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# TRAFFIC IMPACT STUDY

## PROPOSED MIXED-USE DEVELOPMENT

### PLAINFIELD, INDIANA

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### PREPARED FOR

NEW CITY DEVELOPMENT
EST. 2019

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### NOVEMBER 2021

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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.

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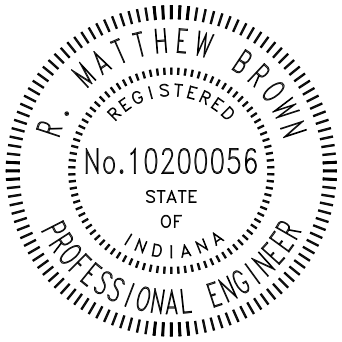


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## INTRODUCTION

This **TRAFFIC IMPACT STUDY**, prepared at the request of the Town of Plainfield on behalf of New City Development, is for a proposed mixed-use development that will be located in the northeast quadrant of Smith Road and Perry Road in Plainfield, Indiana.

## PURPOSE

The purpose of this analysis is to determine what impact traffic generated by the proposed mixed-use 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 mixed-use 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 to 8:30 AM and 4:00 PM to 7:00 PM at the following intersections:

- US 40 & Smith Road
- US 40 & Perry Road
- US 40 & Plainfield Commons Drive/ Williams Trace
- US 40 & Plainfield Village Drive
- Smith Road & Perry Road
- Klondike Road & Frontage Road

Second, adjust existing traffic volumes to account for the reduction in traffic volumes caused by COVID-19.

Third, estimate year 2031 background traffic volumes by applying a 1.0% per year growth rate to the adjusted counts.

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

Fifth, assign and distribute the generated peak hour traffic from the proposed development to the study intersections.

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

*Scenario 1: Adjusted Existing Traffic Volumes* – Based on adjusted existing traffic volumes.

*Scenario 2: Proposed Development Traffic Volumes* – Based on the sum of adjusted existing traffic volumes and generated traffic volumes from the proposed development.

*Scenario 3: Year 2031 Background Traffic Volumes* – Based on applying an annual growth rate to the adjusted existing traffic volumes.

*Scenario 4: Year 2031 Proposed Development Traffic Volumes* – Based on the sum of year 2031 background traffic volumes and generated traffic volumes from the proposed development.

Seventh, perform queue length analysis at several critical locations to determine if vehicles will spill back into adjacent intersections.

Eighth, prepare recommendations for the roadway geometrics that will be needed to accommodate the total traffic volumes for each of the above scenarios.

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 mixed-use development will be located in the northeast quadrant of Smith Road and Perry Road in Plainfield, Indiana. The proposed development will consist of multiple land uses that are summarized in Table 2. As part of this project, Frontage Road will be extended to intersect with Perry Road. As proposed, the site will be served by 7 full access drives along the Frontage Road Extension and 2 full access drives along Smith Road. **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:

- US 40 & Smith Road
- US 40 & Perry Road
- US 40 & Plainfield Commons Drive/ Williams Trace
- US 40 & Plainfield Village Drive
- Smith Road & Perry Road
- Klondike Road & Frontage Road
- Smith Road & Access A
- Smith Road & Access B
- Frontage Road Extension & Access C
- Frontage Road Extension & Access D
- Frontage Road Extension & Access E
- Frontage Road Extension & Access F
- Frontage Road Extension & Access G
- Frontage Road Extension & Access H
- Frontage Road Extension & Access I
- Frontage Road & Plainfield Village Drive
- Frontage Road & Perry Road

**Figure 2** shows the existing intersection geometrics at the study intersections.


**FIGURE 1**

**AREA MAP**

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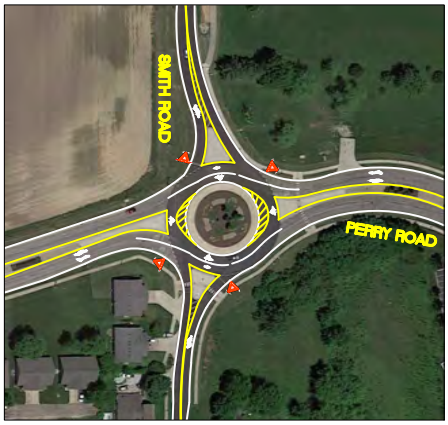
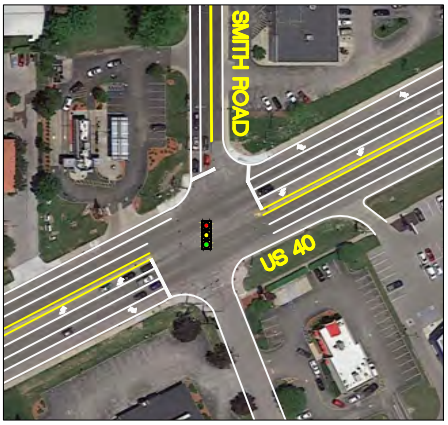
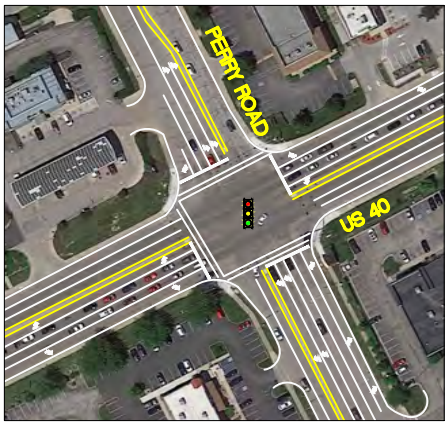


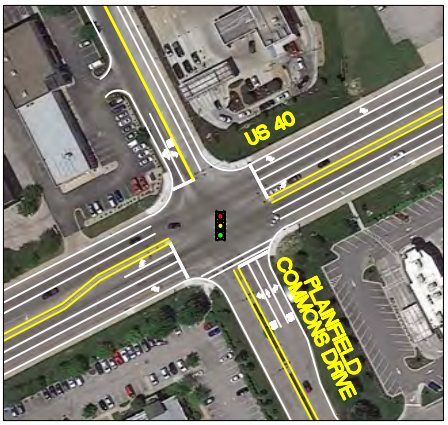

***SMITH ROAD & PERRY ROAD***




***SMITH ROAD & US 40***




***PERRY ROAD & US 40***




***PLAINFIELD COMMONS DRIVE & US 40***


***PLAINFIELD VILLAGE DRIVE & US 40***


***KLONDIKE ROAD & FRONTAGE ROAD***

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***FIGURE 2***

***EXISTING INTERSECTION GEOMETRICS***

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## DESCRIPTION OF ABUTTING STREET SYSTEM

The proposed development will be primarily served by the public roadway system that includes US 40, Smith Road, Perry Road, Plainfield Commons Drive, Williams Trace, Plainfield Village Drive, Klondike Road and Frontage Road.

TABLE 1 – DESCRIPTION OF THE ABUTTING STREET SYSTEM

| STREET NAME | NUMBER OF LANES | SPEED LIMIT (MPH) | FUNCTIONAL CLASSIFICATION |
|---|---|---|---|
| US 40 | 4 | 45 | Principal Arterial |
| Smith Road | 2 | 40 | Major Collector |
| Perry Road | 4 | 35 | Major Collector |
| Plainfield Commons Drive/Williams Trace | 2 | N/A | Local Road |
| Plainfield Village Drive | 2 | N/A | Local Road |
| Klondike Road | 2 | N/A | Local Road |
| Frontage Road | 2 | N/A | Local Road |

N/A – Not Available

## EXISTING TRAFFIC VOLUMES

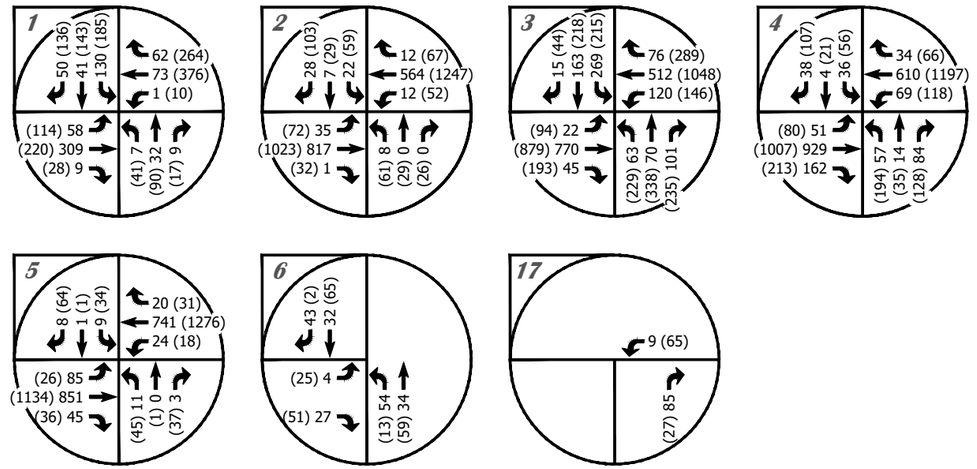
Turning movement traffic volume counts were collected by A&F Engineering at the study intersections between the hours of 6:30 AM and 8:30 AM and 4:00 PM and 7:00 PM during a typical weekday in January 2021 under good weather conditions. The intersection count output summary sheets and the peak hour volumes are included in the **Appendix.**

## ADJUSTED EXISTING TRAFFIC VOLUMES

The existing traffic counts were compared to historic traffic volume data from INDOT to account for the traffic reductions caused by COVID-19. A comparison of the data sets has shown that 2019 traffic volumes are approximately 35% higher than 2021 traffic volumes in the AM peak hour and 10% higher than 2021 traffic volumes in the PM peak hour. Therefore, an adjustment factor of 1.35 was applied to the AM traffic volumes and an adjustment factor of 1.10 was applied to the PM traffic volumes to calculate the adjusted existing traffic volumes shown in **Figure 3**.

## YEAR 2031 BACKGROUND TRAFFIC VOLUMES

In order to account for annual growth in traffic that would occur due to future development, a 1% annual growth rate was applied to the adjusted existing traffic volumes. Therefore, a growth factor of 1.10 was applied to the adjusted existing traffic volumes to calculate the year 2031 background traffic volumes. **Figure 4** summaries of these traffic volumes.


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

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***FIGURE 3***

***ADJUSTED EXISTING TRAFFIC VOLUMES***

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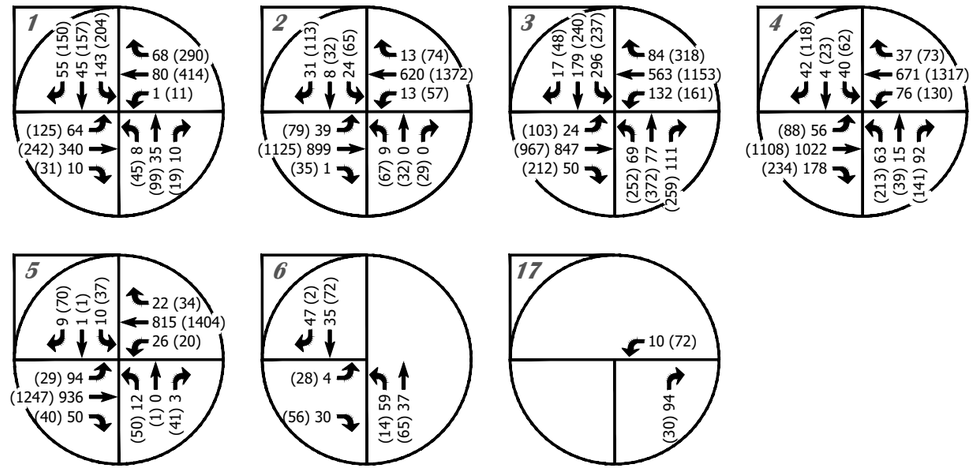


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***FIGURE 4***

***YEAR 2031 BACKGROUND TRAFFIC VOLUMES***

## 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 residential 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 trips that will be generated by the subject site.

TABLE 2 – TOTAL GENERATED TRIPS FOR PROPOSED DEVELOPMENT

| DEVELOPMENT INFORMATION | | | GENERATED TRIPS | | | |
|---|---|---|---|---|---|---|
| LAND USE | ITE CODE | SIZE | AM PEAK | | PM PEAK | |
| | | | IN | OUT | IN | OUT |
| Multi-Family Housing | 221 | 132 DU | 12 | 33 | 35 | 23 |
| Shopping Center | 820 | 33,100 SF | 19 | 12 | 115 | 124 |
| General Office Building | 710 | 99,000 SF | 103 | 17 | 18 | 95 |
| Multi-Family Housing | 221 | 60 DU | 5 | 16 | 16 | 11 |
| Shopping Center | 820 | 22,000 SF | 13 | 8 | 85 | 92 |
| Multi-Family Housing | 221 | 140 DU | 12 | 36 | 37 | 24 |
| Multi-Family Housing | 221 | 72 DU | 7 | 18 | 20 | 12 |
| Multi-Family Housing | 221 | 216 DU | 19 | 54 | 57 | 36 |
| Senior Adult Housing | 252 | 120 DU | 8 | 16 | 17 | 14 |
| Single-Family Housing | 210 | 267 DU | 49 | 145 | 164 | 97 |
| High-Cube Parcel Hub Warehouse | 156 | 233,000 SF | 82 | 81 | 101 | 48 |
| High-Cube Parcel Hub Warehouse | 156 | 263,000 SF | 92 | 92 | 114 | 54 |
| General Light Industrial | 110 | 20,000 SF | 12 | 2 | 2 | 10 |
| **Total** | | | 433 | 530 | 781 | 640 |

[1] *Trip Generation Manual*, Institute of Transportation Engineers, Tenth Edition, 2017.

## 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 back to the existing traffic stream. A significant number of the generated trips from the retail portion of the proposed development will be pass-by trips. Therefore, the pass-by trip procedures outlined within the ITE *Trip Generation Handbook*[2] were used to estimate the pass-by trips.

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 will generate internal trips between the land uses. A summary of the internal and pass-by trip reductions for the proposed development are shown in **Table 3**.

