F | |
| Analysis Period (min) 15 | | | |
| dr Defacto Right Lane. Recode with 1 though lane as a right lane. | | | |

Splits and Phases: 11: SR24 Eastbound Ramps & Williams Field Road





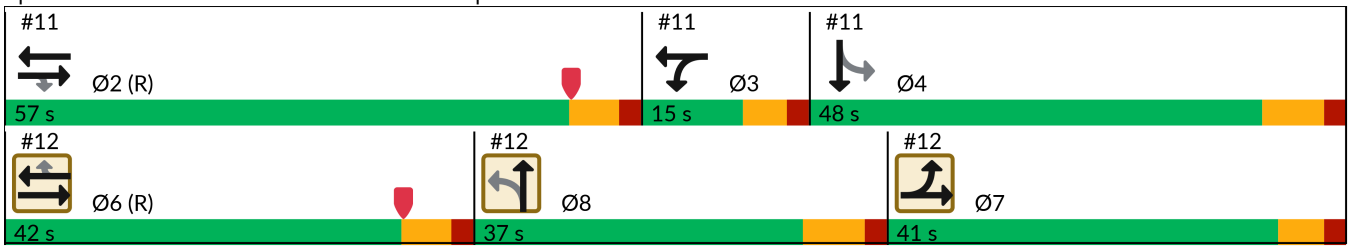
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 705 | 1187 | 0 | 0 | 620 | 782 | 438 | 0 | 14 | 0 | 0 | 0 |
| Future Volume (vph) | 705 | 1187 | 0 | 0 | 620 | 782 | 438 | 0 | 14 | 0 | 0 | 0 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 290 | | 0 | 365 | | 300 | 375 | | 375 | 0 | | 0 |
| Storage Lanes | 0 | | 0 | 2 | | 1 | 1 | | 1 | 0 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 0.97 | 0.95 | 1.00 | 1.00 | 0.86 | 1.00 | 0.91 | 0.91 | 0.95 | 1.00 | 1.00 | 1.00 |
| Frt | | | | | | 0.850 | | 0.991 | | | | |
| Flt Protected | 0.950 | | | | | | 0.950 | 0.955 | | | | |
| Satd. Flow (prot) | 3433 | 3539 | 0 | 0 | 6408 | 1583 | 1610 | 3208 | 0 | 0 | 0 | 0 |
| Flt Permitted | 0.950 | | | | | | 0.950 | 0.955 | | | | |
| Satd. Flow (perm) | 3433 | 3539 | 0 | 0 | 6408 | 1583 | 1610 | 3208 | 0 | 0 | 0 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | | | | 395 | | 100 | | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 481 | | | 694 | | | 897 | | | 1176 | |
| Travel Time (s) | | 10.9 | | | 15.8 | | | 20.4 | | | 26.7 | |
| 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 |
| Adj. Flow (vph) | 766 | 1290 | 0 | 0 | 674 | 850 | 476 | 0 | 15 | 0 | 0 | 0 |
| Shared Lane Traffic (%) | | | | | | | 50% | | | | | |
| Lane Group Flow (vph) | 766 | 1290 | 0 | 0 | 674 | 850 | 238 | 253 | 0 | 0 | 0 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 24 | | | 24 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | | 2 | 1 | 1 | 2 | | | | |
| Detector Template | Left | Thru | | | Thru | Right | Left | Thru | | | | |
| Leading Detector (ft) | 20 | 100 | | | 100 | 20 | 20 | 100 | | | | |
| Trailing Detector (ft) | 0 | 0 | | | 0 | 0 | 0 | 0 | | | | |
| Detector 1 Position(ft) | 0 | 0 | | | 0 | 0 | 0 | 0 | | | | |
| Detector 1 Size(ft) | 20 | 6 | | | 6 | 20 | 20 | 6 | | | | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | | | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | | |
| Turn Type | Prot | NA | | | NA | Perm | Perm | NA | | | | |
| Protected Phases | 7 | 6 7 | | | 6 | | | 8 | | | | |
| Permitted Phases | | | | | | 6 | 8 | | | | | |

| Lane Group | Ø2 | Ø3 | Ø4 |
|---|---|---|---|
| Lane Configurations | | | |
| Traffic Volume (vph) | | | |
| Future Volume (vph) | | | |
| Ideal Flow (vphpl) | | | |
| Storage Length (ft) | | | |
| Storage Lanes | | | |
| Taper Length (ft) | | | |
| Lane Util. Factor | | | |
| Frt | | | |
| Flt Protected | | | |
| Satd. Flow (prot) | | | |
| Flt Permitted | | | |
| Satd. Flow (perm) | | | |
| Right Turn on Red | | | |
| Satd. Flow (RTOR) | | | |
| Link Speed (mph) | | | |
| Link Distance (ft) | | | |
| Travel Time (s) | | | |
| Peak Hour Factor | | | |
| Adj. Flow (vph) | | | |
| Shared Lane Traffic (%) | | | |
| Lane Group Flow (vph) | | | |
| Enter Blocked Intersection | | | |
| Lane Alignment | | | |
| Median Width(ft) | | | |
| Link Offset(ft) | | | |
| Crosswalk Width(ft) | | | |
| Two way Left Turn Lane | | | |
| Headway Factor | | | |
| Turning Speed (mph) | | | |
| Number of Detectors | | | |
| Detector Template | | | |
| Leading Detector (ft) | | | |
| Trailing Detector (ft) | | | |
| Detector 1 Position(ft) | | | |
| Detector 1 Size(ft) | | | |
| Detector 1 Type | | | |
| Detector 1 Channel | | | |
| Detector 1 Extend (s) | | | |
| Detector 1 Queue (s) | | | |
| Detector 1 Delay (s) | | | |
| Detector 2 Position(ft) | | | |
| Detector 2 Size(ft) | | | |
| Detector 2 Type | | | |
| Detector 2 Channel | | | |
| Detector 2 Extend (s) | | | |
| Turn Type | | | |
| Protected Phases | 2 | 3 | 4 |
| Permitted Phases | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | 7 | 6 7 | | | 6 | 6 | 8 | 8 | | | | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | | | | 15.0 | 15.0 | 10.0 | 10.0 | | | | |
| Minimum Split (s) | 11.0 | | | | 26.5 | 26.5 | 45.5 | 45.5 | | | | |
| Total Split (s) | 41.0 | | | | 42.0 | 42.0 | 37.0 | 37.0 | | | | |
| Total Split (%) | 34.2% | | | | 35.0% | 35.0% | 30.8% | 30.8% | | | | |
| Maximum Green (s) | 35.0 | | | | 35.5 | 35.5 | 29.5 | 29.5 | | | | |
| Yellow Time (s) | 4.0 | | | | 4.5 | 4.5 | 5.5 | 5.5 | | | | |
| All-Red Time (s) | 2.0 | | | | 2.0 | 2.0 | 2.0 | 2.0 | | | | |
| Lost Time Adjust (s) | 0.0 | | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Total Lost Time (s) | 6.0 | | | | 6.5 | 6.5 | 7.5 | 7.5 | | | | |
| Lead/Lag | Lag | | | | | | Lead | Lead | | | | |
| Lead-Lag Optimize? | Yes | | | | | | Yes | Yes | | | | |
| Vehicle Extension (s) | 3.0 | | | | 3.0 | 3.0 | 3.0 | 3.0 | | | | |
| Recall Mode | None | | | | C-Max | C-Max | Max | Max | | | | |
| Walk Time (s) | | | | | 4.0 | 4.0 | 4.0 | 4.0 | | | | |
| Flash Don't Walk (s) | | | | | 16.0 | 16.0 | 34.0 | 34.0 | | | | |
| Pedestrian Calls (#/hr) | | | | | 0 | 0 | 0 | 0 | | | | |
| Act Effct Green (s) | 35.0 | 76.5 | | | 35.5 | 35.5 | 29.5 | 29.5 | | | | |
| Actuated g/C Ratio | 0.29 | 0.64 | | | 0.30 | 0.30 | 0.25 | 0.25 | | | | |
| v/c Ratio | 0.77 | 0.57 | | | 0.36 | 1.14 | 0.60 | 0.29 | | | | |
| Control Delay (s/veh) | 52.7 | 9.1 | | | 33.9 | 100.4 | 47.5 | 22.8 | | | | |
| Queue Delay | 0.3 | 0.4 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Total Delay (s/veh) | 53.0 | 9.5 | | | 33.9 | 100.4 | 47.5 | 22.8 | | | | |
| LOS | D | A | | | C | F | D | C | | | | |
| Approach Delay (s/veh) | | 25.7 | | | 71.0 | | | 34.8 | | | | |
| Approach LOS | | C | | | E | | | C | | | | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 120 | | | |
| Actuated Cycle Length: 120 | | | |
| Offset: 10 (8%), Referenced to phase 2:EBWB and 6:, Start of Yellow | | | |
| Natural Cycle: 115 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 1.14 | | | |
| Intersection Signal Delay (s/veh): 43.8 | | Intersection LOS: D | |
| Intersection Capacity Utilization 94.0% | | ICU Level of Service F | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 12: SR24 Westbound Ramps & Williams Field Road



