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# TRAFFIC IMPACT STUDY

## PROPOSED RESIDENTIAL DEVELOPMENT

### HAWK'S CREEK

### BROWNSBURG, INDIANA

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PREPARED FOR

David Weekley Homes

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JULY 2024

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## CERTIFICATION

I certify that this **TRAFFIC IMPACT STUDY** has been prepared by me and under my immediate supervision and that I have experience and training in the field of traffic and transportation engineering.

A&F ENGINEERING CO., LLC


July 23, 2024
R. Matt Brown, P.E.
Indiana Registration 10200056

Sri Gayatri Kesara
Traffic Engineer Technician

## INTRODUCTION

This **TRAFFIC IMPACT STUDY**, prepared on behalf of David Weekley Homes, is for a proposed residential development known as "Hawk's Creek" that will be located south of CR 800 North & west of SR 267 (Green Street) in Brownsburg, Indiana.

## PURPOSE

The purpose of this analysis is to determine what impact traffic generated by the proposed residential development will have on the existing adjacent roadway system. This analysis will identify any existing roadway deficiencies or ones that may occur in the future.

Conclusions will be reached that will determine if the roadway system can accommodate the anticipated traffic volumes or will determine the modifications that will be required to the system if there are identified deficiencies.

Recommendations will be made that will address the conclusions resulting from this analysis. These recommendations will address feasible roadway system improvements to provide safe ingress and egress, to and from the proposed residential development, with minimal interference to traffic on the public street system.

## SCOPE OF WORK

The scope of work for this analysis is as follows:

First, obtain peak hour turning movement traffic volume counts between the hours of 6:30 AM and 9:00 AM and 3:30 PM and 7:00 PM at the following intersections:

- CR 800 N & CR 650 E
- CR 800 N & SR 267 (Green Street)
- CR 700 N & CR 650 E
- CR 700 N & SR 267 (Green Street)
- SR 267 (Green Street) & Acre Lane

Second, estimate the year 2029 background traffic volumes by applying growth rate factors provided by Shrewsberry to the existing traffic volumes.

Third, estimate the number of peak hour trips that will be generated by the proposed residential development.

Fourth, assign and distribute the generated peak hour traffic from the proposed residential development to each of the study intersections.

Fifth, prepare a capacity analysis, level of service analysis and turn lane analysis at the study intersections for each of the following scenarios:

*Scenario 1: Existing Traffic Volumes* – Based on existing peak hour traffic volumes.

*Scenario 2: Year 2029 Background Traffic Volumes* – Based on applying growth rate factors provided by Shrewsberry to the existing traffic volumes.

*Scenario 3: Year 2029 + Proposed Development Traffic Volumes* – Based on the sum of year 2029 background traffic volumes and generated traffic volumes from the proposed development.

Sixth, prepare recommendations for the roadway geometrics that will be needed to accommodate the future traffic volumes.

Finally, prepare a **TRAFFIC IMPACT STUDY** report documenting all data, analyses, conclusions, and recommendations to provide for the safe and efficient movement of traffic through the study area.

## DESCRIPTION OF THE PROPOSED DEVELOPMENT

The proposed development will be located south of CR 800 North & west of SR 267 (Green Street) in Brownsburg, Indiana. The proposed residential development will consist of two parcels. The west parcel will have 89 homes and the east parcel will have 25 homes. As proposed, the west parcel will be served by a full access drive along CR 800 N and a connection to the existing Windridge Lane. The east parcel will be served via a realigned access drive at the existing Connection Pointe Christian Church access location along SR 267 (Green Street). **Figure 1** is an area map showing the location and general layout of the proposed site.

## STUDY AREA

The study area for this analysis has been defined to include the following intersections:

- CR 800 N & CR 650 E
- CR 800 N & SR 267 (Green Street)
- CR 700 N & CR 650 E
- CR 700 N & SR 267 (Green Street)
- SR 267 (Green Street) & Acre Lane/ Connection Pointe Christian Church/ Proposed Development Access Drive
- CR 800 N & Proposed Access Drive

**Figures 2A & 2B** show the existing intersection geometrics at the study intersections.

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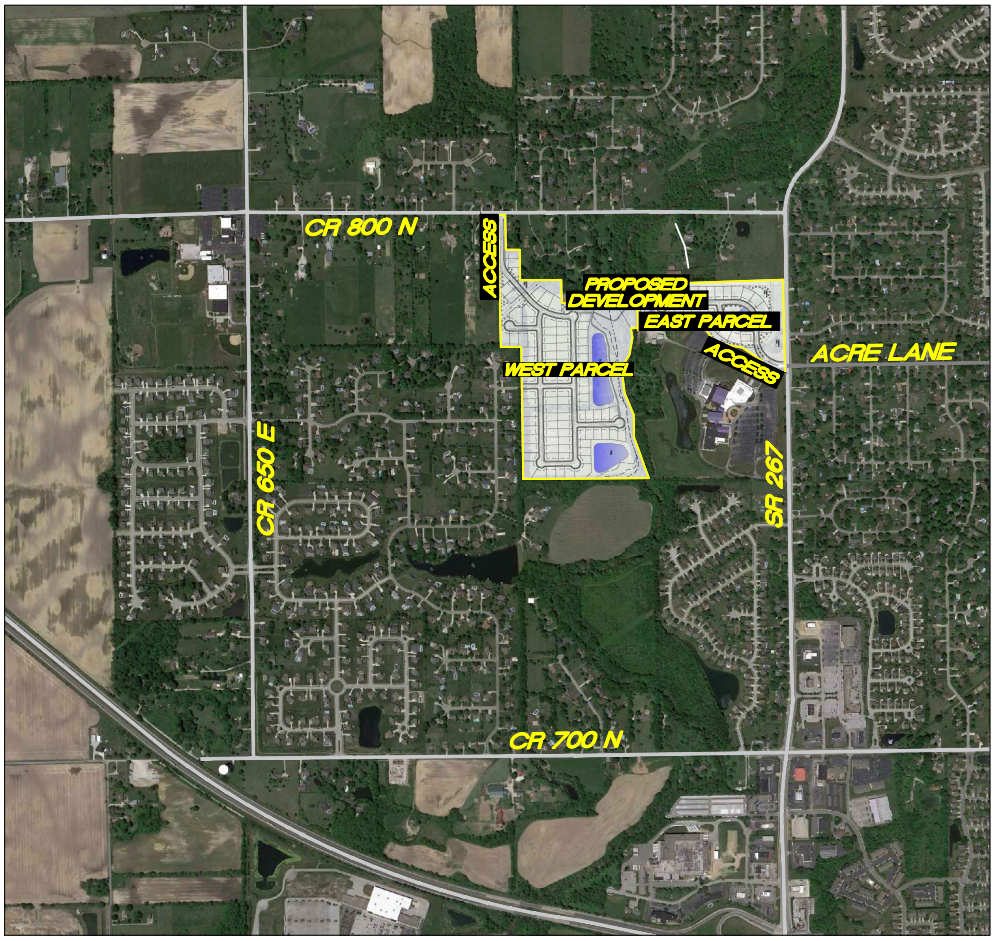


**FIGURE 1**

**AREA MAP**

**TRAFFIC IMPACT STUDY**
**DAVID WEEKLEY HOMES**
**BROWNSBURG, IN**

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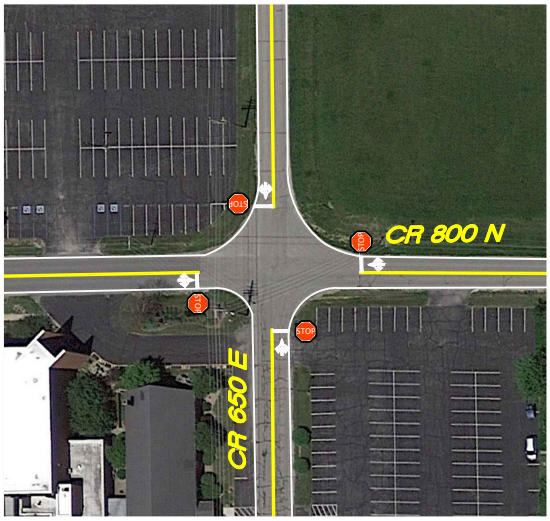
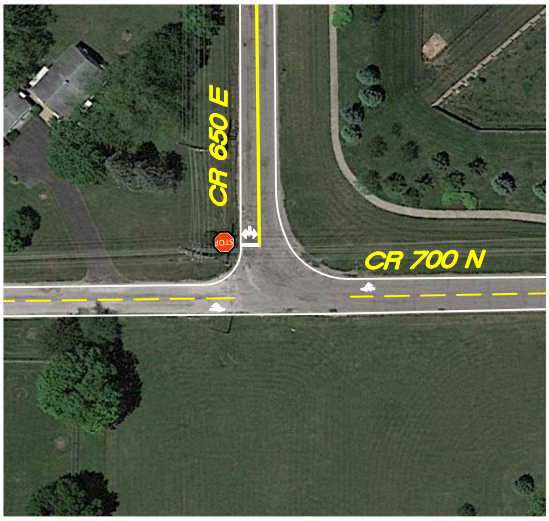
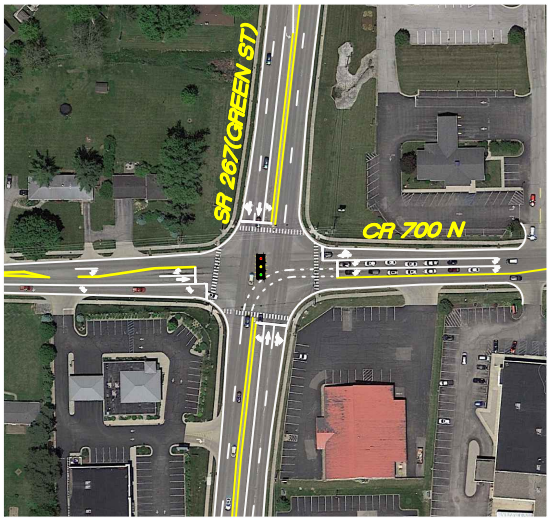


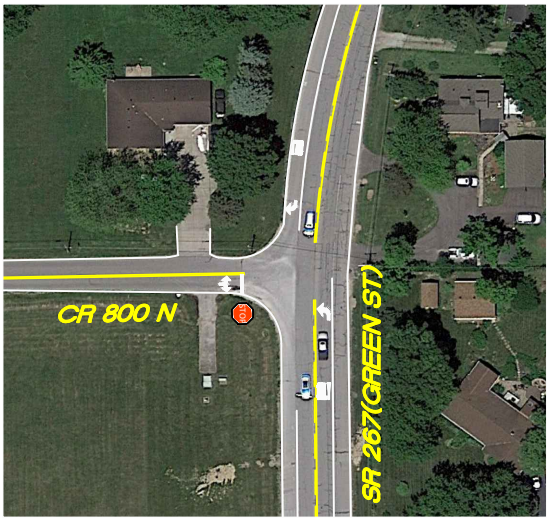

CR 800 N & CR 650 E




CR 700 N & CR 650 E




CR 700 N & SR 267(GREEN ST)




CR 800 N & SR 267(GREEN ST)

## FIGURE 2A

## EXISTING INTERSECTION GEOMETRICS

**TRAFFIC IMPACT STUDY**
**DAVID WEEKLEY HOMES**
**BROWNSBURG, IN**

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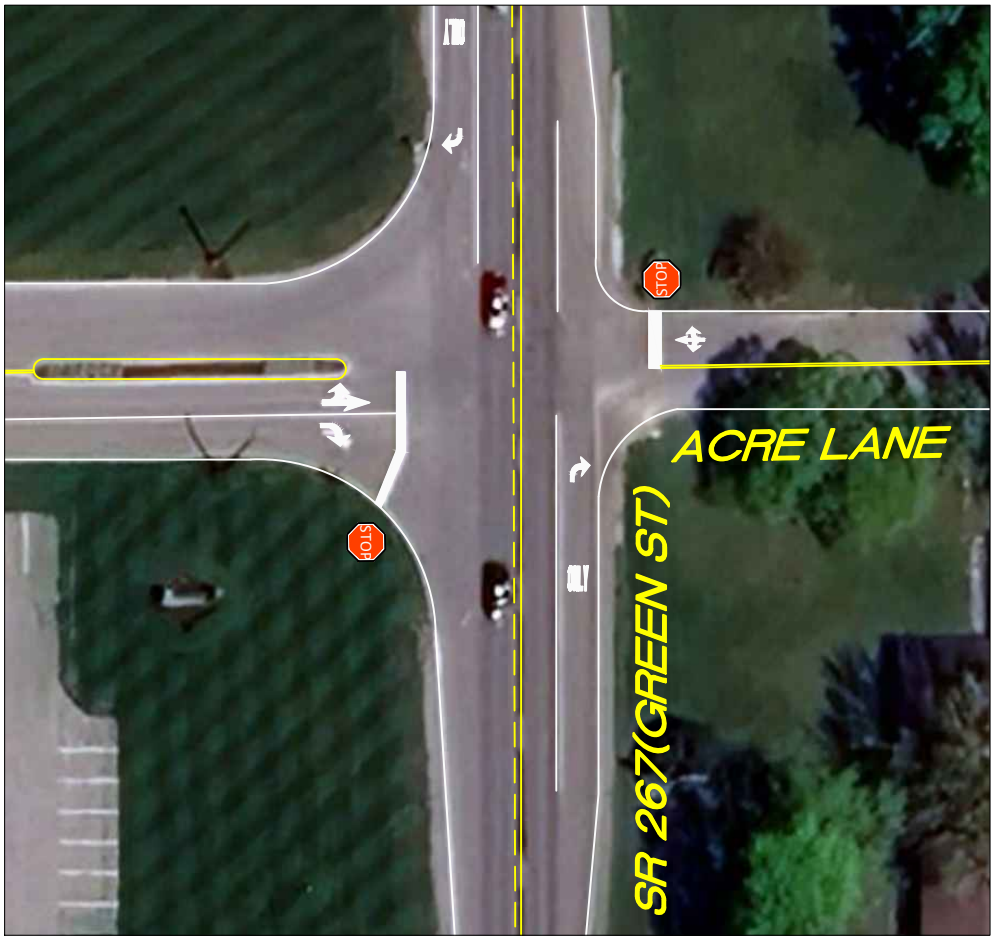


***SR 267(GREEN ST) & ACRE LANE***

***FIGURE 2B***

***EXISTING INTERSECTION GEOMETRICS***

***TRAFFIC IMPACT STUDY***
***DAVID WEEKLEY HOMES***
***BROWNSBURG, IN***

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## DESCRIPTION OF ABUTTING STREET SYSTEM

The proposed residential development will be primarily served by the public roadway system that includes CR 800 N, CR 650 E, CR 700 N, and SR 267 (Green Street).

TABLE 1 – DESCRIPTION OF THE ABUTTING STREET SYSTEM

| STREET NAME | NUMBER OF LANES | SPEED LIMIT (MPH) | FUNCTIONAL CLASSIFICATION |
|---|---|---|---|
| CR 800 N | 2 | 35 | Collector |
| CR 650 E | 2 | 45 | Secondary Arterial |
| CR 700 N | 2 | 30 | Secondary Arterial |
| SR 267 (Green Street) | 2 | 45 | Primary Arterial |

## EXISTING TRAFFIC VOLUMES & PEAK HOURS

The turning movement traffic volume counts were collected by A&F Engineering at the study intersections between the hours of 6:30 AM to 9:00 AM and 3:30 PM to 7:00 PM during a typical weekday in December 2023 & May 2024 under good weather conditions. According to the turning movement counts, the AM and PM peak hours vary slightly at each study intersection. Hence, the actual peak hours are used at each study intersection to create a "worse-case" scenario. The peak hour volumes are shown on **Figure 3** and the intersection count output summary sheets, are included in the **Appendix.**

## REDISTRIBUTION OF EXISTING TRAFFIC VOLUMES

The west parcel of the proposed development will have a secondary access via a connection to Windridge Lane. Therefore, it is possible that existing traffic from the Windridge subdivision could utilize this connection to access CR 800 N. However, it is not anticipated that these volumes will be significant during the peak hours. Therefore, these volumes have been considered negligible for the purposes of this analysis.

## YEAR 2029 BACKGROUND TRAFFIC VOLUMES

In order to account for annual growth in traffic that would occur due to future development outside of the study area, growth rate factors are applied to the existing traffic volumes. Growth rate factors provided by Shrewsberry were applied to the existing traffic volumes to obtain year 2029 background traffic volumes. The year 2029 background traffic volumes are shown in **Figure 4.**

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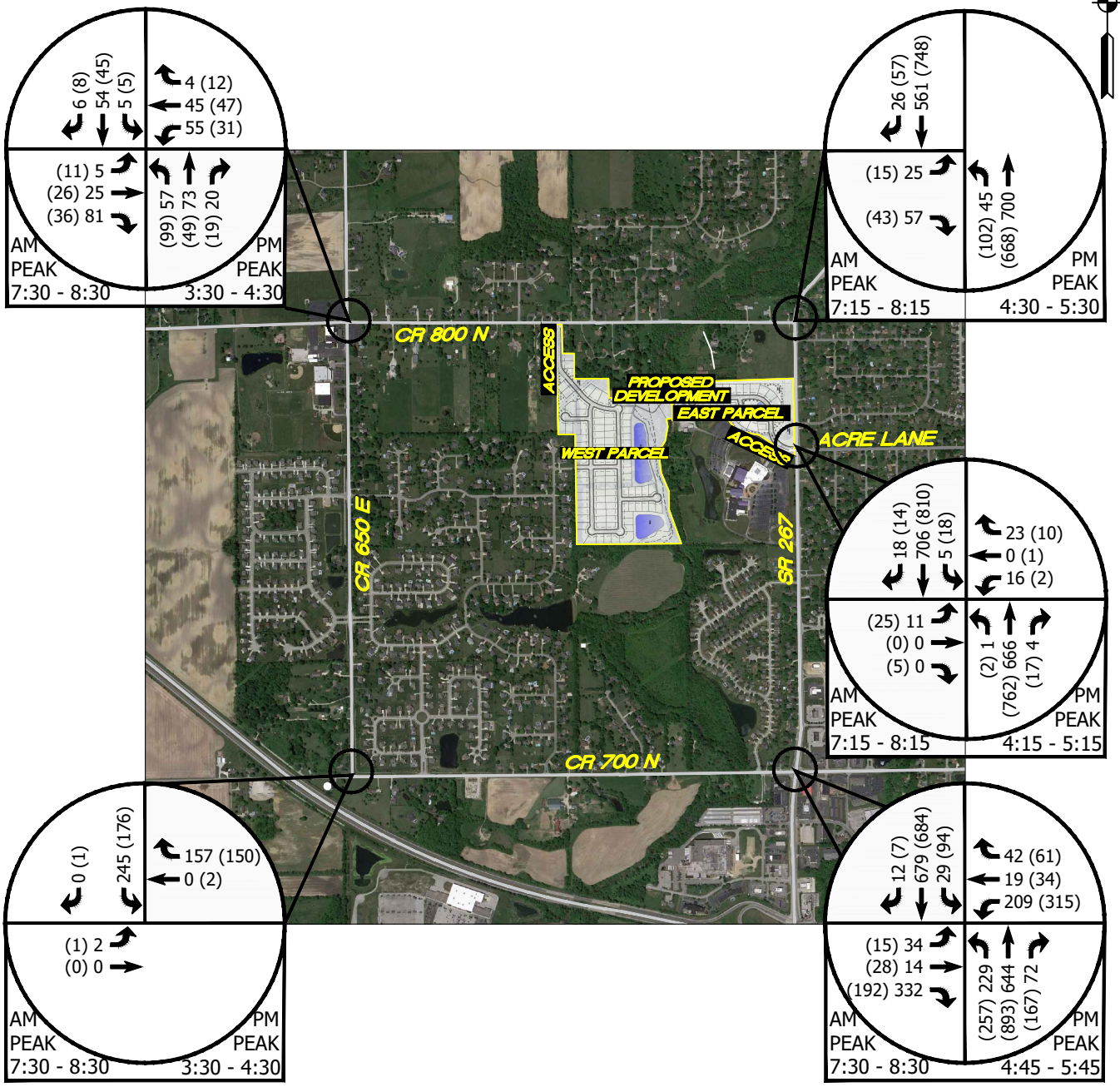


LEGEND
XX = A.M. PEAK HOUR
(XX) = P.M. PEAK HOUR
* = NEGLIGIBLE

**FIGURE 3**

**EXISTING TRAFFIC VOLUMES**

**TRAFFIC IMPACT STUDY**
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**BROWNSBURG, IN**

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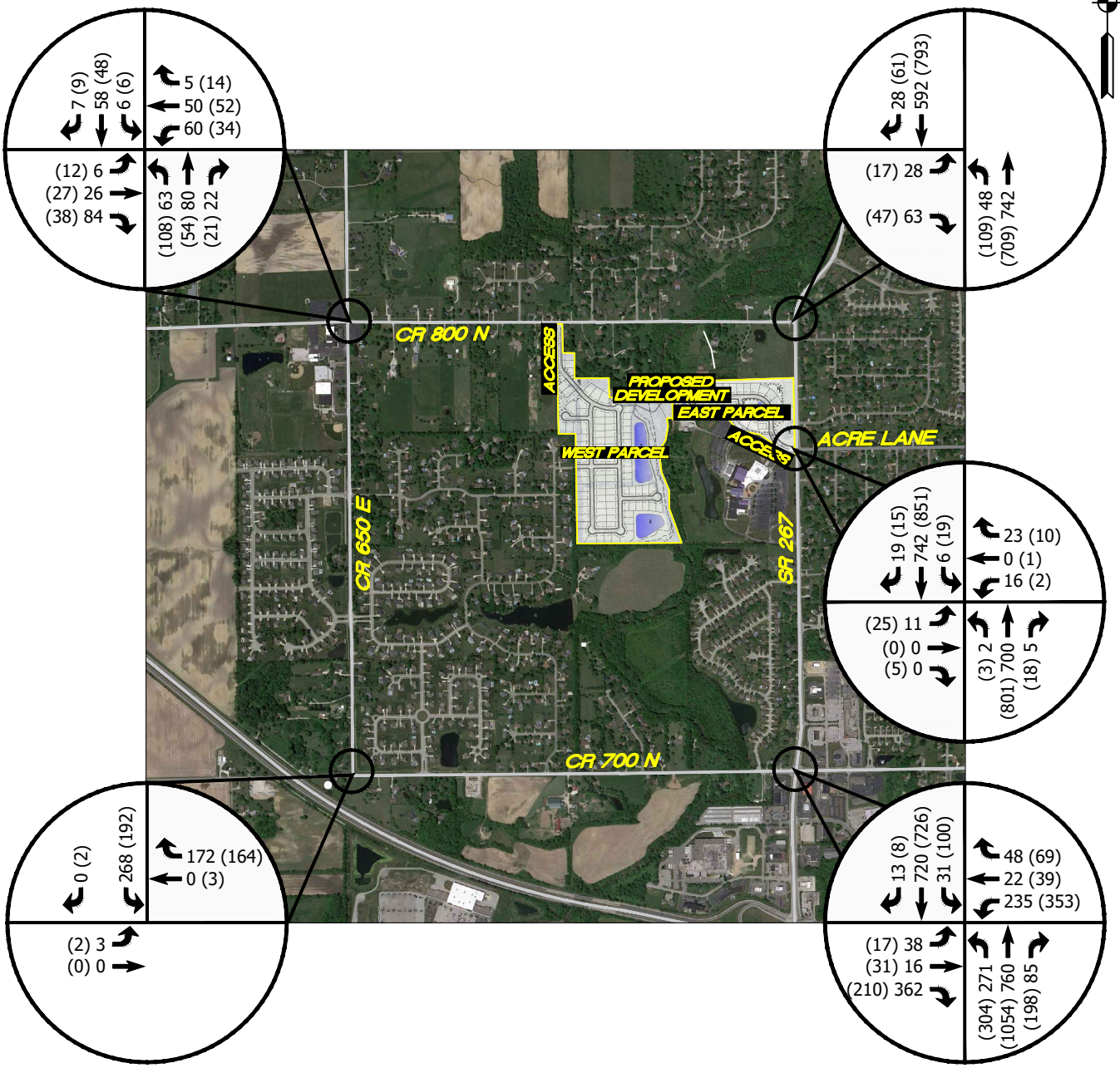


LEGEND
XX = A.M. PEAK HOUR
(XX) = P.M. PEAK HOUR
* = NEGLIGIBLE

**FIGURE 4**

**YEAR 2029 BACKGROUND TRAFFIC VOLUMES**

**TRAFFIC IMPACT STUDY**
**DAVID WEEKLEY HOMES**
**BROWNSBURG, IN**

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## GENERATED TRIPS FOR PROPOSED DEVELOPMENT

The estimate of newly generated traffic is a function of the development size and of the character of the land use. The ITE *Trip Generation Manual*[1] was used to calculate the number of trips that will be generated by the proposed Hawk's Creek development. This report is a compilation of trip data for various land uses as collected by transportation professionals throughout the United States in order to establish the average number of trips generated by those land uses. **Table 2** summarizes the total number of trips that will be generated by the proposed development.

TABLE 2 – GENERATED TRIPS FOR PROPOSED DEVELOPMENT

| DEVELOPMENT INFORMATION | | | GENERATED TRIPS | | | |
|---|---|---|---|---|---|---|
| LAND USE | ITE CODE | SIZE | AM PEAK HOUR | | PM PEAK HOUR | |
| | | | ENTER | EXIT | ENTER | EXIT |
| Single-Family Housing (East Parcel) | 210 | 25 DU | 5 | 16 | 17 | 10 |
| Single-Family Housing (West Parcel) | 210 | 89 DU | 17 | 50 | 56 | 33 |

## PASS-BY & INTERNAL TRIPS

Pass-by trips are trips that are already in the existing traffic stream along the adjacent public roadway system that enter a site, utilize the site, and then return to the existing traffic stream. Residential developments do not typically attract a significant number of pass-by trips. Therefore, pass-by trip reductions are not included in this study.

An internal trip results when a trip is made between two or more land uses without traversing the external public roadway system. The proposed development is a single land use only. Hence, internal trip reductions are not considered in this study.

## ASSIGNMENT AND DISTRIBUTION OF GENERATED TRIPS

The study methodology used to determine the traffic volumes from the site that will be added to the street system is defined as follows:

1. The volume of traffic that will enter and exit the proposed development must be assigned to the access points and to the public street system. Using the traffic volume data collected for this analysis, traffic to and from the site development has been assigned to the proposed driveways and to the public street system that will be serving the site.

[1] *Trip Generation Manual*, Institute of Transportation Engineers, Eleventh Edition, 2021.

2. To determine the volume of traffic that will be added to the public roadway system, the generated traffic must be distributed by direction to the public roadways at their intersection with the driveways. For the proposed development, the trip distribution was based on the location of the development, the existing traffic patterns, and the assignment of generated traffic.

**Figure 5A and 5B** illustrate the assignment and distribution of generated traffic volumes for the proposed development.

## GENERATED TRIPS ADDED TO THE STREET SYSTEM

The generated traffic volumes from the proposed development have been assigned to each of the study intersections. These volumes were determined based on the previously discussed trip generation data, assignment and distribution of generated traffic. The total peak hour generated traffic volumes from the proposed development are shown in **Figure 6,** and **Figure 7** shows the sum of the year 2029 background traffic volumes and generated traffic volumes from the proposed development.

## TURN LANE WARRANT ANALYSIS

A turn lane analysis was conducted to determine if exclusive turn lanes would be warranted at the proposed access drive along CR 800 N when the proposed residential development is constructed. This analysis was done in accordance with the INDOT *Driveway Permit Manual*[2]. The results are summarized in the following table.

TABLE 3 –TURN LANE WARRANT ANALYSIS SUMMARY

| LOCATION | SCENARIO | RIGHT-TURN LANE | LEFT-TURN LANE |
|---|---|---|---|
| CR 800 N & Proposed Development Access Drive | Year 2029 Traffic Volumes + Proposed Development Traffic Volumes | ✗ | ✗ |

✔ =Turn Lane warranted; ✗ =Turn Lane not warranted

The graphs that show the turn lane warrant criteria are shown in the **Appendix**.