TABLE 3 – PASS-BY AND INTERNAL TRIP REDUCTIONS FOR THE PROPOSED DEVELOPMENT

| DEVELOPMENT INFORMATION | | | GENERATED TRIPS | | | |
|---|---|---|---|---|---|---|
| LAND USE | ITE CODE | SIZE | AM PEAK | | PM PEAK | |
| | | | IN | OUT | IN | OUT |
| **Multi-Family Housing** | **221** | **132 DU** | **12** | **33** | **35** | **23** |
| | | Internal Trips | 0 | 1 | 6 | 3 |
| | | External Trips | 12 | 32 | 29 | 20 |
| **Shopping Center** | **820** | **33,100 SF** | **19** | **12** | **115** | **124** |
| | | Internal Trips | 8 | 5 | 21 | 34 |
| | | External Trips | 11 | 7 | 94 | 90 |
| | | External Pass-By Trips | 2 | 2 | 31 | 31 |
| | | External Non-Pass-By Trips | 9 | 5 | 63 | 59 |
| **General Office** | **710** | **99,000 SF** | **103** | **17** | **18** | **95** |
| | | Internal Trips | 7 | 5 | 5 | 12 |
| | | External Trips | 96 | 12 | 13 | 83 |
| **Multi-Family Housing** | **221** | **60 DU** | **5** | **16** | **16** | **11** |
| | | Internal Trips | 0 | 0 | 3 | 1 |
| | | External Trips | 5 | 16 | 13 | 10 |
| **Shopping Center** | **820** | **22,000 SF** | **13** | **8** | **85** | **92** |
| | | Internal Trips | 5 | 3 | 15 | 26 |
| | | External Trips | 8 | 5 | 70 | 66 |
| | | External Pass-By Trips | 2 | 2 | 22 | 22 |
| | | External Non-Pass-By Trips | 6 | 3 | 48 | 44 |
| **Multi-Family Housing** | **221** | **140 DU** | **12** | **36** | **37** | **24** |
| | | Internal Trips | 0 | 1 | 6 | 3 |
| | | External Trips | 12 | 35 | 31 | 21 |

[2] *Trip Generation Handbook 3rd Edition*, Institute of Transportation Engineers, 2017.

| | | | | | | |
|---|---|---|---|---|---|---|
| **Multi-Family Housing** | **221** | **72 DU** | **7** | **18** | **20** | **12** |
| | | Internal Trips | 0 | 1 | 4 | 2 |
| | | External Trips | 7 | 17 | 16 | 10 |
| **Multi-Family Housing** | **221** | **216 DU** | **19** | **54** | **57** | **36** |
| | | Internal Trips | 1 | 2 | 10 | 5 |
| | | External Trips | 18 | 52 | 47 | 31 |
| **Senior Adult Housing** | **252** | **120 DU** | **8** | **16** | **17** | **14** |
| | | Internal Trips | 0 | 0 | 3 | 2 |
| | | External Trips | 8 | 16 | 14 | 12 |
| **Single-Family Housing** | **210** | **267 DU** | **49** | **145** | **164** | **97** |
| | | Internal Trips | 1 | 4 | 28 | 13 |
| | | External Trips | 48 | 141 | 136 | 84 |
| DEVELOPMENT INFORMATION | | | GENERATED TRIPS | | | |
| LAND USE | ITE CODE | SIZE | AM PEAK | | PM PEAK | |
| | | | IN | OUT | IN | OUT |
| **High-Cube Parcel Hub Warehouse** | **156** | **233,000 SF** | **82** | **81** | **101** | **48** |
| | | Passenger Trips | 78 | 77 | 100 | 48 |
| | | Truck Trips | 4 | 4 | 1 | 0 |
| | | Internal Trips | 4 | 4 | 6 | 5 |
| | | External Trips | 78 | 77 | 95 | 43 |
| | | External Passenger Vehicle Trips | 74 | 73 | 94 | 43 |
| | | External Truck Trips | 4 | 4 | 1 | 0 |
| **High-Cube Parcel Hub Warehouse** | **156** | **263,000 SF** | **92** | **92** | **114** | **54** |
| | | Passenger Trips | 87 | 87 | 113 | 53 |
| | | Truck Trips | 5 | 5 | 1 | 1 |
| | | Internal Trips | 4 | 5 | 6 | 5 |
| | | External Trips | 88 | 87 | 108 | 49 |
| | | External Passenger Vehicle Trips | 83 | 82 | 107 | 48 |
| | | External Truck Trips | 5 | 5 | 1 | 1 |
| **General Light Industrial** | **110** | **20,000 SF** | **12** | **2** | **2** | **10** |
| | | Passenger Trips | 12 | 2 | 2 | 10 |
| | | Truck Trips | 0 | 0 | 0 | 0 |
| | | Internal Trips | 0 | 0 | 0 | 1 |
| | | External Trips | 12 | 2 | 2 | 9 |
| | | External Passenger Vehicle Trips | 12 | 2 | 2 | 9 |
| | | External Truck Trips | 0 | 0 | 0 | 0 |
| TOTAL TRIPS | | | 433 | 530 | 781 | 640 |
| TOTAL PASSENGER TRIPS | | | 424 | 521 | 779 | 639 |
| TOTAL TRUCK TRIPS | | | 9 | 9 | 2 | 1 |
| TOTAL INTERNAL TRIPS | | | 30 | 31 | 113 | 112 |
| TOTAL EXTERNAL PASS-BY TRIPS | | | 4 | 4 | 53 | 53 |
| TOTAL EXTERNAL NON-PASS-BY TRIPS | | | 399 | 495 | 615 | 475 |

## 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:

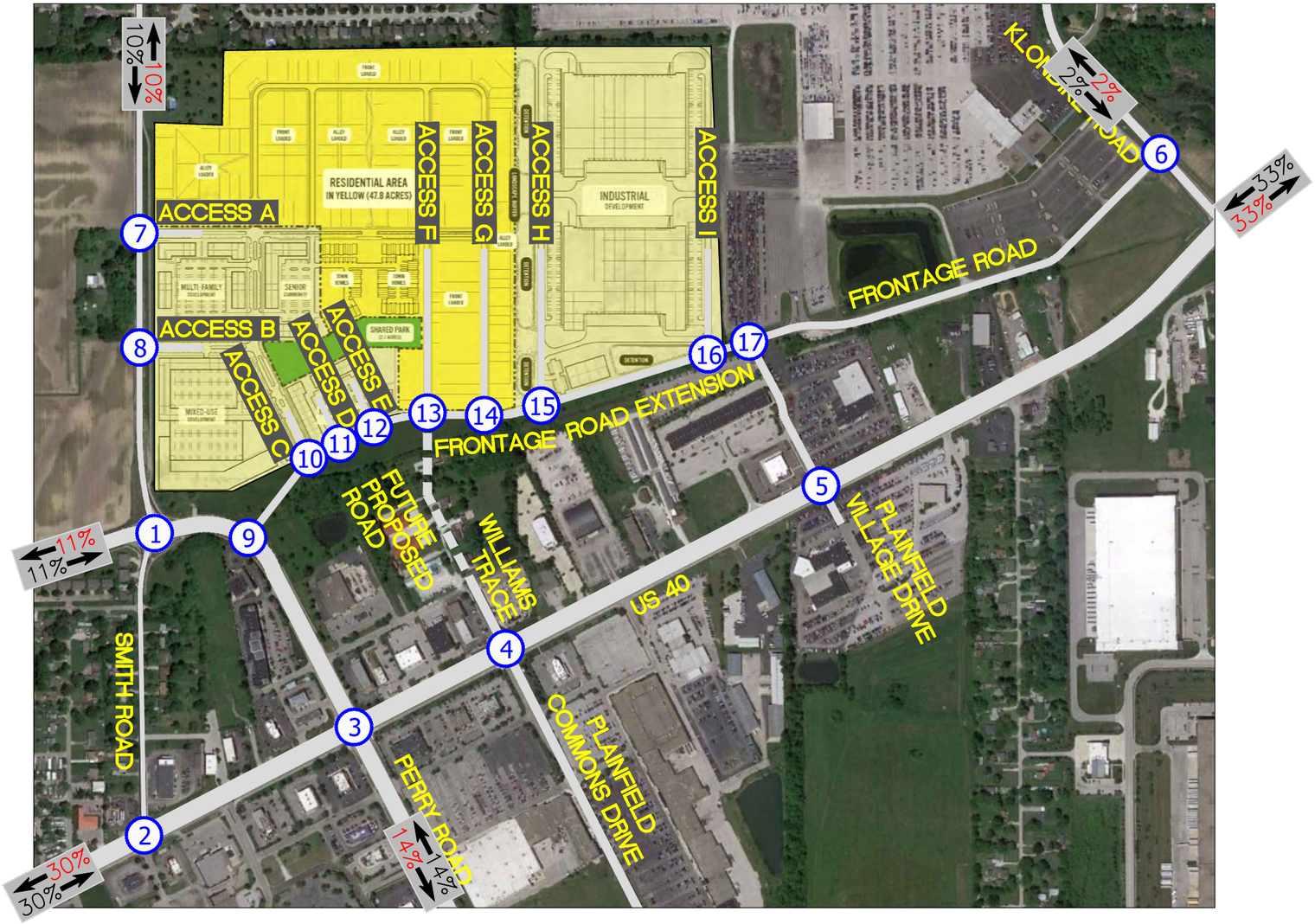
1. The volume of traffic that will enter and exit the proposed development must be assigned to the access points and to the public street system. Using the traffic volume data collected for this analysis, traffic to and from the site development has been assigned to the proposed driveways and to the public street system that will be serving the site.
2. To determine the volumes 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** illustrates the percentage distribution of generated trips from the residential portion of the proposed development.

**Figure 5B** illustrates the percentage distribution of generated non-pass-by trips from the retail and office portion of the proposed development.

**Figure 5C** illustrates the percentage distribution of generated trips from the warehousing portion of the proposed development.

**Figure 5D** illustrates the percentage distribution of generated pass-by trips from the retail and office portion of the proposed development.




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

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***NEW CITY DEVELOPMENT***
***PLAINFIELD, IN***

***FIGURE 5A***

***PERCENTAGE DISTRIBUTION OF GENERATED TRAFFIC VOLUMES FROM PROPOSED DEVELOPMENT (RESIDENTIAL)***

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

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**NEW CITY DEVELOPMENT**
**PLAINFIELD, IN**

**FIGURE 5B**

**PERCENTAGE DISTRIBUTION OF GENERATED NON-PASS-BY TRAFFIC VOLUMES FROM PROPOSED DEVELOPMENT (RETAIL/OFFICE)**

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

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**NEW CITY DEVELOPMENT**
**PLAINFIELD, IN**

**FIGURE 5C**

**PERCENTAGE DISTRIBUTION OF GENERATED TRAFFIC VOLUMES FROM PROPOSED DEVELOPMENT (WAREHOUSING)**

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

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**NEW CITY DEVELOPMENT**
**PLAINFIELD, IN**

**FIGURE 5D**

**PERCENTAGE DISTRIBUTION OF GENERATED PASS-BY TRAFFIC VOLUMES FROM PROPOSED DEVELOPMENT (RETAIL)**

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## GENERATED TRIPS ADDED TO THE STREET SYSTEM

The total generated traffic volumes that can be expected 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 of generated traffic and distribution of generated traffic. The total peak hour generated traffic volumes from the proposed development are shown in **Figure 6**. **Figure 7** shows the sum of adjusted existing traffic volumes and generated traffic volumes from the proposed development, while **Figure 8** shows the sum of year 2031 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 drives along Smith Road, Perry Road, and Frontage Road Extension when the proposed development is constructed. This analysis was done in accordance with the INDOT *Driveway Permit Manual*[3]. The results are summarized in the following table.

| PERRY ROAD & FRONTAGE ROAD EXTENSION | | |
|---|---|---|
| **SCENARIO** | **RIGHT-TURN LANE** | **LEFT-TURN LANE** |
| Adjusted Existing Traffic Volumes + Proposed Development Traffic Volumes | ✔ | ✗ |
| Year 2031 Background Traffic Volumes + Proposed Development Traffic Volumes | ✔ | ✗ |
| **SMITH ROAD & PROPOSED ACCESS DRIVE A** | | |
| **SCENARIO** | **RIGHT-TURN LANE** | **LEFT-TURN LANE** |
| Adjusted Existing Traffic Volumes + Proposed Development Traffic Volumes | ✗ | ✗ |
| Year 2031 Background Traffic Volumes + Proposed Development Traffic Volumes | ✗ | ✗ |
| **SMITH ROAD & PROPOSED ACCESS DRIVE B** | | |
| **SCENARIO** | **RIGHT-TURN LANE** | **LEFT-TURN LANE** |
| Adjusted Existing Traffic Volumes + Proposed Development Traffic Volumes | ✔ | ✗ |
| Year 2031 Background Traffic Volumes + Proposed Development Traffic Volumes | ✔ | ✗ |
| **FRONTAGE ROAD EXTENSION & PROPOSED ACCESS DRIVE C** | | |
| **SCENARIO** | **RIGHT-TURN LANE** | **LEFT-TURN LANE** |
| Adjusted Existing Traffic Volumes + Proposed Development Traffic Volumes | ✗ | ✔ |
| Year 2031 Background Traffic Volumes + Proposed Development Traffic Volumes | ✗ | ✔ |