| Intersection | |
|---|---|
| Int Delay, s/veh | 0.4 |

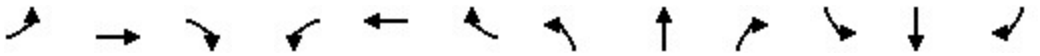
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 0 | 0 | 68 | 0 | 0 | 89 | 0 | 2798 | 15 | 0 | 3253 | 122 |
| Future Vol, veh/h | 0 | 0 | 68 | 0 | 0 | 89 | 0 | 2798 | 15 | 0 | 3253 | 122 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | 0 | - | - | 0 | - | - | 200 | - | - | - |
| 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 | 0 | 0 | 74 | 0 | 0 | 97 | 0 | 3041 | 16 | 0 | 3536 | 133 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | - | - | 1834 | - | - | 1521 | - | 0 | 0 | - | - | 0 |
| Stage 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - | - | - | - | - | - | - |
| Critical Hdwy | - | - | 7.14 | - | - | 7.14 | - | - | - | - | - | - |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | 3.92 | - | - | 3.92 | - | - | - | - | - | - |
| Pot Cap-1 Maneuver | 0 | 0 | *387 | 0 | 0 | *462 | 0 | - | - | 0 | - | - |
| Stage 1 | 0 | 0 | - | 0 | 0 | - | 0 | - | - | 0 | - | - |
| Stage 2 | 0 | 0 | - | 0 | 0 | - | 0 | - | - | 0 | - | - |
| Platoon blocked, % | | | 1 | | | 0 | | - | - | | - | - |
| Mov Cap-1 Maneuver | - | - | *387 | - | - | *462 | - | - | - | - | - | - |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s/v | 16.49 | 14.84 | 0 | 0 |
| HCM LOS | C | B | | |

| Minor Lane/Major Mvmt | NBT | NBR | EBLn1 | WBLn1 | SBT | SBR |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 387 | 462 | - | - |
| HCM Lane V/C Ratio | - | - | 0.191 | 0.209 | - | - |
| HCM Control Delay (s/veh) | - | - | 16.5 | 14.8 | - | - |
| HCM Lane LOS | - | - | C | B | - | - |
| HCM 95th %tile Q(veh) | - | - | 0.7 | 0.8 | - | - |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 190 | 0 | 128 | 159 | 0 | 219 | 95 | 2462 | 117 | 340 | 2852 | 130 |
| Future Volume (veh/h) | 190 | 0 | 128 | 159 | 0 | 219 | 95 | 2462 | 117 | 340 | 2852 | 130 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 207 | 0 | 139 | 173 | 0 | 238 | 103 | 2676 | 127 | 370 | 3100 | 141 |
| 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 | 499 | 379 | 321 | 421 | 0 | 476 | 259 | 2002 | 621 | 431 | 2386 | 107 |
| Arrive On Green | 0.15 | 0.00 | 0.20 | 0.10 | 0.00 | 0.15 | 0.08 | 0.78 | 0.78 | 0.04 | 0.16 | 0.16 |
| Sat Flow, veh/h | 1781 | 1870 | 1585 | 1781 | 0 | 3170 | 3456 | 5106 | 1585 | 3456 | 5009 | 225 |
| Grp Volume(v), veh/h | 207 | 0 | 139 | 173 | 0 | 238 | 103 | 2676 | 127 | 370 | 2092 | 1149 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1870 | 1585 | 1781 | 0 | 1585 | 1728 | 1702 | 1585 | 1728 | 1702 | 1830 |
| Q Serve(g_s), s | 10.8 | 0.0 | 9.2 | 9.7 | 0.0 | 8.3 | 2.1 | 47.0 | 2.5 | 12.8 | 57.2 | 57.2 |
| Cycle Q Clear(g_c), s | 10.8 | 0.0 | 9.2 | 9.7 | 0.0 | 8.3 | 2.1 | 47.0 | 2.5 | 12.8 | 57.2 | 57.2 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.12 |
| Lane Grp Cap(c), veh/h | 499 | 379 | 321 | 421 | 0 | 476 | 259 | 2002 | 621 | 431 | 1622 | 872 |
| V/C Ratio(X) | 0.42 | 0.00 | 0.43 | 0.41 | 0.00 | 0.50 | 0.40 | 1.34 | 0.20 | 0.86 | 1.29 | 1.32 |
| Avail Cap(c_a), veh/h | 499 | 379 | 321 | 421 | 0 | 476 | 581 | 2002 | 621 | 461 | 1622 | 872 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 | 0.33 | 0.33 | 0.33 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 31.7 | 0.0 | 41.8 | 37.6 | 0.0 | 46.9 | 27.9 | 13.0 | 8.1 | 56.5 | 50.6 | 50.6 |
| Incr Delay (d2), s/veh | 2.5 | 0.0 | 0.9 | 0.6 | 0.0 | 3.7 | 1.0 | 155.1 | 0.7 | 14.3 | 135.3 | 151.4 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 8.7 | 0.0 | 6.6 | 7.7 | 0.0 | 6.3 | 1.5 | 51.2 | 1.7 | 11.1 | 82.1 | 94.1 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 34.3 | 0.0 | 42.7 | 38.3 | 0.0 | 50.6 | 28.9 | 168.1 | 8.9 | 70.8 | 185.8 | 202.0 |
| LnGrp LOS | C | | D | D | | D | C | F | A | E | F | F |
| Approach Vol, veh/h | | 346 | | | 411 | | | 2906 | | | 3611 | |
| Approach Delay, s/veh | | 37.7 | | | 45.4 | | | 156.2 | | | 179.2 | |
| Approach LOS | | D | | | D | | | F | | | F | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 17.2 | 30.8 | 8.8 | 63.2 | 23.5 | 24.5 | 19.0 | 53.0 |
| Change Period (Y+Rc), s | 5.5 | 6.5 | 4.0 | 6.0 | 5.5 | 6.5 | 4.0 | 6.0 |
| Max Green Setting (Gmax), s | 11.7 | 24.3 | 16.0 | 46.0 | 18.0 | 18.0 | 16.0 | 46.0 |
| Max Q Clear Time (g_c+I1), s | 11.7 | 11.2 | 4.1 | 59.2 | 12.8 | 10.3 | 14.8 | 49.0 |
| Green Ext Time (p_c), s | 0.0 | 0.3 | 0.2 | 0.0 | 0.3 | 0.5 | 0.2 | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 155.7 |
| HCM 7th LOS | F |