[2] INDOT *Driveway Permit Manual*, Indiana Department of Transportation, 2018

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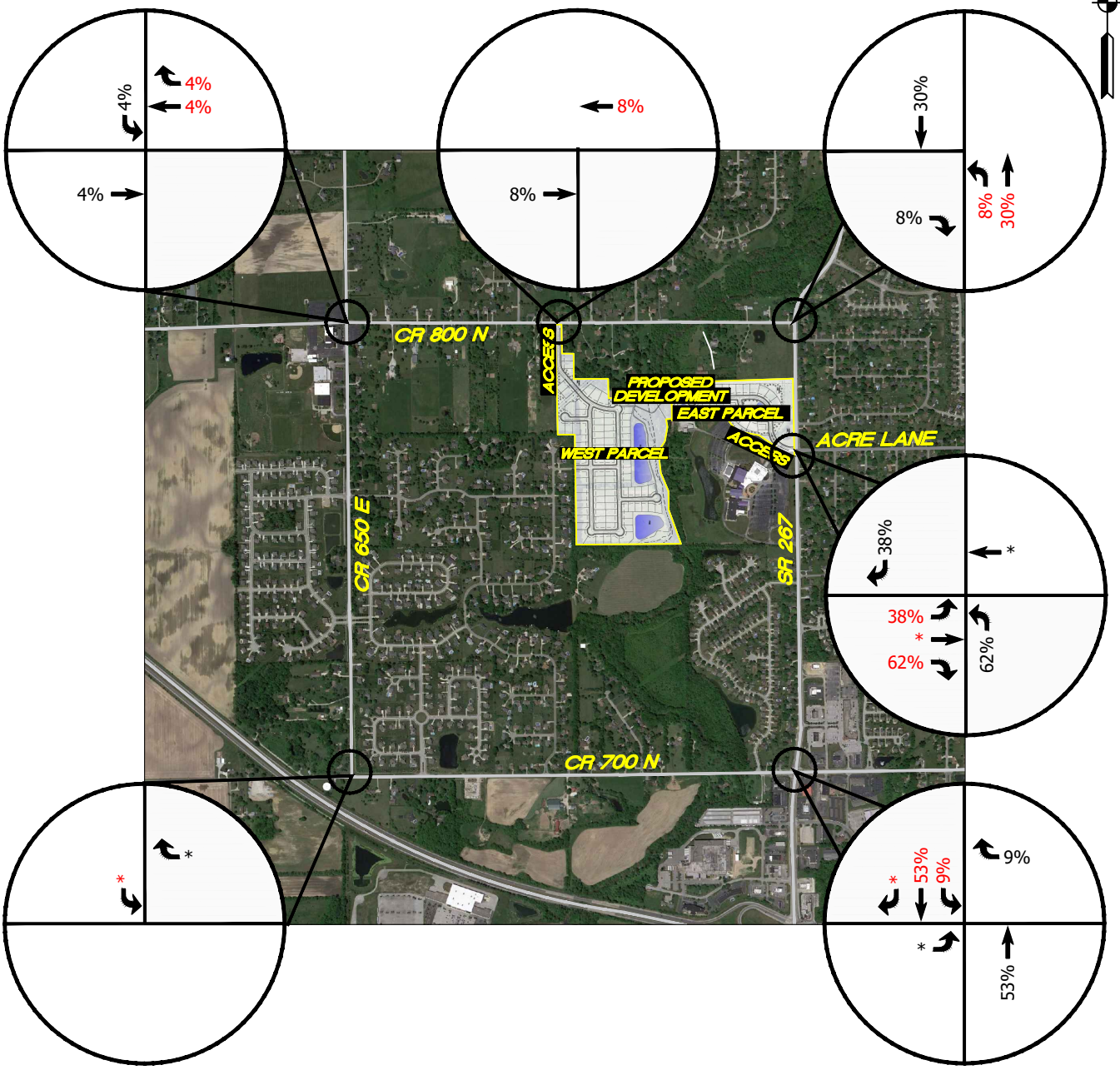


LEGEND
XX = INBOUND TRAFFIC
XX = OUTBOUND TRAFFIC
* = NEGLIGIBLE

**TRAFFIC IMPACT STUDY**
**DAVID WEEKLEY HOMES**
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## FIGURE 5A

## ASSIGNMENT & DISTRIBUTION OF GENERATED TRAFFIC VOLUMES FROM PROPOSED DEVELOPMENT (EAST PARCEL)

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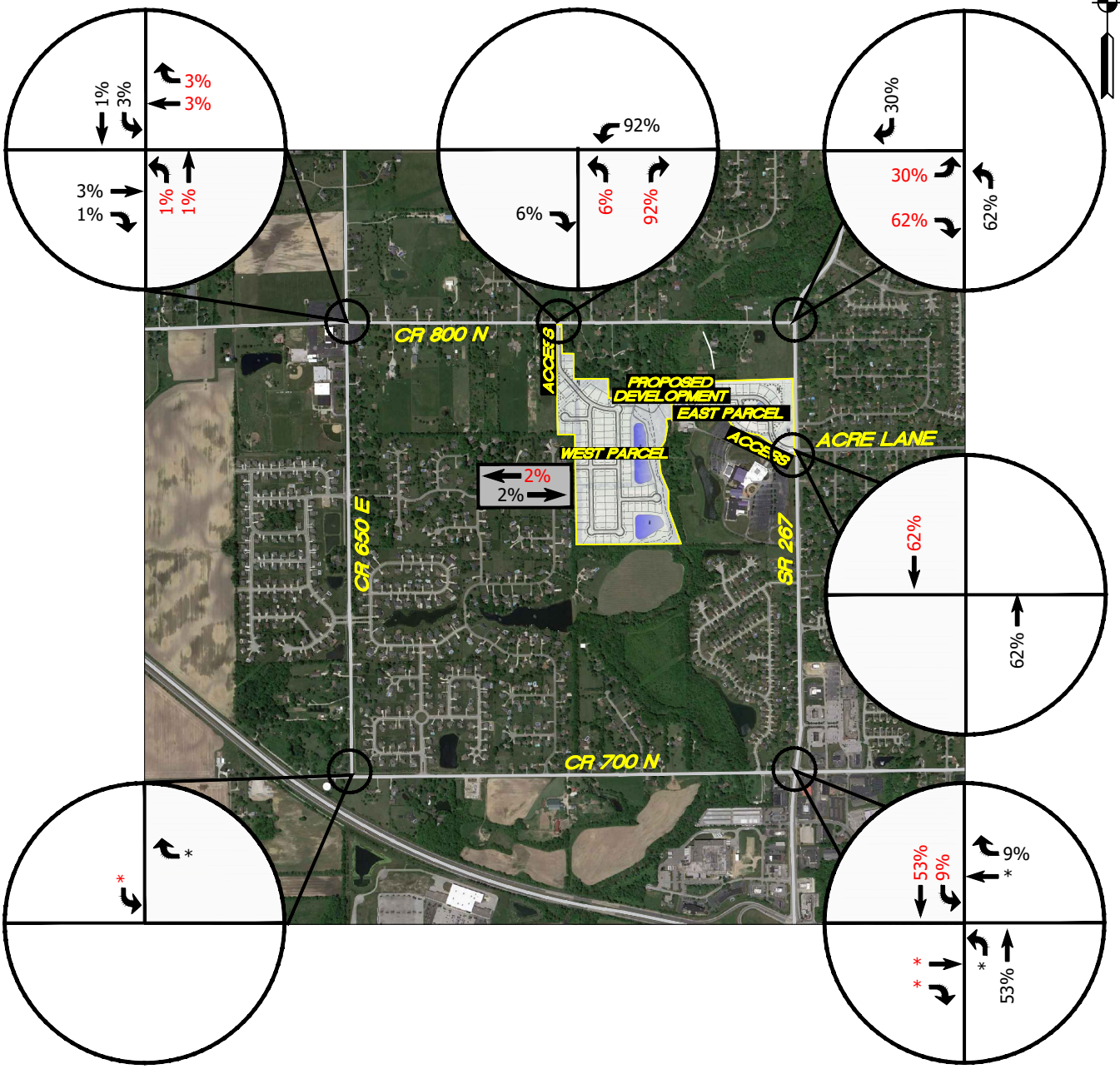


LEGEND
XX = INBOUND TRAFFIC
XX = OUTBOUND TRAFFIC
* = NEGLIGIBLE

**FIGURE 5B**

**ASSIGNMENT & DISTRIBUTION OF GENERATED TRAFFIC VOLUMES FROM PROPOSED DEVELOPMENT (WEST PARCEL)**

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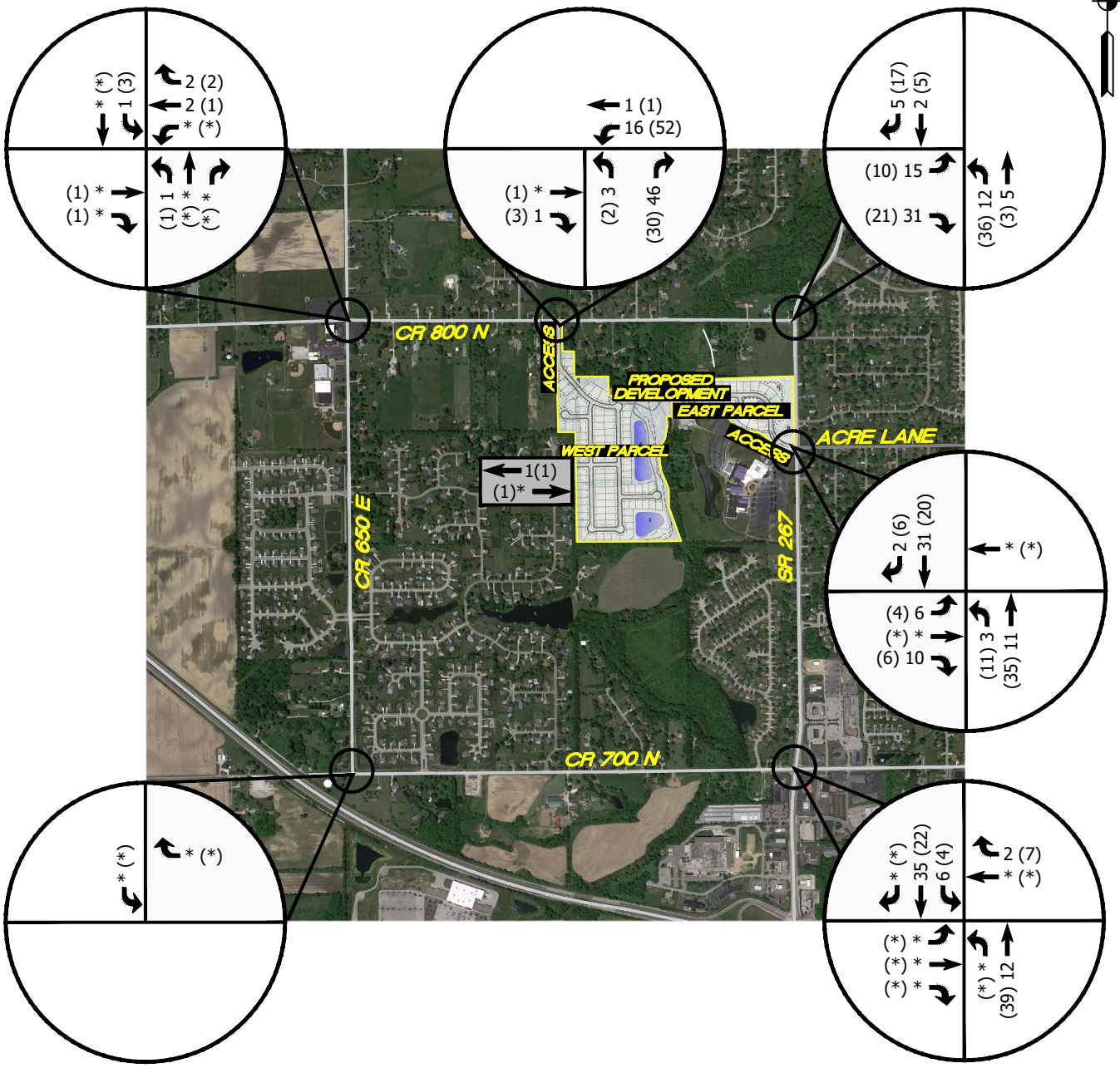


LEGEND
XX = A.M. PEAK HOUR
(XX) = P.M. PEAK HOUR
* = NEGLIGIBLE

**FIGURE 6**
**GENERATED TRAFFIC VOLUMES FROM THE PROPOSED DEVELOPMENT**

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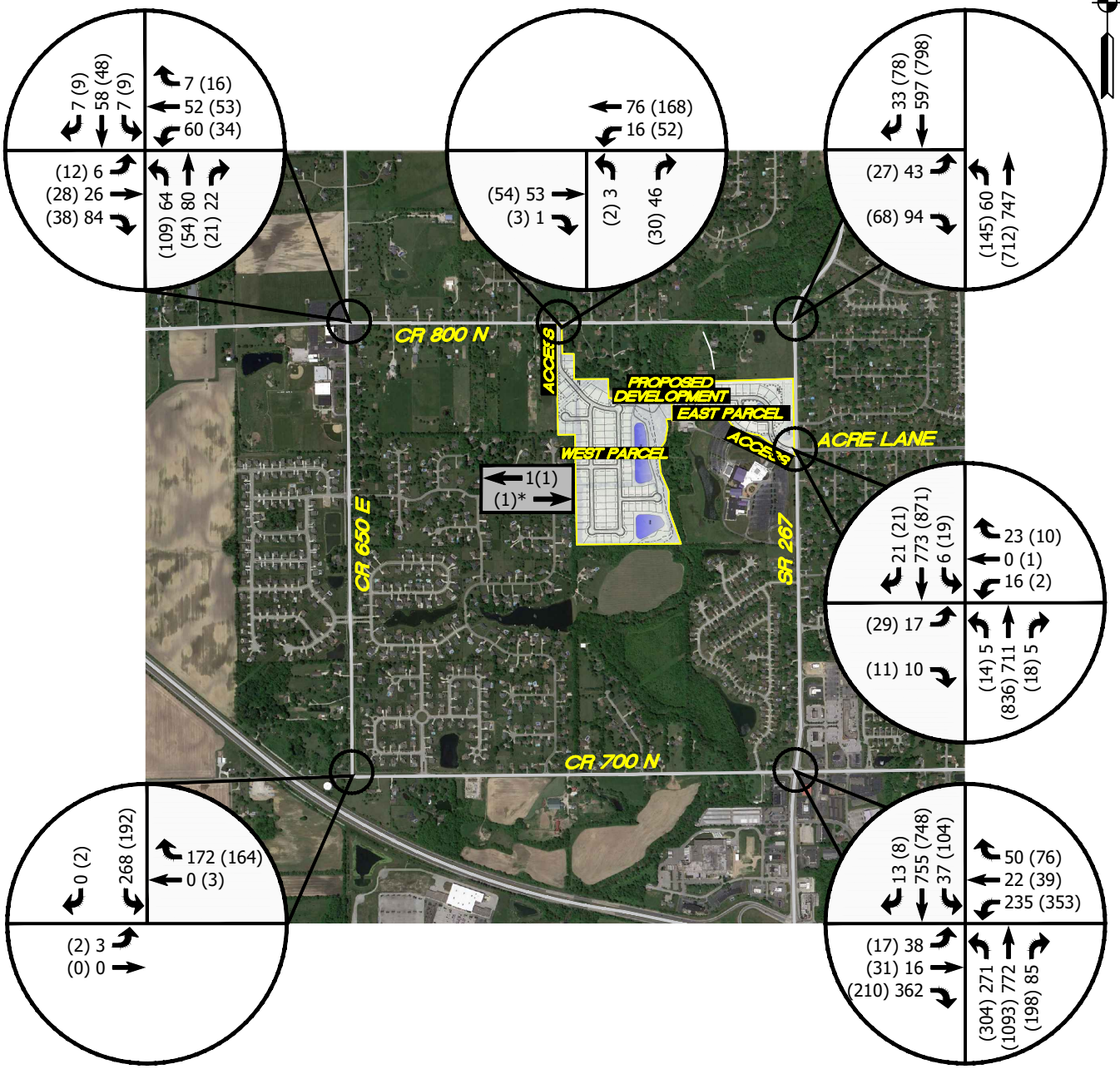


LEGEND
XX = A.M. PEAK HOUR
(XX) = P.M. PEAK HOUR
* = NEGLIGIBLE

**FIGURE 7**

**SUM OF YEAR 2029 BACKGROUND TRAFFIC VOLUMES & GENERATED TRAFFIC VOLUMES FROM PROPOSED DEVELOPMENT**

**TRAFFIC IMPACT STUDY**
**DAVID WEEKLEY HOMES**
**BROWNSBURG, IN**

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## CAPACITY ANALYSIS

The "efficiency" of an intersection is based on its ability to accommodate the traffic volumes that approach the intersection. It is defined by the Level-of-Service (LOS) of the intersection. The LOS is determined by a series of calculations commonly called a "capacity analysis". Input data into a capacity analysis include traffic volumes, intersection geometry, and number and use of lanes. To determine the LOS at each of the study intersections, a capacity analysis has been made using the recognized computer program *Synchro/SimTraffic*[3].This program allows intersections to be analyzed and optimized using the capacity calculation methods outlined within the *Highway Capacity Manual (HCM 7th Edition)*[4]. The following list shows the delays related to the levels of service for unsignalized and signalized intersections:

| Level of Service | Control Delay (seconds/vehicle) | |
|---|---|---|
| | UNSIGNALIZED | SIGNALIZED |
| A | Less than or equal to 10 | Less than or equal to 10 |
| B | Between 10.1 and 15 | Between 10.1 and 20 |
| C | Between 15.1 and 25 | Between 20.1 and 35 |
| D | Between 25.1 and 35 | Between 35.1 and 55 |
| E | Between 35.1 and 50 | Between 55.1 and 80 |
| F | greater than 50 | greater than 80 |

## CAPACITY ANALYSIS SCENARIOS

To evaluate the proposed development's effect on the public street system, a series of traffic volume scenarios were analyzed to determine the adequacy of the existing roadway network. From this analysis, necessary recommendations can be made to improve the public street system so it will accommodate future traffic volumes. An analysis has been made for the peak hours at each of the study intersections for the following traffic volume scenarios:

*Scenario 1: Existing Traffic Volumes* – Based on existing peak hour traffic volumes.

*Scenario 2: Year 2029 Background Traffic Volumes* – Based on applying growth rate factors provided by Shrewsberry to the existing traffic volumes.

*Scenario 3: Year 2029 + Proposed Development Traffic Volumes* – Based on the sum of year 2029 background traffic volumes and generated traffic volumes from the proposed development.

[3] *Synchro/SimTraffic 12*, Cubic Transportation Systems, 2023.
[4] *Highway Capacity Manual (HCM), 7th Edition* Transportation Research Board, National Research Council, Washington, DC, 2022.

The following tables summarize the peak hour level of service results at each of the study intersections. The *Synchro* (*HCM 7th Edition*) intersection reports illustrating the capacity analysis results are included in the **Appendix**.

TABLE 4 – LEVEL OF SERVICE SUMMARY: CR 800 N & CR 650 E

| APPROACH | AM PEAK | | | PM PEAK | | |
|---|---|---|---|---|---|---|
| | Scenarios | | | Scenarios | | |
| | 1 | 2 | 3 | 1 | 2 | 3 |
| Northbound Approach | B | B | B | A | A | A |
| Southbound Approach | A | A | A | A | A | A |
| Eastbound Approach | A | A | B | A | A | A |
| Westbound Approach | A | B | B | A | A | A |
| **Intersection** | **A** | **B** | **B** | **A** | **A** | **A** |

TABLE 5 – LEVEL OF SERVICE SUMMARY: CR 800 N & SR 267 (GREEN STREET)

| APPROACH | AM PEAK | | | | | PM PEAK | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Scenarios | | | | | Scenarios | | | | |
| | 1 | 2A | 2B | 3A | 3B | 1 | 2A | 2B | 3A | 3B |
| Northbound Left-Turn | A | A | A | A | A | B | B | B | B | B |
| Eastbound Approach | C | D | C | E | D | D | E | D | F | E |

Analysis considers the following intersection geometrics:
Scenario A considers existing intersection geometrics.
Scenario B considers construction of a eastbound left-turn lane and right-turn lane.

TABLE 6 – LEVEL OF SERVICE SUMMARY: CR 700 N & SR 267 (GREEN STREET)

| APPROACH | AM PEAK | | | PM PEAK | | |
|---|---|---|---|---|---|---|
| | Scenarios | | | Scenarios | | |
| | 1 | 2 | 3 | 1 | 2 | 3 |
| Northbound Approach | B | B | B | C | C | C |
| Southbound Approach | C | C | C | C | C | C |
| Eastbound Approach | C | C | C | C | C | C |
| Westbound Approach | C | C | C | C | D | D |
| **Intersection** | **C** | **C** | **C** | **C** | **C** | **C** |

TABLE 7 – LEVEL OF SERVICE SUMMARY: CR 700 N & CR 650 E

| APPROACH | AM PEAK | | | PM PEAK | | |
|---|---|---|---|---|---|---|
| | Scenarios | | | Scenarios | | |
| | 1 | 2 | 3 | 1 | 2 | 3 |
| Southbound Approach | B | B | B | B | B | B |
| Eastbound Left-Turn | A | A | A | A | A | A |

TABLE 8 – LEVEL OF SERVICE SUMMARY: SR 267 (GREEN STREET) & ACRE LANE/CONNECTION POINTE CHRISTIAN CHURCH/PROPOSED DEVELOPMENT ACCESS DRIVE

| APPROACH | AM PEAK | | | PM PEAK | | |
|---|---|---|---|---|---|---|
| | Scenarios | | | Scenarios | | |
| | 1 | 2 | 3 | 1 | 2 | 3 |
| Northbound Left-Turn | A | A | A | A | A | A |
| Southbound Left-Turn | A | A | A | A | A | A |
| Eastbound Approach | E | F | E | F | F | F |
| Westbound Approach | D | D | E | C | D | D |

TABLE 9 – LEVEL OF SERVICE SUMMARY: CR 800 N & PROPOSED DEVELOPMENT ACCESS DRIVE

| APPROACH | AM PEAK | PM PEAK |
|---|---|---|
| | Scenario 3 | Scenario 3 |
| Northbound Approach | A | A |
| Westbound Left-Turn | A | A |

Analysis considers construction of the access drive with one inbound and one outbound lane that will stop for CR 800 N.

## CONCLUSIONS & RECOMMENDATIONS

The conclusions that follow are based on existing traffic volume data, trip generation, assignment and distribution of generated traffic, capacity analyses/level of service results and a field review conducted at the site. Based on the analysis and the resulting conclusions of this study, recommendations are formulated to ensure that the roadway system will accommodate the increased traffic volumes from the proposed residential development.

CR 800 N & CR 650 E

Capacity analyses for all traffic volume scenarios have shown that this intersection currently operates and will continue to operate at acceptable levels of service during the AM and PM peak hours with the existing intersection conditions.

CR 800 N & SR 267 (GREEN STREET)

Capacity analyses have shown that all approaches to this intersection currently operate at acceptable levels of service during the AM and PM peak hours with the existing intersection conditions. It is expected that the eastbound approach will experience increased delays during the peak hours as future traffic is added to the intersection. However, additional analyses have shown that these delays can be substantially reduced if separate left-turn and right-turn lanes are constructed along the eastbound approach.

CR 700 N & SR 267 (GREEN STREET)

Capacity analyses for all traffic volume scenarios have shown that this intersection currently operates and will continue to operate at acceptable levels of service during the AM and PM peak hours with the existing intersection conditions.

CR 700 N & CR 650 E

Capacity analyses for all traffic volume scenarios have shown that all approaches to this intersection currently operate and will continue to operate at acceptable levels of service during the AM and PM peak hours with the existing intersection conditions.

SR 267 (GREEN STREET) & ACRE LANE/CONNECTION POINTE CHRISTIAN CHURCH/PROPOSED DEVELOPMENT ACCESS DRIVE

Capacity analyses have shown that the eastbound approach currently operates below acceptable levels of service during the peak hours. The eastbound and westbound approach delays will increase when future traffic volumes are added to the intersection. However, it should be noted that minor street approach peak hour delays are not uncommon when the major street has high peak hour volumes.

CR 800 N & PROPOSED DEVELOPMENT ACCESS DRIVE

Capacity analyses have shown that all approaches to this intersection will operate at acceptable levels of service during the AM and PM peak hours with the following recommended intersection conditions:

- Construction of the access drive with one inbound and one outbound lane.
- The intersection should be stop-controlled with the proposed access drive stopping for CR 800 N.