✔=Turn lane warranted; ✗=Turn lane not warranted

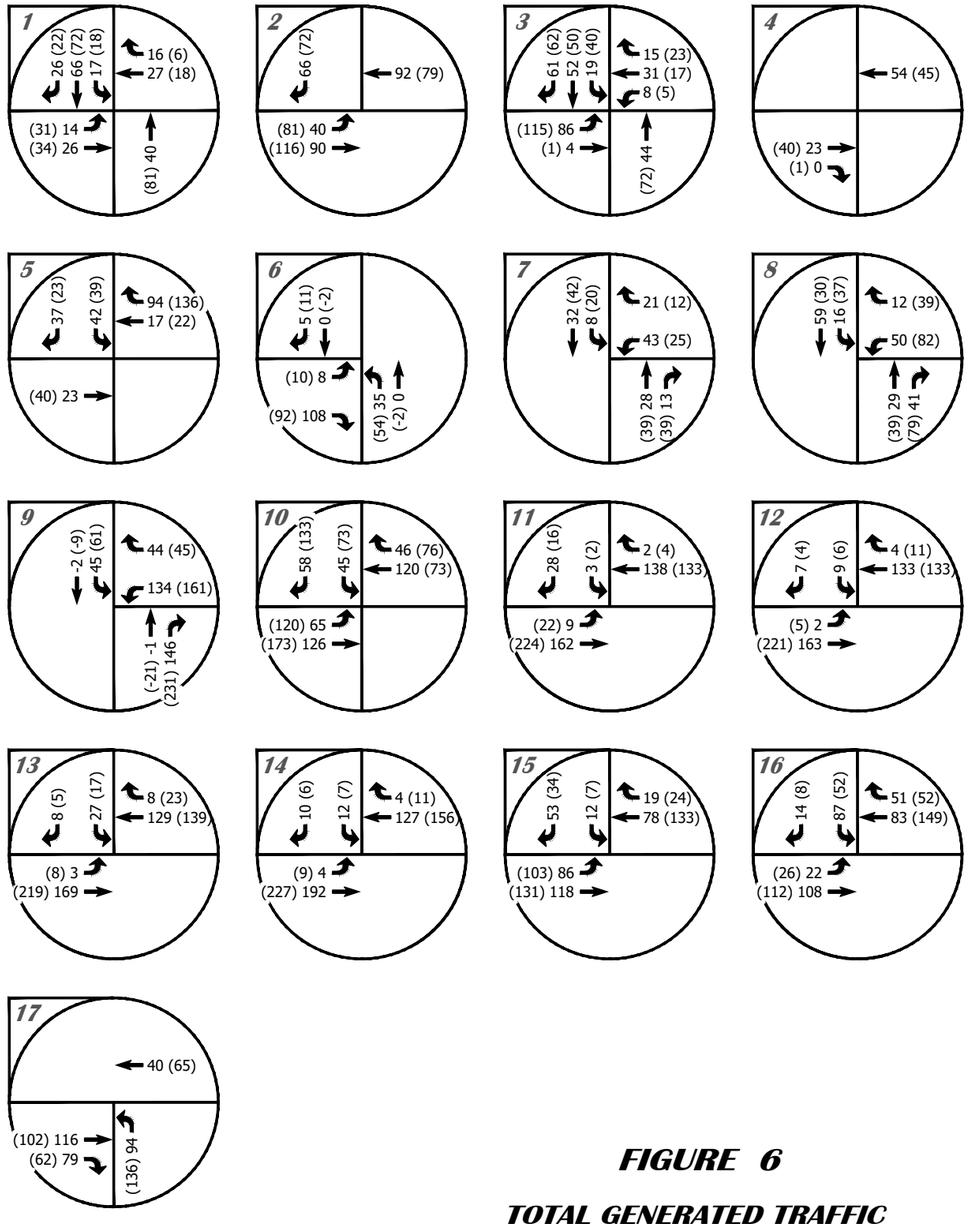
[3] INDOT *Driveway Permit Manual*, Indiana Department of Transportation, 2018

| FRONTAGE ROAD EXTENSION & PROPOSED ACCESS DRIVE D | | |
|---|---|---|
| **SCENARIO** | **RIGHT-TURN LANE** | **LEFT-TURN LANE** |
| Adjusted Existing Traffic Volumes + Proposed Development Traffic Volumes | ✗ | ✗ |
| Year 2031 Background Traffic Volumes + Proposed Development Traffic Volumes | ✗ | ✗ |
| **FRONTAGE ROAD EXTENSION & PROPOSED ACCESS DRIVE E** | | |
| **SCENARIO** | **RIGHT-TURN LANE** | **LEFT-TURN LANE** |
| Adjusted Existing Traffic Volumes + Proposed Development Traffic Volumes | ✗ | ✗ |
| Year 2031 Background Traffic Volumes + Proposed Development Traffic Volumes | ✗ | ✗ |
| **FRONTAGE ROAD EXTENSION & PROPOSED ACCESS DRIVE F** | | |
| **SCENARIO** | **RIGHT-TURN LANE** | **LEFT-TURN LANE** |
| Adjusted Existing Traffic Volumes + Proposed Development Traffic Volumes | ✗ | ✗ |
| Year 2031 Background Traffic Volumes + Proposed Development Traffic Volumes | ✗ | ✗ |
| **FRONTAGE ROAD EXTENSION & PROPOSED ACCESS DRIVE G** | | |
| **SCENARIO** | **RIGHT-TURN LANE** | **LEFT-TURN LANE** |
| Adjusted Existing Traffic Volumes + Proposed Development Traffic Volumes | ✗ | ✗ |
| Year 2031 Background Traffic Volumes + Proposed Development Traffic Volumes | ✗ | ✗ |
| **FRONTAGE ROAD EXTENSION & PROPOSED ACCESS DRIVE H** | | |
| **SCENARIO** | **RIGHT-TURN LANE** | **LEFT-TURN LANE** |
| Adjusted Existing Traffic Volumes + Proposed Development Traffic Volumes | ✗ | ✗ |
| Year 2031 Background Traffic Volumes + Proposed Development Traffic Volumes | ✗ | ✗ |
| **FRONTAGE ROAD EXTENSION & PROPOSED ACCESS DRIVE I** | | |
| **SCENARIO** | **RIGHT-TURN LANE** | **LEFT-TURN LANE** |
| Adjusted Existing Traffic Volumes + Proposed Development Traffic Volumes | ✗ | ✗ |
| Year 2031 Background Traffic Volumes + Proposed Development Traffic Volumes | ✗ | ✗ |

✔=Turn lane warranted; ✗=Turn lane not warranted

Where turn lanes are not shown to be warranted, it should be noted that the Town of Plainfield could require turn treatments at these locations based on local standards.

The graphs that depict the left-turn and right-turn lane warrant criteria for each intersection are shown in the **Appendix**.


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

**TRAFFIC IMPACT STUDY**
**NEW CITY DEVELOPMENT**
**PLAINFIELD, IN**

**FIGURE 6**

**TOTAL GENERATED TRAFFIC VOLUMES FROM PROPOSED DEVELOPMENT**


LEGEND

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

**TRAFFIC IMPACT STUDY**
**NEW CITY DEVELOPMENT**
**PLAINFIELD, IN**

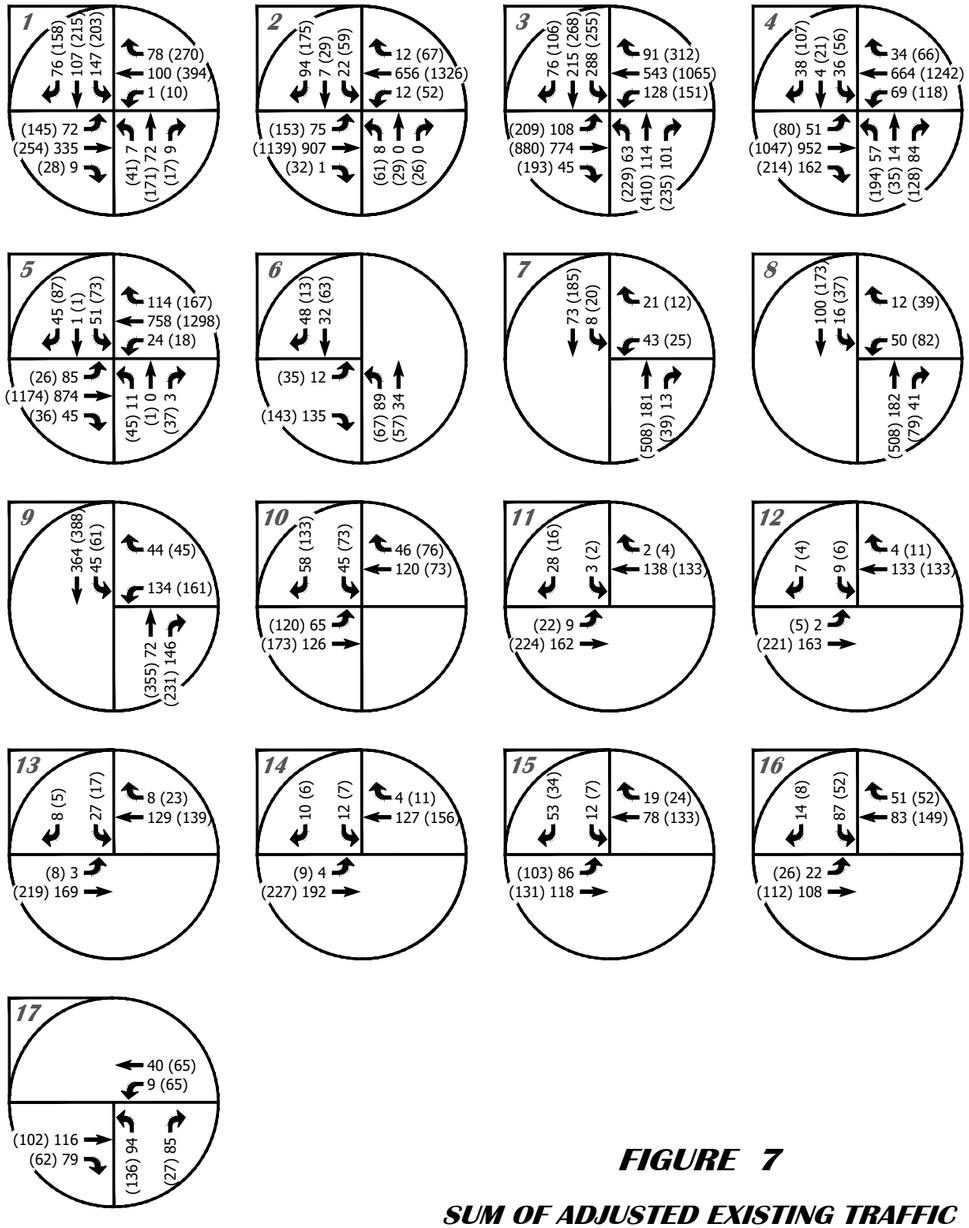
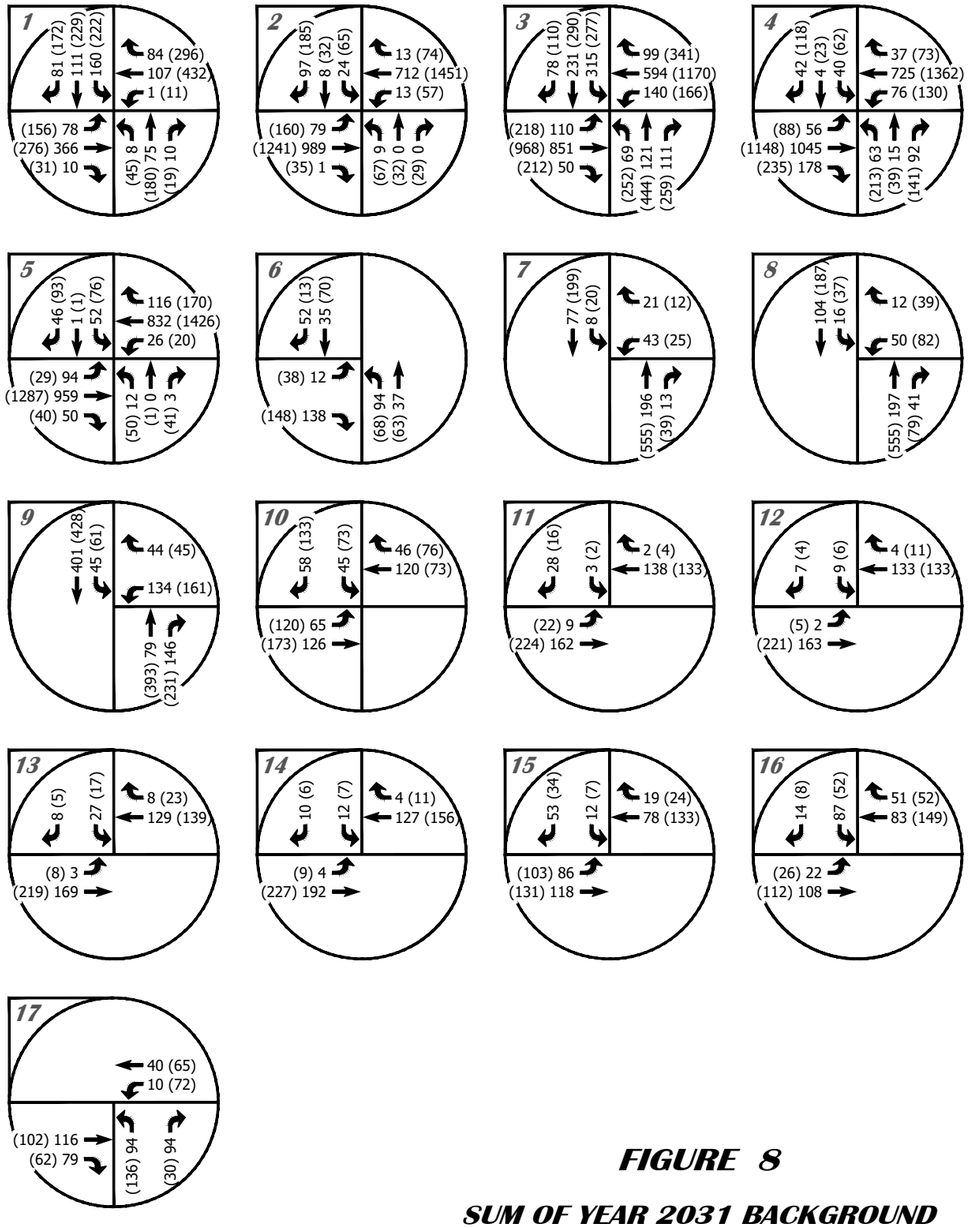



**FIGURE 7**

**SUM OF ADJUSTED EXISTING TRAFFIC VOLUMES & GENERATED TRAFFIC VOLUMES FROM PROPOSED DEVELOPMENT**


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

**TRAFFIC IMPACT STUDY**
**NEW CITY DEVELOPMENT**
**PLAINFIELD, IN**

**FIGURE 8**

**SUM OF YEAR 2031 BACKGROUND TRAFFIC VOLUMES & GENERATED TRAFFIC VOLUMES FROM PROPOSED DEVELOPMENT**

Z:\2021\21007S-New City Development, TIS, Plainfield IN \21007S-EXH.DWG 02-15-21 SV

## 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*[4].This program allows intersections to be analyzed and optimized using the capacity calculation methods outlined within the *Highway Capacity Manual (HCM 6th Edition)*[5]. The following list shows the delays related to the levels of service for roundabout, unsignalized and signalized intersections:

| Level of Service | Control Delay (seconds/vehicle) | |
|---|---|---|
| | UNSIGNALIZED/ROUNDABOUT | 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 the 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: Adjusted Existing Traffic Volumes* – Based on adjusted existing traffic volumes. **Figure 3** is a summary of these volumes.

*Scenario 2: Proposed Development Traffic Volumes* – Based on the sum of adjusted existing traffic volumes and generated traffic volumes from the proposed development. **Figure 7** is a summary of these volumes.

*Scenario 3: Year 2031 Background Traffic Volumes* – Based on applying an annual growth rate to the adjusted existing traffic volumes. **Figure 4** is a summary of these volumes.

*Scenario 4: Year 2031 Proposed Development Traffic Volumes* – Based on the sum of year 2031 background traffic volumes and generated traffic volumes from the proposed development. **Figure 8** is a summary of these volumes.

[4] *Synchro/SimTraffic 11*, Trafficware, 2020.

[5] *Highway Capacity Manual (HCM), 6th Edition* Transportation Research Board, National Research Council, Washington, DC, 2016.

The following tables summarize the peak hour level of service results at each of the study intersections. The *Synchro* (*HCM 6th Edition*) intersection reports illustrating the capacity analysis results are included in the **Appendix**.