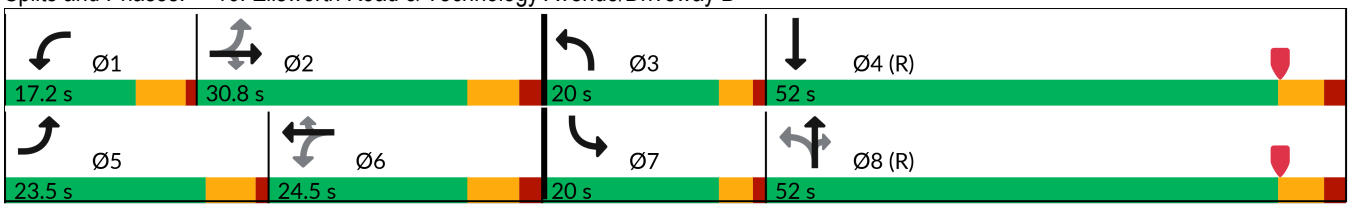
**Notes**

User approved volume balancing among the lanes for turning movement.

| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Movement | WBL | EBTL | NBL | SBT | EBL | WBTL | SBL | NBTL |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | None | None | None | C-Max | Max | Max | None | C-Max |
| Maximum Split (s) | 17.2 | 30.8 | 20 | 52 | 23.5 | 24.5 | 20 | 52 |
| Maximum Split (%) | 14.3% | 25.7% | 16.7% | 43.3% | 19.6% | 20.4% | 16.7% | 43.3% |
| Minimum Split (s) | 10.5 | 24.5 | 9.5 | 24 | 23.5 | 24.5 | 9.5 | 24 |
| Yellow Time (s) | 4.5 | 4.5 | 3 | 4 | 4.5 | 4.5 | 3 | 4 |
| All-Red Time (s) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| Minimum Initial (s) | 5 | 10 | 5 | 15 | 5 | 10 | 5 | 15 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) | | 7 | | 7 | | 7 | | 7 |
| Flash Don't Walk (s) | | 11 | | 11 | | 11 | | 11 |
| Dual Entry | No | Yes | No | Yes | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 6 | 23.2 | 54 | 74 | 6 | 29.5 | 54 | 74 |
| End Time (s) | 23.2 | 54 | 74 | 6 | 29.5 | 54 | 74 | 6 |
| Yield/Force Off (s) | 17.7 | 47.5 | 70 | 0 | 24 | 47.5 | 70 | 0 |
| Yield/Force Off 170(s) | 17.7 | 36.5 | 70 | 109 | 24 | 36.5 | 70 | 109 |
| Local Start Time (s) | 6 | 23.2 | 54 | 74 | 6 | 29.5 | 54 | 74 |
| Local Yield (s) | 17.7 | 47.5 | 70 | 0 | 24 | 47.5 | 70 | 0 |
| Local Yield 170(s) | 17.7 | 36.5 | 70 | 109 | 24 | 36.5 | 70 | 109 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 145 |
| Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBTL, Start of Yellow | |

Splits and Phases: 16: Ellsworth Road & Technology Avenue/Driveway B



| Intersection | |
|---|---|
| Int Delay, s/veh | 0.1 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 0 | 29 | 3509 | 60 | 0 | 3139 |
| Future Vol, veh/h | 0 | 29 | 3509 | 60 | 0 | 3139 |
| 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 | - | 100 | - | - |
| 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 | 32 | 3814 | 65 | 0 | 3412 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | - | 1907 | 0 | 0 | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | 7.14 | - | - | - | - |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | 3.92 | - | - | - | - |
| Pot Cap-1 Maneuver | 0 | *342 | - | - | 0 | - |
| Stage 1 | 0 | - | - | - | 0 | - |
| Stage 2 | 0 | - | - | - | 0 | - |
| Platoon blocked, % | | 1 | - | - | | - |
| Mov Cap-1 Maneuver | - | *342 | - | - | - | - |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 16.61 | 0 | 0 |
| HCM LOS | C | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | SBT |
|---|---|---|---|---|
| Capacity (veh/h) | - | - | 342 | - |
| HCM Lane V/C Ratio | - | - | 0.092 | - |
| HCM Control Delay (s/veh) | - | - | 16.6 | - |
| HCM Lane LOS | - | - | C | - |
| HCM 95th %tile Q(veh) | - | - | 0.3 | - |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 17 | 103 | 3466 | 30 | 106 | 3033 |
| Future Volume (veh/h) | 17 | 103 | 3466 | 30 | 106 | 3033 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width Adj. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 18 | 112 | 3767 | 33 | 115 | 3297 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 267 | 238 | 3553 | 1103 | 134 | 3957 |
| Arrive On Green | 0.15 | 0.15 | 0.70 | 0.70 | 0.04 | 0.77 |
| Sat Flow, veh/h | 1781 | 1585 | 5274 | 1585 | 1781 | 5274 |
| Grp Volume(v), veh/h | 18 | 112 | 3767 | 33 | 115 | 3297 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1585 | 1702 | 1585 | 1781 | 1702 |
| Q Serve(g_s), s | 1.0 | 7.8 | 83.5 | 0.8 | 3.6 | 49.2 |
| Cycle Q Clear(g_c), s | 1.0 | 7.8 | 83.5 | 0.8 | 3.6 | 49.2 |
| Prop In Lane | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Lane Grp Cap(c), veh/h | 267 | 238 | 3553 | 1103 | 134 | 3957 |
| V/C Ratio(X) | 0.07 | 0.47 | 1.06 | 0.03 | 0.86 | 0.83 |
| Avail Cap(c_a), veh/h | 267 | 238 | 3553 | 1103 | 134 | 3957 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 43.8 | 46.6 | 18.2 | 5.7 | 40.5 | 8.6 |
| Incr Delay (d2), s/veh | 0.5 | 6.6 | 34.2 | 0.1 | 38.8 | 2.2 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 0.9 | 6.3 | 52.5 | 0.5 | 6.9 | 21.5 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d), s/veh | 44.3 | 53.2 | 52.4 | 5.7 | 79.3 | 10.8 |
| LnGrp LOS | D | D | F | A | E | B |
| Approach Vol, veh/h | 130 | | 3800 | | | 3412 |
| Approach Delay, s/veh | 52.0 | | 52.0 | | | 13.1 |
| Approach LOS | D | | D | | | B |