# TRAFFIC IMPACT STUDY

# APPENDIX

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# ADDITIONAL FIGURES

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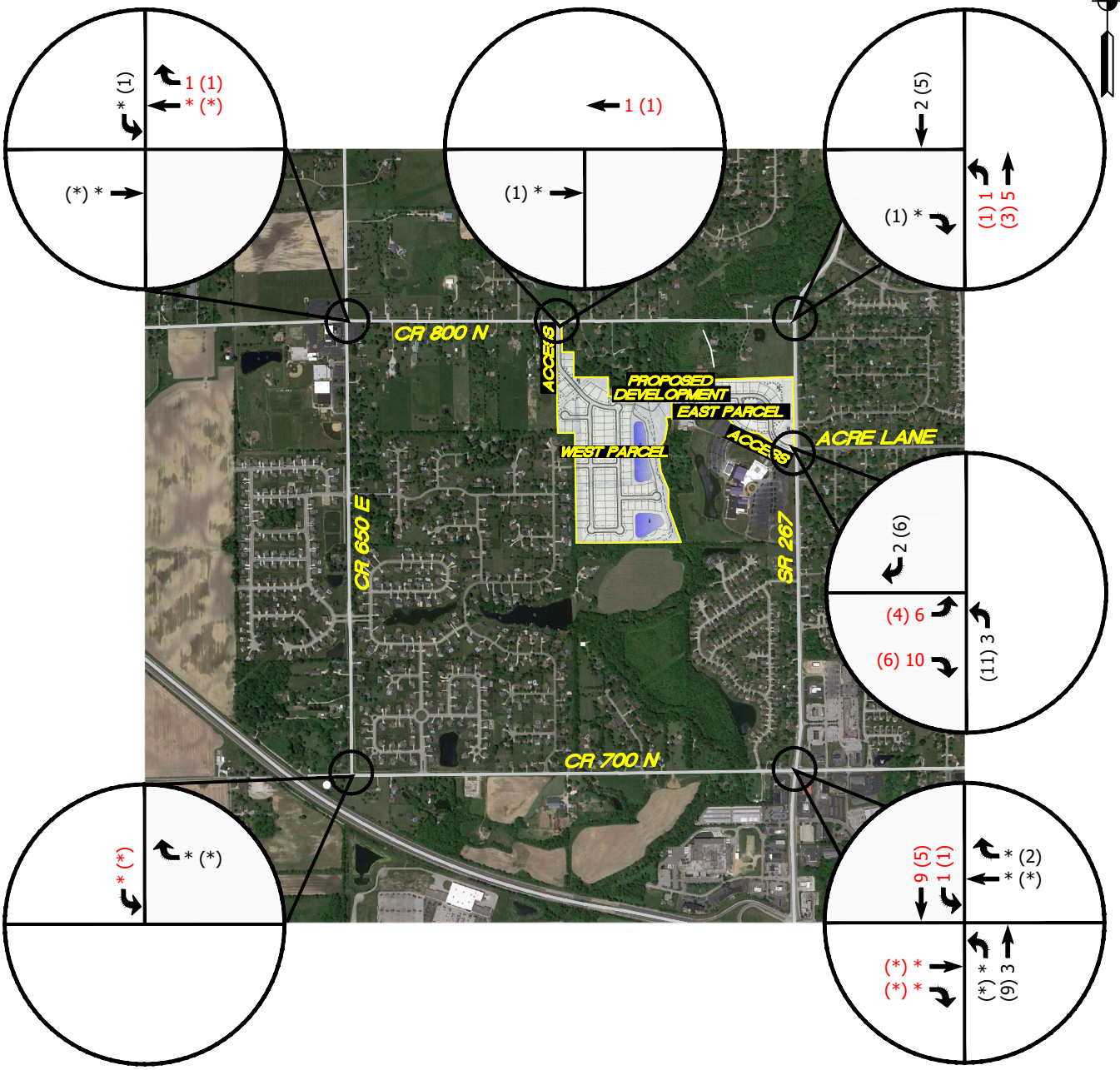


LEGEND
XX = A.M. PEAK HOUR
(XX) = P.M. PEAK HOUR
* = NEGLIGIBLE

**TRAFFIC IMPACT STUDY**
**DAVID WEEKLEY HOMES**
**BROWNSBURG, IN**

## FIGURE A

**GENERATED TRAFFIC VOLUMES FROM THE PROPOSED DEVELOPMENT (EAST PARCEL)**

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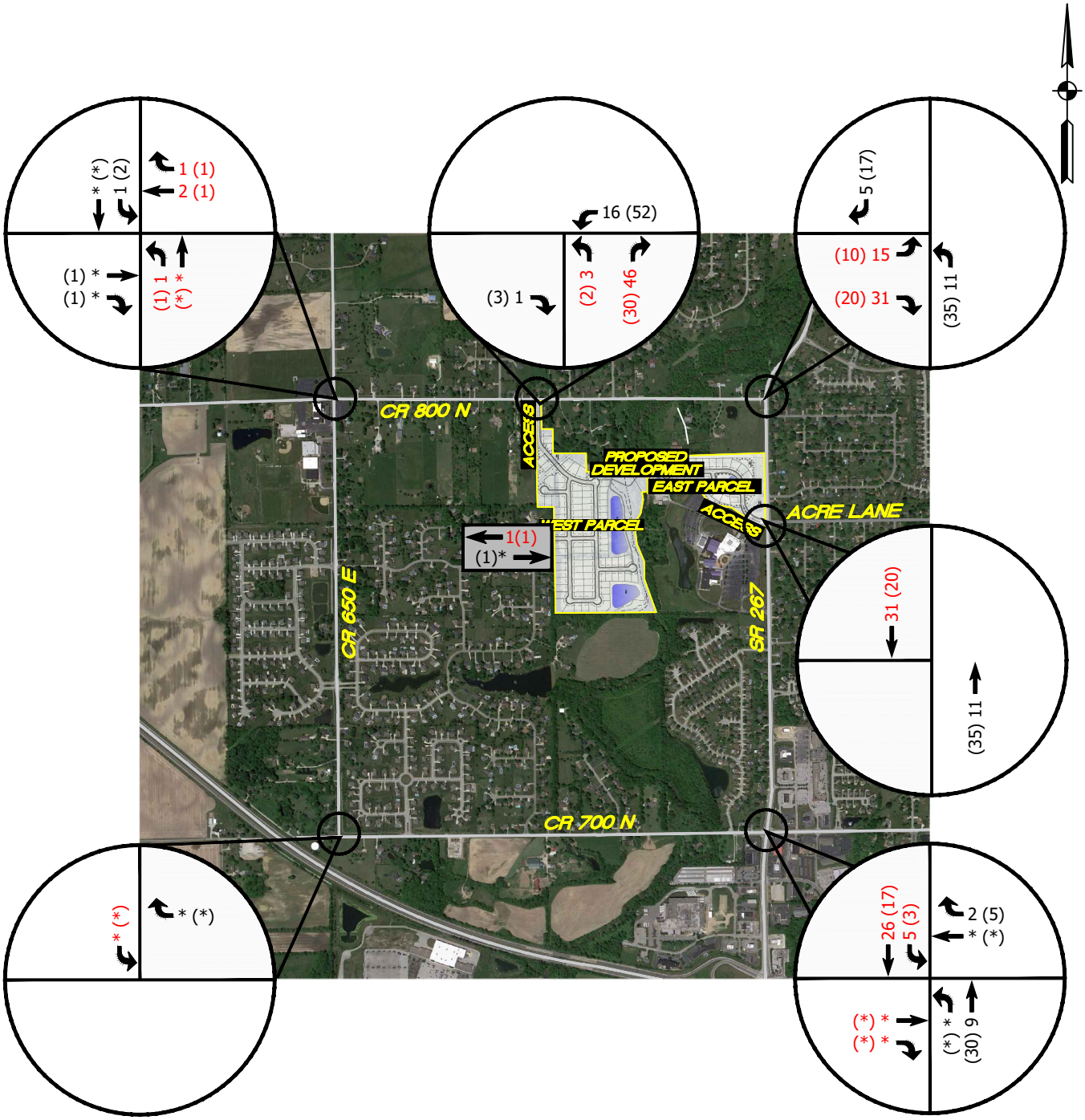



**FIGURE B**

**GENERATED TRAFFIC VOLUMES FROM THE PROPOSED DEVELOPMENT (WEST PARCEL)**

**TRAFFIC IMPACT STUDY**
**DAVID WEEKLEY HOMES**
**BROWNSBURG, IN**

Z:\2023\23112S-Dovid Weekley Homes, TIS, Brownsburg\23112S_EXH.dwg 1=1 2024-06-27 SK

# CR 800 N & CR 650 E

## TRAFFIC VOLUME COUNTS
## CAPACITY ANALYSIS

## CR 800 N & CR 650 E - TMC

Tue Dec 12, 2023
AM Peak (7:30 AM - 8:30 AM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 1142922, Location: 39.880045, -86.411371

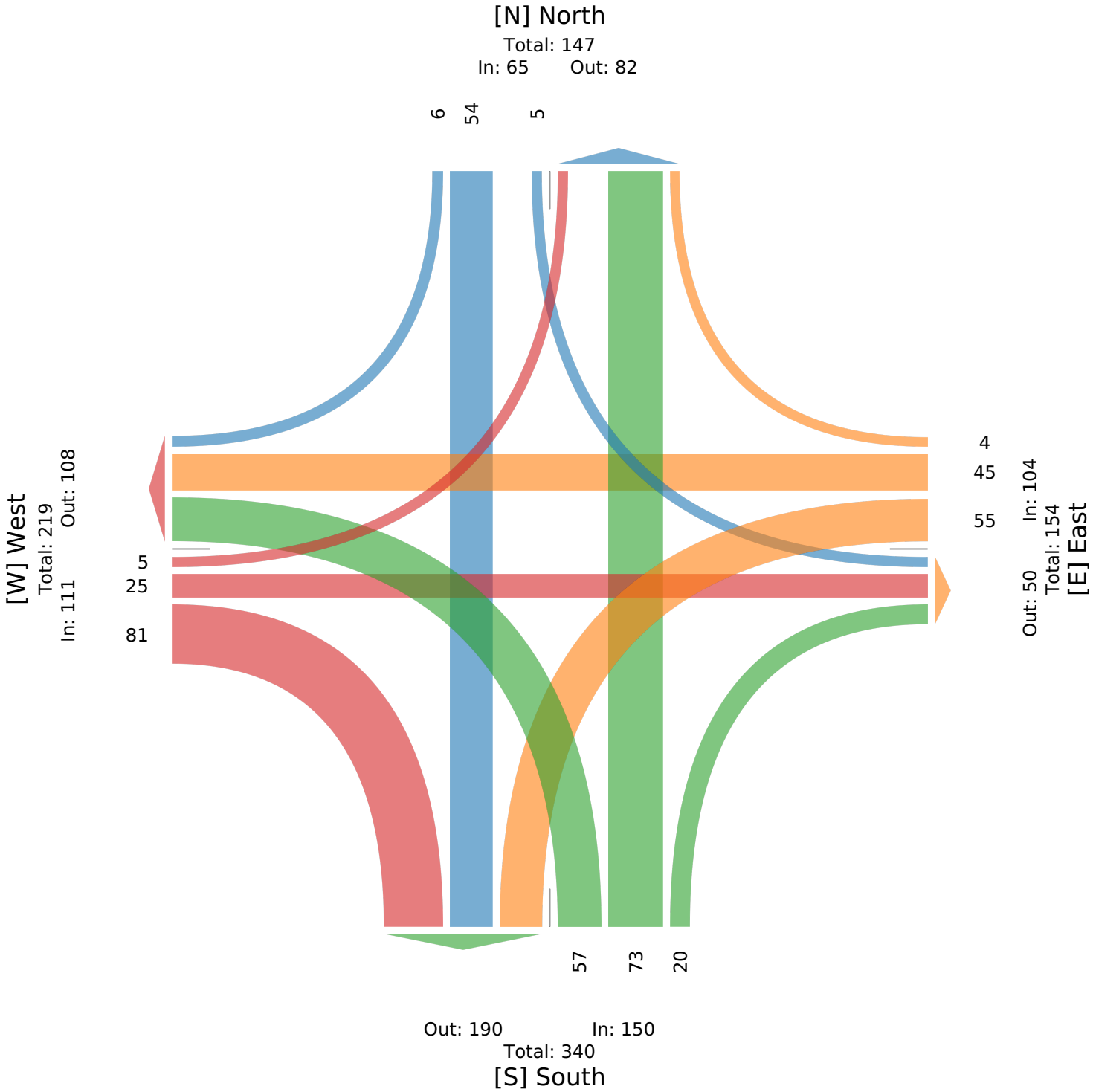

Provided by: A&F Engineering
8365 Keystone Crossing, Suite 201, Indianapolis, IN, 46240, US

| Leg | South | | | | | North | | | | | West | | | | | East | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Direction | Northbound | | | | | Southbound | | | | | Eastbound | | | | | Westbound | | | | | |
| Time | L | T | R | U | **App** | L | T | R | U | **App** | L | T | R | U | **App** | L | T | R | U | **App** | **Int** |
| 2023-12-12 7:30AM | 1 | 13 | 4 | 0 | **18** | 2 | 11 | 1 | 0 | **14** | 2 | 5 | 11 | 0 | **18** | 2 | 7 | 2 | 0 | **11** | **61** |
| 7:45AM | 7 | 9 | 0 | 0 | **16** | 1 | 6 | 0 | 0 | **7** | 0 | 9 | 15 | 0 | **24** | 14 | 4 | 0 | 0 | **18** | **65** |
| 8:00AM | 18 | 20 | 7 | 0 | **45** | 2 | 17 | 2 | 0 | **21** | 1 | 5 | 27 | 0 | **33** | 19 | 13 | 1 | 0 | **33** | **132** |
| 8:15AM | 31 | 31 | 9 | 0 | **71** | 0 | 20 | 3 | 0 | **23** | 2 | 6 | 28 | 0 | **36** | 20 | 21 | 1 | 0 | **42** | **172** |
| **Total** | 57 | 73 | 20 | 0 | **150** | 5 | 54 | 6 | 0 | **65** | 5 | 25 | 81 | 0 | **111** | 55 | 45 | 4 | 0 | **104** | **430** |
| **% Approach** | 38.0% | 48.7% | 13.3% | 0% | **-** | 7.7% | 83.1% | 9.2% | 0% | **-** | 4.5% | 22.5% | 73.0% | 0% | **-** | 52.9% | 43.3% | 3.8% | 0% | **-** | - |
| **% Total** | 13.3% | 17.0% | 4.7% | 0% | **34.9%** | 1.2% | 12.6% | 1.4% | 0% | **15.1%** | 1.2% | 5.8% | 18.8% | 0% | **25.8%** | 12.8% | 10.5% | 0.9% | 0% | **24.2%** | - |
| **PHF** | 0.460 | 0.589 | 0.556 | - | **0.528** | 0.625 | 0.675 | 0.500 | - | **0.707** | 0.625 | 0.694 | 0.723 | - | **0.771** | 0.688 | 0.536 | 0.500 | - | **0.619** | 0.625 |
| **Lights and Motorcycles** | 57 | 73 | 19 | 0 | **149** | 4 | 54 | 6 | 0 | **64** | 4 | 25 | 81 | 0 | **110** | 53 | 44 | 4 | 0 | **101** | 424 |
| **% Lights and Motorcycles** | 100% | 100% | 95.0% | 0% | **99.3%** | 80.0% | 100% | 100% | 0% | **98.5%** | 80.0% | 100% | 100% | 0% | **99.1%** | 96.4% | 97.8% | 100% | 0% | **97.1%** | 98.6% |
| **Heavy** | 0 | 0 | 1 | 0 | **1** | 1 | 0 | 0 | 0 | **1** | 1 | 0 | 0 | 0 | **1** | 2 | 1 | 0 | 0 | **3** | 6 |
| **% Heavy** | 0% | 0% | 5.0% | 0% | **0.7%** | 20.0% | 0% | 0% | 0% | **1.5%** | 20.0% | 0% | 0% | 0% | **0.9%** | 3.6% | 2.2% | 0% | 0% | **2.9%** | 1.4% |

*L: Left, R: Right, T: Thru, U: U-Turn

**CR 800 N & CR 650 E - TMC**
Tue Dec 12, 2023
AM Peak (7:30 AM - 8:30 AM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 1142922, Location: 39.880045, -86.411371

Provided by: A&F Engineering
8365 Keystone Crossing, Suite 201, Indianapolis, IN, 46240, US



## CR 800 N & CR 650 E - TMC

Tue Dec 12, 2023
PM Peak (3:30 PM - 4:30 PM)
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 1142922, Location: 39.880045, -86.411371

Provided by: A&F Engineering
8365 Keystone Crossing, Suite 201, Indianapolis, IN, 46240, US

| Leg / Direction | South Northbound | | | | | North Southbound | | | | | West Eastbound | | | | | East Westbound | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Time | L | T | R | U | **App** | L | T | R | U | **App** | L | T | R | U | **App** | L | T | R | U | **App** | **Int** |
| 2023-12-12 3:30PM | 21 | 5 | 6 | 0 | **32** | 2 | 13 | 5 | 0 | **20** | 1 | 3 | 15 | 0 | **19** | 9 | 18 | 3 | 0 | **30** | **101** |
| 3:45PM | 51 | 20 | 9 | 0 | **80** | 0 | 10 | 1 | 0 | **11** | 4 | 8 | 5 | 0 | **17** | 9 | 14 | 1 | 0 | **24** | **132** |
| 4:00PM | 14 | 14 | 2 | 0 | **30** | 0 | 9 | 1 | 0 | **10** | 3 | 4 | 8 | 0 | **15** | 5 | 7 | 3 | 0 | **15** | **70** |
| 4:15PM | 13 | 10 | 2 | 0 | **25** | 3 | 13 | 1 | 0 | **17** | 3 | 11 | 8 | 0 | **22** | 8 | 8 | 5 | 0 | **21** | **85** |
| **Total** | 99 | 49 | 19 | 0 | **167** | 5 | 45 | 8 | 0 | **58** | 11 | 26 | 36 | 0 | **73** | 31 | 47 | 12 | 0 | **90** | **388** |
| **% Approach** | 59.3% | 29.3% | 11.4% | 0% | **-** | 8.6% | 77.6% | 13.8% | 0% | **-** | 15.1% | 35.6% | 49.3% | 0% | **-** | 34.4% | 52.2% | 13.3% | 0% | **-** | - |
| **% Total** | 25.5% | 12.6% | 4.9% | 0% | **43.0%** | 1.3% | 11.6% | 2.1% | 0% | **14.9%** | 2.8% | 6.7% | 9.3% | 0% | **18.8%** | 8.0% | 12.1% | 3.1% | 0% | **23.2%** | - |
| **PHF** | 0.485 | 0.613 | 0.528 | - | **0.522** | 0.417 | 0.865 | 0.400 | - | **0.725** | 0.688 | 0.591 | 0.600 | - | **0.830** | 0.861 | 0.653 | 0.600 | - | **0.750** | 0.735 |
| **Lights and Motorcycles** | 99 | 47 | 19 | 0 | **165** | 5 | 43 | 8 | 0 | **56** | 9 | 24 | 36 | 0 | **69** | 28 | 46 | 9 | 0 | **83** | 373 |
| **% Lights and Motorcycles** | 100% | 95.9% | 100% | 0% | **98.8%** | 100% | 95.6% | 100% | 0% | **96.6%** | 81.8% | 92.3% | 100% | 0% | **94.5%** | 90.3% | 97.9% | 75.0% | 0% | **92.2%** | 96.1% |
| **Heavy** | 0 | 2 | 0 | 0 | **2** | 0 | 2 | 0 | 0 | **2** | 2 | 2 | 0 | 0 | **4** | 3 | 1 | 3 | 0 | **7** | 15 |
| **% Heavy** | 0% | 4.1% | 0% | 0% | **1.2%** | 0% | 4.4% | 0% | 0% | **3.4%** | 18.2% | 7.7% | 0% | 0% | **5.5%** | 9.7% | 2.1% | 25.0% | 0% | **7.8%** | 3.9% |

*L: Left, R: Right, T: Thru, U: U-Turn

**CR 800 N & CR 650 E - TMC**
Tue Dec 12, 2023
PM Peak (3:30 PM - 4:30 PM)
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 1142922, Location: 39.880045, -86.411371

Provided by: A&F Engineering
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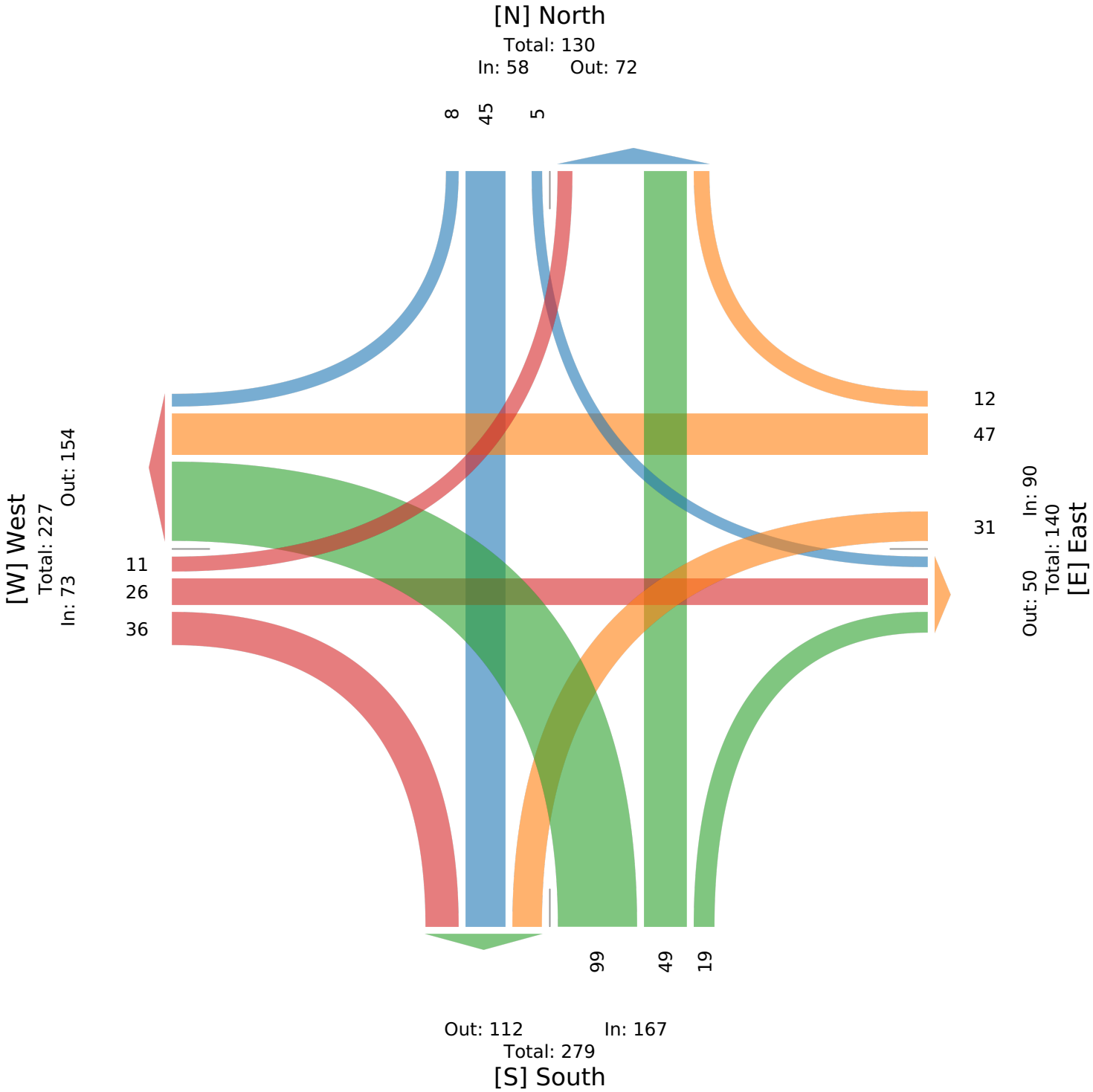


| Intersection | |
|---|---|
| Intersection Delay, s/veh | 9.9 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 5 | 25 | 81 | 55 | 45 | 4 | 57 | 73 | 20 | 5 | 54 | 6 |
| Future Vol, veh/h | 5 | 25 | 81 | 55 | 45 | 4 | 57 | 73 | 20 | 5 | 54 | 6 |
| Peak Hour Factor | 0.62 | 0.62 | 0.62 | 0.62 | 0.62 | 0.62 | 0.62 | 0.62 | 0.62 | 0.62 | 0.62 | 0.62 |
| Heavy Vehicles, % | 20 | 0 | 0 | 4 | 2 | 0 | 0 | 0 | 5 | 20 | 0 | 0 |
| Mvmt Flow | 8 | 40 | 131 | 89 | 73 | 6 | 92 | 118 | 32 | 8 | 87 | 10 |
| 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 | 9.6 | 9.9 | 10.4 | 9.5 |
| HCM LOS | A | A | B | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 38% | 5% | 53% | 8% |
| Vol Thru, % | 49% | 23% | 43% | 83% |
| Vol Right, % | 13% | 73% | 4% | 9% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 150 | 111 | 104 | 65 |
| LT Vol | 57 | 5 | 55 | 5 |
| Through Vol | 73 | 25 | 45 | 54 |
| RT Vol | 20 | 81 | 4 | 6 |
| Lane Flow Rate | 242 | 179 | 168 | 105 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.329 | 0.244 | 0.24 | 0.157 |
| Departure Headway (Hd) | 4.9 | 4.908 | 5.152 | 5.381 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 726 | 723 | 689 | 659 |
| Service Time | 2.977 | 2.99 | 3.236 | 3.474 |
| HCM Lane V/C Ratio | 0.333 | 0.248 | 0.244 | 0.159 |
| HCM Control Delay, s/veh | 10.4 | 9.6 | 9.9 | 9.5 |
| HCM Lane LOS | B | A | A | A |
| HCM 95th-tile Q | 1.4 | 1 | 0.9 | 0.6 |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 9 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 11 | 26 | 36 | 31 | 47 | 12 | 99 | 49 | 19 | 5 | 45 | 8 |
| Future Vol, veh/h | 11 | 26 | 36 | 31 | 47 | 12 | 99 | 49 | 19 | 5 | 45 | 8 |
| Peak Hour Factor | 0.74 | 0.74 | 0.74 | 0.74 | 0.74 | 0.74 | 0.74 | 0.74 | 0.74 | 0.74 | 0.74 | 0.74 |
| Heavy Vehicles, % | 18 | 8 | 0 | 10 | 2 | 25 | 0 | 4 | 0 | 0 | 4 | 0 |
| Mvmt Flow | 15 | 35 | 49 | 42 | 64 | 16 | 134 | 66 | 26 | 7 | 61 | 11 |
| 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 | 8.6 | 8.9 | 9.5 | 8.2 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 59% | 15% | 34% | 9% |
| Vol Thru, % | 29% | 36% | 52% | 78% |
| Vol Right, % | 11% | 49% | 13% | 14% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 167 | 73 | 90 | 58 |
| LT Vol | 99 | 11 | 31 | 5 |
| Through Vol | 49 | 26 | 47 | 45 |
| RT Vol | 19 | 36 | 12 | 8 |
| Lane Flow Rate | 226 | 99 | 122 | 78 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.287 | 0.132 | 0.165 | 0.101 |
| Departure Headway (Hd) | 4.585 | 4.811 | 4.897 | 4.643 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 783 | 744 | 731 | 770 |
| Service Time | 2.617 | 2.851 | 2.937 | 2.683 |
| HCM Lane V/C Ratio | 0.289 | 0.133 | 0.167 | 0.101 |
| HCM Control Delay, s/veh | 9.5 | 8.6 | 8.9 | 8.2 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 1.2 | 0.5 | 0.6 | 0.3 |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 10.5 |
| Intersection LOS | B |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 6 | 26 | 84 | 60 | 50 | 5 | 63 | 80 | 22 | 6 | 58 | 7 |
| Future Vol, veh/h | 6 | 26 | 84 | 60 | 50 | 5 | 63 | 80 | 22 | 6 | 58 | 7 |
| Peak Hour Factor | 0.62 | 0.62 | 0.62 | 0.62 | 0.62 | 0.62 | 0.62 | 0.62 | 0.62 | 0.62 | 0.62 | 0.62 |
| Heavy Vehicles, % | 20 | 0 | 0 | 4 | 2 | 0 | 0 | 0 | 5 | 20 | 0 | 0 |
| Mvmt Flow | 10 | 42 | 135 | 97 | 81 | 8 | 102 | 129 | 35 | 10 | 94 | 11 |
| 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 | 10 | 10.4 | 11.2 | 9.9 |
| HCM LOS | A | B | B | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 38% | 5% | 52% | 8% |
| Vol Thru, % | 48% | 22% | 43% | 82% |
| Vol Right, % | 13% | 72% | 4% | 10% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 165 | 116 | 115 | 71 |
| LT Vol | 63 | 6 | 60 | 6 |
| Through Vol | 80 | 26 | 50 | 58 |
| RT Vol | 22 | 84 | 5 | 7 |
| Lane Flow Rate | 266 | 187 | 185 | 115 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.378 | 0.267 | 0.276 | 0.179 |
| Departure Headway (Hd) | 5.114 | 5.143 | 5.366 | 5.616 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 708 | 698 | 670 | 639 |
| Service Time | 3.114 | 3.175 | 3.398 | 3.646 |
| HCM Lane V/C Ratio | 0.376 | 0.268 | 0.276 | 0.18 |
| HCM Control Delay, s/veh | 11.2 | 10 | 10.4 | 9.9 |
| HCM Lane LOS | B | A | B | A |
| HCM 95th-tile Q | 1.8 | 1.1 | 1.1 | 0.6 |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 9.3 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 12 | 27 | 38 | 34 | 52 | 14 | 108 | 54 | 21 | 6 | 48 | 9 |
| Future Vol, veh/h | 12 | 27 | 38 | 34 | 52 | 14 | 108 | 54 | 21 | 6 | 48 | 9 |
| Peak Hour Factor | 0.74 | 0.74 | 0.74 | 0.74 | 0.74 | 0.74 | 0.74 | 0.74 | 0.74 | 0.74 | 0.74 | 0.74 |
| Heavy Vehicles, % | 18 | 8 | 0 | 10 | 2 | 25 | 0 | 4 | 0 | 0 | 4 | 0 |
| Mvmt Flow | 16 | 36 | 51 | 46 | 70 | 19 | 146 | 73 | 28 | 8 | 65 | 12 |
| 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 | 8.8 | 9.2 | 9.9 | 8.4 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 59% | 16% | 34% | 10% |
| Vol Thru, % | 30% | 35% | 52% | 76% |
| Vol Right, % | 11% | 49% | 14% | 14% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 183 | 77 | 100 | 63 |
| LT Vol | 108 | 12 | 34 | 6 |
| Through Vol | 54 | 27 | 52 | 48 |
| RT Vol | 21 | 38 | 14 | 9 |
| Lane Flow Rate | 247 | 104 | 135 | 85 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.319 | 0.142 | 0.187 | 0.112 |
| Departure Headway (Hd) | 4.647 | 4.905 | 4.974 | 4.727 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 772 | 727 | 719 | 754 |
| Service Time | 2.688 | 2.959 | 3.025 | 2.779 |
| HCM Lane V/C Ratio | 0.32 | 0.143 | 0.188 | 0.113 |
| HCM Control Delay, s/veh | 9.9 | 8.8 | 9.2 | 8.4 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 1.4 | 0.5 | 0.7 | 0.4 |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 10.6 |
| Intersection LOS | B |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 6 | 26 | 84 | 60 | 52 | 7 | 64 | 80 | 22 | 7 | 58 | 7 |
| Future Vol, veh/h | 6 | 26 | 84 | 60 | 52 | 7 | 64 | 80 | 22 | 7 | 58 | 7 |
| Peak Hour Factor | 0.62 | 0.62 | 0.62 | 0.62 | 0.62 | 0.62 | 0.62 | 0.62 | 0.62 | 0.62 | 0.62 | 0.62 |
| Heavy Vehicles, % | 20 | 0 | 0 | 4 | 2 | 0 | 0 | 0 | 5 | 20 | 0 | 0 |
| Mvmt Flow | 10 | 42 | 135 | 97 | 84 | 11 | 103 | 129 | 35 | 11 | 94 | 11 |
| 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 | 10.1 | 10.6 | 11.3 | 9.9 |
| HCM LOS | B | B | B | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 39% | 5% | 50% | 10% |
| Vol Thru, % | 48% | 22% | 44% | 81% |
| Vol Right, % | 13% | 72% | 6% | 10% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 166 | 116 | 119 | 72 |
| LT Vol | 64 | 6 | 60 | 7 |
| Through Vol | 80 | 26 | 52 | 58 |
| RT Vol | 22 | 84 | 7 | 7 |
| Lane Flow Rate | 268 | 187 | 192 | 116 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.382 | 0.269 | 0.286 | 0.182 |
| Departure Headway (Hd) | 5.141 | 5.167 | 5.368 | 5.644 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 704 | 696 | 670 | 635 |
| Service Time | 3.141 | 3.2 | 3.401 | 3.679 |
| HCM Lane V/C Ratio | 0.381 | 0.269 | 0.287 | 0.183 |
| HCM Control Delay, s/veh | 11.3 | 10.1 | 10.6 | 9.9 |
| HCM Lane LOS | B | B | B | A |
| HCM 95th-tile Q | 1.8 | 1.1 | 1.2 | 0.7 |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 9.3 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 12 | 28 | 39 | 34 | 53 | 16 | 109 | 54 | 21 | 9 | 48 | 9 |
| Future Vol, veh/h | 12 | 28 | 39 | 34 | 53 | 16 | 109 | 54 | 21 | 9 | 48 | 9 |
| Peak Hour Factor | 0.74 | 0.74 | 0.74 | 0.74 | 0.74 | 0.74 | 0.74 | 0.74 | 0.74 | 0.74 | 0.74 | 0.74 |
| Heavy Vehicles, % | 18 | 8 | 0 | 10 | 2 | 25 | 0 | 4 | 0 | 0 | 4 | 0 |
| Mvmt Flow | 16 | 38 | 53 | 46 | 72 | 22 | 147 | 73 | 28 | 12 | 65 | 12 |
| 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 | 8.8 | 9.2 | 9.9 | 8.5 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 59% | 15% | 33% | 14% |
| Vol Thru, % | 29% | 35% | 51% | 73% |
| Vol Right, % | 11% | 49% | 16% | 14% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 184 | 79 | 103 | 66 |
| LT Vol | 109 | 12 | 34 | 9 |
| Through Vol | 54 | 28 | 53 | 48 |
| RT Vol | 21 | 39 | 16 | 9 |
| Lane Flow Rate | 249 | 107 | 139 | 89 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.323 | 0.146 | 0.193 | 0.118 |
| Departure Headway (Hd) | 4.671 | 4.927 | 4.984 | 4.761 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 768 | 724 | 717 | 749 |
| Service Time | 2.714 | 2.984 | 3.037 | 2.815 |
| HCM Lane V/C Ratio | 0.324 | 0.148 | 0.194 | 0.119 |
| HCM Control Delay, s/veh | 9.9 | 8.8 | 9.2 | 8.5 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 1.4 | 0.5 | 0.7 | 0.4 |