TABLE 4 – LEVEL OF SERVICE SUMMARY: US 40 & SMITH ROAD

| APPROACH | AM PEAK | | | | PM PEAK | | | |
|---|---|---|---|---|---|---|---|---|
| | Scenarios | | | | Scenarios | | | |
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| Northbound Approach | C | C | C | C | C | C | C | C |
| Southbound Approach | C | C | C | C | C | D | C | D |
| Eastbound Approach | B | B | B | B | B | B | B | B |
| Westbound Approach | A | B | A | B | B | C | B | C |
| **Intersection** | **B** | **B** | **B** | **B** | **B** | **C** | **B** | **C** |

TABLE 5 – LEVEL OF SERVICE SUMMARY: US 40 & PERRY ROAD

| APPROACH | AM PEAK | | | | PM PEAK | | | |
|---|---|---|---|---|---|---|---|---|
| | Scenarios | | | | Scenarios | | | |
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| Northbound Approach | C | C | C | C | C | C | C | D |
| Southbound Approach | C | C | C | C | C | D | C | D |
| Eastbound Approach | B | C | C | C | C | C | C | C |
| Westbound Approach | B | B | B | B | C | C | C | D |
| **Intersection** | **B** | **C** | **C** | **C** | **C** | **C** | **C** | **D** |

TABLE 6 – LEVEL OF SERVICE SUMMARY: US 40 & PLAINFIELD COMMONS DRIVE/WILLIAMS TRACE

| APPROACH | AM PEAK | | | | PM PEAK | | | |
|---|---|---|---|---|---|---|---|---|
| | Scenarios | | | | Scenarios | | | |
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| Northbound Approach | C | C | C | C | C | C | D | D |
| Southbound Approach | C | C | C | C | D | D | D | D |
| Eastbound Approach | B | B | B | B | B | B | C | B |
| Westbound Approach | B | B | B | B | B | C | C | C |
| **Intersection** | **B** | **B** | **B** | **B** | **C** | **C** | **C** | **C** |

TABLE 7 – LEVEL OF SERVICE SUMMARY: US 40 & PLAINFIELD VILLAGE DRIVE

| APPROACH | AM PEAK | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Scenarios | | | | | | | |
| | 1A | 1B | 2A | 2B | 3A | 3B | 4A | 4B |
| Northbound Approach | E | B | E | C | E | B | F | C |
| Southbound Approach | C | C | D | C | D | C | E | C |
| Eastbound Left-Turn | B | B | B | B | B | B | B | B |
| Westbound Left-Turn | B | B | B | B | B | B | B | B |
| **Intersection** | **-** | **B** | **-** | **B** | **-** | **B** | **-** | **B** |
| APPROACH | PM PEAK | | | | | | | |
| | Scenarios | | | | | | | |
| | 1A | 1B | 2A | 2B | 3A | 3B | 4A | 4B |
| Northbound Approach | E | C | E | C | F | C | F | C |
| Southbound Approach | D | C | F | C | E | C | F | C |
| Eastbound Left-Turn | B | B | B | B | B | B | C | B |
| Westbound Left-Turn | B | B | B | B | B | B | B | B |
| **Intersection** | **-** | **B** | **-** | **B** | **-** | **B** | **-** | **B** |

Scenario A: Existing intersection conditions.
Scenario B: Proposed signal control at this intersection.

TABLE 8 – LEVEL OF SERVICE SUMMARY: SMITH ROAD & PERRY ROAD

| APPROACH | AM PEAK | | | | PM PEAK | | | |
|---|---|---|---|---|---|---|---|---|
| | Scenarios | | | | Scenarios | | | |
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| Northbound Approach | A | A | A | A | A | A | A | A |
| Southbound Approach | A | A | A | A | A | B | B | C |
| Eastbound Approach | A | A | A | A | A | A | A | A |
| Westbound Approach | A | A | A | A | A | A | A | A |
| **Intersection** | **A** | **A** | **A** | **A** | **A** | **A** | **A** | **B** |

TABLE 9 – LEVEL OF SERVICE SUMMARY: KLONDIKE ROAD & FRONTAGE ROAD

| APPROACH | AM PEAK | | | | PM PEAK | | | |
|---|---|---|---|---|---|---|---|---|
| | Scenarios | | | | Scenarios | | | |
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| Northbound Left-Turn | A | A | A | A | A | A | A | A |
| Eastbound Approach | A | B | A | B | A | B | A | B |

TABLE 10 – LEVEL OF SERVICE SUMMARY: PERRY ROAD & FRONTAGE ROAD EXTENSION

| APPROACH | AM PEAK | | | | PM PEAK | | | |
|---|---|---|---|---|---|---|---|---|
| | Scenarios | | | | Scenarios | | | |
| | 2A* | 2B* | 4A* | 4B* | 2A* | 2B* | 4A* | 4B* |
| Southbound Left-Turn | A | A | A | A | A | A | A | A |
| Westbound Approach | B | B | B | B | D | C | E | D |

Scenario A: No northbound right-turn lane included.
Scenario B: Northbound right-turn lane included.

*The proposed intersection conditions include construction of the westbound approach (Frontage Road Extension) with at least one inbound lane and two outbound lanes that will stop for Perry Road.

TABLE 11 – LEVEL OF SERVICE SUMMARY: SMITH ROAD & PROPOSED ACCESS DRIVE A

| APPROACH | AM PEAK | | PM PEAK | |
|---|---|---|---|---|
| | Scenario 2* | Scenario 4* | Scenario 2* | Scenario 4* |
| Southbound Left-Turn | A | A | A | A |
| Westbound Approach | B | B | C | C |

*The proposed intersection conditions include construction of the westbound access drive with at least one inbound and two outbound lanes that will stop for Smith Road.

TABLE 12 – LEVEL OF SERVICE SUMMARY: SMITH ROAD & PROPOSED ACCESS DRIVE B

| APPROACH | AM PEAK | | PM PEAK | |
|---|---|---|---|---|
| | Scenario 2* | Scenario 4* | Scenario 2* | Scenario 4* |
| Southbound Left-Turn | A | A | A | A |
| Westbound Approach | B | B | C | C |

*The proposed intersection conditions include construction of the westbound access drive with at least one inbound and two outbound lanes that will stop for Smith Road; and the addition of an exclusive northbound right-turn lane along Smith Road.

TABLE 13 – LEVEL OF SERVICE SUMMARY: FRONTAGE ROAD EXTENSION & PROPOSED ACCESS DRIVE C

| APPROACH | AM PEAK | | PM PEAK | |
|---|---|---|---|---|
| | Scenario 2* | Scenario 4* | Scenario 2* | Scenario 4* |
| Southbound Approach | B | B | B | B |
| Eastbound Left-Turn | A | A | A | A |

*The proposed intersection conditions include the construction of the southbound approach with at least one inbound and two outbound lanes that will stop for Frontage Road Extension; and the addition of an exclusive eastbound left-turn lane along Frontage Road Extension.

TABLE 14 – LEVEL OF SERVICE SUMMARY: FRONTAGE ROAD EXTENSION & PROPOSED ACCESS DRIVE D

| APPROACH | AM PEAK | | PM PEAK | |
|---|---|---|---|---|
| | Scenario 2* | Scenario 4* | Scenario 2* | Scenario 4* |
| Southbound Approach | A | A | A | A |
| Eastbound Left-Turn | A | A | A | A |

*The proposed intersection conditions include construction of the southbound access drive with at least one inbound and one outbound lane that will stop for Frontage Road Extension.

TABLE 15 – LEVEL OF SERVICE SUMMARY: FRONTAGE ROAD EXTENSION & PROPOSED ACCESS DRIVE E

| APPROACH | AM PEAK | | PM PEAK | |
|---|---|---|---|---|
| | Scenario 2* | Scenario 4* | Scenario 2* | Scenario 4* |
| Southbound Approach | A | A | B | B |
| Eastbound Left-Turn | A | A | A | A |

*The proposed intersection conditions include construction of the southbound access drive with at least one inbound and one outbound lane that will stop for Frontage Road Extension.

TABLE 16 – LEVEL OF SERVICE SUMMARY: FRONTAGE ROAD EXTENSION & PROPOSED ACCESS DRIVE F

| APPROACH | AM PEAK | | PM PEAK | |
|---|---|---|---|---|
| | Scenario 2* | Scenario 4* | Scenario 2* | Scenario 4* |
| Southbound Approach | B | B | B | B |
| Eastbound Left-Turn | A | A | A | A |

*The proposed intersection conditions include construction of the southbound access drive with at least one inbound and one outbound lane that will stop for Frontage Road Extension.

TABLE 17 – LEVEL OF SERVICE SUMMARY: FRONTAGE ROAD EXTENSION & PROPOSED ACCESS DRIVE G

| APPROACH | AM PEAK | | PM PEAK | |
|---|---|---|---|---|
| | Scenario 2* | Scenario 4* | Scenario 2* | Scenario 4* |
| Southbound Approach | B | B | B | B |
| Eastbound Left-Turn | A | A | A | A |

*The proposed intersection conditions include construction of the southbound access drive with at least one inbound and one outbound lane that will stop for Frontage Road Extension.

TABLE 18 – LEVEL OF SERVICE SUMMARY: FRONTAGE ROAD EXTENSION & PROPOSED ACCESS DRIVE H

| APPROACH | AM PEAK | | PM PEAK | |
|---|---|---|---|---|
| | Scenario 2* | Scenario 4* | Scenario 2* | Scenario 4* |
| Southbound Approach | A | A | A | A |
| Eastbound Left-Turn | A | A | A | A |

*The proposed intersection conditions include construction of the southbound access drive with at least one inbound and one outbound lane that will stop for Frontage Road Extension.

TABLE 19 – LEVEL OF SERVICE SUMMARY: FRONTAGE ROAD EXTENSION & PROPOSED ACCESS DRIVE I

| APPROACH | AM PEAK | | PM PEAK | |
|---|---|---|---|---|
| | Scenario 2* | Scenario 4* | Scenario 2* | Scenario 4* |
| Southbound Approach | B | B | B | B |
| Eastbound Left-Turn | A | A | A | A |

*The proposed intersection conditions include construction of the southbound access drive with at least one inbound and one outbound lane that will stop for Frontage Road Extension.

TABLE 20 – LEVEL OF SERVICE SUMMARY: FRONTAGE ROAD & PLAINFIELD VILLAGE DRIVE

| APPROACH | AM PEAK | | PM PEAK | |
|---|---|---|---|---|
| | Scenario 2* | Scenario 4* | Scenario 2* | Scenario 4* |
| Northbound Approach | B | B | B | B |
| Westbound Left-Turn | A | A | A | A |

*The proposed intersection conditions include construction of the eastbound approach (Frontage Road Extension) with Plainfield Village Drive stopping for Frontage Road.

## QUEUE LENGTH ANALYSIS

A queue length analysis has been conducted using Synchro 11 software at each of the following intersections to determine if vehicles will spill back into adjacent intersections:

- Frontage Road & Klondike Road
- Frontage Road & Plainfield Village Drive
- Frontage Road & Perry Road
- US 40 & Perry Road

The following tables summarize the segment lengths between the adjacent intersections and the 95$^{th}$ percentile queue lengths at each location:

TABLE 21 – QUEUE LENGTH SUMMARY FOR SCENARIO 2

| Intersection | Approach | Segment Length | 95$^{th}$ Percentile Queue Length | |
|---|---|---|---|---|
| | | | AM Peak | PM Peak |
| Frontage Road & Klondike Road | Northbound | 405 ft | 25 ft | 25 ft |
| Frontage Road & Plainfield Village Drive | Northbound | 710 ft | 25 ft | 28 ft |
| Frontage Road & Perry Road | Southbound | 415 ft | 25 ft | 25 ft |
| US 40 & Perry Road | Southbound | 265 ft | 130 ft | 133 ft |

Note: Vehicle length was assumed to be 25 ft.

TABLE 22 – QUEUE LENGTH SUMMARY FOR SCENARIO 4

| Intersection | Approach | Segment Length | 95$^{th}$ Percentile Queue Length | |
|---|---|---|---|---|
| | | | AM Peak | PM Peak |
| Frontage Road & Klondike Road | Northbound | 405 ft | 25 ft | 25 ft |
| Frontage Road & Plainfield Village Drive | Northbound | 710 ft | 25 ft | 30 ft |
| Frontage Road & Perry Road | Southbound | 415 ft | 25 ft | 25 ft |
| US 40 & Perry Road | Southbound | 265 ft | 142 ft | 162 ft |

Note: Vehicle length was assumed to be 25 ft.

Based on queue analysis results, it is anticipated that the 95$^{th}$ percentile queue lengths will not exceed the lengths of their critical segments. Therefore, queue lengths are not expected to cause operational problems at these locations.

## 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/turn lane analysis results and a field review conducted at the site. Based on the analyses and the resulting conclusions, the following recommendations are formulated.

### FRONTAGE ROAD EXTENSION

It is recommended that the Frontage Road Extension be constructed with a width of at least 24 feet. The area between the intersection of Perry Road & Frontage Road Extension and the intersection of Frontage Road Extension & Access Drive G should be constructed as a two-lane boulevard with an eastbound left-turn lane at Frontage Road & Access Drive C. The Frontage Road Extension should then transition to a three-lane industrial road for Access Drive H and Access Drive I.

### US 40 & SMITH ROAD

Capacity analyses for all traffic volume scenarios have shown that this intersection operates and will continue to operate at acceptable levels of service during the AM and PM peak hours with existing intersection conditions. Therefore, no improvements are recommended at this location.

### US 40 & PERRY ROAD

Capacity analyses for all traffic volume scenarios have shown that this intersection operates and will continue to operate at acceptable levels of service during the AM and PM peak hours with existing intersection conditions. Therefore, no improvements are recommended at this location.

### US 40 & PLAINFIELD COMMONS DRIVE/WILLIAMS TRACE

Capacity analyses for all traffic volume scenarios have shown that this intersection operates and will continue to operate at acceptable levels of service during the AM and PM peak hours with existing intersection conditions. Therefore, no improvements are recommended at this location.

US 40 & PLAINFIELD VILLAGE DRIVE

Capacity analyses for adjusted existing traffic volumes and year 2031 background traffic volumes have shown that the northbound and southbound approaches to this intersection will experience increased delays and will continue to experience increased delays during the AM and PM peak hours with existing intersection conditions when the proposed development traffic volumes are considered. However, a previous study conducted by Traffic Engineering showed that this intersection will likely warrant a future traffic signal. Capacity analyses with a traffic signal have shown that this intersection will operate at acceptable levels of service under future traffic volumes during the AM and PM peak hours.