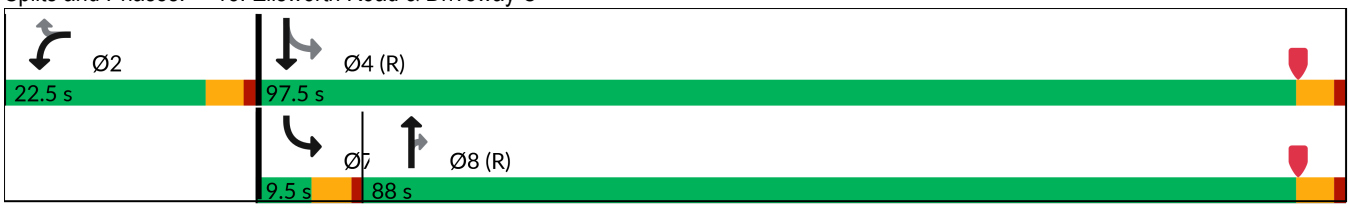
| Timer - Assigned Phs | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 22.5 | 97.5 | 9.5 | 88.0 |
| Change Period (Y+Rc), s | 4.5 | 4.5 | 4.5 | 4.5 |
| Max Green Setting (Gmax), s | 18.0 | 93.0 | 5.0 | 83.5 |
| Max Q Clear Time (g_c+I1), s | 9.8 | 51.2 | 5.6 | 85.5 |
| Green Ext Time (p_c), s | 0.2 | 39.6 | 0.0 | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 33.9 |
| HCM 7th LOS | C |

| Phase Number | 2 | 4 | 7 | 8 |
|---|---|---|---|---|
| Movement | WBL | SBTL | SBL | NBT |
| Lead/Lag | | | Lead | Lag |
| Lead-Lag Optimize | | | Yes | Yes |
| Recall Mode | Max | C-Max | None | C-Max |
| Maximum Split (s) | 22.5 | 97.5 | 9.5 | 88 |
| Maximum Split (%) | 18.8% | 81.3% | 7.9% | 73.3% |
| Minimum Split (s) | 22.5 | 22.5 | 9.5 | 22.5 |
| Yellow Time (s) | 3.5 | 3.5 | 3.5 | 3.5 |
| All-Red Time (s) | 1 | 1 | 1 | 1 |
| Minimum Initial (s) | 5 | 5 | 5 | 5 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | 7 | 7 | | 7 |
| Flash Don't Walk (s) | 11 | 11 | | 11 |
| Dual Entry | Yes | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 4.5 | 27 | 27 | 36.5 |
| End Time (s) | 27 | 4.5 | 36.5 | 4.5 |
| Yield/Force Off (s) | 22.5 | 0 | 32 | 0 |
| Yield/Force Off 170(s) | 11.5 | 109 | 32 | 109 |
| Local Start Time (s) | 4.5 | 27 | 27 | 36.5 |
| Local Yield (s) | 22.5 | 0 | 32 | 0 |
| Local Yield 170(s) | 11.5 | 109 | 32 | 109 |

| Intersection Summary | |
|---|---|
| Cycle Length | 120 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 150 |
| Offset: 0 (0%), Referenced to phase 4:SBTL and 8:NBT, Start of Yellow | |

Splits and Phases: 18: Ellsworth Road & Driveway C



| Intersection | |
|---|---|
| Int Delay, s/veh | 0.8 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 0 | 0 | 102 | 0 | 0 | 118 | 0 | 2454 | 88 | 37 | 2965 | 27 |
| Future Vol, veh/h | 0 | 0 | 102 | 0 | 0 | 118 | 0 | 2454 | 88 | 37 | 2965 | 27 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | 0 | - | - | 0 | - | - | 200 | 150 | - | - |
| 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 | 0 | 0 | 111 | 0 | 0 | 128 | 0 | 2667 | 96 | 40 | 3223 | 29 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | - | - | 1626 | - | - | 1334 | - | 0 | 0 | 2763 | 0 | 0 |
| Stage 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - | - | - | - | - | - | - |
| Critical Hdwy | - | - | 7.14 | - | - | 7.14 | - | - | - | 5.34 | - | - |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | 3.92 | - | - | 3.92 | - | - | - | 3.12 | - | - |
| Pot Cap-1 Maneuver | 0 | 0 | *432 | 0 | 0 | *522 | 0 | - | - | 135 | - | - |
| Stage 1 | 0 | 0 | - | 0 | 0 | - | 0 | - | - | - | - | - |
| Stage 2 | 0 | 0 | - | 0 | 0 | - | 0 | - | - | - | - | - |
| Platoon blocked, % | | | 1 | | | 0 | | - | - | 0 | - | - |
| Mov Cap-1 Maneuver | - | - | *432 | - | - | *522 | - | - | - | 135 | - | - |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s/v | 16.19 | 14.12 | 0 | 0.52 |
| HCM LOS | C | B | | |