# CR 800 N & SR 267

## TRAFFIC VOLUME COUNTS
## CAPACITY ANALYSIS

## SR 267 & CR 800 N - TMC

Tue Dec 12, 2023
AM Peak (7:15 AM - 8:15 AM)
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 1142924, Location: 39.880075, -86.392508

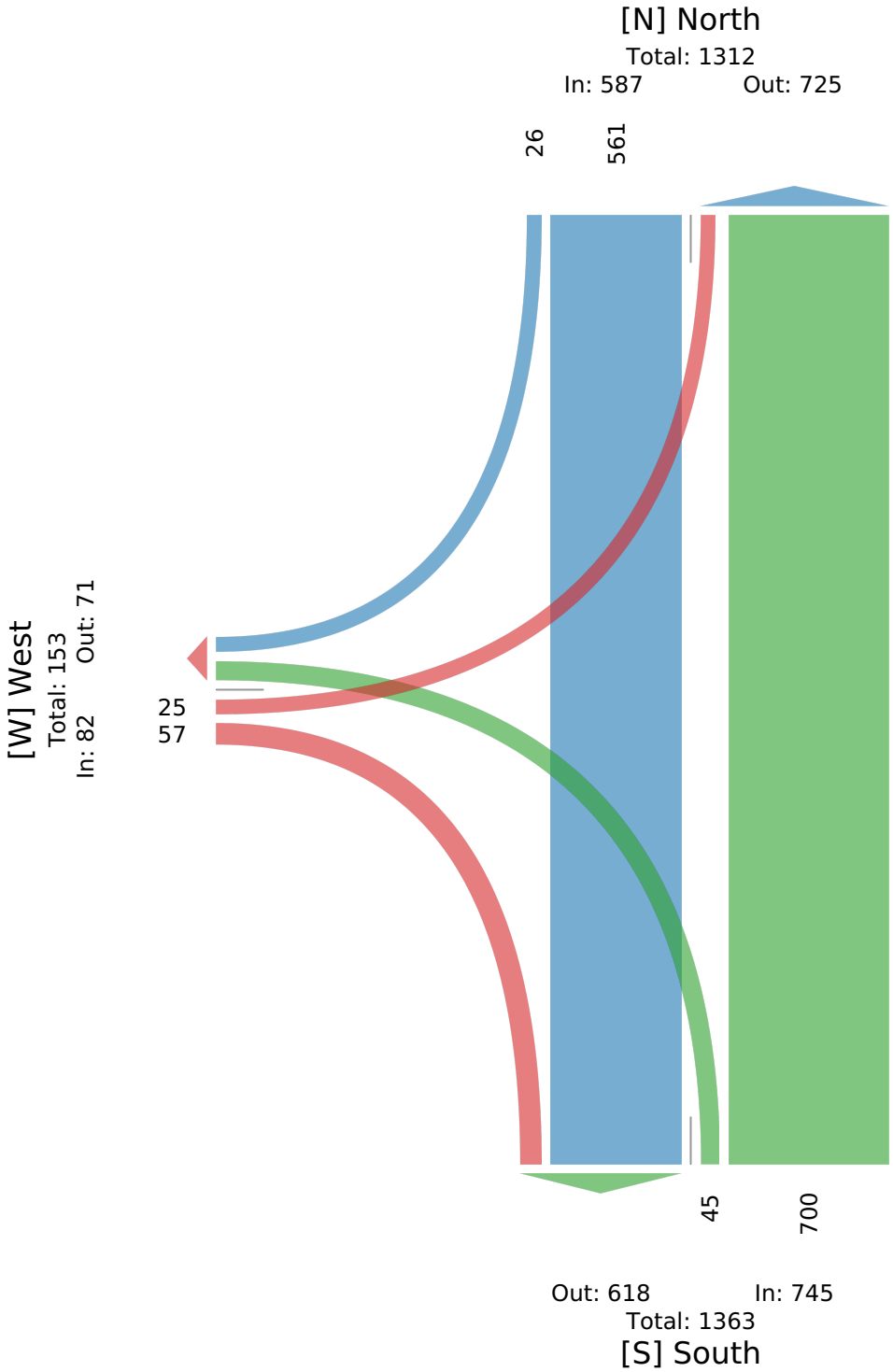
Provided by: A&F Engineering
8365 Keystone Crossing, Suite 201, Indianapolis, IN, 46240, US

| Leg | South | | | | North | | | | West | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Direction | Northbound | | | | Southbound | | | | Eastbound | | | | |
| Time | L | T | U | **App** | T | R | U | **App** | L | R | U | **App** | **Int** |
| 2023-12-12 7:15AM | 5 | 191 | 0 | **196** | 156 | 1 | 0 | **157** | 10 | 13 | 0 | **23** | **376** |
| 7:30AM | 8 | 191 | 0 | **199** | 131 | 5 | 0 | **136** | 9 | 12 | 0 | **21** | **356** |
| 7:45AM | 4 | 182 | 0 | **186** | 145 | 10 | 0 | **155** | 4 | 17 | 0 | **21** | **362** |
| 8:00AM | 28 | 136 | 0 | **164** | 129 | 10 | 0 | **139** | 2 | 15 | 0 | **17** | **320** |
| **Total** | 45 | 700 | 0 | **745** | 561 | 26 | 0 | **587** | 25 | 57 | 0 | **82** | **1414** |
| **% Approach** | 6.0% | 94.0% | 0% | **-** | 95.6% | 4.4% | 0% | **-** | 30.5% | 69.5% | 0% | **-** | - |
| **% Total** | 3.2% | 49.5% | 0% | **52.7%** | 39.7% | 1.8% | 0% | **41.5%** | 1.8% | 4.0% | 0% | **5.8%** | - |
| **PHF** | 0.402 | 0.916 | - | **0.936** | 0.899 | 0.650 | - | **0.935** | 0.625 | 0.838 | - | **0.891** | 0.940 |
| **Lights and Motorcycles** | 45 | 680 | 0 | **725** | 540 | 24 | 0 | **564** | 25 | 55 | 0 | **80** | 1369 |
| **% Lights and Motorcycles** | 100% | 97.1% | 0% | **97.3%** | 96.3% | 92.3% | 0% | **96.1%** | 100% | 96.5% | 0% | **97.6%** | 96.8% |
| **Heavy** | 0 | 20 | 0 | **20** | 21 | 2 | 0 | **23** | 0 | 2 | 0 | **2** | 45 |
| **% Heavy** | 0% | 2.9% | 0% | **2.7%** | 3.7% | 7.7% | 0% | **3.9%** | 0% | 3.5% | 0% | **2.4%** | 3.2% |

*L: Left, R: Right, T: Thru, U: U-Turn

SR 267 & CR 800 N - TMC
Tue Dec 12, 2023
AM Peak (7:15 AM - 8:15 AM)
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 1142924, Location: 39.880075, -86.392508

Provided by: A&F Engineering
8365 Keystone Crossing, Suite 201, Indianapolis, IN, 46240, US



## SR 267 & CR 800 N - TMC

Tue Dec 12, 2023
PM Peak (4:30 PM - 5:30 PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 1142924, Location: 39.880075, -86.392508

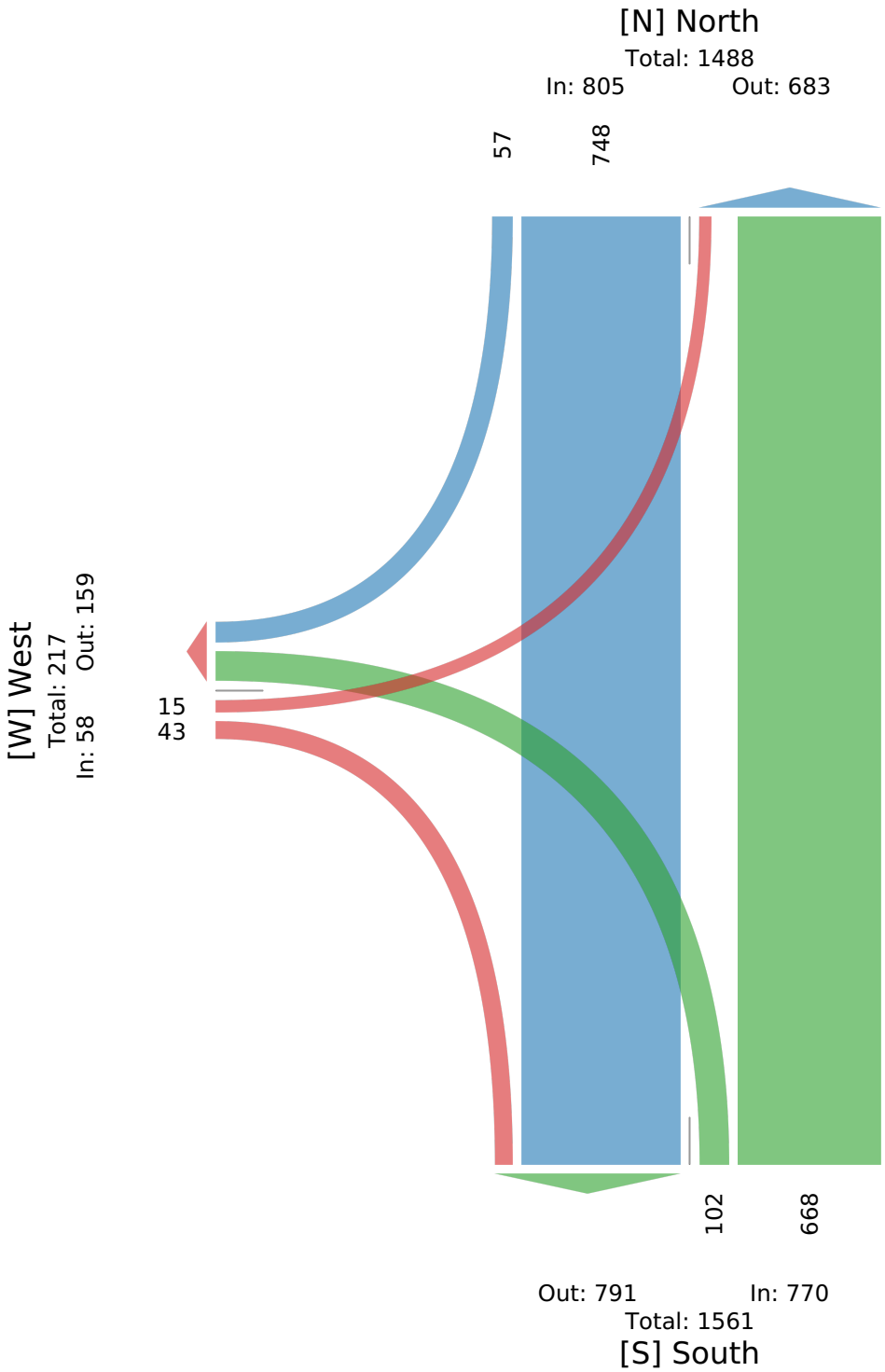
Provided by: A&F Engineering
8365 Keystone Crossing, Suite 201, Indianapolis, IN, 46240, US

| Leg | South | | | | North | | | | West | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Direction | Northbound | | | | Southbound | | | | Eastbound | | | | |
| Time | L | T | U | **App** | T | R | U | **App** | L | R | U | **App** | **Int** |
| 2023-12-12 4:30PM | 30 | 169 | 0 | **199** | 172 | 18 | 0 | **190** | 3 | 5 | 0 | **8** | **397** |
| 4:45PM | 20 | 156 | 0 | **176** | 202 | 13 | 0 | **215** | 1 | 10 | 0 | **11** | **402** |
| 5:00PM | 26 | 173 | 0 | **199** | 174 | 15 | 0 | **189** | 7 | 19 | 0 | **26** | **414** |
| 5:15PM | 26 | 170 | 0 | **196** | 200 | 11 | 0 | **211** | 4 | 9 | 0 | **13** | **420** |
| **Total** | 102 | 668 | 0 | **770** | 748 | 57 | 0 | **805** | 15 | 43 | 0 | **58** | **1633** |
| **% Approach** | 13.2% | 86.8% | 0% | **-** | 92.9% | 7.1% | 0% | **-** | 25.9% | 74.1% | 0% | **-** | - |
| **% Total** | 6.2% | 40.9% | 0% | **47.2%** | 45.8% | 3.5% | 0% | **49.3%** | 0.9% | 2.6% | 0% | **3.6%** | - |
| **PHF** | 0.850 | 0.965 | - | **0.967** | 0.926 | 0.792 | - | **0.936** | 0.536 | 0.566 | - | **0.558** | 0.972 |
| **Lights and Motorcycles** | 102 | 655 | 0 | **757** | 726 | 56 | 0 | **782** | 14 | 43 | 0 | **57** | 1596 |
| **% Lights and Motorcycles** | 100% | 98.1% | 0% | **98.3%** | 97.1% | 98.2% | 0% | **97.1%** | 93.3% | 100% | 0% | **98.3%** | 97.7% |
| **Heavy** | 0 | 13 | 0 | **13** | 22 | 1 | 0 | **23** | 1 | 0 | 0 | **1** | 37 |
| **% Heavy** | 0% | 1.9% | 0% | **1.7%** | 2.9% | 1.8% | 0% | **2.9%** | 6.7% | 0% | 0% | **1.7%** | 2.3% |

*L: Left, R: Right, T: Thru, U: U-Turn

SR 267 & CR 800 N - TMC
Tue Dec 12, 2023
PM Peak (4:30 PM - 5:30 PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 1142924, Location: 39.880075, -86.392508

Provided by: A&F Engineering
8365 Keystone Crossing, Suite 201, Indianapolis, IN, 46240, US



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

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 25 | 57 | 45 | 700 | 561 | 26 |
| Future Vol, veh/h | 25 | 57 | 45 | 700 | 561 | 26 |
| 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 | - | 195 | - | - | 145 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 94 | 94 | 94 | 94 | 94 | 94 |
| Heavy Vehicles, % | 0 | 4 | 0 | 3 | 4 | 8 |
| Mvmt Flow | 27 | 61 | 48 | 745 | 597 | 28 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 1437 | 597 | 624 | 0 | - | 0 |
| Stage 1 | 597 | - | - | - | - | - |
| Stage 2 | 840 | - | - | - | - | - |
| Critical Hdwy | 6.4 | 6.24 | 4.1 | - | - | - |
| Critical Hdwy Stg 1 | 5.4 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.4 | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 3.336 | 2.2 | - | - | - |
| Pot Cap-1 Maneuver | 148 | 499 | 967 | - | - | - |
| Stage 1 | 554 | - | - | - | - | - |
| Stage 2 | 427 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 141 | 499 | 967 | - | - | - |
| Mov Cap-2 Maneuver | 141 | - | - | - | - | - |
| Stage 1 | 526 | - | - | - | - | - |
| Stage 2 | 427 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 23.45 | 0.54 | 0 |
| HCM LOS | C | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 967 | - | 281 | - | - |
| HCM Lane V/C Ratio | 0.05 | - | 0.31 | - | - |
| HCM Control Delay (s/veh) | 8.9 | - | 23.4 | - | - |
| HCM Lane LOS | A | - | C | - | - |
| HCM 95th %tile Q(veh) | 0.2 | - | 1.3 | - | - |

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

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 15 | 43 | 102 | 668 | 748 | 57 |
| Future Vol, veh/h | 15 | 43 | 102 | 668 | 748 | 57 |
| 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 | - | 195 | - | - | 145 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 97 | 97 | 97 | 97 | 97 | 97 |
| Heavy Vehicles, % | 7 | 0 | 0 | 2 | 3 | 2 |
| Mvmt Flow | 15 | 44 | 105 | 689 | 771 | 59 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 1670 | 771 | 830 | 0 | - | 0 |
| Stage 1 | 771 | - | - | - | - | - |
| Stage 2 | 899 | - | - | - | - | - |
| Critical Hdwy | 6.47 | 6.2 | 4.1 | - | - | - |
| Critical Hdwy Stg 1 | 5.47 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.47 | - | - | - | - | - |
| Follow-up Hdwy | 3.563 | 3.3 | 2.2 | - | - | - |
| Pot Cap-1 Maneuver | 103 | 403 | 811 | - | - | - |
| Stage 1 | 448 | - | - | - | - | - |
| Stage 2 | 389 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 89 | 403 | 811 | - | - | - |
| Mov Cap-2 Maneuver | 89 | - | - | - | - | - |
| Stage 1 | 390 | - | - | - | - | - |
| Stage 2 | 389 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 28.63 | 1.34 | 0 |
| HCM LOS | D | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 811 | - | 211 | - | - |
| HCM Lane V/C Ratio | 0.13 | - | 0.283 | - | - |
| HCM Control Delay (s/veh) | 10.1 | - | 28.6 | - | - |
| HCM Lane LOS | B | - | D | - | - |
| HCM 95th %tile Q(veh) | 0.4 | - | 1.1 | - | - |

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

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 28 | 63 | 48 | 742 | 592 | 28 |
| Future Vol, veh/h | 28 | 63 | 48 | 742 | 592 | 28 |
| 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 | - | 195 | - | - | 145 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 94 | 94 | 94 | 94 | 94 | 94 |
| Heavy Vehicles, % | 0 | 4 | 0 | 3 | 4 | 8 |
| Mvmt Flow | 30 | 67 | 51 | 789 | 630 | 30 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 1521 | 630 | 660 | 0 | - | 0 |
| Stage 1 | 630 | - | - | - | - | - |
| Stage 2 | 891 | - | - | - | - | - |
| Critical Hdwy | 6.4 | 6.24 | 4.1 | - | - | - |
| Critical Hdwy Stg 1 | 5.4 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.4 | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 3.336 | 2.2 | - | - | - |
| Pot Cap-1 Maneuver | 132 | 478 | 938 | - | - | - |
| Stage 1 | 535 | - | - | - | - | - |
| Stage 2 | 404 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 125 | 478 | 938 | - | - | - |
| Mov Cap-2 Maneuver | 125 | - | - | - | - | - |
| Stage 1 | 506 | - | - | - | - | - |
| Stage 2 | 404 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 27.46 | 0.55 | 0 |
| HCM LOS | D | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 938 | - | 255 | - | - |
| HCM Lane V/C Ratio | 0.054 | - | 0.379 | - | - |
| HCM Control Delay (s/veh) | 9.1 | - | 27.5 | - | - |
| HCM Lane LOS | A | - | D | - | - |
| HCM 95th %tile Q(veh) | 0.2 | - | 1.7 | - | - |

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

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 17 | 47 | 109 | 709 | 793 | 61 |
| Future Vol, veh/h | 17 | 47 | 109 | 709 | 793 | 61 |
| 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 | - | 195 | - | - | 145 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 97 | 97 | 97 | 97 | 97 | 97 |
| Heavy Vehicles, % | 7 | 0 | 0 | 2 | 3 | 2 |
| Mvmt Flow | 18 | 48 | 112 | 731 | 818 | 63 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 1773 | 818 | 880 | 0 | - | 0 |
| Stage 1 | 818 | - | - | - | - | - |
| Stage 2 | 956 | - | - | - | - | - |
| Critical Hdwy | 6.47 | 6.2 | 4.1 | - | - | - |
| Critical Hdwy Stg 1 | 5.47 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.47 | - | - | - | - | - |
| Follow-up Hdwy | 3.563 | 3.3 | 2.2 | - | - | - |
| Pot Cap-1 Maneuver | 89 | 379 | 776 | - | - | - |
| Stage 1 | 426 | - | - | - | - | - |
| Stage 2 | 366 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 76 | 379 | 776 | - | - | - |
| Mov Cap-2 Maneuver | 76 | - | - | - | - | - |
| Stage 1 | 364 | - | - | - | - | - |
| Stage 2 | 366 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 35.19 | 1.39 | 0 |
| HCM LOS | E | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 776 | - | 184 | - | - |
| HCM Lane V/C Ratio | 0.145 | - | 0.359 | - | - |
| HCM Control Delay (s/veh) | 10.4 | - | 35.2 | - | - |
| HCM Lane LOS | B | - | E | - | - |
| HCM 95th %tile Q(veh) | 0.5 | - | 1.5 | - | - |

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

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 28 | 63 | 48 | 742 | 592 | 28 |
| Future Vol, veh/h | 28 | 63 | 48 | 742 | 592 | 28 |
| 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 | 195 | - | - | 145 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 94 | 94 | 94 | 94 | 94 | 94 |
| Heavy Vehicles, % | 0 | 4 | 0 | 3 | 4 | 8 |
| Mvmt Flow | 30 | 67 | 51 | 789 | 630 | 30 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 1521 | 630 | 660 | 0 | - | 0 |
| Stage 1 | 630 | - | - | - | - | - |
| Stage 2 | 891 | - | - | - | - | - |
| Critical Hdwy | 6.4 | 6.24 | 4.1 | - | - | - |
| Critical Hdwy Stg 1 | 5.4 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.4 | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 3.336 | 2.2 | - | - | - |
| Pot Cap-1 Maneuver | 132 | 478 | 938 | - | - | - |
| Stage 1 | 535 | - | - | - | - | - |
| Stage 2 | 404 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 125 | 478 | 938 | - | - | - |
| Mov Cap-2 Maneuver | 125 | - | - | - | - | - |
| Stage 1 | 506 | - | - | - | - | - |
| Stage 2 | 404 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 22.67 | 0.55 | 0 |
| HCM LOS | C | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | EBLn2 | SBT | SBR |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | 938 | - | 125 | 478 | - | - |
| HCM Lane V/C Ratio | 0.054 | - | 0.239 | 0.14 | - | - |
| HCM Control Delay (s/veh) | 9.1 | - | 42.7 | 13.8 | - | - |
| HCM Lane LOS | A | - | E | B | - | - |
| HCM 95th %tile Q(veh) | 0.2 | - | 0.9 | 0.5 | - | - |

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

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 17 | 47 | 109 | 709 | 793 | 61 |
| Future Vol, veh/h | 17 | 47 | 109 | 709 | 793 | 61 |
| 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 | 195 | - | - | 145 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 97 | 97 | 97 | 97 | 97 | 97 |
| Heavy Vehicles, % | 7 | 0 | 0 | 2 | 3 | 2 |
| Mvmt Flow | 18 | 48 | 112 | 731 | 818 | 63 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 1773 | 818 | 880 | 0 | - | 0 |
| Stage 1 | 818 | - | - | - | - | - |
| Stage 2 | 956 | - | - | - | - | - |
| Critical Hdwy | 6.47 | 6.2 | 4.1 | - | - | - |
| Critical Hdwy Stg 1 | 5.47 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.47 | - | - | - | - | - |
| Follow-up Hdwy | 3.563 | 3.3 | 2.2 | - | - | - |
| Pot Cap-1 Maneuver | 89 | 379 | 776 | - | - | - |
| Stage 1 | 426 | - | - | - | - | - |
| Stage 2 | 366 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 76 | 379 | 776 | - | - | - |
| Mov Cap-2 Maneuver | 76 | - | - | - | - | - |
| Stage 1 | 364 | - | - | - | - | - |
| Stage 2 | 366 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 29.27 | 1.39 | 0 |
| HCM LOS | D | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | EBLn2 | SBT | SBR |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | 776 | - | 76 | 379 | - | - |
| HCM Lane V/C Ratio | 0.145 | - | 0.231 | 0.128 | - | - |
| HCM Control Delay (s/veh) | 10.4 | - | 66.3 | 15.9 | - | - |
| HCM Lane LOS | B | - | F | C | - | - |
| HCM 95th %tile Q(veh) | 0.5 | - | 0.8 | 0.4 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 3.8 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 43 | 94 | 60 | 747 | 597 | 33 |
| Future Vol, veh/h | 43 | 94 | 60 | 747 | 597 | 33 |
| 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 | - | 195 | - | - | 145 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 94 | 94 | 94 | 94 | 94 | 94 |
| Heavy Vehicles, % | 0 | 4 | 0 | 3 | 4 | 8 |
| Mvmt Flow | 46 | 100 | 64 | 795 | 635 | 35 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 1557 | 635 | 670 | 0 | - | 0 |
| Stage 1 | 635 | - | - | - | - | - |
| Stage 2 | 922 | - | - | - | - | - |
| Critical Hdwy | 6.4 | 6.24 | 4.1 | - | - | - |
| Critical Hdwy Stg 1 | 5.4 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.4 | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 3.336 | 2.2 | - | - | - |
| Pot Cap-1 Maneuver | 125 | 475 | 930 | - | - | - |
| Stage 1 | 532 | - | - | - | - | - |
| Stage 2 | 391 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 117 | 475 | 930 | - | - | - |
| Mov Cap-2 Maneuver | 117 | - | - | - | - | - |
| Stage 1 | 495 | - | - | - | - | - |
| Stage 2 | 391 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 40.17 | 0.68 | 0 |
| HCM LOS | E | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 930 | - | 242 | - | - |
| HCM Lane V/C Ratio | 0.069 | - | 0.603 | - | - |
| HCM Control Delay (s/veh) | 9.2 | - | 40.2 | - | - |
| HCM Lane LOS | A | - | E | - | - |
| HCM 95th %tile Q(veh) | 0.2 | - | 3.5 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 4 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 27 | 68 | 145 | 712 | 798 | 78 |
| Future Vol, veh/h | 27 | 68 | 145 | 712 | 798 | 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 | - | 195 | - | - | 145 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 97 | 97 | 97 | 97 | 97 | 97 |
| Heavy Vehicles, % | 7 | 0 | 0 | 2 | 3 | 2 |
| Mvmt Flow | 28 | 70 | 149 | 734 | 823 | 80 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 1856 | 823 | 903 | 0 | - | 0 |
| Stage 1 | 823 | - | - | - | - | - |
| Stage 2 | 1033 | - | - | - | - | - |
| Critical Hdwy | 6.47 | 6.2 | 4.1 | - | - | - |
| Critical Hdwy Stg 1 | 5.47 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.47 | - | - | - | - | - |
| Follow-up Hdwy | 3.563 | 3.3 | 2.2 | - | - | - |
| Pot Cap-1 Maneuver | 79 | 377 | 761 | - | - | - |
| Stage 1 | 423 | - | - | - | - | - |
| Stage 2 | 336 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 63 | 377 | 761 | - | - | - |
| Mov Cap-2 Maneuver | 63 | - | - | - | - | - |
| Stage 1 | 340 | - | - | - | - | - |
| Stage 2 | 336 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 60.45 | 1.84 | 0 |
| HCM LOS | F | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 761 | - | 156 | - | - |
| HCM Lane V/C Ratio | 0.196 | - | 0.627 | - | - |
| HCM Control Delay (s/veh) | 10.9 | - | 60.5 | - | - |
| HCM Lane LOS | B | - | F | - | - |
| HCM 95th %tile Q(veh) | 0.7 | - | 3.4 | - | - |