SMITH ROAD & PERRY ROAD

Capacity analyses for all traffic volume scenarios have shown that this intersection operates and will continue to operate at acceptable levels of service during the AM and PM peak hours with existing intersection conditions. Therefore, no improvements are recommended at this location.

KLONDIKE ROAD & FRONTAGE ROAD

Capacity analyses for all traffic volume scenarios have shown that all approaches to this intersection operate and will continue to operate at acceptable levels of service during the AM and PM peak hours with existing intersection conditions. Therefore, no improvements are recommended at this location.

PERRY ROAD & FRONTAGE ROAD EXTENSION

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 westbound approach (Frontage Road Extension) with at least one inbound lane and two outbound lanes.
- The intersection should be stop controlled with the Frontage Road Extension stopping for Perry Road.

While a northbound right-turn lane along Perry Road is warranted, one is not necessary for the intersection to operate at an acceptable level of service.

A queue length analysis has shown that when the proposed development traffic volumes are added to the roadway network, southbound left-turn queues at this intersection are not expected to spill back into the roundabout at Smith Road. However, it should be noted if future development and more traffic intense redevelopment occurs between the Frontage Road Extension and US 40; this intersection should be monitored, and alternative geometric/control measures should be considered if southbound queuing impacts the nearby roundabout.

SMITH ROAD & PROPOSED ACCESS DRIVE A

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 westbound approach (access drive) with at least one inbound lane and two outbound lanes.
- The intersection should be stop controlled with the access drive stopping for Smith Road.

SMITH ROAD & PROPOSED ACCESS DRIVE B

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 westbound approach (access drive) with at least one inbound lane and two outbound lanes.
- Construction of an exclusive northbound right-turn lane along Smith Road.
- The intersection should be stop controlled with the access drive stopping for Smith Road.

FRONTAGE ROAD EXTENSION & PROPOSED ACCESS DRIVE C

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 southbound approach (access drive) with at least one inbound lane and two outbound lanes.
- The intersection should be stop controlled with the access drive stopping for Frontage Road Extension.

FRONTAGE ROAD EXTENSION & PROPOSED ACCESS DRIVE D

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 southbound approach (access drive) with at least one inbound lane and one outbound lane.
- The intersection should be stop controlled with the access drive stopping for Frontage Road Extension.

FRONTAGE ROAD EXTENSION & PROPOSED ACCESS DRIVE E

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 southbound approach (access drive) with at least one inbound lane and one outbound lane.
- The intersection should be stop controlled with the access drive stopping for Frontage Road Extension.

FRONTAGE ROAD EXTENSION & PROPOSED ACCESS DRIVE F

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 southbound approach (access drive) with at least one inbound lane and one outbound lane.
- The intersection should be stop controlled with the access drive stopping for Frontage Road Extension.

In the future Williams Trace will be extended to connect at this location, creating a northbound approach.

FRONTAGE ROAD EXTENSION & PROPOSED ACCESS DRIVE G

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 southbound approach (access drive) with at least one inbound lane and one outbound lane.
- The intersection should be stop controlled with the access drive stopping for Frontage Road Extension.

FRONTAGE ROAD EXTENSION & PROPOSED ACCESS DRIVE H

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 southbound approach (access drive) with at least one inbound lane and one outbound lane.
- The intersection should be stop controlled with the access drive stopping for Frontage Road Extension.

FRONTAGE ROAD EXTENSION & PROPOSED ACCESS DRIVE I

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 southbound approach (access drive) with at least one inbound lane and one outbound lane.
- The intersection should be stop controlled with the access drive stopping for Frontage Road Extension.

FRONTAGE ROAD & PLAINFIELD VILLAGE 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 eastbound approach (Frontage Road Extension).
- The intersection should be stop controlled with the northbound approach stopping for Frontage Road Extension.

# TRAFFIC IMPACT STUDY

# APPENDIX

A&F ENGINEERING
Transportation & Site Engineering
Creating Order Since 1966

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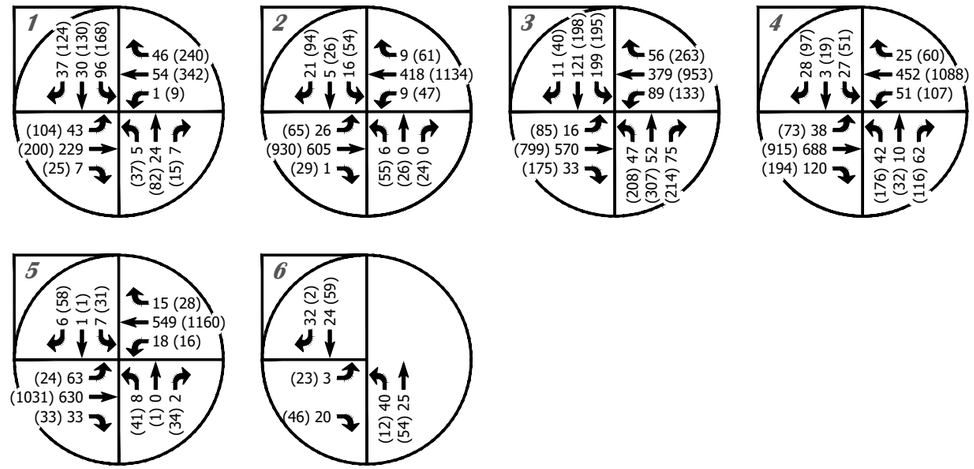
# ADDITIONAL FIGURES


LEGEND

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

**TRAFFIC IMPACT STUDY**
**NEW CITY DEVELOPMENT**
**PLAINFIELD, IN**

**FIGURE A**

**EXISTING TRAFFIC VOLUMES**

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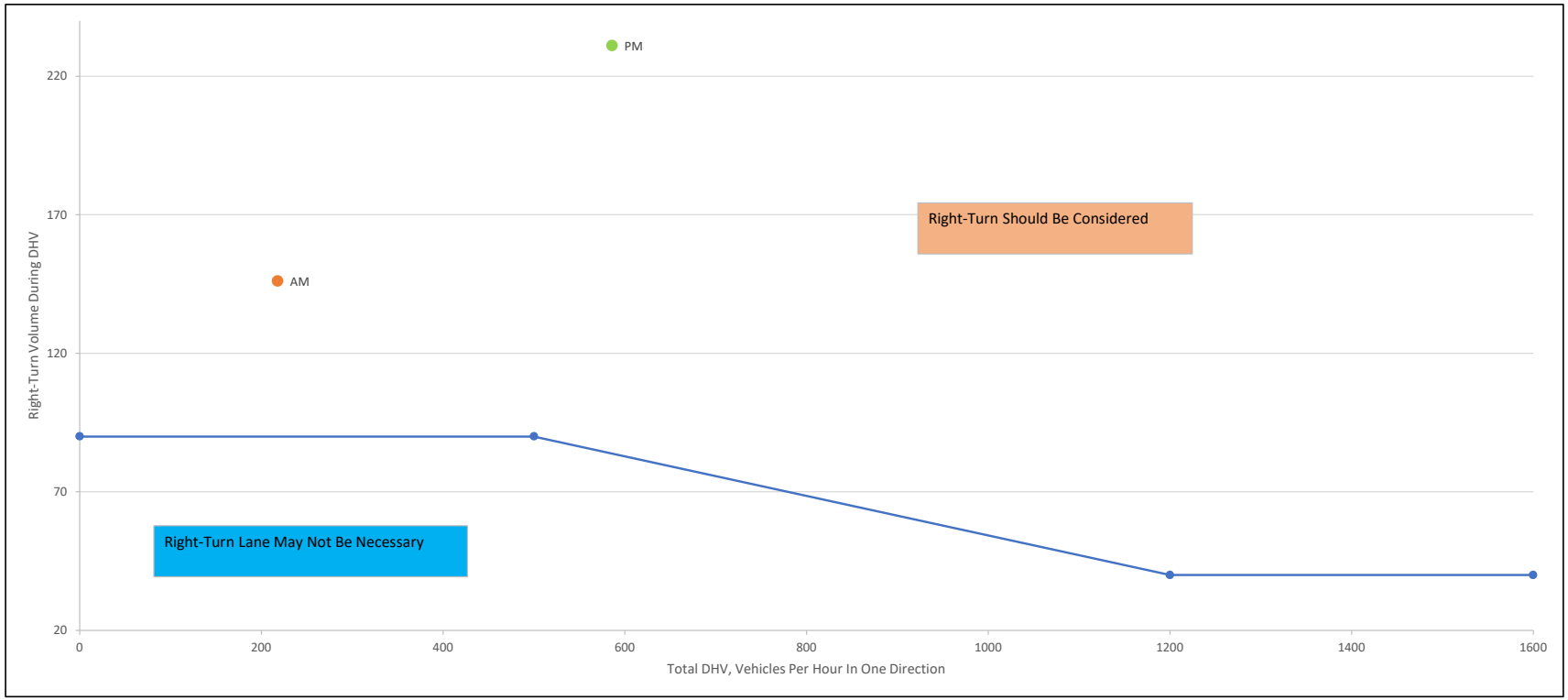
# TURN LANE WARRANT ANALYSIS

| Total Volume | RT Volume |
|---|---|
| 0 | 90 |
| 500 | 90 |
| 1200 | 40 |
| 1600 | 40 |

**Perry Road & Frontage Road - Existing + Proposed**

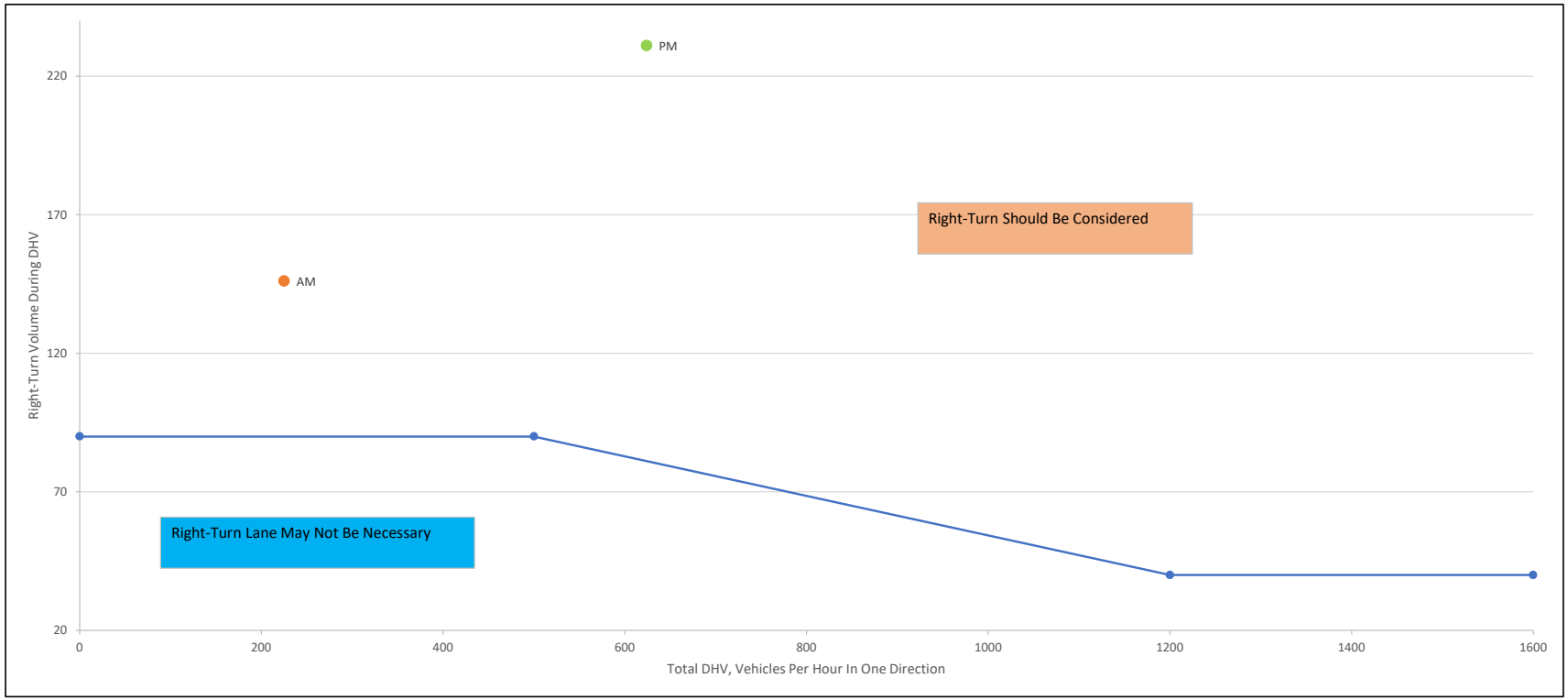
| Time | Input | | Met? |
|---|---|---|---|
| AM | **RT Volume** | 146 | YES |
| | **Total Volume** | 218 | |
| PM | **RT Volume** | 231 | YES |
| | **Total Volume** | 586 | |



**Perry Road & Frontage Road - Background + Proposed**

| Total Volume | RT Volume |
|---|---|
| 0 | 90 |
| 500 | 90 |
| 1200 | 40 |
| 1600 | 40 |