| Minor Lane/Major Mvmt | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 432 | 522 | 135 | - | - |
| HCM Lane V/C Ratio | - | - | 0.257 | 0.246 | 0.298 | - | - |
| HCM Control Delay (s/veh) | - | - | 16.2 | 14.1 | 42.7 | - | - |
| HCM Lane LOS | - | - | C | B | E | - | - |
| HCM 95th %tile Q(veh) | - | - | 1 | 1 | 1.2 | - | - |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.2 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | ↑↑↑ | ↑↑↑ | ↱ | | ↱ |
| Traffic Vol, veh/h | 0 | 1724 | 1520 | 38 | 0 | 54 |
| Future Vol, veh/h | 0 | 1724 | 1520 | 38 | 0 | 54 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | 200 | - | 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 | 1874 | 1652 | 41 | 0 | 59 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | - | 0 | - | 0 | - | 826 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | - | - | - | - | 7.14 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | - | - | - | 3.92 |
| Pot Cap-1 Maneuver | 0 | - | - | - | 0 | *673 |
| Stage 1 | 0 | - | - | - | 0 | - |
| Stage 2 | 0 | - | - | - | 0 | - |
| Platoon blocked, % | | - | - | - | | 0 |
| Mov Cap-1 Maneuver | - | - | - | - | - | *673 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 0 | 0 | 10.86 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|
| Capacity (veh/h) | - | - | - | 673 |
| HCM Lane V/C Ratio | - | - | - | 0.087 |
| HCM Control Delay (s/veh) | - | - | - | 10.9 |
| HCM Lane LOS | - | - | - | B |
| HCM 95th %tile Q(veh) | - | - | - | 0.3 |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.1 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | ↑↑↑ | ↑↑↑ | ↱ | | ↱ |
| Traffic Vol, veh/h | 0 | 1724 | 1522 | 29 | 0 | 35 |
| Future Vol, veh/h | 0 | 1724 | 1522 | 29 | 0 | 35 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | 200 | - | 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 | 1874 | 1654 | 32 | 0 | 38 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | - | 0 | - | 0 | - | 827 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | - | - | - | - | 7.14 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | - | - | - | 3.92 |
| Pot Cap-1 Maneuver | 0 | - | - | - | 0 | *673 |
| Stage 1 | 0 | - | - | - | 0 | - |
| Stage 2 | 0 | - | - | - | 0 | - |
| Platoon blocked, % | | - | - | - | | 0 |
| Mov Cap-1 Maneuver | - | - | - | - | - | *673 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 0 | 0 | 10.67 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|
| Capacity (veh/h) | - | - | - | 673 |
| HCM Lane V/C Ratio | - | - | - | 0.057 |
| HCM Control Delay (s/veh) | - | - | - | 10.7 |
| HCM Lane LOS | - | - | - | B |
| HCM 95th %tile Q(veh) | - | - | - | 0.2 |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.7 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 112 | 1548 | 1200 | 42 | 0 | 48 |
| Future Vol, veh/h | 112 | 1548 | 1200 | 42 | 0 | 48 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 100 | - | - | 200 | - | 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 | 122 | 1683 | 1304 | 46 | 0 | 52 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 1350 | 0 | - | 0 | - | 652 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | 5.34 | - | - | - | - | 7.14 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | 3.12 | - | - | - | - | 3.92 |
| Pot Cap-1 Maneuver | 498 | - | - | - | 0 | *738 |
| Stage 1 | - | - | - | - | 0 | - |
| Stage 2 | - | - | - | - | 0 | - |
| Platoon blocked, % | 0 | - | - | - | | 0 |
| Mov Cap-1 Maneuver | 498 | - | - | - | - | *738 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 0.98 | 0 | 10.25 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 498 | - | - | - | 738 |
| HCM Lane V/C Ratio | 0.244 | - | - | - | 0.071 |
| HCM Control Delay (s/veh) | 14.5 | - | - | - | 10.2 |
| HCM Lane LOS | B | - | - | - | B |
| HCM 95th %tile Q(veh) | 1 | - | - | - | 0.2 |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.1 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | ↑↑↑ | ↑↑↑ | ↱ | | ↱ |
| Traffic Vol, veh/h | 0 | 1585 | 1200 | 64 | 0 | 40 |
| Future Vol, veh/h | 0 | 1585 | 1200 | 64 | 0 | 40 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | 0 | - | 0 |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 1723 | 1304 | 70 | 0 | 43 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | - | 0 | - | 0 | - | 652 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | - | - | - | - | 7.14 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | - | - | - | 3.92 |
| Pot Cap-1 Maneuver | 0 | - | - | - | 0 | *738 |
| Stage 1 | 0 | - | - | - | 0 | - |
| Stage 2 | 0 | - | - | - | 0 | - |
| Platoon blocked, % | | - | - | - | | 0 |
| Mov Cap-1 Maneuver | - | - | - | - | - | *738 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 0 | 0 | 10.18 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|
| Capacity (veh/h) | - | - | - | 738 |
| HCM Lane V/C Ratio | - | - | - | 0.059 |
| HCM Control Delay (s/veh) | - | - | - | 10.2 |
| HCM Lane LOS | - | - | - | B |
| HCM 95th %tile Q(veh) | - | - | - | 0.2 |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.6 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 89 | 1496 | 1216 | 83 | 0 | 48 |
| Future Vol, veh/h | 89 | 1496 | 1216 | 83 | 0 | 48 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 200 | - | - | 200 | - | 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 | 97 | 1626 | 1322 | 90 | 0 | 52 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 1412 | 0 | - | 0 | - | 661 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | 5.34 | - | - | - | - | 7.14 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | 3.12 | - | - | - | - | 3.92 |
| Pot Cap-1 Maneuver | 466 | - | - | - | 0 | *734 |
| Stage 1 | - | - | - | - | 0 | - |
| Stage 2 | - | - | - | - | 0 | - |
| Platoon blocked, % | 0 | - | - | - | | 0 |
| Mov Cap-1 Maneuver | 466 | - | - | - | - | *734 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 0.83 | 0 | 10.28 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 466 | - | - | - | 734 |
| HCM Lane V/C Ratio | 0.208 | - | - | - | 0.071 |
| HCM Control Delay (s/veh) | 14.7 | - | - | - | 10.3 |
| HCM Lane LOS | B | - | - | - | B |
| HCM 95th %tile Q(veh) | 0.8 | - | - | - | 0.2 |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Intersection | |
|---|---|
| Int Delay, s/veh | 1 |

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | ↑↑↑ | ↱ | | ↑↑↑ | | ↱ |
| Traffic Vol, veh/h | 1278 | 333 | 0 | 1298 | 0 | 237 |
| Future Vol, veh/h | 1278 | 333 | 0 | 1298 | 0 | 237 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 0 | - | - | - | 0 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 1389 | 362 | 0 | 1411 | 0 | 258 |

| Major/Minor | Major1 | | Major2 | | Minor1 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 0 | 0 | - | - | - | 695 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | - | - | - | - | 7.14 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | - | - | - | 3.92 |
| Pot Cap-1 Maneuver | - | - | 0 | - | 0 | *718 |
| Stage 1 | - | - | 0 | - | 0 | - |
| Stage 2 | - | - | 0 | - | 0 | - |
| Platoon blocked, % | - | - | | - | | 0 |
| Mov Cap-1 Maneuver | - | - | - | - | - | *718 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | WB | NB |
|---|---|---|---|
| HCM Control Delay, s/v | 0 | 0 | 12.79 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBT |
|---|---|---|---|---|
| Capacity (veh/h) | 718 | - | - | - |
| HCM Lane V/C Ratio | 0.359 | - | - | - |
| HCM Control Delay (s/veh) | 12.8 | - | - | - |
| HCM Lane LOS | B | - | - | - |
| HCM 95th %tile Q(veh) | 1.6 | - | - | - |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 3.6 |
| Intersection LOS | A |

| Approach | WB | SB | NE |
|---|---|---|---|
| Entry Lanes | 2 | 2 | 1 |
| Conflicting Circle Lanes | 2 | 2 | 2 |
| Adj Approach Flow, veh/h | 175 | 208 | 129 |
| Demand Flow Rate, veh/h | 179 | 213 | 131 |
| Vehicles Circulating, veh/h | 71 | 0 | 129 |
| Vehicles Exiting, veh/h | 189 | 250 | 84 |
| Ped Vol Crossing Leg, #/h | 0 | 0 | 0 |
| Ped Cap Adj | 1.000 | 1.000 | 1.000 |
| Approach Delay, s/veh | 3.8 | 3.3 | 3.7 |
| Approach LOS | A | A | A |