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

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 43 | 94 | 60 | 747 | 597 | 33 |
| Future Vol, veh/h | 43 | 94 | 60 | 747 | 597 | 33 |
| 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 | 195 | - | - | 145 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 94 | 94 | 94 | 94 | 94 | 94 |
| Heavy Vehicles, % | 0 | 4 | 0 | 3 | 4 | 8 |
| Mvmt Flow | 46 | 100 | 64 | 795 | 635 | 35 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 1557 | 635 | 670 | 0 | - | 0 |
| Stage 1 | 635 | - | - | - | - | - |
| Stage 2 | 922 | - | - | - | - | - |
| Critical Hdwy | 6.4 | 6.24 | 4.1 | - | - | - |
| Critical Hdwy Stg 1 | 5.4 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.4 | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 3.336 | 2.2 | - | - | - |
| Pot Cap-1 Maneuver | 125 | 475 | 930 | - | - | - |
| Stage 1 | 532 | - | - | - | - | - |
| Stage 2 | 391 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 117 | 475 | 930 | - | - | - |
| Mov Cap-2 Maneuver | 117 | - | - | - | - | - |
| Stage 1 | 495 | - | - | - | - | - |
| Stage 2 | 391 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 27.12 | 0.68 | 0 |
| HCM LOS | D | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | EBLn2 | SBT | SBR |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | 930 | - | 117 | 475 | - | - |
| HCM Lane V/C Ratio | 0.069 | - | 0.392 | 0.211 | - | - |
| HCM Control Delay (s/veh) | 9.2 | - | 54.5 | 14.6 | - | - |
| HCM Lane LOS | A | - | F | B | - | - |
| HCM 95th %tile Q(veh) | 0.2 | - | 1.6 | 0.8 | - | - |

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

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 27 | 68 | 145 | 712 | 798 | 78 |
| Future Vol, veh/h | 27 | 68 | 145 | 712 | 798 | 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 | 0 | 195 | - | - | 145 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 97 | 97 | 97 | 97 | 97 | 97 |
| Heavy Vehicles, % | 7 | 0 | 0 | 2 | 3 | 2 |
| Mvmt Flow | 28 | 70 | 149 | 734 | 823 | 80 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 1856 | 823 | 903 | 0 | - | 0 |
| Stage 1 | 823 | - | - | - | - | - |
| Stage 2 | 1033 | - | - | - | - | - |
| Critical Hdwy | 6.47 | 6.2 | 4.1 | - | - | - |
| Critical Hdwy Stg 1 | 5.47 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.47 | - | - | - | - | - |
| Follow-up Hdwy | 3.563 | 3.3 | 2.2 | - | - | - |
| Pot Cap-1 Maneuver | 79 | 377 | 761 | - | - | - |
| Stage 1 | 423 | - | - | - | - | - |
| Stage 2 | 336 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 63 | 377 | 761 | - | - | - |
| Mov Cap-2 Maneuver | 63 | - | - | - | - | - |
| Stage 1 | 340 | - | - | - | - | - |
| Stage 2 | 336 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 40.64 | 1.84 | 0 |
| HCM LOS | E | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | EBLn2 | SBT | SBR |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | 761 | - | 63 | 377 | - | - |
| HCM Lane V/C Ratio | 0.196 | - | 0.441 | 0.186 | - | - |
| HCM Control Delay (s/veh) | 10.9 | - | 100.9 | 16.7 | - | - |
| HCM Lane LOS | B | - | F | C | - | - |
| HCM 95th %tile Q(veh) | 0.7 | - | 1.7 | 0.7 | - | - |

# CR 700 N & CR 650 E

## TRAFFIC VOLUME COUNTS
## CAPACITY ANALYSIS

## CR 700 N & CR 650 E - TMC

Tue Dec 12, 2023
AM Peak (7:30 AM - 8:30 AM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 1142921, Location: 39.865393, -86.41116

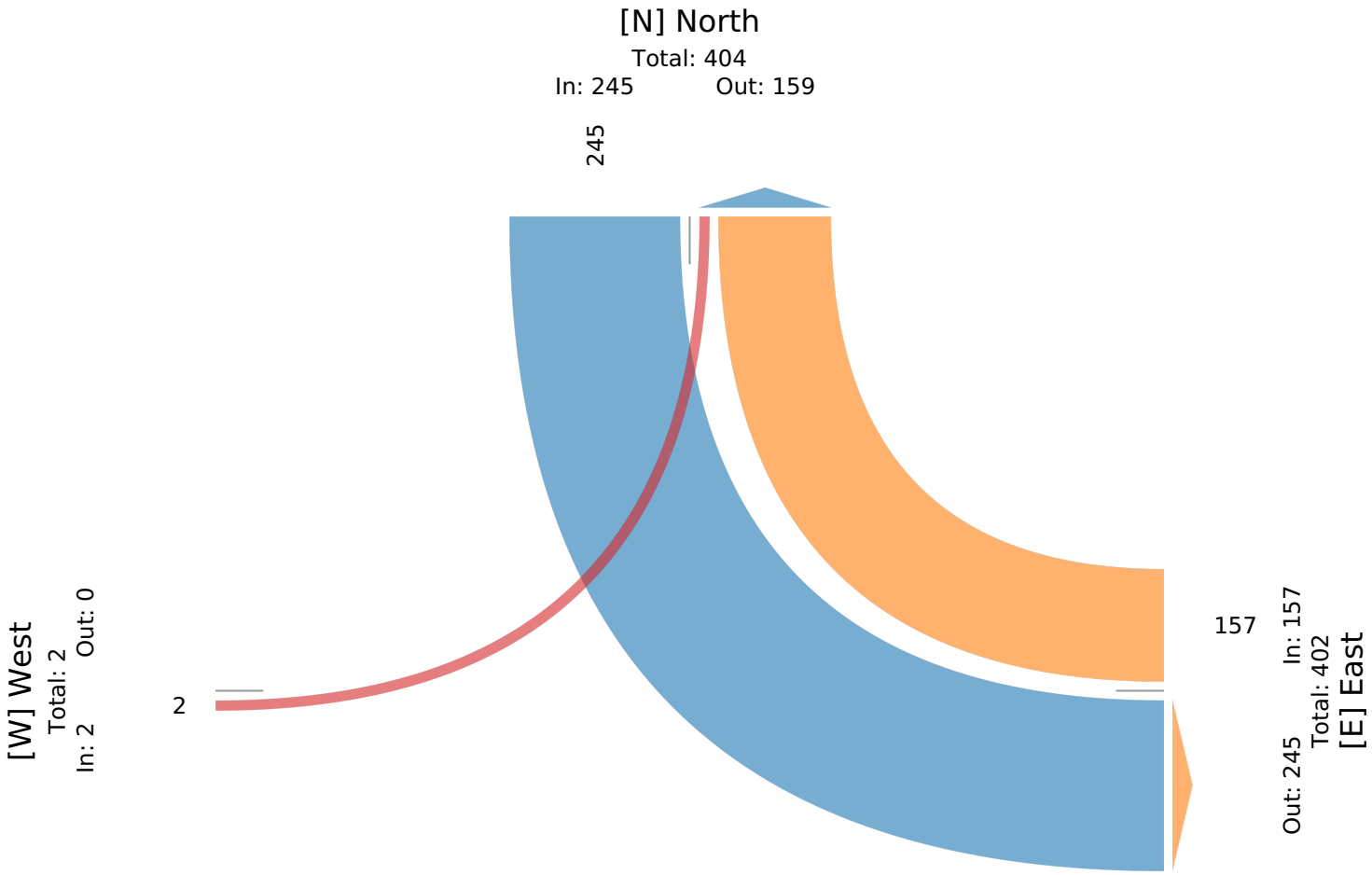
Provided by: A&F Engineering
8365 Keystone Crossing, Suite 201, Indianapolis, IN, 46240, US

| Leg | North | | | | West | | | | East | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Direction | Southbound | | | | Eastbound | | | | Westbound | | | | |
| Time | L | R | U | **App** | L | T | U | **App** | T | R | U | **App** | **Int** |
| 2023-12-12 7:30AM | 33 | 0 | 0 | **33** | 1 | 0 | 0 | **1** | 0 | 15 | 0 | **15** | **49** |
| 7:45AM | 39 | 0 | 0 | **39** | 0 | 0 | 0 | **0** | 0 | 36 | 0 | **36** | **75** |
| 8:00AM | 67 | 0 | 0 | **67** | 1 | 0 | 0 | **1** | 0 | 58 | 0 | **58** | **126** |
| 8:15AM | 106 | 0 | 0 | **106** | 0 | 0 | 0 | **0** | 0 | 48 | 0 | **48** | **154** |
| **Total** | 245 | 0 | 0 | **245** | 2 | 0 | 0 | **2** | 0 | 157 | 0 | **157** | **404** |
| **% Approach** | 100% | 0% | 0% | **-** | 100% | 0% | 0% | **-** | 0% | 100% | 0% | **-** | - |
| **% Total** | 60.6% | 0% | 0% | **60.6%** | 0.5% | 0% | 0% | **0.5%** | 0% | 38.9% | 0% | **38.9%** | - |
| **PHF** | 0.578 | - | - | **0.578** | 0.500 | - | - | **0.500** | - | 0.677 | - | **0.677** | 0.656 |
| **Lights and Motorcycles** | 238 | 0 | 0 | **238** | 2 | 0 | 0 | **2** | 0 | 153 | 0 | **153** | 393 |
| **% Lights and Motorcycles** | 97.1% | 0% | 0% | **97.1%** | 100% | 0% | 0% | **100%** | 0% | 97.5% | 0% | **97.5%** | 97.3% |
| **Heavy** | 7 | 0 | 0 | **7** | 0 | 0 | 0 | **0** | 0 | 4 | 0 | **4** | 11 |
| **% Heavy** | 2.9% | 0% | 0% | **2.9%** | 0% | 0% | 0% | **0%** | 0% | 2.5% | 0% | **2.5%** | 2.7% |

*L: Left, R: Right, T: Thru, U: U-Turn

**CR 700 N & CR 650 E - TMC**
Tue Dec 12, 2023
AM Peak (7:30 AM - 8:30 AM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 1142921, Location: 39.865393, -86.41116

Provided by: A&F Engineering
8365 Keystone Crossing, Suite 201, Indianapolis, IN, 46240, US



## CR 700 N & CR 650 E - TMC

Tue Dec 12, 2023
PM Peak (3:30 PM - 4:30 PM)
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 1142921, Location: 39.865393, -86.41116

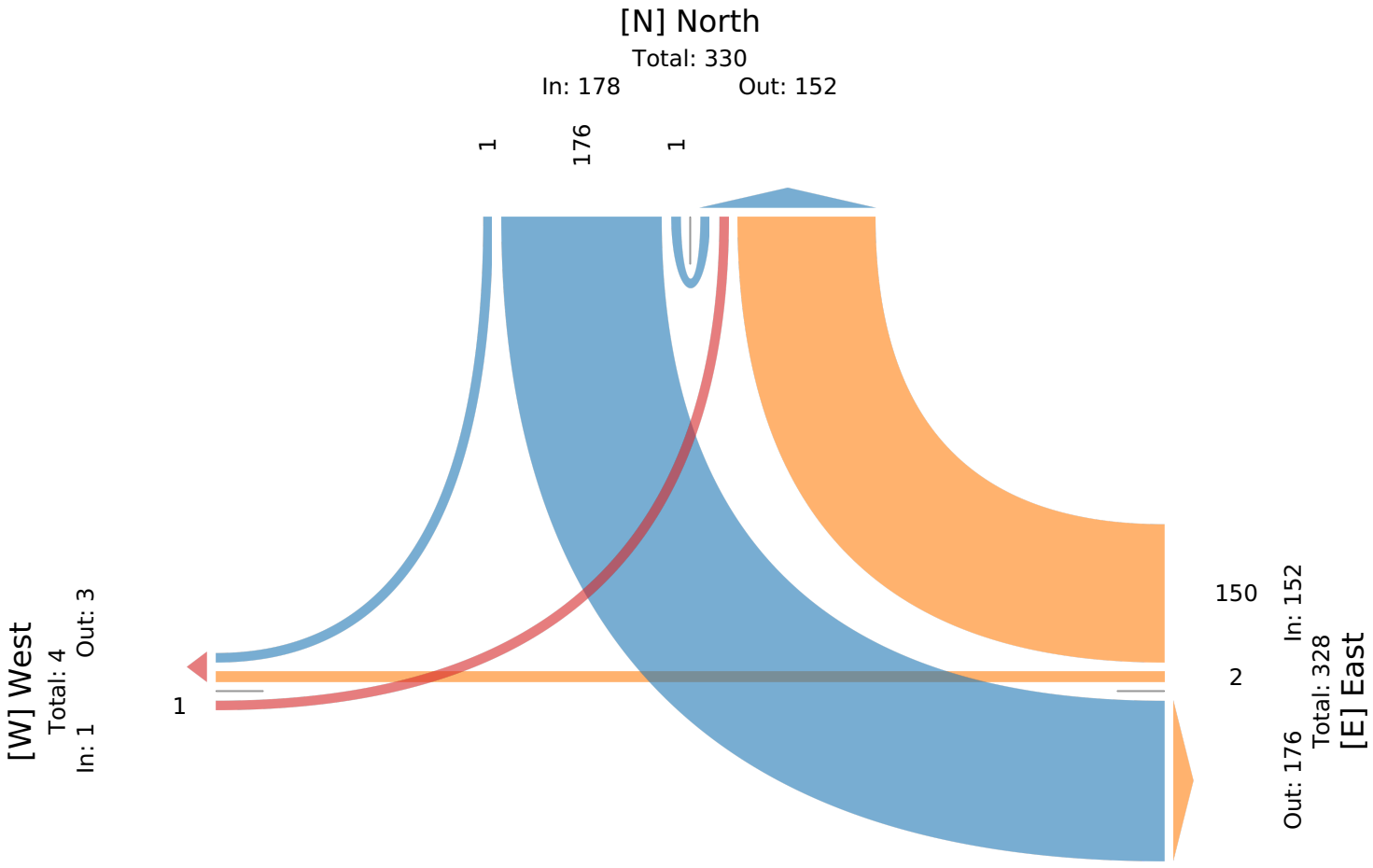
Provided by: A&F Engineering
8365 Keystone Crossing, Suite 201, Indianapolis, IN, 46240, US

| Leg / Direction | North Southbound | | | | West Eastbound | | | | East Westbound | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Time | L | R | U | **App** | L | T | U | **App** | T | R | U | **App** | **Int** |
| 2023-12-12 3:30PM | 49 | 0 | 0 | **49** | 1 | 0 | 0 | **1** | 0 | 44 | 0 | **44** | **94** |
| 3:45PM | 71 | 0 | 0 | **71** | 0 | 0 | 0 | **0** | 0 | 26 | 0 | **26** | **97** |
| 4:00PM | 27 | 1 | 1 | **29** | 0 | 0 | 0 | **0** | 0 | 37 | 0 | **37** | **66** |
| 4:15PM | 29 | 0 | 0 | **29** | 0 | 0 | 0 | **0** | 2 | 43 | 0 | **45** | **74** |
| **Total** | 176 | 1 | 1 | **178** | 1 | 0 | 0 | **1** | 2 | 150 | 0 | **152** | **331** |
| **% Approach** | 98.9% | 0.6% | 0.6% | **-** | 100% | 0% | 0% | **-** | 1.3% | 98.7% | 0% | **-** | - |
| **% Total** | 53.2% | 0.3% | 0.3% | **53.8%** | 0.3% | 0% | 0% | **0.3%** | 0.6% | 45.3% | 0% | **45.9%** | - |
| **PHF** | 0.620 | 0.250 | 0.250 | **0.627** | 0.250 | - | - | **0.250** | 0.250 | 0.852 | - | **0.844** | 0.853 |
| **Lights and Motorcycles** | 167 | 0 | 0 | **167** | 0 | 0 | 0 | **0** | 2 | 148 | 0 | **150** | 317 |
| **% Lights and Motorcycles** | 94.9% | 0% | 0% | **93.8%** | 0% | 0% | 0% | **0%** | 100% | 98.7% | 0% | **98.7%** | 95.8% |
| **Heavy** | 9 | 1 | 1 | **11** | 1 | 0 | 0 | **1** | 0 | 2 | 0 | **2** | 14 |
| **% Heavy** | 5.1% | 100% | 100% | **6.2%** | 100% | 0% | 0% | **100%** | 0% | 1.3% | 0% | **1.3%** | 4.2% |

*L: Left, R: Right, T: Thru, U: U-Turn

**CR 700 N & CR 650 E - TMC**
Tue Dec 12, 2023
PM Peak (3:30 PM - 4:30 PM)
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 1142921, Location: 39.865393, -86.41116

Provided by: A&F Engineering
8365 Keystone Crossing, Suite 201, Indianapolis, IN, 46240, US



| Intersection | |
|---|---|
| Int Delay, s/veh | 7.5 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 2 | 0 | 0 | 157 | 245 | 0 |
| Future Vol, veh/h | 2 | 0 | 0 | 157 | 245 | 0 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 66 | 66 | 66 | 66 | 66 | 66 |
| Heavy Vehicles, % | 0 | 0 | 0 | 3 | 3 | 0 |
| Mvmt Flow | 3 | 0 | 0 | 238 | 371 | 0 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 238 | 0 | - | 0 | 125 | 119 |
| Stage 1 | - | - | - | - | 119 | - |
| Stage 2 | - | - | - | - | 6 | - |
| Critical Hdwy | 4.1 | - | - | - | 6.43 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.43 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.43 | - |
| Follow-up Hdwy | 2.2 | - | - | - | 3.527 | 3.3 |
| Pot Cap-1 Maneuver | 1341 | - | - | - | 867 | 938 |
| Stage 1 | - | - | - | - | 904 | - |
| Stage 2 | - | - | - | - | 1014 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1341 | - | - | - | 866 | 938 |
| Mov Cap-2 Maneuver | - | - | - | - | 866 | - |
| Stage 1 | - | - | - | - | 902 | - |
| Stage 2 | - | - | - | - | 1014 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 7.69 | 0 | 12.25 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1341 | - | - | - | 866 |
| HCM Lane V/C Ratio | 0.002 | - | - | - | 0.429 |
| HCM Control Delay (s/veh) | 7.7 | 0 | - | - | 12.2 |
| HCM Lane LOS | A | A | - | - | B |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 2.2 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 5.5 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 1 | 0 | 2 | 150 | 176 | 1 |
| Future Vol, veh/h | 1 | 0 | 2 | 150 | 176 | 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 | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 85 | 85 | 85 | 85 | 85 | 85 |
| Heavy Vehicles, % | 100 | 0 | 0 | 1 | 5 | 100 |
| Mvmt Flow | 1 | 0 | 2 | 176 | 207 | 1 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 179 | 0 | - | 0 | 93 | 91 |
| Stage 1 | - | - | - | - | 91 | - |
| Stage 2 | - | - | - | - | 2 | - |
| Critical Hdwy | 5.1 | - | - | - | 6.45 | 7.2 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.45 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.45 | - |
| Follow-up Hdwy | 3.1 | - | - | - | 3.545 | 4.2 |
| Pot Cap-1 Maneuver | 973 | - | - | - | 900 | 754 |
| Stage 1 | - | - | - | - | 925 | - |
| Stage 2 | - | - | - | - | 1013 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 973 | - | - | - | 899 | 754 |
| Mov Cap-2 Maneuver | - | - | - | - | 899 | - |
| Stage 1 | - | - | - | - | 924 | - |
| Stage 2 | - | - | - | - | 1013 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 8.71 | 0 | 10.22 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 973 | - | - | - | 898 |
| HCM Lane V/C Ratio | 0.001 | - | - | - | 0.232 |
| HCM Control Delay (s/veh) | 8.7 | 0 | - | - | 10.2 |
| HCM Lane LOS | A | A | - | - | B |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.9 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 8 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 3 | 0 | 0 | 172 | 268 | 0 |
| Future Vol, veh/h | 3 | 0 | 0 | 172 | 268 | 0 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 66 | 66 | 66 | 66 | 66 | 66 |
| Heavy Vehicles, % | 0 | 0 | 0 | 3 | 3 | 0 |
| Mvmt Flow | 5 | 0 | 0 | 261 | 406 | 0 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 261 | 0 | - | 0 | 139 | 130 |
| Stage 1 | - | - | - | - | 130 | - |
| Stage 2 | - | - | - | - | 9 | - |
| Critical Hdwy | 4.1 | - | - | - | 6.43 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.43 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.43 | - |
| Follow-up Hdwy | 2.2 | - | - | - | 3.527 | 3.3 |
| Pot Cap-1 Maneuver | 1316 | - | - | - | 851 | 925 |
| Stage 1 | - | - | - | - | 893 | - |
| Stage 2 | - | - | - | - | 1011 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1316 | - | - | - | 848 | 925 |
| Mov Cap-2 Maneuver | - | - | - | - | 848 | - |
| Stage 1 | - | - | - | - | 890 | - |
| Stage 2 | - | - | - | - | 1011 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 7.75 | 0 | 13.08 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1316 | - | - | - | 848 |
| HCM Lane V/C Ratio | 0.003 | - | - | - | 0.479 |
| HCM Control Delay (s/veh) | 7.7 | 0 | - | - | 13.1 |
| HCM Lane LOS | A | A | - | - | B |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 2.6 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 5.7 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 2 | 0 | 3 | 164 | 192 | 2 |
| Future Vol, veh/h | 2 | 0 | 3 | 164 | 192 | 2 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 85 | 85 | 85 | 85 | 85 | 85 |
| Heavy Vehicles, % | 100 | 0 | 0 | 1 | 5 | 100 |
| Mvmt Flow | 2 | 0 | 4 | 193 | 226 | 2 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 196 | 0 | - | 0 | 105 | 100 |
| Stage 1 | - | - | - | - | 100 | - |
| Stage 2 | - | - | - | - | 5 | - |
| Critical Hdwy | 5.1 | - | - | - | 6.45 | 7.2 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.45 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.45 | - |
| Follow-up Hdwy | 3.1 | - | - | - | 3.545 | 4.2 |
| Pot Cap-1 Maneuver | 956 | - | - | - | 886 | 744 |
| Stage 1 | - | - | - | - | 917 | - |
| Stage 2 | - | - | - | - | 1011 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 956 | - | - | - | 884 | 744 |
| Mov Cap-2 Maneuver | - | - | - | - | 884 | - |
| Stage 1 | - | - | - | - | 914 | - |
| Stage 2 | - | - | - | - | 1011 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 8.78 | 0 | 10.5 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 956 | - | - | - | 882 |
| HCM Lane V/C Ratio | 0.002 | - | - | - | 0.259 |
| HCM Control Delay (s/veh) | 8.8 | 0 | - | - | 10.5 |
| HCM Lane LOS | A | A | - | - | B |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 1 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 8 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 3 | 0 | 0 | 172 | 268 | 0 |
| Future Vol, veh/h | 3 | 0 | 0 | 172 | 268 | 0 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 66 | 66 | 66 | 66 | 66 | 66 |
| Heavy Vehicles, % | 0 | 0 | 0 | 3 | 3 | 0 |
| Mvmt Flow | 5 | 0 | 0 | 261 | 406 | 0 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 261 | 0 | - | 0 | 139 | 130 |
| Stage 1 | - | - | - | - | 130 | - |
| Stage 2 | - | - | - | - | 9 | - |
| Critical Hdwy | 4.1 | - | - | - | 6.43 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.43 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.43 | - |
| Follow-up Hdwy | 2.2 | - | - | - | 3.527 | 3.3 |
| Pot Cap-1 Maneuver | 1316 | - | - | - | 851 | 925 |
| Stage 1 | - | - | - | - | 893 | - |
| Stage 2 | - | - | - | - | 1011 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1316 | - | - | - | 848 | 925 |
| Mov Cap-2 Maneuver | - | - | - | - | 848 | - |
| Stage 1 | - | - | - | - | 890 | - |
| Stage 2 | - | - | - | - | 1011 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 7.75 | 0 | 13.08 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1316 | - | - | - | 848 |
| HCM Lane V/C Ratio | 0.003 | - | - | - | 0.479 |
| HCM Control Delay (s/veh) | 7.7 | 0 | - | - | 13.1 |
| HCM Lane LOS | A | A | - | - | B |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 2.6 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 5.7 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 2 | 0 | 3 | 164 | 192 | 2 |
| Future Vol, veh/h | 2 | 0 | 3 | 164 | 192 | 2 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 85 | 85 | 85 | 85 | 85 | 85 |
| Heavy Vehicles, % | 100 | 0 | 0 | 1 | 5 | 100 |
| Mvmt Flow | 2 | 0 | 4 | 193 | 226 | 2 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 196 | 0 | - | 0 | 105 | 100 |
| Stage 1 | - | - | - | - | 100 | - |
| Stage 2 | - | - | - | - | 5 | - |
| Critical Hdwy | 5.1 | - | - | - | 6.45 | 7.2 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.45 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.45 | - |
| Follow-up Hdwy | 3.1 | - | - | - | 3.545 | 4.2 |
| Pot Cap-1 Maneuver | 956 | - | - | - | 886 | 744 |
| Stage 1 | - | - | - | - | 917 | - |
| Stage 2 | - | - | - | - | 1011 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 956 | - | - | - | 884 | 744 |
| Mov Cap-2 Maneuver | - | - | - | - | 884 | - |
| Stage 1 | - | - | - | - | 914 | - |
| Stage 2 | - | - | - | - | 1011 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s/v | 8.78 | 0 | 10.5 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 956 | - | - | - | 882 |
| HCM Lane V/C Ratio | 0.002 | - | - | - | 0.259 |
| HCM Control Delay (s/veh) | 8.8 | 0 | - | - | 10.5 |
| HCM Lane LOS | A | A | - | - | B |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 1 |

# CR 700 N & SR 267

## TRAFFIC VOLUME COUNTS
## CAPACITY ANALYSIS

## SR 267 & CR 700 N - TMC

Tue Dec 12, 2023
AM Peak (7:30 AM - 8:30 AM)
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 1142918, Location: 39.865527, -86.39247