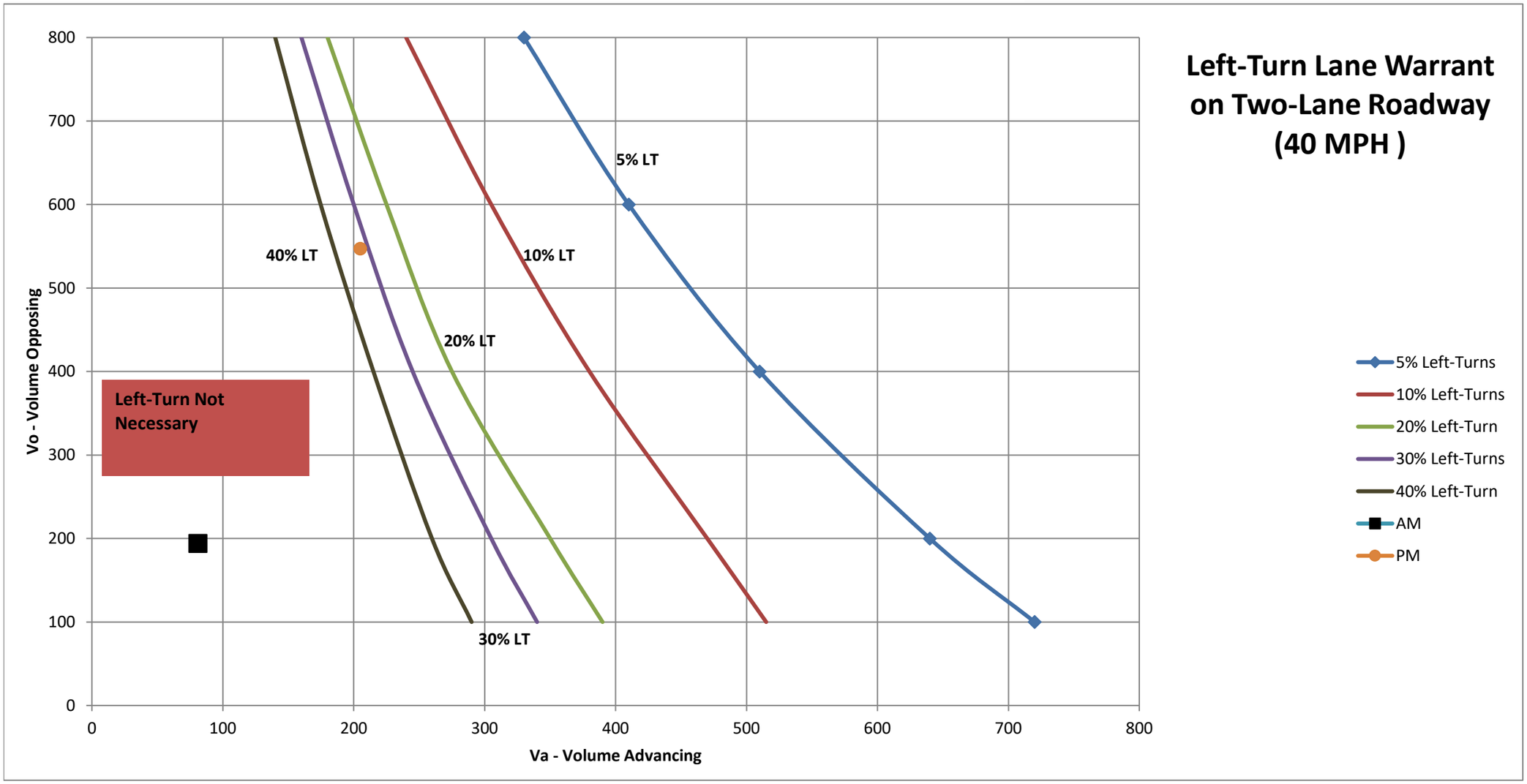
| Time | Input | | Met? |
|---|---|---|---|
| AM | **RT Volume** | 146 | YES |
| | **Total Volume** | 225 | |
| PM | **RT Volume** | 231 | YES |
| | **Total Volume** | 624 | |



## Smith Road & Access Drive A - Existing + Proposed

| 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 | 210 | 180 | 170 | 160 | 150 | 140 |
| | 600 | 410 | 305 | 265 | 225 | 213 | 200 | 187 | 175 |
| | 400 | 510 | 380 | 328 | 275 | 260 | 245 | 230 | 215 |
| | 200 | 640 | 470 | 410 | 350 | 328 | 305 | 282 | 260 |
| | 100 | 720 | 515 | 453 | 390 | 365 | 340 | 315 | 290 |

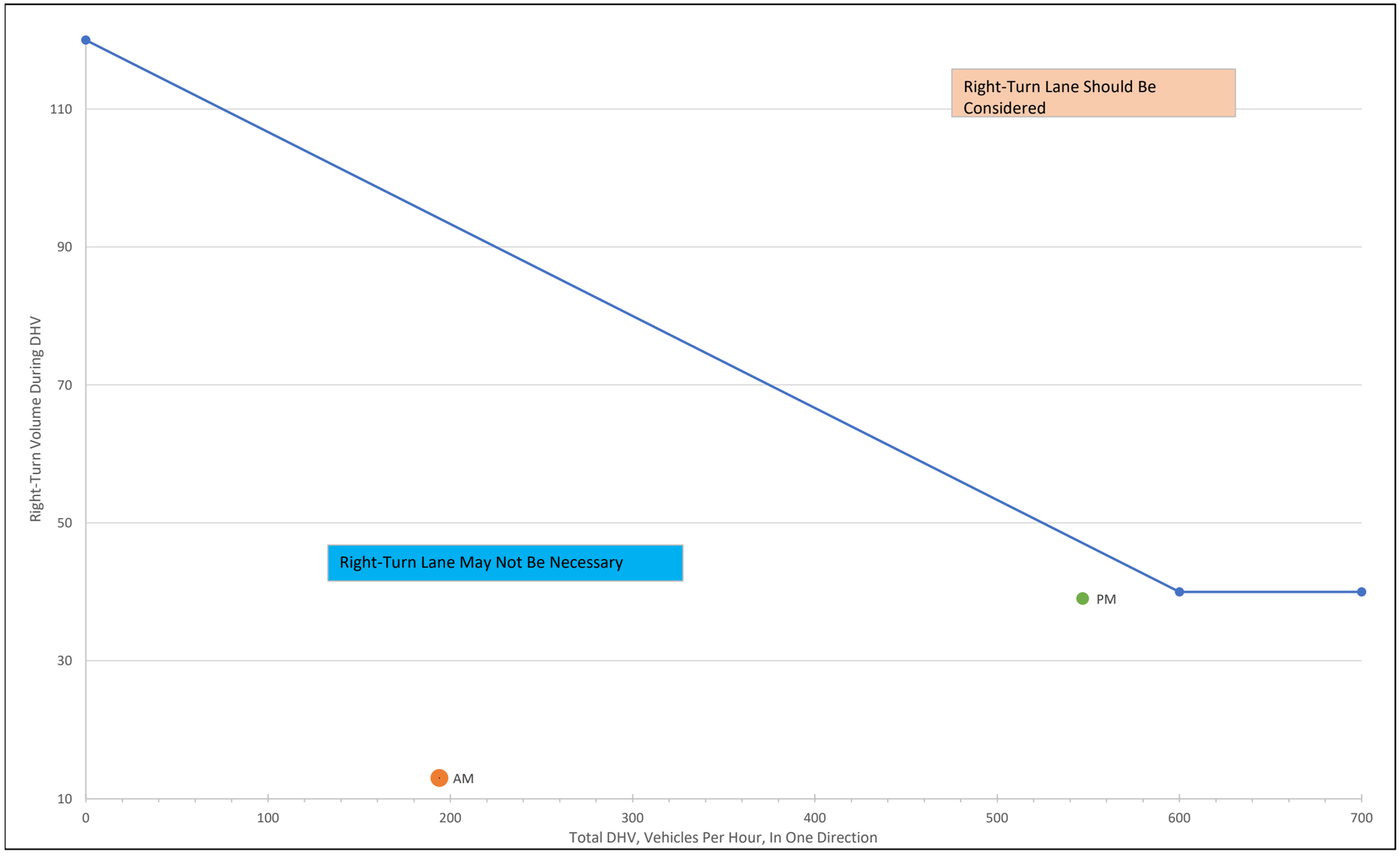
| | INPUT | | Warrant? |
|---|---|---|---|
| AM | Advancing Volume (Va) | 81 | NO |
| | Opposing Volume (Vo) | 194 | |
| | Left-turn Volume | 8 | |
| | Left-turn % | 10% | |
| PM | Advancing Volume (Va) | 205 | NO |
| | Opposing Volume (Vo) | 547 | |
| | Left-turn Volume | 20 | |
| | Left-turn % | 10% | |



| Total Volume | RT Volume |
|---|---|
| 0 | 120 |
| 600 | 40 |
| 700 | 40 |

**Smith Road & Access Drive A - Existing + Proposed**

| Time | Input | | Met? |
|---|---|---|---|
| AM | **RT Volume** | 13 | NO |
| | **Total Volume** | 194 | |
| PM | **RT Volume** | 39 | NO |
| | **Total Volume** | 547 | |

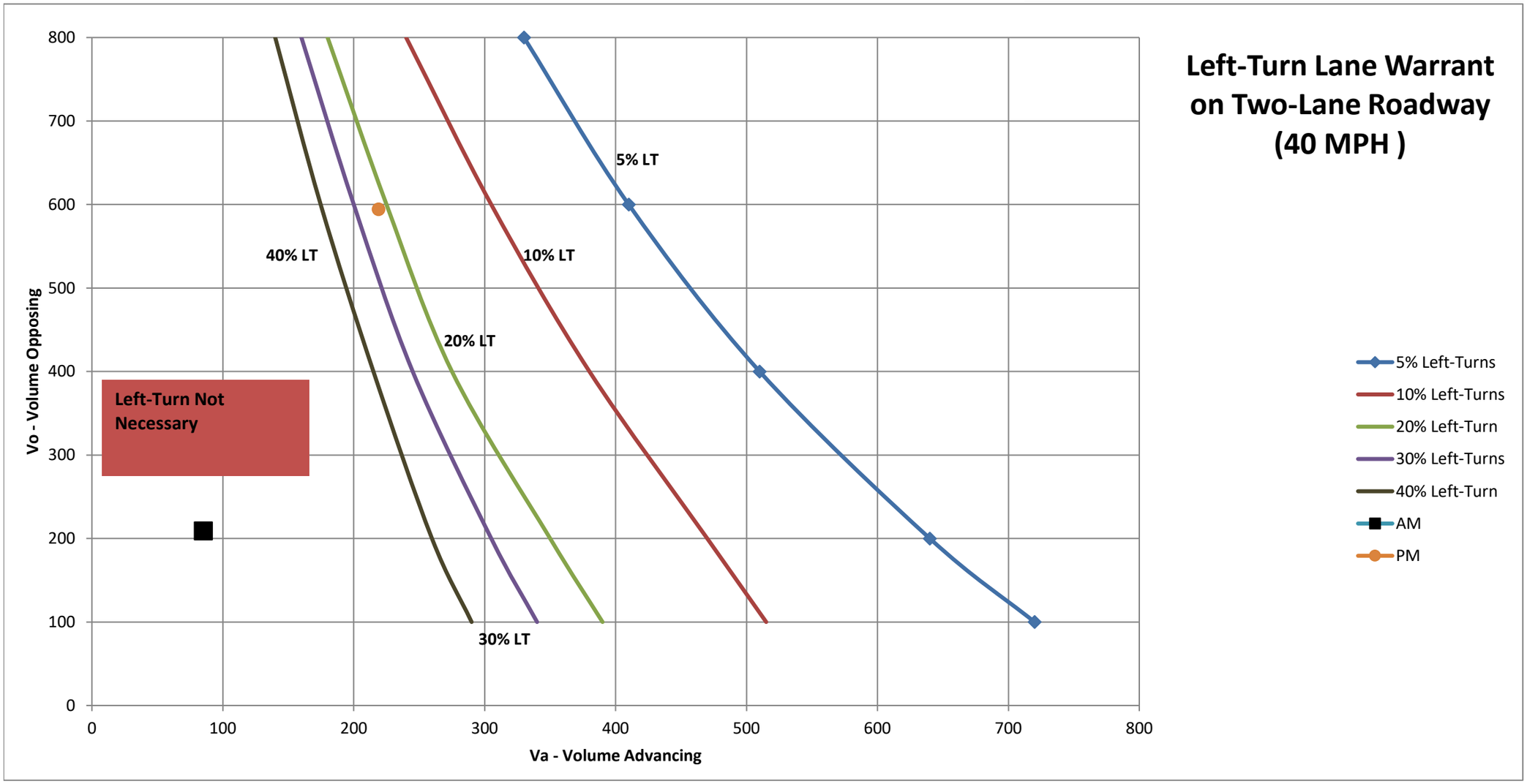



***NOTE : For highways with a design speed below 80 km/h (50 mph) with a DHV < 300 and where right turns > 40, an adjustment should be used. To read the vertical axis of the chart, subtract 20 from the actual number of right turns.***

## Smith Road & Access Drive A - Background + Proposed

| 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 | 210 | 180 | 170 | 160 | 150 | 140 |
| | 600 | 410 | 305 | 265 | 225 | 213 | 200 | 187 | 175 |
| | 400 | 510 | 380 | 328 | 275 | 260 | 245 | 230 | 215 |
| | 200 | 640 | 470 | 410 | 350 | 328 | 305 | 282 | 260 |
| | 100 | 720 | 515 | 453 | 390 | 365 | 340 | 315 | 290 |

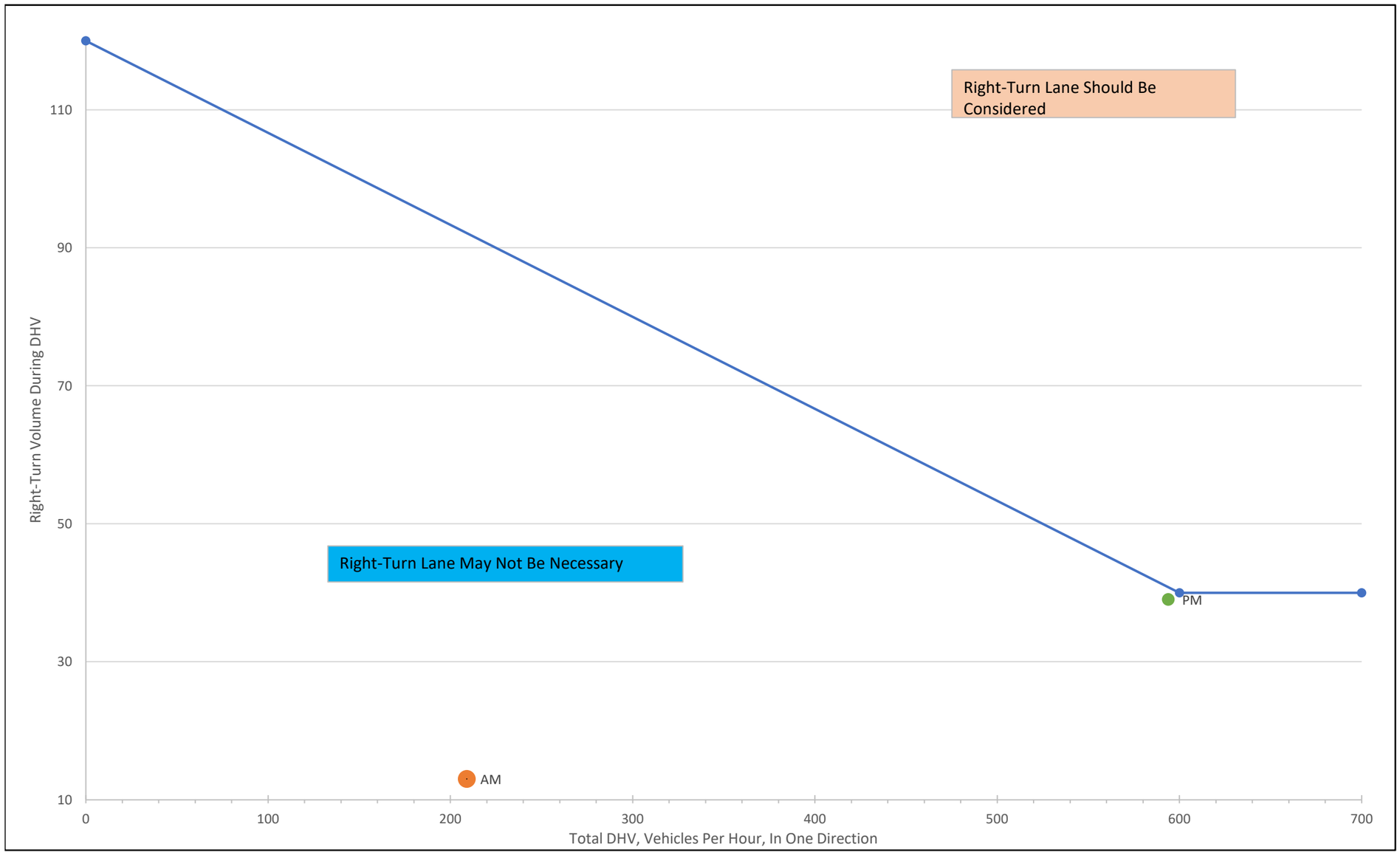
| | INPUT | | Warrant? |
|---|---|---|---|
| AM | **Advancing Volume (Va)** | 85 | NO |
| | **Opposing Volume (Vo)** | 209 | |
| | **Left-turn Volume** | 8 | |
| | **Left-turn %** | 9% | |
| PM | **Advancing Volume (Va)** | 219 | NO |
| | **Opposing Volume (Vo)** | 594 | |
| | **Left-turn Volume** | 20 | |
| | **Left-turn %** | 9% | |



| Total Volume | RT Volume |
|---|---|
| 0 | 120 |
| 600 | 40 |
| 700 | 40 |

**Smith Road & Access Drive A - Background + Proposed**

| Time | Input | | Met? |
|---|---|---|---|
| AM | **RT Volume** | 13 | NO |
| | **Total Volume** | 209 | |
| PM | **RT Volume** | 39 | NO |
| | **Total Volume** | 594 | |