| Lane | Left | Right | Left | Right | Left |
|---|---|---|---|---|---|
| Designated Moves | L | TR | L | LTR | LR |
| Assumed Moves | L | TR | L | LTR | LR |
| RT Channelized | | | | | |
| Lane Util | 0.000 | 1.000 | 0.531 | 0.469 | 1.000 |
| Follow-Up Headway, s | 2.667 | 2.535 | 2.667 | 2.535 | 2.535 |
| Critical Headway, s | 4.645 | 4.328 | 4.645 | 4.328 | 4.328 |
| A (Intercept) | 1350 | 1420 | 1350 | 1420 | 1420 |
| B (Slope) | 9.199e-4 | 8.501e-4 | 9.199e-4 | 8.501e-4 | 8.501e-4 |
| Entry Flow, veh/h | 0 | 179 | 113 | 100 | 131 |
| Cap Entry Lane, veh/h | 1264 | 1337 | 1350 | 1420 | 1273 |
| Entry HV Adj Factor | 1.000 | 0.978 | 0.976 | 0.978 | 0.985 |
| Flow Entry, veh/h | 0 | 175 | 110 | 98 | 129 |
| Cap Entry, veh/h | 1264 | 1307 | 1317 | 1388 | 1253 |
| V/C Ratio | 0.000 | 0.134 | 0.084 | 0.070 | 0.103 |
| Control Delay, s/veh | 2.8 | 3.8 | 3.4 | 3.1 | 3.7 |
| LOS | A | A | A | A | A |
| 95th %tile Queue, veh | 0 | 0 | 0 | 0 | 0 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 4.1 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 46 | 41 | 29 | 72 | 75 | 0 |
| Future Vol, veh/h | 46 | 41 | 29 | 72 | 75 | 0 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | - | - |
| 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 | 50 | 45 | 32 | 78 | 82 | 0 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 223 | 82 | 82 | 0 | - | 0 |
| Stage 1 | 82 | - | - | - | - | - |
| Stage 2 | 141 | - | - | - | - | - |
| 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 | 765 | 978 | 1516 | - | - | - |
| Stage 1 | 942 | - | - | - | - | - |
| Stage 2 | 886 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 749 | 978 | 1516 | - | - | - |
| Mov Cap-2 Maneuver | 749 | - | - | - | - | - |
| Stage 1 | 921 | - | - | - | - | - |
| Stage 2 | 886 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 9.82 | 2.13 | 0 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 517 | - | 842 | - | - |
| HCM Lane V/C Ratio | 0.021 | - | 0.112 | - | - |
| HCM Control Delay (s/veh) | 7.4 | 0 | 9.8 | - | - |
| HCM Lane LOS | A | A | A | - | - |
| HCM 95th %tile Q(veh) | 0.1 | - | 0.4 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 6.2 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 51 | 81 | 104 | 42 | 60 | 16 |
| Future Vol, veh/h | 51 | 81 | 104 | 42 | 60 | 16 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | - | - |
| 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 | 55 | 88 | 113 | 46 | 65 | 17 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 346 | 74 | 83 | 0 | - | 0 |
| Stage 1 | 74 | - | - | - | - | - |
| Stage 2 | 272 | - | - | - | - | - |
| 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 | 651 | 988 | 1515 | - | - | - |
| Stage 1 | 949 | - | - | - | - | - |
| Stage 2 | 774 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 601 | 988 | 1515 | - | - | - |
| Mov Cap-2 Maneuver | 601 | - | - | - | - | - |
| Stage 1 | 876 | - | - | - | - | - |
| Stage 2 | 774 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 10.56 | 5.39 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1282 | - | 791 | - | - |
| HCM Lane V/C Ratio | 0.075 | - | 0.181 | - | - |
| HCM Control Delay (s/veh) | 7.6 | 0 | 10.6 | - | - |
| HCM Lane LOS | A | A | B | - | - |
| HCM 95th %tile Q(veh) | 0.2 | - | 0.7 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 6.7 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 15 | 70 | 40 | 0 | 101 | 51 | 12 | 79 | 8 | 87 | 79 | 6 |
| Future Vol, veh/h | 15 | 70 | 40 | 0 | 101 | 51 | 12 | 79 | 8 | 87 | 79 | 6 |
| 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 | - | - | - | - | - | - | - | - | - | - | - | - |
| 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 | 76 | 43 | 0 | 110 | 55 | 13 | 86 | 9 | 95 | 86 | 7 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 165 | 0 | 0 | 120 | 0 | 0 | 283 | 296 | 98 | 289 | 290 | 138 |
| Stage 1 | - | - | - | - | - | - | 130 | 130 | - | 138 | 138 | - |
| Stage 2 | - | - | - | - | - | - | 153 | 165 | - | 152 | 152 | - |
| Critical Hdwy | 4.12 | - | - | 4.12 | - | - | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Follow-up Hdwy | 2.218 | - | - | 2.218 | - | - | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 |
| Pot Cap-1 Maneuver | 1413 | - | - | 1468 | - | - | 669 | 616 | 958 | 663 | 621 | 911 |
| Stage 1 | - | - | - | - | - | - | 873 | 788 | - | 866 | 783 | - |
| Stage 2 | - | - | - | - | - | - | 850 | 762 | - | 851 | 771 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1413 | - | - | 1468 | - | - | 565 | 608 | 958 | 558 | 613 | 911 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 565 | 608 | - | 558 | 613 | - |
| Stage 1 | - | - | - | - | - | - | 862 | 778 | - | 866 | 783 | - |
| Stage 2 | - | - | - | - | - | - | 751 | 762 | - | 741 | 762 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s/v | 0.91 | 0 | 12.01 | 13.9 |
| HCM LOS | | | B | B |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 621 | 201 | - | - | 1468 | - | - | 590 |
| HCM Lane V/C Ratio | 0.173 | 0.012 | - | - | - | - | - | 0.317 |
| HCM Control Delay (s/veh) | 12 | 7.6 | 0 | - | 0 | - | - | 13.9 |
| HCM Lane LOS | B | A | A | - | A | - | - | B |
| HCM 95th %tile Q(veh) | 0.6 | 0 | - | - | 0 | - | - | 1.4 |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 4.0 |
| Intersection LOS | A |

| Approach | EB | WB | NB |
|---|---|---|---|
| Entry Lanes | 1 | 1 | 1 |
| Conflicting Circle Lanes | 1 | 1 | 1 |
| Adj Approach Flow, veh/h | 180 | 163 | 153 |
| Demand Flow Rate, veh/h | 183 | 166 | 156 |
| Vehicles Circulating, veh/h | 66 | 68 | 109 |
| Vehicles Exiting, veh/h | 168 | 197 | 140 |
| Ped Vol Crossing Leg, #/h | 0 | 0 | 0 |
| Ped Cap Adj | 1.000 | 1.000 | 1.000 |
| Approach Delay, s/veh | 4.0 | 3.9 | 4.0 |
| Approach LOS | A | A | A |

| Lane | Left | Left | Left |
|---|---|---|---|
| Designated Moves | TR | LT | LR |
| Assumed Moves | TR | LT | LR |
| RT Channelized | | | |
| Lane Util | 1.000 | 1.000 | 1.000 |
| Follow-Up Headway, s | 2.609 | 2.609 | 2.609 |
| Critical Headway, s | 4.976 | 4.976 | 4.976 |
| A (Intercept) | 1380 | 1380 | 1380 |
| B (Slope) | 1.02e-3 | 1.02e-3 | 1.02e-3 |
| Entry Flow, veh/h | 183 | 166 | 156 |
| Cap Entry Lane, veh/h | 1290 | 1287 | 1235 |
| Entry HV Adj Factor | 0.983 | 0.982 | 0.981 |
| Flow Entry, veh/h | 180 | 163 | 153 |
| Cap Entry, veh/h | 1268 | 1264 | 1211 |
| V/C Ratio | 0.142 | 0.129 | 0.126 |
| Control Delay, s/veh | 4.0 | 3.9 | 4.0 |
| LOS | A | A | A |
| 95th %tile Queue, veh | 0 | 0 | 0 |