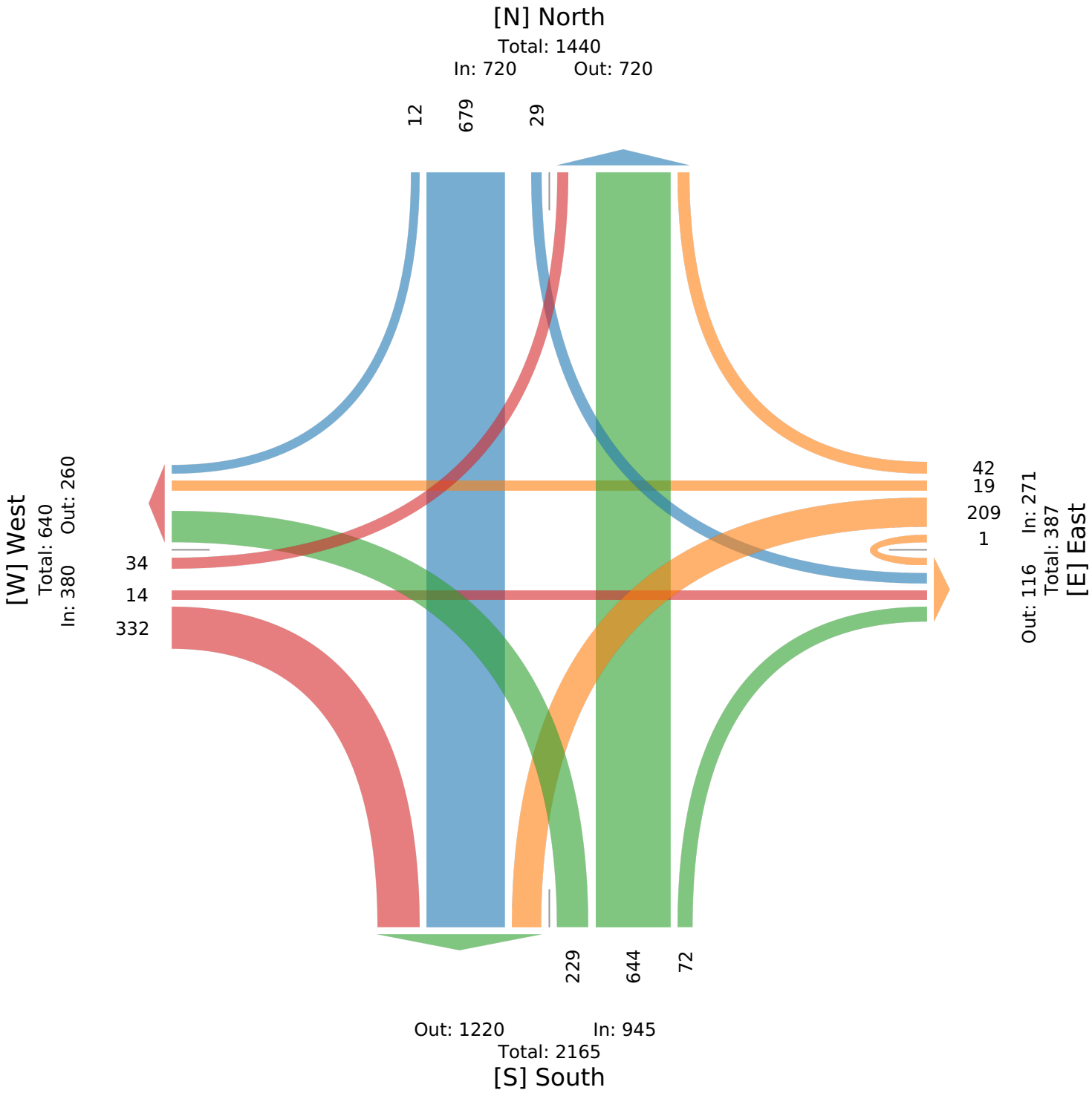
Provided by: A&F Engineering
8365 Keystone Crossing, Suite 201, Indianapolis, IN, 46240, US

| Leg / Direction | South Northbound | | | | | North Southbound | | | | | West Eastbound | | | | | East Westbound | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Time | L | T | R | U | **App** | L | T | R | U | **App** | L | T | R | U | **App** | L | T | R | U | **App** | **Int** |
| 2023-12-12 7:30AM | 45 | 170 | 16 | 0 | **231** | 7 | 180 | 2 | 0 | **189** | 10 | 5 | 61 | 0 | **76** | 57 | 5 | 13 | 0 | **75** | **571** |
| 7:45AM | 67 | 185 | 15 | 0 | **267** | 5 | 173 | 0 | 0 | **178** | 7 | 4 | 60 | 0 | **71** | 37 | 5 | 8 | 0 | **50** | **566** |
| 8:00AM | 61 | 147 | 20 | 0 | **228** | 9 | 148 | 5 | 0 | **162** | 11 | 2 | 82 | 0 | **95** | 54 | 5 | 8 | 0 | **67** | **552** |
| 8:15AM | 56 | 142 | 21 | 0 | **219** | 8 | 178 | 5 | 0 | **191** | 6 | 3 | 129 | 0 | **138** | 61 | 4 | 13 | 1 | **79** | **627** |
| **Total** | 229 | 644 | 72 | 0 | **945** | 29 | 679 | 12 | 0 | **720** | 34 | 14 | 332 | 0 | **380** | 209 | 19 | 42 | 1 | **271** | **2316** |
| **% Approach** | 24.2% | 68.1% | 7.6% | 0% | **-** | 4.0% | 94.3% | 1.7% | 0% | **-** | 8.9% | 3.7% | 87.4% | 0% | **-** | 77.1% | 7.0% | 15.5% | 0.4% | **-** | - |
| **% Total** | 9.9% | 27.8% | 3.1% | 0% | **40.8%** | 1.3% | 29.3% | 0.5% | 0% | **31.1%** | 1.5% | 0.6% | 14.3% | 0% | **16.4%** | 9.0% | 0.8% | 1.8% | 0% | **11.7%** | - |
| **PHF** | 0.854 | 0.870 | 0.857 | - | **0.885** | 0.806 | 0.943 | 0.600 | - | **0.942** | 0.773 | 0.700 | 0.643 | - | **0.688** | 0.857 | 0.950 | 0.808 | 0.250 | **0.858** | 0.923 |
| **Lights and Motorcycles** | 225 | 623 | 67 | 0 | **915** | 27 | 661 | 12 | 0 | **700** | 34 | 14 | 325 | 0 | **373** | 209 | 18 | 41 | 1 | **269** | 2257 |
| **% Lights and Motorcycles** | 98.3% | 96.7% | 93.1% | 0% | **96.8%** | 93.1% | 97.3% | 100% | 0% | **97.2%** | 100% | 100% | 97.9% | 0% | **98.2%** | 100% | 94.7% | 97.6% | 100% | **99.3%** | 97.5% |
| **Heavy** | 4 | 21 | 5 | 0 | **30** | 2 | 18 | 0 | 0 | **20** | 0 | 0 | 7 | 0 | **7** | 0 | 1 | 1 | 0 | **2** | 59 |
| **% Heavy** | 1.7% | 3.3% | 6.9% | 0% | **3.2%** | 6.9% | 2.7% | 0% | 0% | **2.8%** | 0% | 0% | 2.1% | 0% | **1.8%** | 0% | 5.3% | 2.4% | 0% | **0.7%** | 2.5% |

*L: Left, R: Right, T: Thru, U: U-Turn

**SR 267 & CR 700 N - TMC**
Tue Dec 12, 2023
AM Peak (7:30 AM - 8:30 AM)
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 1142918, Location: 39.865527, -86.39247

Provided by: A&F Engineering
8365 Keystone Crossing, Suite 201, Indianapolis, IN, 46240, US



## SR 267 & CR 700 N - TMC

Tue Dec 12, 2023
PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 1142918, Location: 39.865527, -86.39247

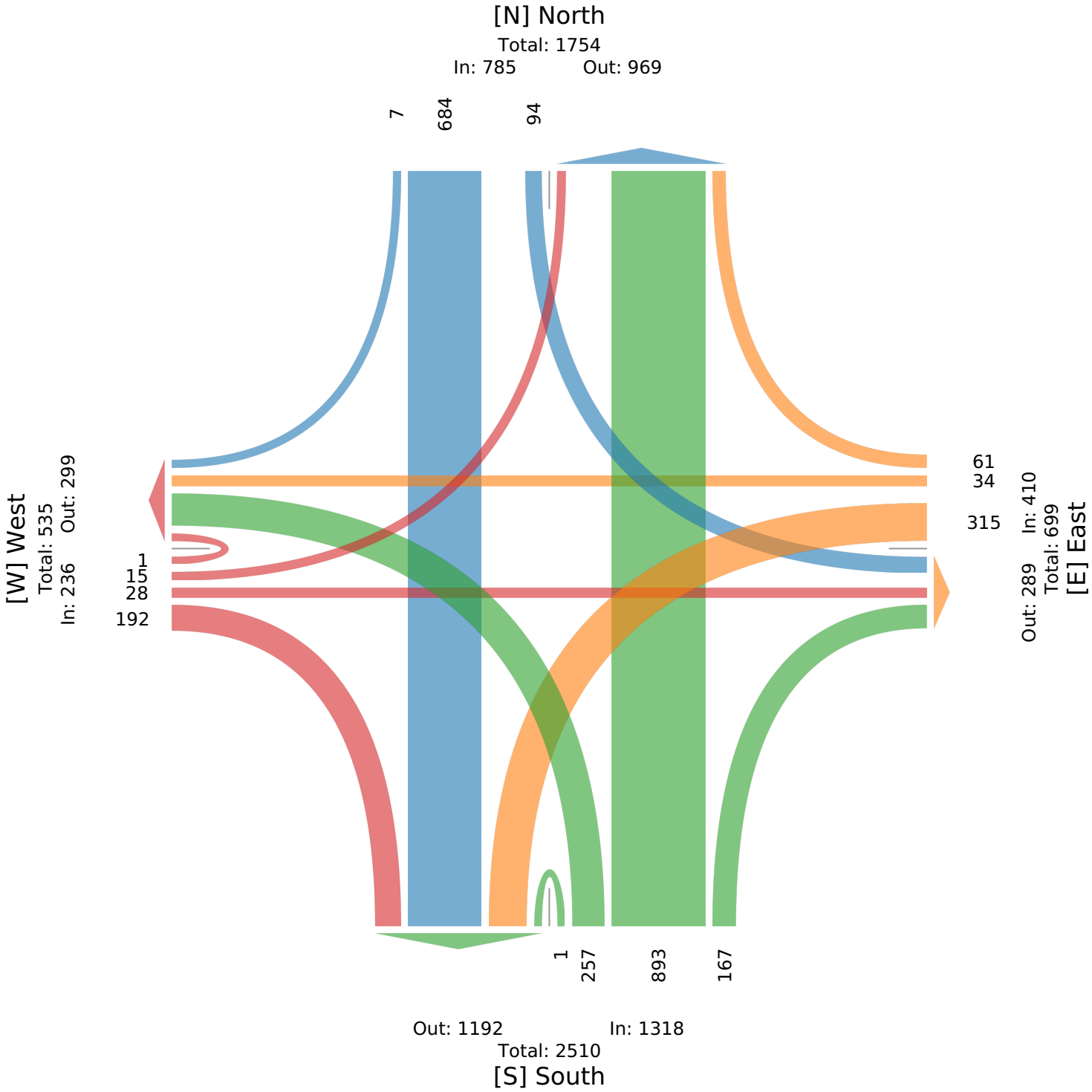
Provided by: A&F Engineering
8365 Keystone Crossing, Suite 201, Indianapolis, IN, 46240, US

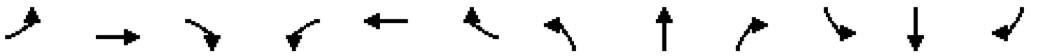
| Leg | South | | | | | North | | | | | West | | | | | East | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Direction | Northbound | | | | | Southbound | | | | | Eastbound | | | | | Westbound | | | | | |
| Time | L | T | R | U | App | L | T | R | U | App | L | T | R | U | App | L | T | R | U | App | Int |
| 2023-12-12 4:45PM | 63 | 215 | 42 | 1 | **321** | 26 | 191 | 0 | 0 | **217** | 4 | 2 | 46 | 0 | **52** | 78 | 9 | 13 | 0 | **100** | **690** |
| 5:00PM | 78 | 228 | 36 | 0 | **342** | 23 | 132 | 2 | 0 | **157** | 4 | 12 | 33 | 1 | **50** | 86 | 8 | 14 | 0 | **108** | **657** |
| 5:15PM | 52 | 225 | 40 | 0 | **317** | 24 | 194 | 5 | 0 | **223** | 4 | 4 | 55 | 0 | **63** | 70 | 8 | 15 | 0 | **93** | **696** |
| 5:30PM | 64 | 225 | 49 | 0 | **338** | 21 | 167 | 0 | 0 | **188** | 3 | 10 | 58 | 0 | **71** | 81 | 9 | 19 | 0 | **109** | **706** |
| **Total** | 257 | 893 | 167 | 1 | **1318** | 94 | 684 | 7 | 0 | **785** | 15 | 28 | 192 | 1 | **236** | 315 | 34 | 61 | 0 | **410** | **2749** |
| **% Approach** | 19.5% | 67.8% | 12.7% | 0.1% | **-** | 12.0% | 87.1% | 0.9% | 0% | **-** | 6.4% | 11.9% | 81.4% | 0.4% | **-** | 76.8% | 8.3% | 14.9% | 0% | **-** | - |
| **% Total** | 9.3% | 32.5% | 6.1% | 0% | **47.9%** | 3.4% | 24.9% | 0.3% | 0% | **28.6%** | 0.5% | 1.0% | 7.0% | 0% | **8.6%** | 11.5% | 1.2% | 2.2% | 0% | **14.9%** | - |
| **PHF** | 0.824 | 0.979 | 0.852 | 0.250 | **0.963** | 0.904 | 0.881 | 0.350 | - | **0.880** | 0.938 | 0.583 | 0.828 | 0.250 | **0.831** | 0.916 | 0.944 | 0.803 | - | **0.940** | 0.973 |
| **Lights and Motorcycles** | 256 | 878 | 167 | 1 | **1302** | 94 | 660 | 7 | 0 | **761** | 15 | 28 | 190 | 1 | **234** | 314 | 34 | 60 | 0 | **408** | 2705 |
| **% Lights and Motorcycles** | 99.6% | 98.3% | 100% | 100% | **98.8%** | 100% | 96.5% | 100% | 0% | **96.9%** | 100% | 100% | 99.0% | 100% | **99.2%** | 99.7% | 100% | 98.4% | 0% | **99.5%** | 98.4% |
| **Heavy** | 1 | 15 | 0 | 0 | **16** | 0 | 24 | 0 | 0 | **24** | 0 | 0 | 2 | 0 | **2** | 1 | 0 | 1 | 0 | **2** | 44 |
| **% Heavy** | 0.4% | 1.7% | 0% | 0% | **1.2%** | 0% | 3.5% | 0% | 0% | **3.1%** | 0% | 0% | 1.0% | 0% | **0.8%** | 0.3% | 0% | 1.6% | 0% | **0.5%** | 1.6% |

*L: Left, R: Right, T: Thru, U: U-Turn

**SR 267 & CR 700 N - TMC**
Tue Dec 12, 2023
PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 1142918, Location: 39.865527, -86.39247

Provided by: A&F Engineering
8365 Keystone Crossing, Suite 201, Indianapolis, IN, 46240, US

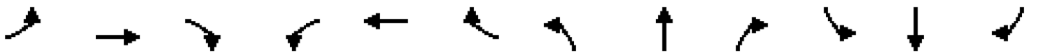




| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 34 | 14 | 332 | 209 | 19 | 42 | 229 | 644 | 72 | 29 | 679 | 12 |
| Future Volume (veh/h) | 34 | 14 | 332 | 209 | 19 | 42 | 229 | 644 | 72 | 29 | 679 | 12 |
| 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 | 1900 | 1900 | 1870 | 1900 | 1826 | 1870 | 1870 | 1856 | 1796 | 1796 | 1856 | 1900 |
| Adj Flow Rate, veh/h | 37 | 15 | 361 | 227 | 21 | 46 | 249 | 700 | 78 | 32 | 738 | 13 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 0 | 0 | 2 | 0 | 5 | 2 | 2 | 3 | 7 | 7 | 3 | 0 |
| Cap, veh/h | 458 | 353 | 499 | 374 | 126 | 276 | 403 | 1147 | 128 | 312 | 981 | 17 |
| Arrive On Green | 0.05 | 0.19 | 0.19 | 0.11 | 0.25 | 0.25 | 0.13 | 0.36 | 0.36 | 0.05 | 0.28 | 0.28 |
| Sat Flow, veh/h | 1810 | 1900 | 1585 | 3510 | 509 | 1116 | 1781 | 3198 | 356 | 1711 | 3545 | 62 |
| Grp Volume(v), veh/h | 37 | 15 | 361 | 227 | 0 | 67 | 249 | 386 | 392 | 32 | 367 | 384 |
| Grp Sat Flow(s),veh/h/ln | 1810 | 1900 | 1585 | 1755 | 0 | 1625 | 1781 | 1763 | 1791 | 1711 | 1763 | 1844 |
| Q Serve(g_s), s | 1.0 | 0.4 | 12.0 | 4.0 | 0.0 | 2.1 | 5.9 | 11.6 | 11.6 | 0.8 | 12.3 | 12.3 |
| Cycle Q Clear(g_c), s | 1.0 | 0.4 | 12.0 | 4.0 | 0.0 | 2.1 | 5.9 | 11.6 | 11.6 | 0.8 | 12.3 | 12.3 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 0.69 | 1.00 | | 0.20 | 1.00 | | 0.03 |
| Lane Grp Cap(c), veh/h | 458 | 353 | 499 | 374 | 0 | 402 | 403 | 632 | 643 | 312 | 488 | 511 |
| V/C Ratio(X) | 0.08 | 0.04 | 0.72 | 0.61 | 0.00 | 0.17 | 0.62 | 0.61 | 0.61 | 0.10 | 0.75 | 0.75 |
| Avail Cap(c_a), veh/h | 562 | 353 | 499 | 543 | 0 | 402 | 724 | 1129 | 1148 | 419 | 777 | 813 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 19.1 | 21.6 | 19.6 | 27.6 | 0.0 | 19.1 | 14.3 | 17.0 | 17.0 | 15.4 | 21.3 | 21.3 |
| Incr Delay (d2), s/veh | 0.1 | 0.0 | 5.1 | 1.6 | 0.0 | 0.2 | 1.5 | 1.0 | 0.9 | 0.1 | 2.4 | 2.3 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.4 | 0.2 | 5.1 | 1.7 | 0.0 | 0.8 | 2.1 | 4.1 | 4.2 | 0.3 | 4.7 | 4.9 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 19.2 | 21.6 | 24.8 | 29.2 | 0.0 | 19.3 | 15.8 | 18.0 | 18.0 | 15.5 | 23.7 | 23.6 |
| LnGrp LOS | B | C | C | C | | B | B | B | B | B | C | C |
| Approach Vol, veh/h | | 413 | | | 294 | | | 1027 | | | 783 | |
| Approach Delay, s/veh | | 24.2 | | | 26.9 | | | 17.4 | | | 23.3 | |
| Approach LOS | | C | | | C | | | B | | | C | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 7.6 | 28.2 | 11.9 | 17.0 | 12.8 | 22.9 | 7.9 | 21.0 |
| Change Period (Y+Rc), s | 4.5 | 5.0 | 5.0 | 5.0 | 4.5 | 5.0 | 4.5 | 5.0 |
| Max Green Setting (Gmax), s | 7.1 | 41.4 | 10.0 | 12.0 | 20.0 | 28.5 | 7.1 | 15.4 |
| Max Q Clear Time (g_c+I1), s | 2.8 | 13.6 | 6.0 | 14.0 | 7.9 | 14.3 | 3.0 | 4.1 |
| Green Ext Time (p_c), s | 0.0 | 4.7 | 0.3 | 0.0 | 0.5 | 3.6 | 0.0 | 0.2 |

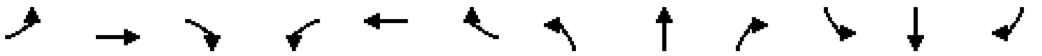
| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 21.5 |
| HCM 7th LOS | C |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 15 | 28 | 192 | 315 | 34 | 61 | 257 | 893 | 167 | 94 | 684 | 7 |
| Future Volume (veh/h) | 15 | 28 | 192 | 315 | 34 | 61 | 257 | 893 | 167 | 94 | 684 | 7 |
| 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 | 1900 | 1900 | 1885 | 1900 | 1900 | 1870 | 1900 | 1870 | 1900 | 1900 | 1841 | 1900 |
| Adj Flow Rate, veh/h | 15 | 29 | 198 | 325 | 35 | 63 | 265 | 921 | 172 | 97 | 705 | 7 |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Percent Heavy Veh, % | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 4 | 0 |
| Cap, veh/h | 340 | 292 | 440 | 438 | 158 | 285 | 453 | 1172 | 219 | 299 | 1239 | 12 |
| Arrive On Green | 0.02 | 0.15 | 0.15 | 0.12 | 0.26 | 0.26 | 0.12 | 0.39 | 0.39 | 0.08 | 0.35 | 0.35 |
| Sat Flow, veh/h | 1810 | 1900 | 1598 | 3510 | 608 | 1095 | 1810 | 2989 | 558 | 1810 | 3548 | 35 |
| Grp Volume(v), veh/h | 15 | 29 | 198 | 325 | 0 | 98 | 265 | 547 | 546 | 97 | 347 | 365 |
| Grp Sat Flow(s),veh/h/ln | 1810 | 1900 | 1598 | 1755 | 0 | 1703 | 1810 | 1777 | 1770 | 1810 | 1749 | 1834 |
| Q Serve(g_s), s | 0.5 | 1.0 | 8.0 | 7.0 | 0.0 | 3.5 | 6.9 | 21.1 | 21.1 | 2.5 | 12.6 | 12.6 |
| Cycle Q Clear(g_c), s | 0.5 | 1.0 | 8.0 | 7.0 | 0.0 | 3.5 | 6.9 | 21.1 | 21.1 | 2.5 | 12.6 | 12.6 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 0.64 | 1.00 | | 0.32 | 1.00 | | 0.02 |
| Lane Grp Cap(c), veh/h | 340 | 292 | 440 | 438 | 0 | 443 | 453 | 697 | 694 | 299 | 611 | 641 |
| V/C Ratio(X) | 0.04 | 0.10 | 0.45 | 0.74 | 0.00 | 0.22 | 0.58 | 0.79 | 0.79 | 0.32 | 0.57 | 0.57 |
| Avail Cap(c_a), veh/h | 469 | 293 | 440 | 811 | 0 | 503 | 733 | 1159 | 1154 | 381 | 875 | 918 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 26.5 | 28.3 | 23.3 | 32.9 | 0.0 | 22.6 | 14.0 | 20.8 | 20.8 | 15.9 | 20.6 | 20.6 |
| Incr Delay (d2), s/veh | 0.1 | 0.1 | 0.7 | 2.5 | 0.0 | 0.2 | 1.2 | 2.0 | 2.0 | 0.6 | 0.8 | 0.8 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.2 | 0.5 | 3.0 | 3.0 | 0.0 | 1.4 | 2.5 | 8.0 | 8.0 | 0.9 | 4.7 | 4.9 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 26.5 | 28.5 | 24.1 | 35.4 | 0.0 | 22.9 | 15.2 | 22.8 | 22.8 | 16.6 | 21.4 | 21.4 |
| LnGrp LOS | C | C | C | D | | C | B | C | C | B | C | C |
| Approach Vol, veh/h | | 242 | | | 423 | | | 1358 | | | 809 | |
| Approach Delay, s/veh | | 24.7 | | | 32.5 | | | 21.3 | | | 20.8 | |
| Approach LOS | | C | | | C | | | C | | | C | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 10.6 | 35.5 | 14.7 | 17.0 | 14.0 | 32.2 | 6.4 | 25.3 |
| Change Period (Y+Rc), s | 4.5 | 5.0 | 5.0 | 5.0 | 4.5 | 5.0 | 4.5 | 5.0 |
| Max Green Setting (Gmax), s | 9.7 | 50.8 | 18.0 | 12.0 | 21.5 | 39.0 | 7.5 | 23.0 |
| Max Q Clear Time (g_c+I1), s | 4.5 | 23.1 | 9.0 | 10.0 | 8.9 | 14.6 | 2.5 | 5.5 |
| Green Ext Time (p_c), s | 0.1 | 7.4 | 0.8 | 0.2 | 0.6 | 4.1 | 0.0 | 0.4 |

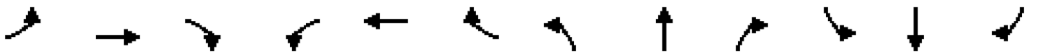
| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 23.1 |
| HCM 7th LOS | C |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 38 | 16 | 362 | 235 | 22 | 48 | 271 | 760 | 85 | 31 | 720 | 13 |
| Future Volume (veh/h) | 38 | 16 | 362 | 235 | 22 | 48 | 271 | 760 | 85 | 31 | 720 | 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 | 1900 | 1900 | 1870 | 1900 | 1826 | 1870 | 1870 | 1856 | 1796 | 1796 | 1856 | 1900 |
| Adj Flow Rate, veh/h | 41 | 17 | 393 | 255 | 24 | 52 | 295 | 826 | 92 | 34 | 783 | 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, % | 0 | 0 | 2 | 0 | 5 | 2 | 2 | 3 | 7 | 7 | 3 | 0 |
| Cap, veh/h | 445 | 336 | 510 | 359 | 119 | 257 | 423 | 1229 | 137 | 289 | 1022 | 18 |
| Arrive On Green | 0.06 | 0.18 | 0.18 | 0.10 | 0.23 | 0.23 | 0.14 | 0.38 | 0.38 | 0.05 | 0.29 | 0.29 |
| Sat Flow, veh/h | 1810 | 1900 | 1585 | 3510 | 513 | 1112 | 1781 | 3198 | 356 | 1711 | 3544 | 63 |
| Grp Volume(v), veh/h | 41 | 17 | 393 | 255 | 0 | 76 | 295 | 455 | 463 | 34 | 389 | 408 |
| Grp Sat Flow(s),veh/h/ln | 1810 | 1900 | 1585 | 1755 | 0 | 1626 | 1781 | 1763 | 1791 | 1711 | 1763 | 1844 |
| Q Serve(g_s), s | 1.2 | 0.5 | 12.0 | 4.8 | 0.0 | 2.6 | 7.2 | 14.5 | 14.5 | 0.9 | 13.7 | 13.7 |
| Cycle Q Clear(g_c), s | 1.2 | 0.5 | 12.0 | 4.8 | 0.0 | 2.6 | 7.2 | 14.5 | 14.5 | 0.9 | 13.7 | 13.7 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 0.68 | 1.00 | | 0.20 | 1.00 | | 0.03 |
| Lane Grp Cap(c), veh/h | 445 | 336 | 510 | 359 | 0 | 376 | 423 | 677 | 688 | 289 | 509 | 532 |
| V/C Ratio(X) | 0.09 | 0.05 | 0.77 | 0.71 | 0.00 | 0.20 | 0.70 | 0.67 | 0.67 | 0.12 | 0.77 | 0.77 |
| Avail Cap(c_a), veh/h | 534 | 336 | 510 | 466 | 0 | 376 | 678 | 1102 | 1120 | 385 | 780 | 816 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 20.4 | 23.2 | 20.8 | 29.5 | 0.0 | 21.0 | 14.6 | 17.3 | 17.3 | 15.7 | 22.0 | 22.0 |
| Incr Delay (d2), s/veh | 0.1 | 0.1 | 7.1 | 3.5 | 0.0 | 0.3 | 2.1 | 1.2 | 1.1 | 0.2 | 2.4 | 2.3 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.5 | 0.2 | 6.2 | 2.1 | 0.0 | 1.0 | 2.6 | 5.1 | 5.2 | 0.3 | 5.3 | 5.5 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 20.5 | 23.2 | 27.9 | 32.9 | 0.0 | 21.3 | 16.7 | 18.5 | 18.5 | 15.9 | 24.5 | 24.4 |
| LnGrp LOS | C | C | C | C | | C | B | B | B | B | C | C |
| Approach Vol, veh/h | | 451 | | | 331 | | | 1213 | | | 831 | |
| Approach Delay, s/veh | | 27.0 | | | 30.2 | | | 18.0 | | | 24.1 | |
| Approach LOS | | C | | | C | | | B | | | C | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 7.8 | 31.1 | 11.9 | 17.0 | 14.3 | 24.6 | 8.3 | 20.7 |
| Change Period (Y+Rc), s | 4.5 | 5.0 | 5.0 | 5.0 | 4.5 | 5.0 | 4.5 | 5.0 |
| Max Green Setting (Gmax), s | 7.1 | 42.4 | 9.0 | 12.0 | 19.5 | 30.0 | 7.1 | 14.4 |
| Max Q Clear Time (g_c+I1), s | 2.9 | 16.5 | 6.8 | 14.0 | 9.2 | 15.7 | 3.2 | 4.6 |
| Green Ext Time (p_c), s | 0.0 | 5.7 | 0.2 | 0.0 | 0.6 | 3.9 | 0.0 | 0.2 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 22.7 |
| HCM 7th LOS | C |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 17 | 31 | 210 | 353 | 39 | 69 | 304 | 1054 | 198 | 100 | 726 | 8 |
| Future Volume (veh/h) | 17 | 31 | 210 | 353 | 39 | 69 | 304 | 1054 | 198 | 100 | 726 | 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 | 1900 | 1900 | 1885 | 1900 | 1900 | 1870 | 1900 | 1870 | 1900 | 1900 | 1841 | 1900 |
| Adj Flow Rate, veh/h | 18 | 32 | 216 | 364 | 40 | 71 | 313 | 1087 | 204 | 103 | 748 | 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, % | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 4 | 0 |
| Cap, veh/h | 308 | 257 | 421 | 462 | 150 | 266 | 472 | 1316 | 246 | 264 | 1366 | 15 |
| Arrive On Green | 0.03 | 0.14 | 0.14 | 0.13 | 0.24 | 0.24 | 0.13 | 0.44 | 0.44 | 0.07 | 0.39 | 0.39 |
| Sat Flow, veh/h | 1810 | 1900 | 1598 | 3510 | 614 | 1090 | 1810 | 2988 | 559 | 1810 | 3545 | 38 |
| Grp Volume(v), veh/h | 18 | 32 | 216 | 364 | 0 | 111 | 313 | 645 | 646 | 103 | 369 | 387 |
| Grp Sat Flow(s),veh/h/ln | 1810 | 1900 | 1598 | 1755 | 0 | 1704 | 1810 | 1777 | 1770 | 1810 | 1749 | 1834 |
| Q Serve(g_s), s | 0.7 | 1.3 | 10.2 | 8.9 | 0.0 | 4.7 | 8.6 | 28.3 | 28.5 | 2.9 | 14.6 | 14.6 |
| Cycle Q Clear(g_c), s | 0.7 | 1.3 | 10.2 | 8.9 | 0.0 | 4.7 | 8.6 | 28.3 | 28.5 | 2.9 | 14.6 | 14.6 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 0.64 | 1.00 | | 0.32 | 1.00 | | 0.02 |
| Lane Grp Cap(c), veh/h | 308 | 257 | 421 | 462 | 0 | 416 | 472 | 783 | 780 | 264 | 674 | 707 |
| V/C Ratio(X) | 0.06 | 0.12 | 0.51 | 0.79 | 0.00 | 0.27 | 0.66 | 0.82 | 0.83 | 0.39 | 0.55 | 0.55 |
| Avail Cap(c_a), veh/h | 402 | 257 | 421 | 712 | 0 | 449 | 740 | 1041 | 1037 | 306 | 710 | 744 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 31.4 | 33.7 | 27.8 | 37.3 | 0.0 | 27.1 | 14.3 | 21.8 | 21.9 | 17.9 | 21.2 | 21.2 |
| Incr Delay (d2), s/veh | 0.1 | 0.2 | 1.1 | 3.3 | 0.0 | 0.3 | 1.6 | 4.1 | 4.3 | 0.9 | 0.8 | 0.8 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.3 | 0.6 | 3.9 | 4.0 | 0.0 | 1.9 | 3.2 | 11.3 | 11.3 | 1.1 | 5.6 | 5.8 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 31.4 | 34.0 | 28.9 | 40.6 | 0.0 | 27.4 | 15.9 | 25.9 | 26.2 | 18.9 | 22.0 | 22.0 |
| LnGrp LOS | C | C | C | D | | C | B | C | C | B | C | C |
| Approach Vol, veh/h | | 266 | | | 475 | | | 1604 | | | 859 | |
| Approach Delay, s/veh | | 29.7 | | | 37.5 | | | 24.1 | | | 21.6 | |
| Approach LOS | | C | | | D | | | C | | | C | |