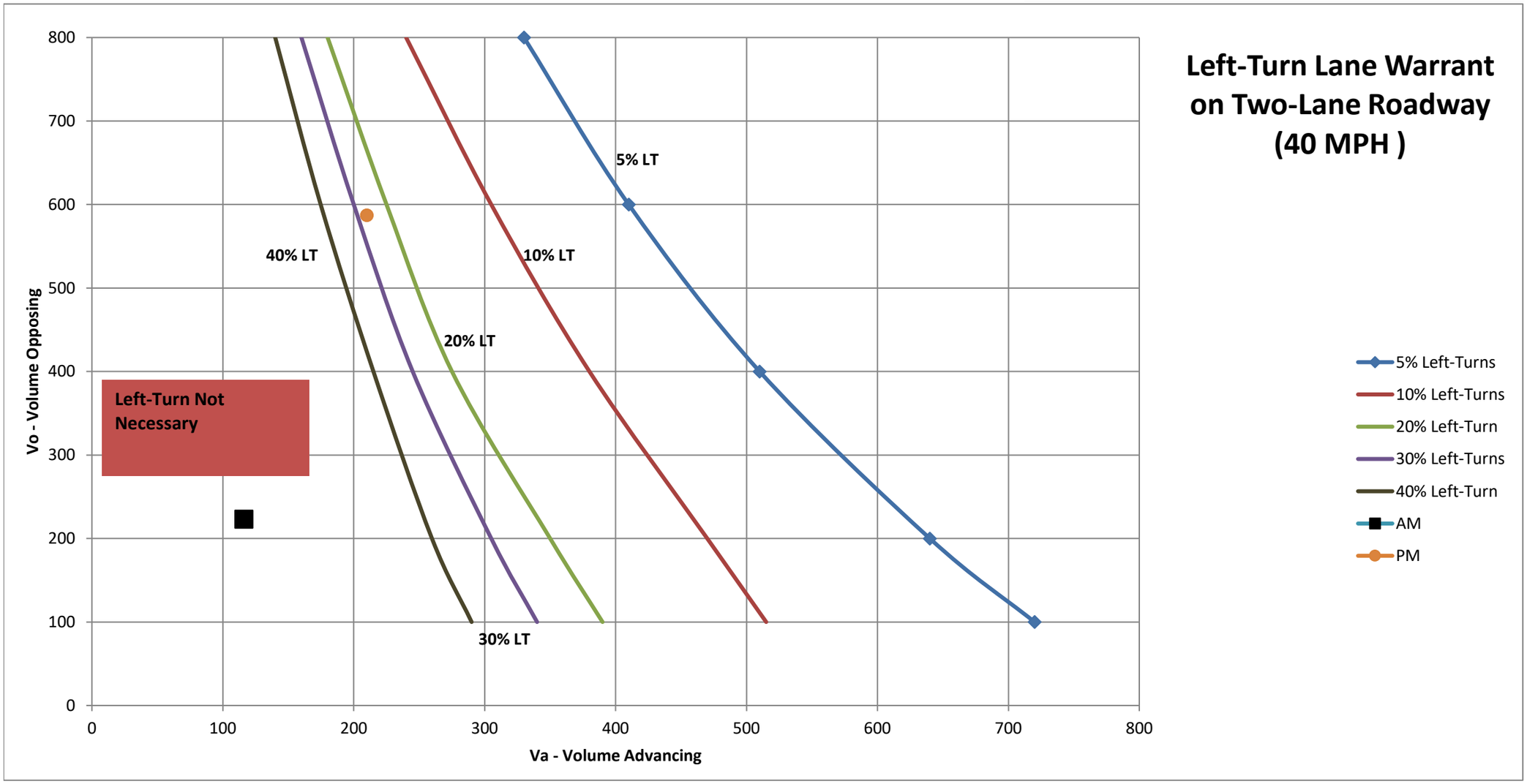



***NOTE : For highways with a design speed below 80 km/h (50 mph) with a DHV < 300 and where right turns > 40, an adjustment should be used. To read the vertical axis of the chart, subtract 20 from the actual number of right turns.***

## Smith Road & Access Drive B - Existing + Proposed

| 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 | 210 | 180 | 170 | 160 | 150 | 140 |
| | 600 | 410 | 305 | 265 | 225 | 213 | 200 | 187 | 175 |
| | 400 | 510 | 380 | 328 | 275 | 260 | 245 | 230 | 215 |
| | 200 | 640 | 470 | 410 | 350 | 328 | 305 | 282 | 260 |
| | 100 | 720 | 515 | 453 | 390 | 365 | 340 | 315 | 290 |

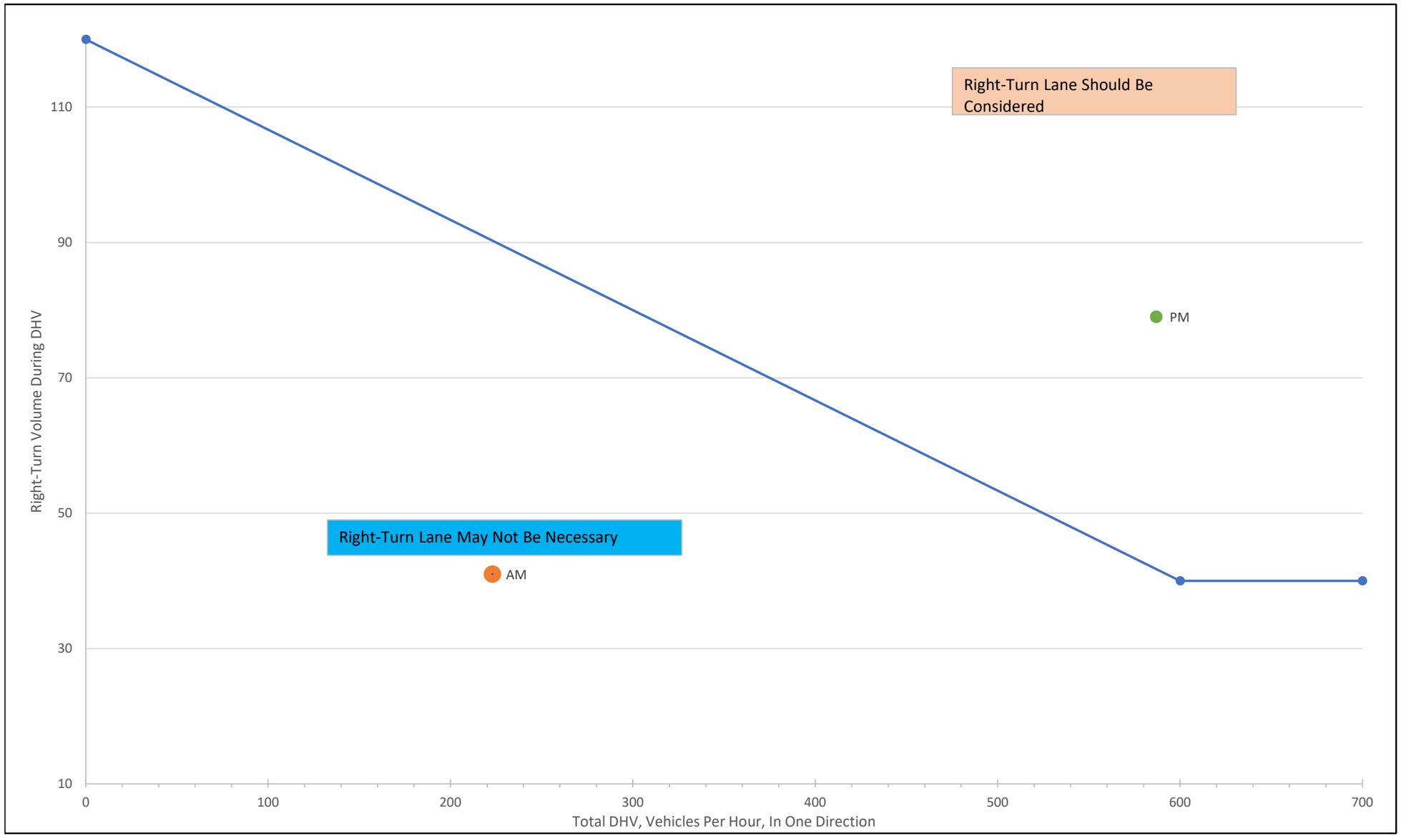
| | INPUT | | Warrant? |
|---|---|---|---|
| AM | Advancing Volume (Va) | 116 | NO |
| | Opposing Volume (Vo) | 223 | |
| | Left-turn Volume | 41 | |
| | Left-turn % | 35% | |
| PM | Advancing Volume (Va) | 210 | NO |
| | Opposing Volume (Vo) | 587 | |
| | Left-turn Volume | 37 | |
| | Left-turn % | 18% | |



| Total Volume | RT Volume |
|---|---|
| 0 | 120 |
| 600 | 40 |
| 700 | 40 |

**Smith Road & Access Drive B - Existing + Proposed**

| Time | Input | | Met? |
|---|---|---|---|
| AM | **RT Volume** | 41 | NO |
| | **Total Volume** | 223 | |
| PM | **RT Volume** | 79 | YES |
| | **Total Volume** | 587 | |

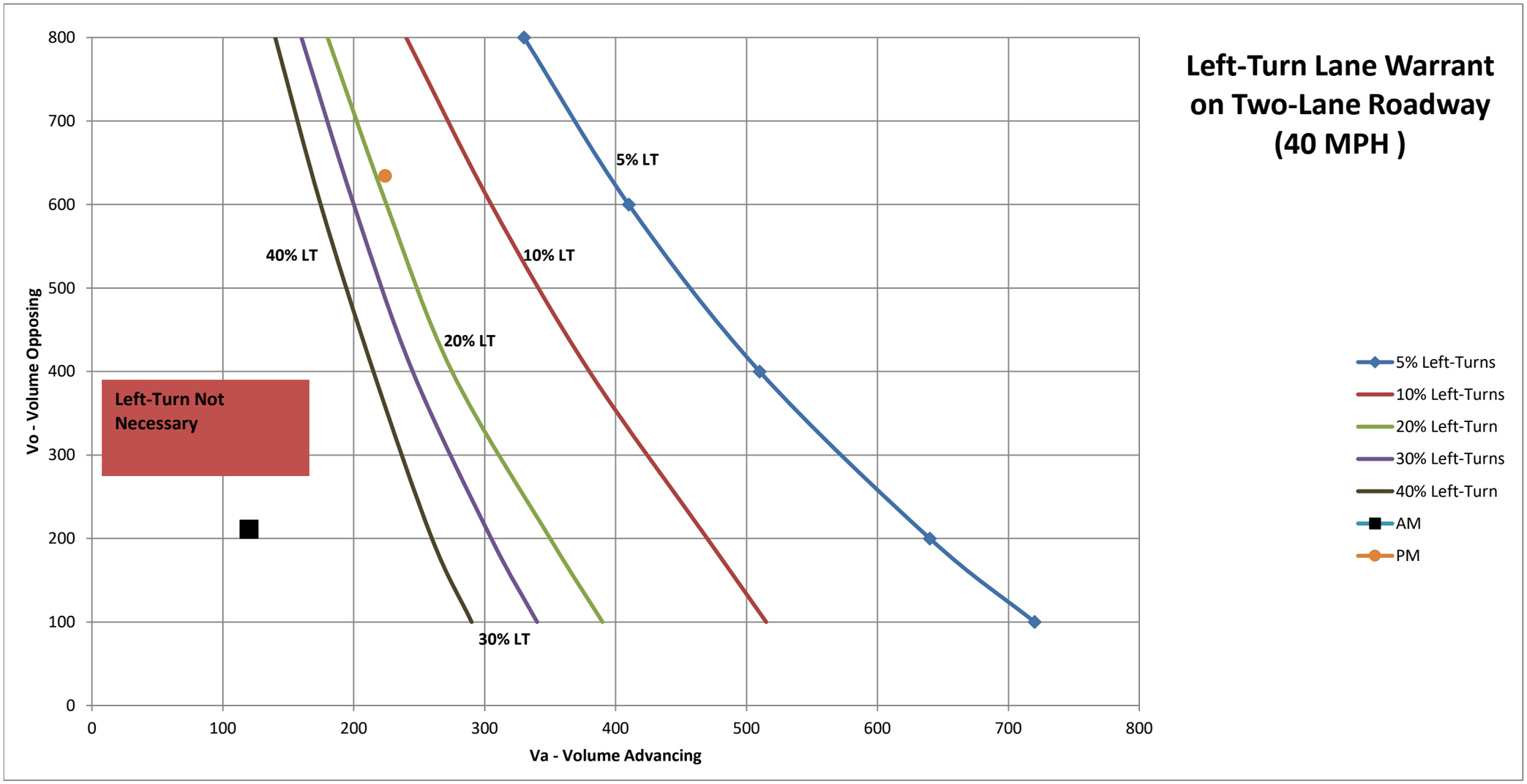



***NOTE : For highways with a design speed below 80 km/h (50 mph) with a DHV < 300 and where right turns > 40, an adjustment should be used. To read the vertical axis of the chart, subtract 20 from the actual number of right turns.***