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

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 28 | 13 | 2 | 86 | 68 | 34 |
| Future Vol, veh/h | 28 | 13 | 2 | 86 | 68 | 34 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | 150 | - | - | - |
| 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 | 30 | 14 | 2 | 93 | 74 | 37 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 143 | 55 | 111 | 0 | - | 0 |
| Stage 1 | 92 | - | - | - | - | - |
| Stage 2 | 51 | - | - | - | - | - |
| Critical Hdwy | 6.84 | 6.94 | 4.14 | - | - | - |
| Critical Hdwy Stg 1 | 5.84 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.84 | - | - | - | - | - |
| Follow-up Hdwy | 3.52 | 3.32 | 2.22 | - | - | - |
| Pot Cap-1 Maneuver | 835 | 1000 | 1477 | - | - | - |
| Stage 1 | 921 | - | - | - | - | - |
| Stage 2 | 965 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 833 | 1000 | 1477 | - | - | - |
| Mov Cap-2 Maneuver | 833 | - | - | - | - | - |
| Stage 1 | 919 | - | - | - | - | - |
| Stage 2 | 965 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 9.31 | 0.17 | 0 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1477 | - | 880 | - | - |
| HCM Lane V/C Ratio | 0.001 | - | 0.051 | - | - |
| HCM Control Delay (s/veh) | 7.4 | - | 9.3 | - | - |
| HCM Lane LOS | A | - | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 0.2 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 3.1 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 5 | 135 | 31 | 207 | 109 | 7 |
| Future Vol, veh/h | 5 | 135 | 31 | 207 | 109 | 7 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | 150 | - | - | - |
| 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 | 5 | 147 | 34 | 225 | 118 | 8 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 302 | 63 | 126 | 0 | - | 0 |
| Stage 1 | 122 | - | - | - | - | - |
| Stage 2 | 180 | - | - | - | - | - |
| Critical Hdwy | 6.84 | 6.94 | 4.14 | - | - | - |
| Critical Hdwy Stg 1 | 5.84 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.84 | - | - | - | - | - |
| Follow-up Hdwy | 3.52 | 3.32 | 2.22 | - | - | - |
| Pot Cap-1 Maneuver | 665 | 988 | 1458 | - | - | - |
| Stage 1 | 890 | - | - | - | - | - |
| Stage 2 | 833 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 650 | 988 | 1458 | - | - | - |
| Mov Cap-2 Maneuver | 650 | - | - | - | - | - |
| Stage 1 | 869 | - | - | - | - | - |
| Stage 2 | 833 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 9.4 | 0.98 | 0 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1458 | - | 970 | - | - |
| HCM Lane V/C Ratio | 0.023 | - | 0.157 | - | - |
| HCM Control Delay (s/veh) | 7.5 | - | 9.4 | - | - |
| HCM Lane LOS | A | - | A | - | - |
| HCM 95th %tile Q(veh) | 0.1 | - | 0.6 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 6.6 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 75 | 124 | 113 | 125 | 243 | 90 |
| Future Vol, veh/h | 75 | 124 | 113 | 125 | 243 | 90 |
| 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 | - | - | 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 | 82 | 135 | 123 | 136 | 264 | 98 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 817 | 191 | 0 | 0 | 259 | 0 |
| Stage 1 | 191 | - | - | - | - | - |
| Stage 2 | 626 | - | - | - | - | - |
| 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 | 346 | 851 | - | - | 1306 | - |
| Stage 1 | 842 | - | - | - | - | - |
| Stage 2 | 533 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | 276 | 851 | - | - | 1306 | - |
| Mov Cap-2 Maneuver | 276 | - | - | - | - | - |
| Stage 1 | 842 | - | - | - | - | - |
| Stage 2 | 425 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 15.07 | 0 | 6.17 |
| HCM LOS | C | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | WBLn2 | SBL | SBT |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 276 | 851 | 1306 | - |
| HCM Lane V/C Ratio | - | - | 0.295 | 0.158 | 0.202 | - |
| HCM Control Delay (s/veh) | - | - | 23.4 | 10 | 8.5 | - |
| HCM Lane LOS | - | - | C | B | A | - |
| HCM 95th %tile Q(veh) | - | - | 1.2 | 0.6 | 0.8 | - |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 25.6 |
| Intersection LOS | D |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 222 | 78 | 34 | 428 | 349 | 144 |
| Future Vol, veh/h | 222 | 78 | 34 | 428 | 349 | 144 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 241 | 85 | 37 | 465 | 379 | 157 |
| Number of Lanes | 1 | 1 | 1 | 1 | 1 | 1 |

| Approach | EB | WB | SB |
|---|---|---|---|
| Opposing Approach | WB | EB | |
| Opposing Lanes | 2 | 2 | 0 |
| Conflicting Approach Left | SB | | WB |
| Conflicting Lanes Left | 2 | 0 | 2 |
| Conflicting Approach Right | | SB | EB |
| Conflicting Lanes Right | 0 | 2 | 2 |
| HCM Control Delay, s/veh | 16.8 | 29.8 | 27.1 |
| HCM LOS | C | D | D |

| Lane | EBLn1 | EBLn2 | WBLn1 | WBLn2 | SBLn1 | SBLn2 |
|---|---|---|---|---|---|---|
| Vol Left, % | 100% | 0% | 0% | 0% | 100% | 0% |
| Vol Thru, % | 0% | 100% | 100% | 0% | 0% | 0% |
| Vol Right, % | 0% | 0% | 0% | 100% | 0% | 100% |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 222 | 78 | 34 | 428 | 349 | 144 |
| LT Vol | 222 | 0 | 0 | 0 | 349 | 0 |
| Through Vol | 0 | 78 | 34 | 0 | 0 | 0 |
| RT Vol | 0 | 0 | 0 | 428 | 0 | 144 |
| Lane Flow Rate | 241 | 85 | 37 | 465 | 379 | 157 |
| Geometry Grp | 5 | 5 | 5 | 5 | 5 | 5 |
| Degree of Util (X) | 0.52 | 0.171 | 0.072 | 0.816 | 0.795 | 0.275 |
| Departure Headway (Hd) | 7.763 | 7.248 | 7.032 | 6.315 | 7.541 | 6.319 |
| Convergence, Y/N | Yes | Yes | Yes | Yes | Yes | Yes |
| Cap | 466 | 495 | 510 | 572 | 482 | 571 |
| Service Time | 5.506 | 4.992 | 4.77 | 4.052 | 5.241 | 4.019 |
| HCM Lane V/C Ratio | 0.517 | 0.172 | 0.073 | 0.813 | 0.786 | 0.275 |
| HCM Control Delay, s/veh | 18.7 | 11.5 | 10.3 | 31.3 | 33.6 | 11.4 |
| HCM Lane LOS | C | B | B | D | D | B |
| HCM 95th-tile Q | 2.9 | 0.6 | 0.2 | 8.2 | 7.3 | 1.1 |