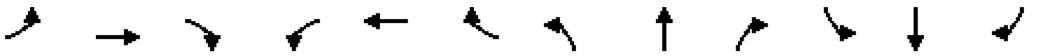
| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 10.9 | 44.1 | 16.7 | 17.0 | 15.9 | 39.2 | 7.0 | 26.7 |
| Change Period (Y+Rc), s | 4.5 | 5.0 | 5.0 | 5.0 | 4.5 | 5.0 | 4.5 | 5.0 |
| Max Green Setting (Gmax), s | 8.5 | 52.0 | 18.0 | 12.0 | 24.5 | 36.0 | 7.1 | 23.4 |
| Max Q Clear Time (g_c+I1), s | 4.9 | 30.5 | 10.9 | 12.2 | 10.6 | 16.6 | 2.7 | 6.7 |
| Green Ext Time (p_c), s | 0.1 | 8.6 | 0.8 | 0.0 | 0.7 | 4.1 | 0.0 | 0.5 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 25.9 |
| HCM 7th LOS | C |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 38 | 16 | 362 | 235 | 22 | 50 | 271 | 772 | 85 | 37 | 755 | 13 |
| Future Volume (veh/h) | 38 | 16 | 362 | 235 | 22 | 50 | 271 | 772 | 85 | 37 | 755 | 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 | 1900 | 1900 | 1870 | 1900 | 1826 | 1870 | 1870 | 1856 | 1796 | 1796 | 1856 | 1900 |
| Adj Flow Rate, veh/h | 41 | 17 | 393 | 255 | 24 | 54 | 295 | 839 | 92 | 40 | 821 | 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, % | 0 | 0 | 2 | 0 | 5 | 2 | 2 | 3 | 7 | 7 | 3 | 0 |
| Cap, veh/h | 438 | 331 | 501 | 356 | 114 | 256 | 416 | 1241 | 136 | 295 | 1063 | 18 |
| Arrive On Green | 0.06 | 0.17 | 0.17 | 0.10 | 0.23 | 0.23 | 0.14 | 0.39 | 0.39 | 0.05 | 0.30 | 0.30 |
| Sat Flow, veh/h | 1810 | 1900 | 1585 | 3510 | 500 | 1124 | 1781 | 3204 | 351 | 1711 | 3547 | 60 |
| Grp Volume(v), veh/h | 41 | 17 | 393 | 255 | 0 | 78 | 295 | 462 | 469 | 40 | 408 | 427 |
| Grp Sat Flow(s),veh/h/ln | 1810 | 1900 | 1585 | 1755 | 0 | 1624 | 1781 | 1763 | 1792 | 1711 | 1763 | 1845 |
| Q Serve(g_s), s | 1.2 | 0.5 | 12.0 | 4.9 | 0.0 | 2.7 | 7.2 | 15.0 | 15.0 | 1.1 | 14.5 | 14.5 |
| Cycle Q Clear(g_c), s | 1.2 | 0.5 | 12.0 | 4.9 | 0.0 | 2.7 | 7.2 | 15.0 | 15.0 | 1.1 | 14.5 | 14.5 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 0.69 | 1.00 | | 0.20 | 1.00 | | 0.03 |
| Lane Grp Cap(c), veh/h | 438 | 331 | 501 | 356 | 0 | 369 | 416 | 683 | 694 | 295 | 528 | 553 |
| V/C Ratio(X) | 0.09 | 0.05 | 0.78 | 0.72 | 0.00 | 0.21 | 0.71 | 0.68 | 0.68 | 0.14 | 0.77 | 0.77 |
| Avail Cap(c_a), veh/h | 525 | 331 | 501 | 458 | 0 | 369 | 641 | 1084 | 1103 | 379 | 793 | 830 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 20.9 | 23.7 | 21.4 | 30.0 | 0.0 | 21.6 | 14.7 | 17.5 | 17.5 | 15.4 | 22.0 | 22.0 |
| Incr Delay (d2), s/veh | 0.1 | 0.1 | 8.0 | 3.8 | 0.0 | 0.3 | 2.2 | 1.2 | 1.2 | 0.2 | 2.7 | 2.6 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.5 | 0.2 | 6.4 | 2.2 | 0.0 | 1.0 | 2.6 | 5.3 | 5.4 | 0.4 | 5.6 | 5.9 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 21.0 | 23.8 | 29.4 | 33.8 | 0.0 | 21.9 | 16.9 | 18.7 | 18.7 | 15.6 | 24.7 | 24.6 |
| LnGrp LOS | C | C | C | C | | C | B | B | B | B | C | C |
| Approach Vol, veh/h | | 451 | | | 333 | | | 1226 | | | 875 | |
| Approach Delay, s/veh | | 28.5 | | | 31.0 | | | 18.3 | | | 24.2 | |
| Approach LOS | | C | | | C | | | B | | | C | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 8.2 | 31.7 | 12.0 | 17.0 | 14.3 | 25.6 | 8.3 | 20.7 |
| Change Period (Y+Rc), s | 4.5 | 5.0 | 5.0 | 5.0 | 4.5 | 5.0 | 4.5 | 5.0 |
| Max Green Setting (Gmax), s | 7.1 | 42.4 | 9.0 | 12.0 | 18.5 | 31.0 | 7.1 | 14.4 |
| Max Q Clear Time (g_c+I1), s | 3.1 | 17.0 | 6.9 | 14.0 | 9.2 | 16.5 | 3.2 | 4.7 |
| Green Ext Time (p_c), s | 0.0 | 5.8 | 0.2 | 0.0 | 0.6 | 4.1 | 0.0 | 0.2 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 23.1 |
| HCM 7th LOS | C |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 17 | 31 | 210 | 353 | 39 | 76 | 304 | 1093 | 198 | 104 | 748 | 8 |
| Future Volume (veh/h) | 17 | 31 | 210 | 353 | 39 | 76 | 304 | 1093 | 198 | 104 | 748 | 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 | 1900 | 1900 | 1885 | 1900 | 1900 | 1870 | 1900 | 1870 | 1900 | 1900 | 1841 | 1900 |
| Adj Flow Rate, veh/h | 18 | 32 | 216 | 364 | 40 | 78 | 313 | 1127 | 204 | 107 | 771 | 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, % | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 4 | 0 |
| Cap, veh/h | 302 | 252 | 412 | 454 | 138 | 269 | 468 | 1356 | 244 | 260 | 1409 | 15 |
| Arrive On Green | 0.03 | 0.13 | 0.13 | 0.13 | 0.24 | 0.24 | 0.13 | 0.45 | 0.45 | 0.07 | 0.40 | 0.40 |
| Sat Flow, veh/h | 1810 | 1900 | 1598 | 3510 | 576 | 1122 | 1810 | 3008 | 542 | 1810 | 3546 | 37 |
| Grp Volume(v), veh/h | 18 | 32 | 216 | 364 | 0 | 118 | 313 | 664 | 667 | 107 | 380 | 399 |
| Grp Sat Flow(s),veh/h/ln | 1810 | 1900 | 1598 | 1755 | 0 | 1698 | 1810 | 1777 | 1773 | 1810 | 1749 | 1834 |
| Q Serve(g_s), s | 0.8 | 1.3 | 10.5 | 9.1 | 0.0 | 5.1 | 8.6 | 29.7 | 30.0 | 3.0 | 15.2 | 15.2 |
| Cycle Q Clear(g_c), s | 0.8 | 1.3 | 10.5 | 9.1 | 0.0 | 5.1 | 8.6 | 29.7 | 30.0 | 3.0 | 15.2 | 15.2 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 0.66 | 1.00 | | 0.31 | 1.00 | | 0.02 |
| Lane Grp Cap(c), veh/h | 302 | 252 | 412 | 454 | 0 | 406 | 468 | 801 | 799 | 260 | 695 | 729 |
| V/C Ratio(X) | 0.06 | 0.13 | 0.52 | 0.80 | 0.00 | 0.29 | 0.67 | 0.83 | 0.83 | 0.41 | 0.55 | 0.55 |
| Avail Cap(c_a), veh/h | 393 | 252 | 412 | 620 | 0 | 406 | 723 | 1040 | 1037 | 319 | 741 | 778 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 32.2 | 34.7 | 28.8 | 38.3 | 0.0 | 28.2 | 14.3 | 21.8 | 21.9 | 18.3 | 21.0 | 21.0 |
| Incr Delay (d2), s/veh | 0.1 | 0.2 | 1.2 | 5.3 | 0.0 | 0.4 | 1.7 | 4.5 | 4.7 | 1.0 | 0.7 | 0.7 |
| Initial Q Delay(d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.3 | 0.6 | 4.1 | 4.2 | 0.0 | 2.1 | 3.2 | 11.9 | 12.0 | 1.2 | 5.8 | 6.1 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d), s/veh | 32.3 | 34.9 | 30.1 | 43.6 | 0.0 | 28.6 | 15.9 | 26.3 | 26.6 | 19.3 | 21.7 | 21.7 |
| LnGrp LOS | C | C | C | D | | C | B | C | C | B | C | C |
| Approach Vol, veh/h | | 266 | | | 482 | | | 1644 | | | 886 | |
| Approach Delay, s/veh | | 30.8 | | | 39.9 | | | 24.4 | | | 21.4 | |
| Approach LOS | | C | | | D | | | C | | | C | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 11.0 | 45.8 | 16.7 | 17.0 | 15.9 | 41.0 | 7.0 | 26.7 |
| Change Period (Y+Rc), s | 4.5 | 5.0 | 5.0 | 5.0 | 4.5 | 5.0 | 4.5 | 5.0 |
| Max Green Setting (Gmax), s | 9.5 | 53.0 | 16.0 | 12.0 | 24.1 | 38.4 | 7.1 | 21.4 |
| Max Q Clear Time (g_c+I1), s | 5.0 | 32.0 | 11.1 | 12.5 | 10.6 | 17.2 | 2.8 | 7.1 |
| Green Ext Time (p_c), s | 0.1 | 8.8 | 0.6 | 0.0 | 0.7 | 4.4 | 0.0 | 0.5 |

| Intersection Summary | |
|---|---|
| HCM 7th Control Delay, s/veh | 26.4 |
| HCM 7th LOS | C |

# SR 267 (GREEN STREET)/ACRE LANE & PROPOSED DEVELOPMENT ACCESS DRIVE

## TRAFFIC VOLUME COUNTS
## CAPACITY ANALYSIS

## SR 267 & ACRE LANE - TMC

Tue May 21, 2024
AM Peak (7:15 AM - 8:15 AM)
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 1189708, Location: 39.875959, -86.392414

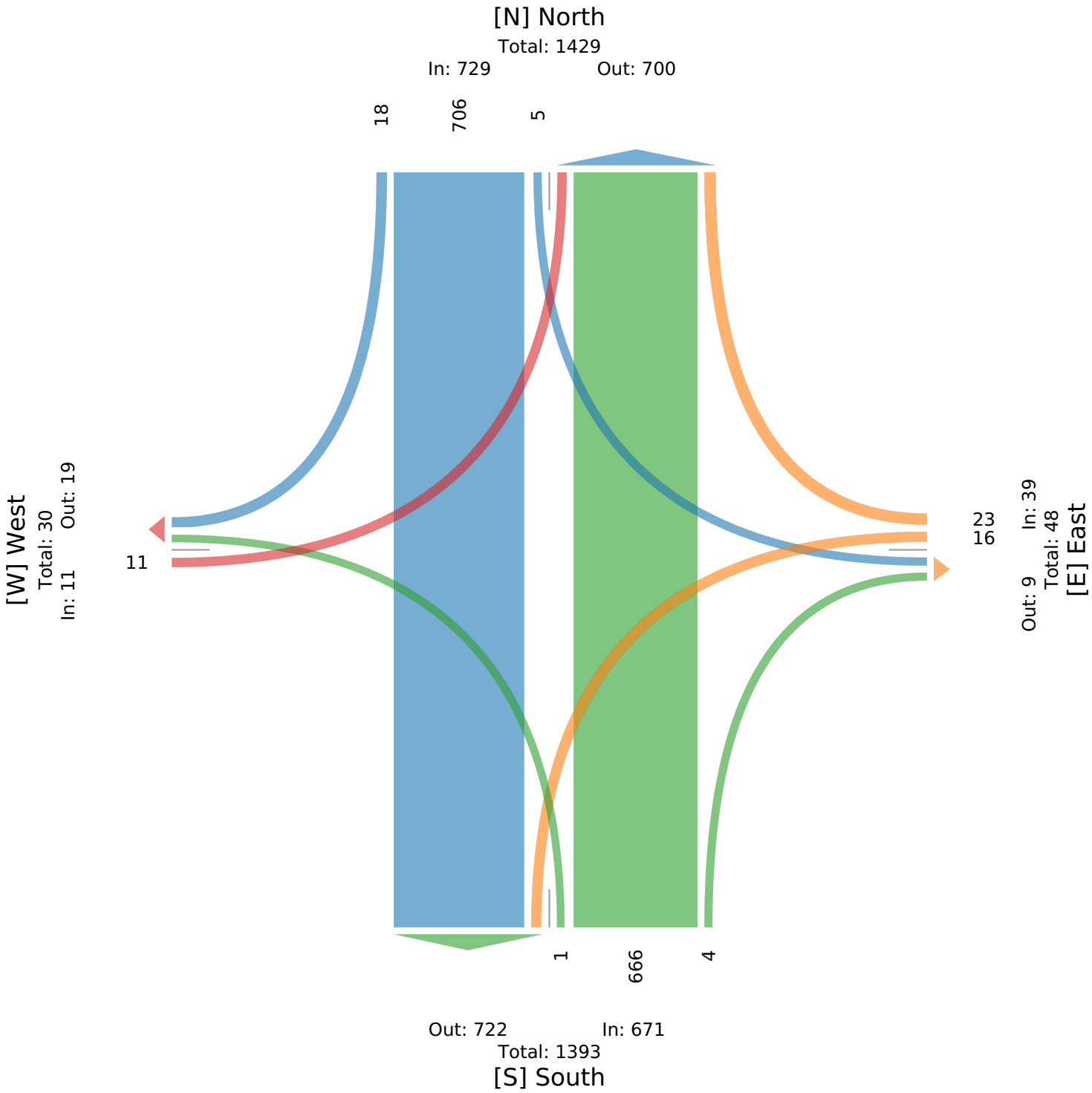
Provided by: A&F Engineering
8365 Keystone Crossing, Suite 201, Indianapolis, IN, 46240, US

| Leg | South | | | | | North | | | | | West | | | | | East | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Direction | Northbound | | | | | Southbound | | | | | Eastbound | | | | | Westbound | | | | | |
| Time | L | T | R | U | **App** | L | T | R | U | **App** | L | T | R | U | **App** | L | T | R | U | **App** | **Int** |
| 2024-05-21 7:15AM | 0 | 150 | 1 | 0 | **151** | 1 | 197 | 2 | 0 | **200** | 2 | 0 | 0 | 0 | **2** | 6 | 0 | 4 | 0 | **10** | **363** |
| 7:30AM | 0 | 186 | 2 | 0 | **188** | 1 | 164 | 5 | 0 | **170** | 4 | 0 | 0 | 0 | **4** | 2 | 0 | 8 | 0 | **10** | **372** |
| 7:45AM | 1 | 166 | 0 | 0 | **167** | 1 | 195 | 8 | 0 | **204** | 3 | 0 | 0 | 0 | **3** | 4 | 0 | 9 | 0 | **13** | **387** |
| 8:00AM | 0 | 164 | 1 | 0 | **165** | 2 | 150 | 3 | 0 | **155** | 2 | 0 | 0 | 0 | **2** | 4 | 0 | 2 | 0 | **6** | **328** |
| **Total** | 1 | 666 | 4 | 0 | **671** | 5 | 706 | 18 | 0 | **729** | 11 | 0 | 0 | 0 | **11** | 16 | 0 | 23 | 0 | **39** | **1450** |
| **% Approach** | 0.1% | 99.3% | 0.6% | 0% | **-** | 0.7% | 96.8% | 2.5% | 0% | **-** | 100% | 0% | 0% | 0% | **-** | 41.0% | 0% | 59.0% | 0% | **-** | - |
| **% Total** | 0.1% | 45.9% | 0.3% | 0% | **46.3%** | 0.3% | 48.7% | 1.2% | 0% | **50.3%** | 0.8% | 0% | 0% | 0% | **0.8%** | 1.1% | 0% | 1.6% | 0% | **2.7%** | - |
| **PHF** | 0.250 | 0.895 | 0.500 | - | **0.892** | 0.625 | 0.896 | 0.563 | - | **0.893** | 0.688 | - | - | - | **0.688** | 0.667 | - | 0.639 | - | **0.750** | 0.937 |
| **Lights and Motorcycles** | 1 | 638 | 3 | 0 | **642** | 5 | 678 | 18 | 0 | **701** | 11 | 0 | 0 | 0 | **11** | 16 | 0 | 23 | 0 | **39** | 1393 |
| **% Lights and Motorcycles** | 100% | 95.8% | 75.0% | 0% | **95.7%** | 100% | 96.0% | 100% | 0% | **96.2%** | 100% | 0% | 0% | 0% | **100%** | 100% | 0% | 100% | 0% | **100%** | 96.1% |
| **Heavy** | 0 | 28 | 1 | 0 | **29** | 0 | 28 | 0 | 0 | **28** | 0 | 0 | 0 | 0 | **0** | 0 | 0 | 0 | 0 | **0** | 57 |
| **% Heavy** | 0% | 4.2% | 25.0% | 0% | **4.3%** | 0% | 4.0% | 0% | 0% | **3.8%** | 0% | 0% | 0% | 0% | **0%** | 0% | 0% | 0% | 0% | **0%** | 3.9% |

*L: Left, R: Right, T: Thru, U: U-Turn

SR 267 & ACRE LANE - TMC
Tue May 21, 2024
AM Peak (7:15 AM - 8:15 AM)
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 1189708, Location: 39.875959, -86.392414

Provided by: A&F Engineering
8365 Keystone Crossing, Suite 201, Indianapolis, IN, 46240, US



## SR 267 & ACRE LANE - TMC

Tue May 21, 2024
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 1189708, Location: 39.875959, -86.392414

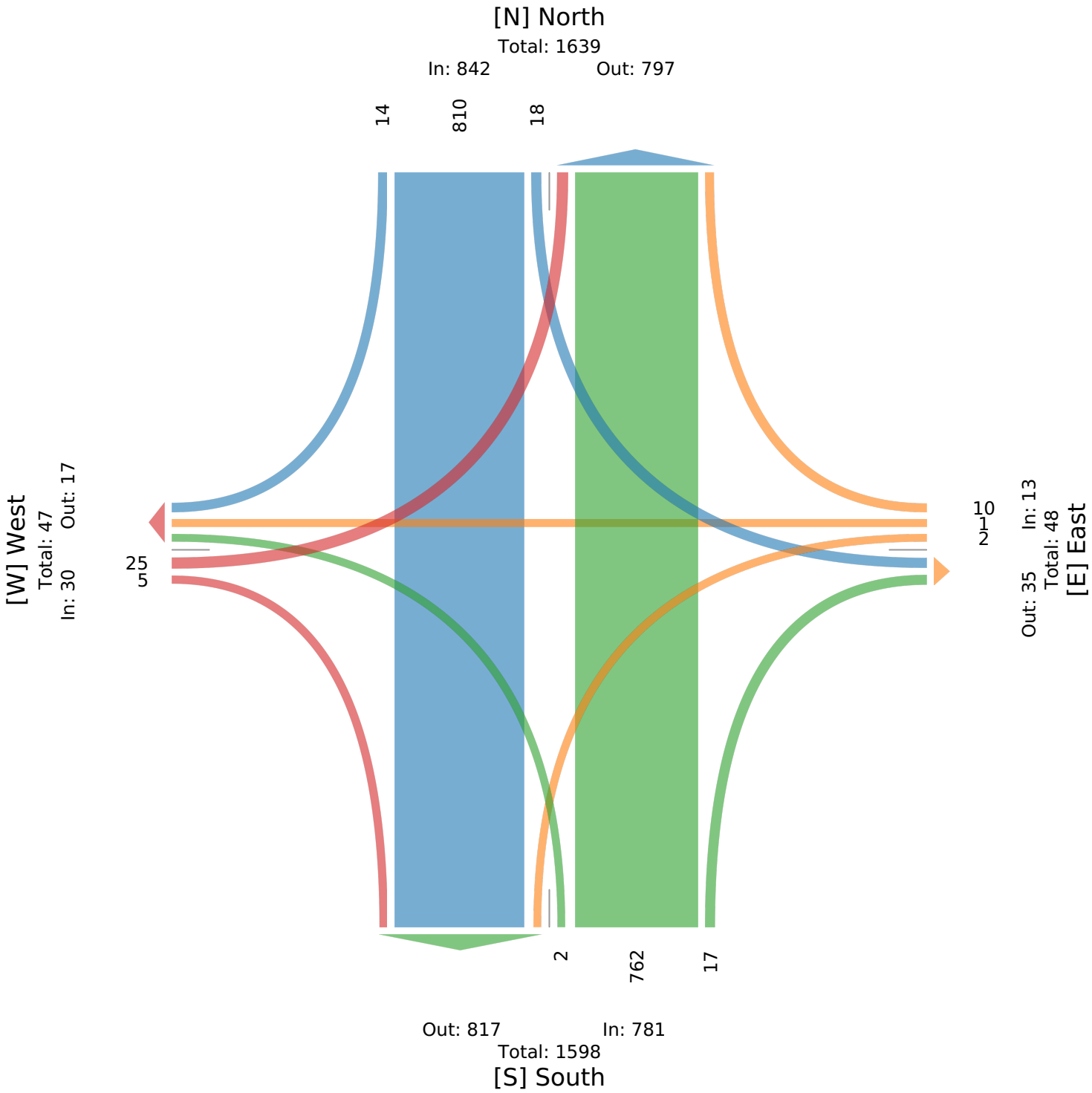
Provided by: A&F Engineering
8365 Keystone Crossing, Suite 201, Indianapolis, IN, 46240, US

| Leg / Direction | South Northbound | | | | | North Southbound | | | | | West Eastbound | | | | | East Westbound | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Time | L | T | R | U | **App** | L | T | R | U | **App** | L | T | R | U | **App** | L | T | R | U | **App** | **Int** |
| 2024-05-21 4:15PM | 0 | 179 | 5 | 0 | **184** | 3 | 204 | 2 | 0 | **209** | 8 | 0 | 1 | 0 | **9** | 1 | 0 | 1 | 0 | **2** | **404** |
| 4:30PM | 1 | 197 | 2 | 0 | **200** | 7 | 198 | 4 | 0 | **209** | 4 | 0 | 0 | 0 | **4** | 1 | 0 | 4 | 0 | **5** | **418** |
| 4:45PM | 1 | 199 | 6 | 0 | **206** | 1 | 204 | 6 | 0 | **211** | 6 | 0 | 2 | 0 | **8** | 0 | 1 | 4 | 0 | **5** | **430** |
| 5:00PM | 0 | 187 | 4 | 0 | **191** | 7 | 204 | 2 | 0 | **213** | 7 | 0 | 2 | 0 | **9** | 0 | 0 | 1 | 0 | **1** | **414** |
| **Total** | 2 | 762 | 17 | 0 | **781** | 18 | 810 | 14 | 0 | **842** | 25 | 0 | 5 | 0 | **30** | 2 | 1 | 10 | 0 | **13** | **1666** |
| **% Approach** | 0.3% | 97.6% | 2.2% | 0% | **-** | 2.1% | 96.2% | 1.7% | 0% | **-** | 83.3% | 0% | 16.7% | 0% | **-** | 15.4% | 7.7% | 76.9% | 0% | **-** | - |
| **% Total** | 0.1% | 45.7% | 1.0% | 0% | **46.9%** | 1.1% | 48.6% | 0.8% | 0% | **50.5%** | 1.5% | 0% | 0.3% | 0% | **1.8%** | 0.1% | 0.1% | 0.6% | 0% | **0.8%** | - |
| **PHF** | 0.500 | 0.957 | 0.708 | - | **0.948** | 0.643 | 0.993 | 0.583 | - | **0.988** | 0.781 | - | 0.625 | - | **0.833** | 0.500 | 0.250 | 0.625 | - | **0.650** | 0.969 |
| **Lights and Motorcycles** | 2 | 745 | 17 | 0 | **764** | 17 | 788 | 14 | 0 | **819** | 25 | 0 | 5 | 0 | **30** | 2 | 1 | 10 | 0 | **13** | 1626 |
| **% Lights and Motorcycles** | 100% | 97.8% | 100% | 0% | **97.8%** | 94.4% | 97.3% | 100% | 0% | **97.3%** | 100% | 0% | 100% | 0% | **100%** | 100% | 100% | 100% | 0% | **100%** | 97.6% |
| **Heavy** | 0 | 17 | 0 | 0 | **17** | 1 | 22 | 0 | 0 | **23** | 0 | 0 | 0 | 0 | **0** | 0 | 0 | 0 | 0 | **0** | 40 |
| **% Heavy** | 0% | 2.2% | 0% | 0% | **2.2%** | 5.6% | 2.7% | 0% | 0% | **2.7%** | 0% | 0% | 0% | 0% | **0%** | 0% | 0% | 0% | 0% | **0%** | 2.4% |