# Appendix N – Arizona Athletic Grounds Schedule

# AAG: WEEKEND OF JANUARY 23-25

## FIELDHOUSE A

**North American Grappling Association**

Days/Hours:
- Friday: Weigh Ins - 6pm
- Saturday 8 AM - 9 PM

Tickets: EXTERNAL
- $20 Adult
- $12 Youth (Under 12)

**STREAMING: FLOW**
**Not on NBC**

## SOCCER FIELDS

**AZ Soccer Clash**

Days/Hours:
- Friday 5 PM - 930 PM
- Saturday 8 AM - 10 PM
- Sunday 8 AM - 6 PM

Tickets: Main/East
- $24+ LOE
- $8+ Daily
- 10 & Under FREE

## FIELDHOUSE B

**Grind Session B-Ball**

Days/Hours:
- Friday 5 PM - 930 PM
- Saturday 9 AM - 9 PM
- Sunday 9 AM - 12 PM

Tickets: A/B
- $31 LOE
- $15 Day
- 10 & Under FREE

**AZ Region Volleyball**

Days/Hours:
- Saturday 8 AM - 10 PM

Tickets: A/B & C
- $8 Adult
- $10 & Under FREE

**BOTH STREAMING: NBC**

## THE YARD

**P1440 Grass Volleyball Tournament**

Days/Hours:
- Saturday 10 AM - 3 PM

Tickets:
- FREE

## FIELDHOUSE C

**VOS Cheer Winter Championship**

Days/Hours:
- Saturday 8 AM - 4 PM
- Sunday 8 AM - 4 PM

Tickets: Fieldhouse C
- Adult
  - $65 LOE $38 Day
- Youth (11-15 yrs)
  - $53 LOE $33 Day
- 10 & Under FREE

## DIAMONDS

**One Swing Fastpitch AZ Last Blast**

Days/Hours:
- Friday 9 AM - 930 PM
- Saturday 8 AM - 11 PM

Tickets: Diamonds
- $15+ LOE
- $8+ Daily
- 10 & Under FREE

## HELPFUL INFORMATION:

Other Events
- US Soccer National Camp
  - Getting Bused in, will be dropped off and buses will go park
  - EMT will be onsite in the Com Lot.
  - Using Performance & Fields 5,6 West gate monitored by Security & Fields team
  - Food Catered in Performance
  - Everyone will have US Soccer Credentials
  - Using all Showers
- Beach Birthday Party Sunday from 2pm-8pm 50ish people

Soccer
- Main gate ONLY on Friday. East Gate Saturday and Sunday
- Arsenal Teams get in with passes (1 person per qr code)
- Team Check-In is at the player gate

## ARCADE

**Saturday:** 11 AM - 6 PM
**Sunday:** 10 AM - 3 PM

## SHUTTLES

**Friday:** 8 AM - 9 PM
**Saturday:** 7 AM - 9 PM
**Sunday:** 7 AM - 6 PM

## SECURITY

RADIO CHANNEL 2
OR TEXT
480 - 572 - 0606

# Appendix O – Signal Warrant

# Warrants Summary Report

**1: 2029 - Ellsworth Rd and Dwy C**

**Intersection Information:**

| | Major Street | Minor Street |
|---|---|---|
| **Street Name** | Ellsworth Road | Driveway C |
| **Direction** | NB/SB | WB |
| **Number of Lanes** | 2 | 2 |
| **Approach Speed** | 50 | 25 |

| Warrant | Met? | Notes |
|---|---|---|
| **Warrant 1, Eight-Hour Vehicular Volume** | | |
| | No | |
| Condition A or B Met? | No | 0 Hours met (8 required) |
| Condition A and B Met? | No | 0 Hours met (8 required) |
| **Warrant 2, Four-Hour Vehicular Volume** | | |
| | No | 0 Hours met (4 required) |
| **Warrant 3, Peak Hour** | | |
| | No | |
| Condition A Met? | No | 0 Hours met (1 required) |
| Condition B Met? | No | 0 Hours met (1 required) |
| **Warrant 4, Pedestrian Volume** | | |
| | No | |
| Peds > 100 Condition Me | No | 0 Hours met (4 required) |
| Peds > 190 Condition Me | No | 0 Hours met (1 required) |
| **Warrant 5, School Crossing** | | |
| | No | |

# Warrants Summary Report

**1: 2029 - Ellsworth Rd and Dwy C**

**Warrant 6, Coordinated Signal System**

No

**Warrant 7, Crash Experience**

No

| | | |
|---|---|---|
| Traffic Volume Cond.? | No | 0 Hours met (8 required) |
| Ped Condition? | No | 0 Hours met (8 required) |

**Warrant 8, Roadway Network**

No

# Warrants Summary Report

**2: 2044 - Ellsworth Rd and Dwy C**

**Intersection Information:**

| | Major Street | Minor Street |
|---|---|---|
| **Street Name** | Ellsworth Rd | Driveway C |
| **Direction** | NB/SB | WB |
| **Number of Lanes** | 2 | 2 |
| **Approach Speed** | 45 | 25 |

| Warrant | Met? | Notes |
|---|---|---|
| **Warrant 1, Eight-Hour Vehicular Volume** | | |
| | Yes | |
| Condition A or B Met? | Yes | 14 Hours met (8 required) |
| Condition A and B Met? | Yes | 10 Hours met (8 required) |
| **Warrant 2, Four-Hour Vehicular Volume** | | |
| | Yes | 14 Hours met (4 required) |
| **Warrant 3, Peak Hour** | | |
| | Yes | |
| Condition A Met? | No | 0 Hours met (1 required) |
| Condition B Met? | Yes | 12 Hours met (1 required) |
| **Warrant 4, Pedestrian Volume** | | |
| | No | |
| Peds > 100 Condition Me | No | 0 Hours met (4 required) |
| Peds > 190 Condition Me | No | 0 Hours met (1 required) |
| **Warrant 5, School Crossing** | | |
| | No | |

# Warrants Summary Report

**2: 2044 - Ellsworth Rd and Dwy C**

**Warrant 6, Coordinated Signal System**

No

**Warrant 7, Crash Experience**

No

| | | |
|---|---|---|
| Traffic Volume Cond.? | Yes | 16 Hours met (8 required) |
| Ped Condition? | No | 0 Hours met (8 required) |

**Warrant 8, Roadway Network**

Yes