*L: Left, R: Right, T: Thru, U: U-Turn

SR 267 & ACRE LANE - TMC
Tue May 21, 2024
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 1189708, Location: 39.875959, -86.392414

Provided by: A&F Engineering
8365 Keystone Crossing, Suite 201, Indianapolis, IN, 46240, US



| Intersection | |
|---|---|
| Int Delay, s/veh | 1.2 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 11 | 0 | 0 | 16 | 0 | 23 | 1 | 666 | 4 | 5 | 706 | 18 |
| Future Vol, veh/h | 11 | 0 | 0 | 16 | 0 | 23 | 1 | 666 | 4 | 5 | 706 | 18 |
| 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 | - | - | 0 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 94 | 94 | 94 | 94 | 94 | 94 | 94 | 94 | 94 | 94 | 94 | 94 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 25 | 0 | 4 | 0 |
| Mvmt Flow | 12 | 0 | 0 | 17 | 0 | 24 | 1 | 709 | 4 | 5 | 751 | 19 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 1482 | 1486 | 761 | 1474 | 1494 | 711 | 770 | 0 | 0 | 713 | 0 | 0 |
| Stage 1 | 771 | 771 | - | 713 | 713 | - | - | - | - | - | - | - |
| Stage 2 | 711 | 715 | - | 762 | 781 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 | 4.1 | - | - | 4.1 | - | - |
| Critical Hdwy Stg 1 | 6.1 | 5.5 | - | 6.1 | 5.5 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.1 | 5.5 | - | 6.1 | 5.5 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 | 2.2 | - | - | 2.2 | - | - |
| Pot Cap-1 Maneuver | 104 | 126 | 409 | 106 | 124 | 437 | 853 | - | - | 896 | - | - |
| Stage 1 | 396 | 412 | - | 426 | 439 | - | - | - | - | - | - | - |
| Stage 2 | 427 | 438 | - | 401 | 408 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 98 | 125 | 409 | 105 | 123 | 437 | 853 | - | - | 896 | - | - |
| Mov Cap-2 Maneuver | 98 | 125 | - | 105 | 123 | - | - | - | - | - | - | - |
| Stage 1 | 393 | 410 | - | 426 | 438 | - | - | - | - | - | - | - |
| Stage 2 | 403 | 437 | - | 398 | 406 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s/v | 46.71 | 29.15 | 0.01 | 0.06 |
| HCM LOS | E | D | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | EBLn2 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 853 | - | - | 98 | - | 190 | 896 | - | - |
| HCM Lane V/C Ratio | 0.001 | - | - | 0.12 | - | 0.218 | 0.006 | - | - |
| HCM Control Delay (s/veh) | 9.2 | - | - | 46.7 | 0 | 29.1 | 9 | - | - |
| HCM Lane LOS | A | - | - | E | A | D | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0.4 | - | 0.8 | 0 | - | - |

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

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 25 | 0 | 5 | 2 | 1 | 10 | 2 | 762 | 17 | 18 | 810 | 14 |
| Future Vol, veh/h | 25 | 0 | 5 | 2 | 1 | 10 | 2 | 762 | 17 | 18 | 810 | 14 |
| 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 | - | - | 0 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 97 | 97 | 97 | 97 | 97 | 97 | 97 | 97 | 97 | 97 | 97 | 97 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 6 | 3 | 0 |
| Mvmt Flow | 26 | 0 | 5 | 2 | 1 | 10 | 2 | 786 | 18 | 19 | 835 | 14 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 1670 | 1687 | 842 | 1671 | 1685 | 794 | 849 | 0 | 0 | 803 | 0 | 0 |
| Stage 1 | 879 | 879 | - | 798 | 798 | - | - | - | - | - | - | - |
| Stage 2 | 790 | 807 | - | 872 | 887 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 | 4.1 | - | - | 4.16 | - | - |
| Critical Hdwy Stg 1 | 6.1 | 5.5 | - | 6.1 | 5.5 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.1 | 5.5 | - | 6.1 | 5.5 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 | 2.2 | - | - | 2.254 | - | - |
| Pot Cap-1 Maneuver | 77 | 95 | 367 | 77 | 95 | 391 | 797 | - | - | 803 | - | - |
| Stage 1 | 345 | 368 | - | 382 | 401 | - | - | - | - | - | - | - |
| Stage 2 | 386 | 397 | - | 348 | 365 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 73 | 92 | 367 | 74 | 93 | 391 | 797 | - | - | 803 | - | - |
| Mov Cap-2 Maneuver | 73 | 92 | - | 74 | 93 | - | - | - | - | - | - | - |
| Stage 1 | 337 | 359 | - | 381 | 400 | - | - | - | - | - | - | - |
| Stage 2 | 374 | 396 | - | 335 | 357 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s/v | 69.03 | 23.77 | 0.02 | 0.2 |
| HCM LOS | F | C | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | EBLn2 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 797 | - | - | 73 | 367 | 205 | 803 | - | - |
| HCM Lane V/C Ratio | 0.003 | - | - | 0.355 | 0.014 | 0.065 | 0.023 | - | - |
| HCM Control Delay (s/veh) | 9.5 | - | - | 79.8 | 14.9 | 23.8 | 9.6 | - | - |
| HCM Lane LOS | A | - | - | F | B | C | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 1.3 | 0 | 0.2 | 0.1 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 1.3 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 11 | 0 | 0 | 16 | 0 | 23 | 2 | 700 | 5 | 6 | 742 | 19 |
| Future Vol, veh/h | 11 | 0 | 0 | 16 | 0 | 23 | 2 | 700 | 5 | 6 | 742 | 19 |
| 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 | - | - | 0 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 94 | 94 | 94 | 94 | 94 | 94 | 94 | 94 | 94 | 94 | 94 | 94 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 25 | 0 | 4 | 0 |
| Mvmt Flow | 12 | 0 | 0 | 17 | 0 | 24 | 2 | 745 | 5 | 6 | 789 | 20 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 1561 | 1566 | 799 | 1554 | 1574 | 747 | 810 | 0 | 0 | 750 | 0 | 0 |
| Stage 1 | 812 | 812 | - | 752 | 752 | - | - | - | - | - | - | - |
| Stage 2 | 749 | 754 | - | 802 | 822 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 | 4.1 | - | - | 4.1 | - | - |
| Critical Hdwy Stg 1 | 6.1 | 5.5 | - | 6.1 | 5.5 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.1 | 5.5 | - | 6.1 | 5.5 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 | 2.2 | - | - | 2.2 | - | - |
| Pot Cap-1 Maneuver | 92 | 112 | 388 | 93 | 111 | 416 | 825 | - | - | 868 | - | - |
| Stage 1 | 376 | 395 | - | 406 | 421 | - | - | - | - | - | - | - |
| Stage 2 | 407 | 420 | - | 380 | 391 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 86 | 111 | 388 | 92 | 110 | 416 | 825 | - | - | 868 | - | - |
| Mov Cap-2 Maneuver | 86 | 111 | - | 92 | 110 | - | - | - | - | - | - | - |
| Stage 1 | 373 | 392 | - | 405 | 420 | - | - | - | - | - | - | - |
| Stage 2 | 382 | 419 | - | 378 | 388 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s/v | 53.53 | 32.8 | 0.03 | 0.07 |
| HCM LOS | F | D | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | EBLn2 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 825 | - | - | 86 | - | 170 | 868 | - | - |
| HCM Lane V/C Ratio | 0.003 | - | - | 0.137 | - | 0.243 | 0.007 | - | - |
| HCM Control Delay (s/veh) | 9.4 | - | - | 53.5 | 0 | 32.8 | 9.2 | - | - |
| HCM Lane LOS | A | - | - | F | A | D | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0.5 | - | 0.9 | 0 | - | - |

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

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 25 | 0 | 5 | 2 | 1 | 10 | 3 | 801 | 18 | 19 | 851 | 15 |
| Future Vol, veh/h | 25 | 0 | 5 | 2 | 1 | 10 | 3 | 801 | 18 | 19 | 851 | 15 |
| 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 | - | - | 0 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 97 | 97 | 97 | 97 | 97 | 97 | 97 | 97 | 97 | 97 | 97 | 97 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 6 | 3 | 0 |
| Mvmt Flow | 26 | 0 | 5 | 2 | 1 | 10 | 3 | 826 | 19 | 20 | 877 | 15 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 1757 | 1775 | 885 | 1758 | 1773 | 835 | 893 | 0 | 0 | 844 | 0 | 0 |
| Stage 1 | 924 | 924 | - | 841 | 841 | - | - | - | - | - | - | - |
| Stage 2 | 832 | 851 | - | 916 | 932 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 | 4.1 | - | - | 4.16 | - | - |
| Critical Hdwy Stg 1 | 6.1 | 5.5 | - | 6.1 | 5.5 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.1 | 5.5 | - | 6.1 | 5.5 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 | 2.2 | - | - | 2.254 | - | - |
| Pot Cap-1 Maneuver | 67 | 84 | 347 | 67 | 84 | 371 | 768 | - | - | 775 | - | - |
| Stage 1 | 326 | 351 | - | 362 | 383 | - | - | - | - | - | - | - |
| Stage 2 | 366 | 379 | - | 329 | 348 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 63 | 81 | 347 | 64 | 81 | 371 | 768 | - | - | 775 | - | - |
| Mov Cap-2 Maneuver | 63 | 81 | - | 64 | 81 | - | - | - | - | - | - | - |
| Stage 1 | 317 | 342 | - | 361 | 382 | - | - | - | - | - | - | - |
| Stage 2 | 354 | 378 | - | 316 | 339 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s/v | 84.3 | 26.04 | 0.04 | 0.21 |
| HCM LOS | F | D | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | EBLn2 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 768 | - | - | 63 | 347 | 184 | 775 | - | - |
| HCM Lane V/C Ratio | 0.004 | - | - | 0.412 | 0.015 | 0.073 | 0.025 | - | - |
| HCM Control Delay (s/veh) | 9.7 | - | - | 98.1 | 15.5 | 26 | 9.8 | - | - |
| HCM Lane LOS | A | - | - | F | C | D | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 1.6 | 0 | 0.2 | 0.1 | - | - |

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

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 17 | 0 | 10 | 16 | 0 | 23 | 5 | 711 | 5 | 6 | 773 | 21 |
| Future Vol, veh/h | 17 | 0 | 10 | 16 | 0 | 23 | 5 | 711 | 5 | 6 | 773 | 21 |
| 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 | - | - | 0 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 94 | 94 | 94 | 94 | 94 | 94 | 94 | 94 | 94 | 94 | 94 | 94 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 25 | 0 | 4 | 0 |
| Mvmt Flow | 18 | 0 | 11 | 17 | 0 | 24 | 5 | 756 | 5 | 6 | 822 | 22 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 1613 | 1619 | 834 | 1605 | 1627 | 759 | 845 | 0 | 0 | 762 | 0 | 0 |
| Stage 1 | 846 | 846 | - | 770 | 770 | - | - | - | - | - | - | - |
| Stage 2 | 767 | 772 | - | 835 | 857 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 | 4.1 | - | - | 4.1 | - | - |
| Critical Hdwy Stg 1 | 6.1 | 5.5 | - | 6.1 | 5.5 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.1 | 5.5 | - | 6.1 | 5.5 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 | 2.2 | - | - | 2.2 | - | - |
| Pot Cap-1 Maneuver | 85 | 104 | 371 | 86 | 103 | 410 | 801 | - | - | 860 | - | - |
| Stage 1 | 360 | 381 | - | 396 | 413 | - | - | - | - | - | - | - |
| Stage 2 | 398 | 412 | - | 365 | 377 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 78 | 103 | 371 | 82 | 102 | 410 | 801 | - | - | 860 | - | - |
| Mov Cap-2 Maneuver | 78 | 103 | - | 82 | 102 | - | - | - | - | - | - | - |
| Stage 1 | 357 | 378 | - | 394 | 410 | - | - | - | - | - | - | - |
| Stage 2 | 372 | 409 | - | 352 | 374 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s/v | 45.94 | 36.39 | 0.07 | 0.07 |
| HCM LOS | E | E | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | EBLn2 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 801 | - | - | 78 | 371 | 155 | 860 | - | - |
| HCM Lane V/C Ratio | 0.007 | - | - | 0.231 | 0.029 | 0.267 | 0.007 | - | - |
| HCM Control Delay (s/veh) | 9.5 | - | - | 64.2 | 15 | 36.4 | 9.2 | - | - |
| HCM Lane LOS | A | - | - | F | B | E | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0.8 | 0.1 | 1 | 0 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 2.6 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 29 | 0 | 11 | 2 | 1 | 10 | 14 | 836 | 18 | 19 | 871 | 21 |
| Future Vol, veh/h | 29 | 0 | 11 | 2 | 1 | 10 | 14 | 836 | 18 | 19 | 871 | 21 |
| 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 | - | - | 0 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 97 | 97 | 97 | 97 | 97 | 97 | 97 | 97 | 97 | 97 | 97 | 97 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 6 | 3 | 0 |
| Mvmt Flow | 30 | 0 | 11 | 2 | 1 | 10 | 14 | 862 | 19 | 20 | 898 | 22 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 1839 | 1857 | 909 | 1837 | 1859 | 871 | 920 | 0 | 0 | 880 | 0 | 0 |
| Stage 1 | 948 | 948 | - | 900 | 900 | - | - | - | - | - | - | - |
| Stage 2 | 891 | 909 | - | 937 | 959 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 | 4.1 | - | - | 4.16 | - | - |
| Critical Hdwy Stg 1 | 6.1 | 5.5 | - | 6.1 | 5.5 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.1 | 5.5 | - | 6.1 | 5.5 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 | 2.2 | - | - | 2.254 | - | - |
| Pot Cap-1 Maneuver | 59 | 74 | 336 | 59 | 74 | 353 | 751 | - | - | 751 | - | - |
| Stage 1 | 316 | 342 | - | 336 | 360 | - | - | - | - | - | - | - |
| Stage 2 | 340 | 356 | - | 320 | 338 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 54 | 71 | 336 | 54 | 71 | 353 | 751 | - | - | 751 | - | - |
| Mov Cap-2 Maneuver | 54 | 71 | - | 54 | 71 | - | - | - | - | - | - | - |
| Stage 1 | 308 | 333 | - | 329 | 353 | - | - | - | - | - | - | - |
| Stage 2 | 322 | 350 | - | 301 | 329 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s/v | 102.9 | 28.87 | 0.16 | 0.21 |
| HCM LOS | F | D | | |

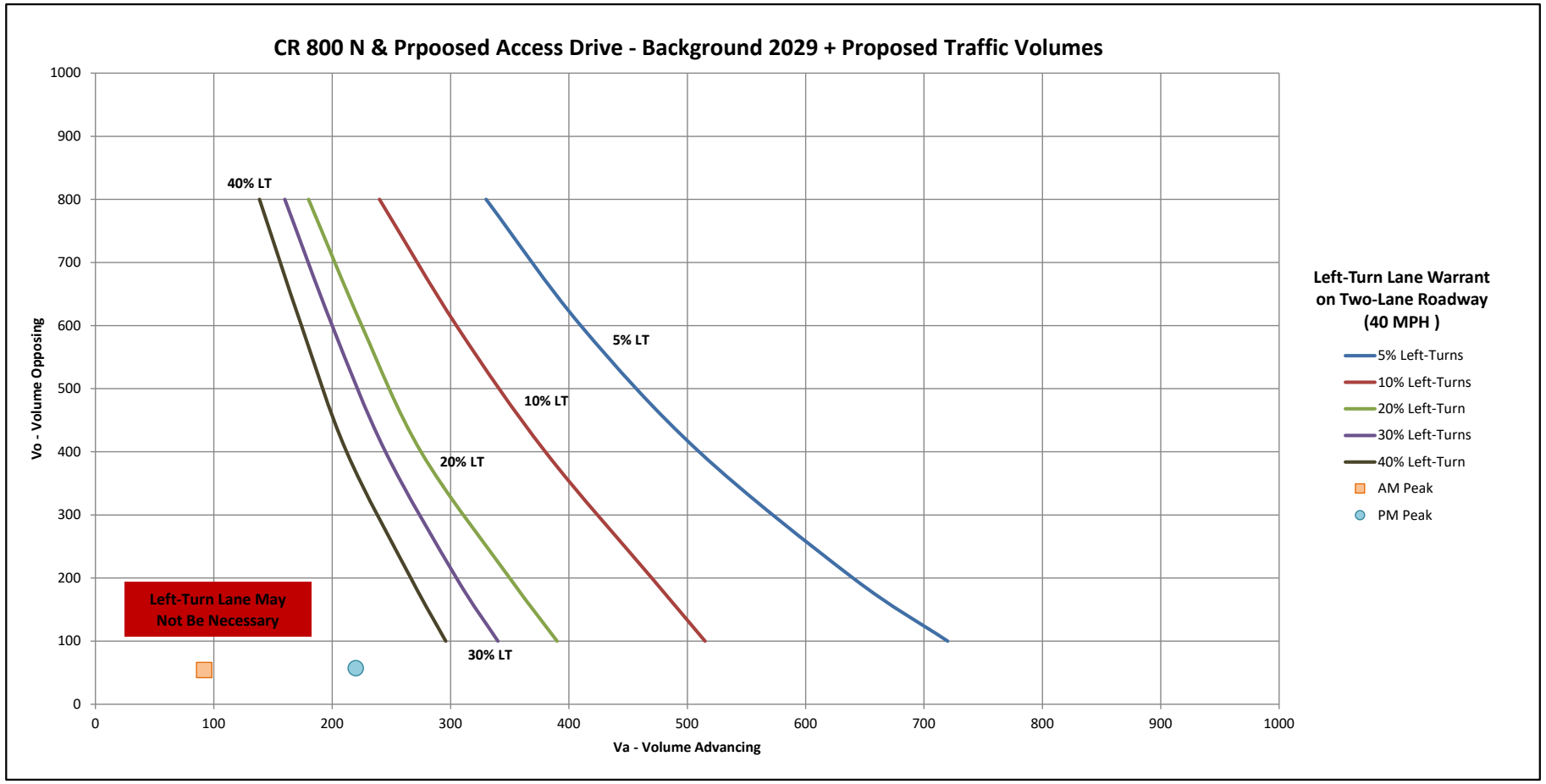
| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | EBLn2 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 751 | - | - | 54 | 336 | 164 | 751 | - | - |
| HCM Lane V/C Ratio | 0.019 | - | - | 0.557 | 0.034 | 0.082 | 0.026 | - | - |
| HCM Control Delay (s/veh) | 9.9 | - | - | 135.8 | 16.1 | 28.9 | 9.9 | - | - |
| HCM Lane LOS | A | - | - | F | C | D | A | - | - |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 2.2 | 0.1 | 0.3 | 0.1 | - | - |

# CR 800 N & PROPOSED DEVELOPMENT ACCESS DRIVE

## TURN LANE ANALYSIS
## CAPACITY ANALYSIS

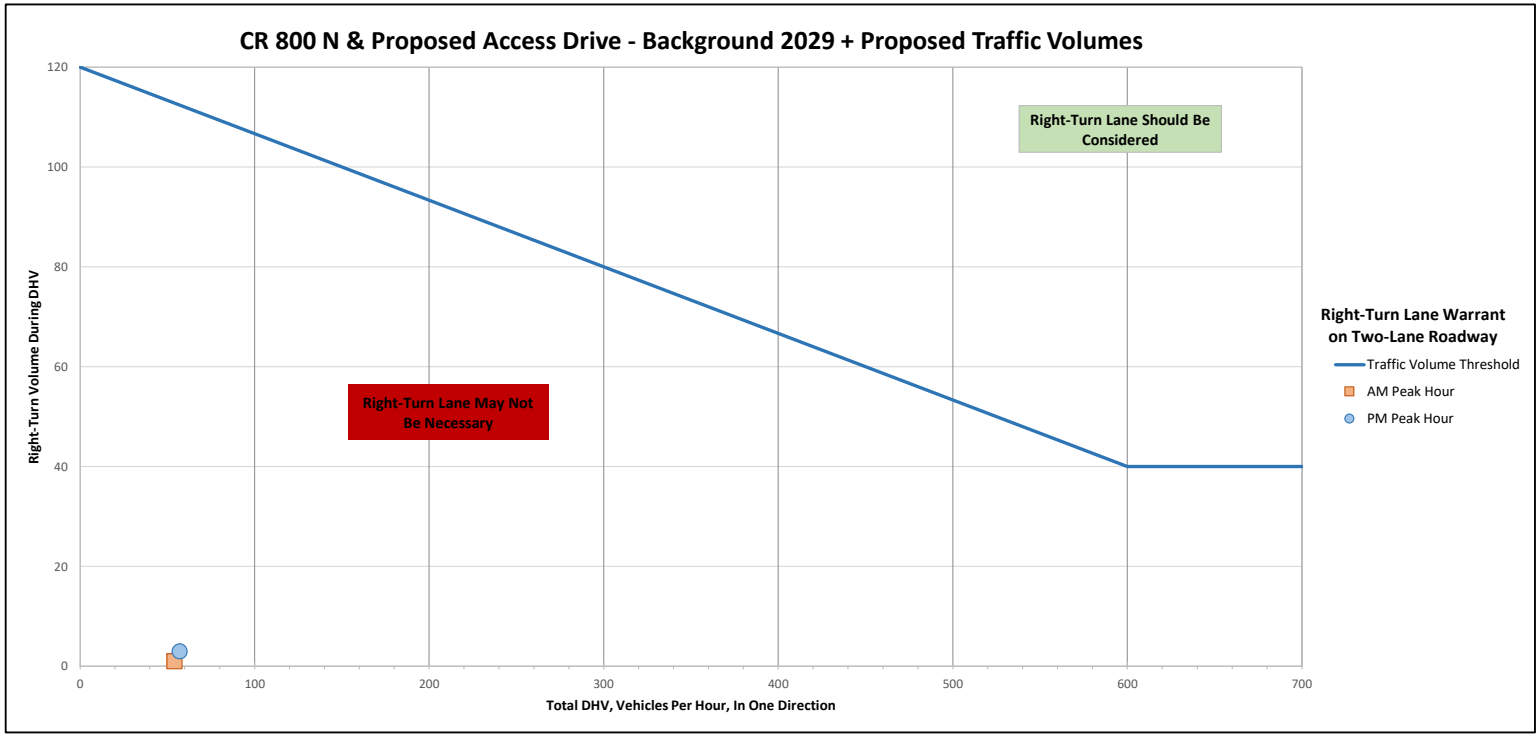
| Operating Speed (mph) | Opposing Volume (veh/h) | Advancing Volume (veh/h) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 5% Left Turns | 10% Left Turns | 15% Left Turns | 20% Left Turns | 25% Left Turns | 30% Left Turns | 35% Left Turns | 40% Left Turns |
| 40 | 800 | 330 | 240 | 207 | 180 | 168 | 160 | 146 | 139 |
| | 600 | 410 | 305 | 260 | 225 | 211 | 200 | 184 | 174 |
| | 400 | 510 | 380 | 320 | 275 | 258 | 245 | 224 | 212 |
| | 200 | 640 | 470 | 401 | 350 | 324 | 305 | 282 | 266 |
| | 100 | 720 | 515 | 446 | 390 | 360 | 340 | 313 | 296 |

| AM Peak Hour Traffic Volume Input | | PM Peak Hour Traffic Volume Input | |
|---|---|---|---|
| Advancing Volume (Va) | 92 | Advancing Volume (Va) | 220 |
| Opposing Volume (Vo) | 54 | Opposing Volume (Vo) | 57 |
| Left-Turn Volume | 16 | Left-Turn Volume | 52 |
| % Left-Turn | 17% | % Left-Turn | 24% |
| WARRANTED? | NO | WARRANTED? | NO |



| Total Approach Volume | Right-Turn Volume |
|---|---|
| 0 | 120 |
| 600 | 40 |
| 700 | 40 |

| AM Peak Hour Traffic Volume Input | | PM Peak Hour Traffic Volume Input | |
|---|---|---|---|
| Total Approach Volume | 54 | Total Approach Volume | 57 |
| Right-Turn Volume | 1 | Right-Turn Volume | 3 |
| WARRANTED? | NO | WARRANTED? | NO |




***NOTE : For highways with a design speed below 80 km/h (50 mph) with a DHV < 300 and where right turns > 40, an adjustment should be used. To read the vertical axis of the chart, subtract 20***

| Intersection | |
|---|---|
| Int Delay, s/veh | 2.8 |

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 53 | 1 | 16 | 76 | 3 | 46 |
| Future Vol, veh/h | 53 | 1 | 16 | 76 | 3 | 46 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 58 | 1 | 17 | 83 | 3 | 50 |

| Major/Minor | Major1 | | Major2 | | Minor1 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 0 | 0 | 59 | 0 | 176 | 58 |
| Stage 1 | - | - | - | - | 58 | - |
| Stage 2 | - | - | - | - | 117 | - |
| 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 | - | - | 1545 | - | 814 | 1008 |
| Stage 1 | - | - | - | - | 964 | - |
| Stage 2 | - | - | - | - | 908 | - |
| Platoon blocked, % | - | - | | - | | |
| Mov Cap-1 Maneuver | - | - | 1545 | - | 805 | 1008 |
| Mov Cap-2 Maneuver | - | - | - | - | 805 | - |
| Stage 1 | - | - | - | - | 964 | - |
| Stage 2 | - | - | - | - | 897 | - |

| Approach | EB | WB | NB |
|---|---|---|---|
| HCM Control Delay, s/v | 0 | 1.28 | 8.83 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT |
|---|---|---|---|---|---|
| Capacity (veh/h) | 992 | - | - | 313 | - |
| HCM Lane V/C Ratio | 0.054 | - | - | 0.011 | - |
| HCM Control Delay (s/veh) | 8.8 | - | - | 7.4 | 0 |
| HCM Lane LOS | A | - | - | A | A |
| HCM 95th %tile Q(veh) | 0.2 | - | - | 0 | - |

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

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 54 | 3 | 52 | 168 | 2 | 30 |
| Future Vol, veh/h | 54 | 3 | 52 | 168 | 2 | 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 | - | - | - | - | 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 | 59 | 3 | 57 | 183 | 2 | 33 |

| Major/Minor | Major1 | | Major2 | | Minor1 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 0 | 0 | 62 | 0 | 356 | 60 |
| Stage 1 | - | - | - | - | 60 | - |
| Stage 2 | - | - | - | - | 296 | - |
| 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 | - | - | 1541 | - | 642 | 1005 |
| Stage 1 | - | - | - | - | 962 | - |
| Stage 2 | - | - | - | - | 755 | - |
| Platoon blocked, % | - | - | | - | | |
| Mov Cap-1 Maneuver | - | - | 1541 | - | 616 | 1005 |
| Mov Cap-2 Maneuver | - | - | - | - | 616 | - |
| Stage 1 | - | - | - | - | 962 | - |
| Stage 2 | - | - | - | - | 724 | - |

| Approach | EB | WB | NB |
|---|---|---|---|
| HCM Control Delay, s/v | 0 | 1.76 | 8.86 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT |
|---|---|---|---|---|---|
| Capacity (veh/h) | 967 | - | - | 425 | - |
| HCM Lane V/C Ratio | 0.036 | - | - | 0.037 | - |
| HCM Control Delay (s/veh) | 8.9 | - | - | 7.4 | 0 |
| HCM Lane LOS | A | - | - | A | A |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 0.1 | - |