## Smith Road & Access Drive B - Background + Proposed

| 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 | 210 | 180 | 170 | 160 | 150 | 140 |
| | 600 | 410 | 305 | 265 | 225 | 213 | 200 | 187 | 175 |
| | 400 | 510 | 380 | 328 | 275 | 260 | 245 | 230 | 215 |
| | 200 | 640 | 470 | 410 | 350 | 328 | 305 | 282 | 260 |
| | 100 | 720 | 515 | 453 | 390 | 365 | 340 | 315 | 290 |

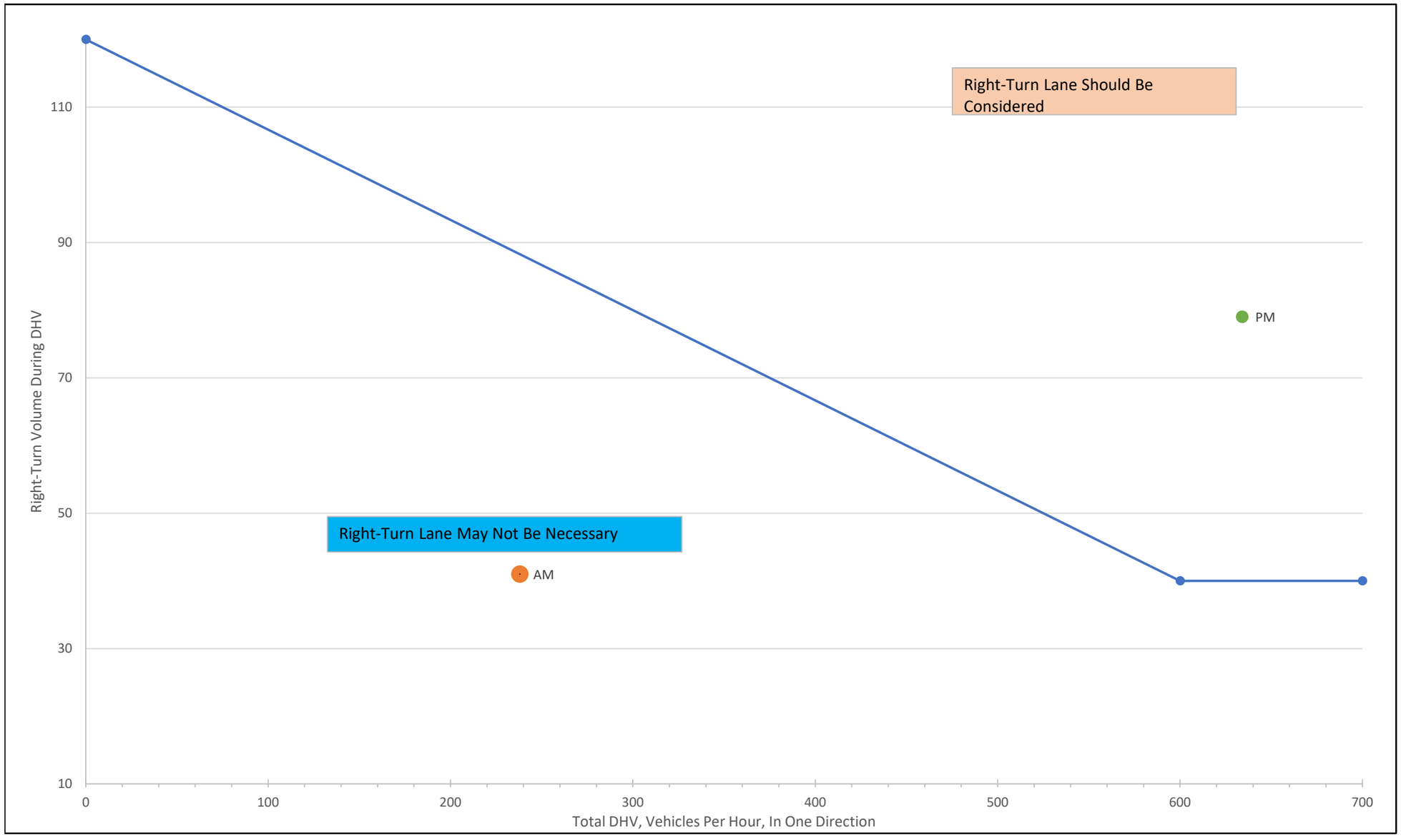
| | INPUT | | Warrant? |
|---|---|---|---|
| AM | Advancing Volume (Va) | 120 | NO |
| | Opposing Volume (Vo) | 211 | |
| | Left-turn Volume | 16 | |
| | Left-turn % | 13% | |
| PM | Advancing Volume (Va) | 224 | NO |
| | Opposing Volume (Vo) | 634 | |
| | Left-turn Volume | 37 | |
| | Left-turn % | 17% | |



| Total Volume | RT Volume |
|---|---|
| 0 | 120 |
| 600 | 40 |
| 700 | 40 |

**Smith Road & Access Drive B - Background + Proposed**

| Time | Input | | Met? |
|---|---|---|---|
| AM | **RT Volume** | 41 | NO |
| | **Total Volume** | 238 | |
| PM | **RT Volume** | 79 | YES |
| | **Total Volume** | 634 | |

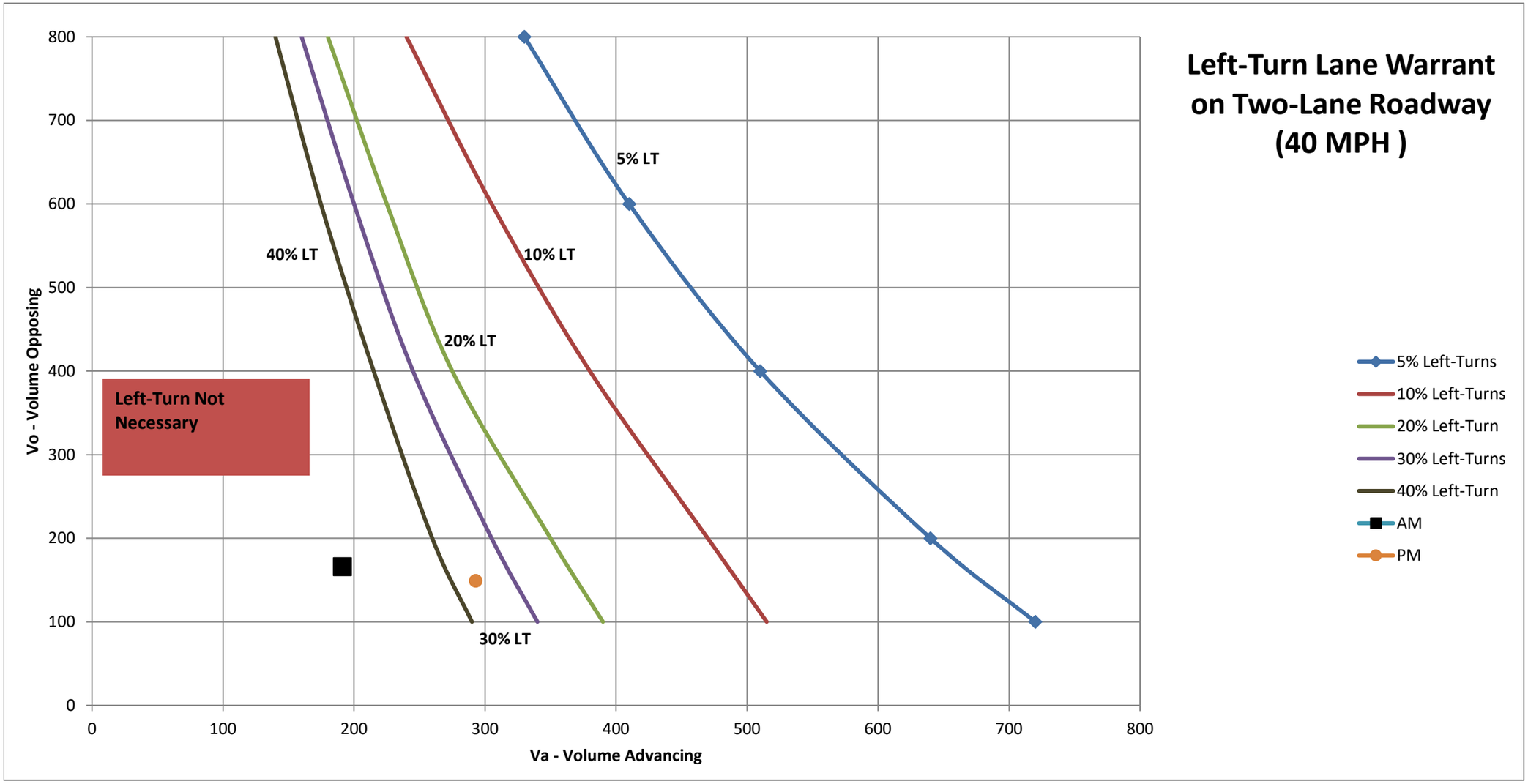



***NOTE : For highways with a design speed below 80 km/h (50 mph) with a DHV < 300 and where right turns > 40, an adjustment should be used. To read the vertical axis of the chart, subtract 20 from the actual number of right turns.***

## Frontage Road & Access Drive C

| 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 | 210 | 180 | 170 | 160 | 150 | 140 |
| | 600 | 410 | 305 | 265 | 225 | 213 | 200 | 187 | 175 |
| | 400 | 510 | 380 | 328 | 275 | 260 | 245 | 230 | 215 |
| | 200 | 640 | 470 | 410 | 350 | 328 | 305 | 282 | 260 |
| | 100 | 720 | 515 | 453 | 390 | 365 | 340 | 315 | 290 |

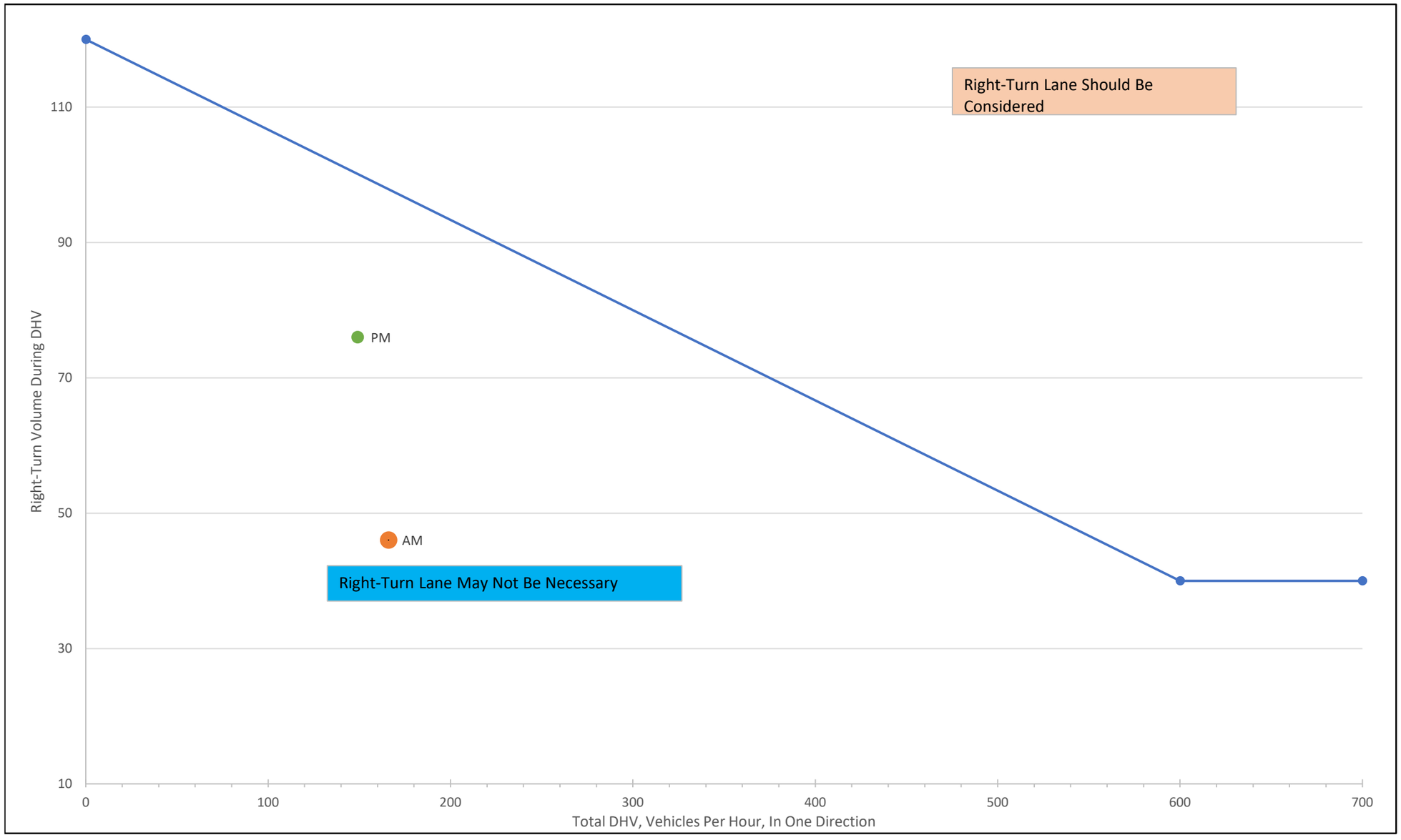
| | INPUT | | Warrant? |
|---|---|---|---|
| AM | **Advancing Volume (Va)** | 191 | NO |
| | **Opposing Volume (Vo)** | 166 | |
| | **Left-turn Volume** | 65 | |
| | **Left-turn %** | 34% | |
| PM | **Advancing Volume (Va)** | 293 | YES |
| | **Opposing Volume (Vo)** | 149 | |
| | **Left-turn Volume** | 120 | |
| | **Left-turn %** | 41% | |



| Total Volume | RT Volume |
|---|---|
| 0 | 120 |
| 600 | 40 |
| 700 | 40 |

**Frontage Road & Access Drive C**

| Time | Input | | Met? |
|---|---|---|---|
| AM | **RT Volume** | 46 | NO |
| | **Total Volume** | 166 | |
| PM | **RT Volume** | 76 | NO |
| | **Total Volume** | 149 | |

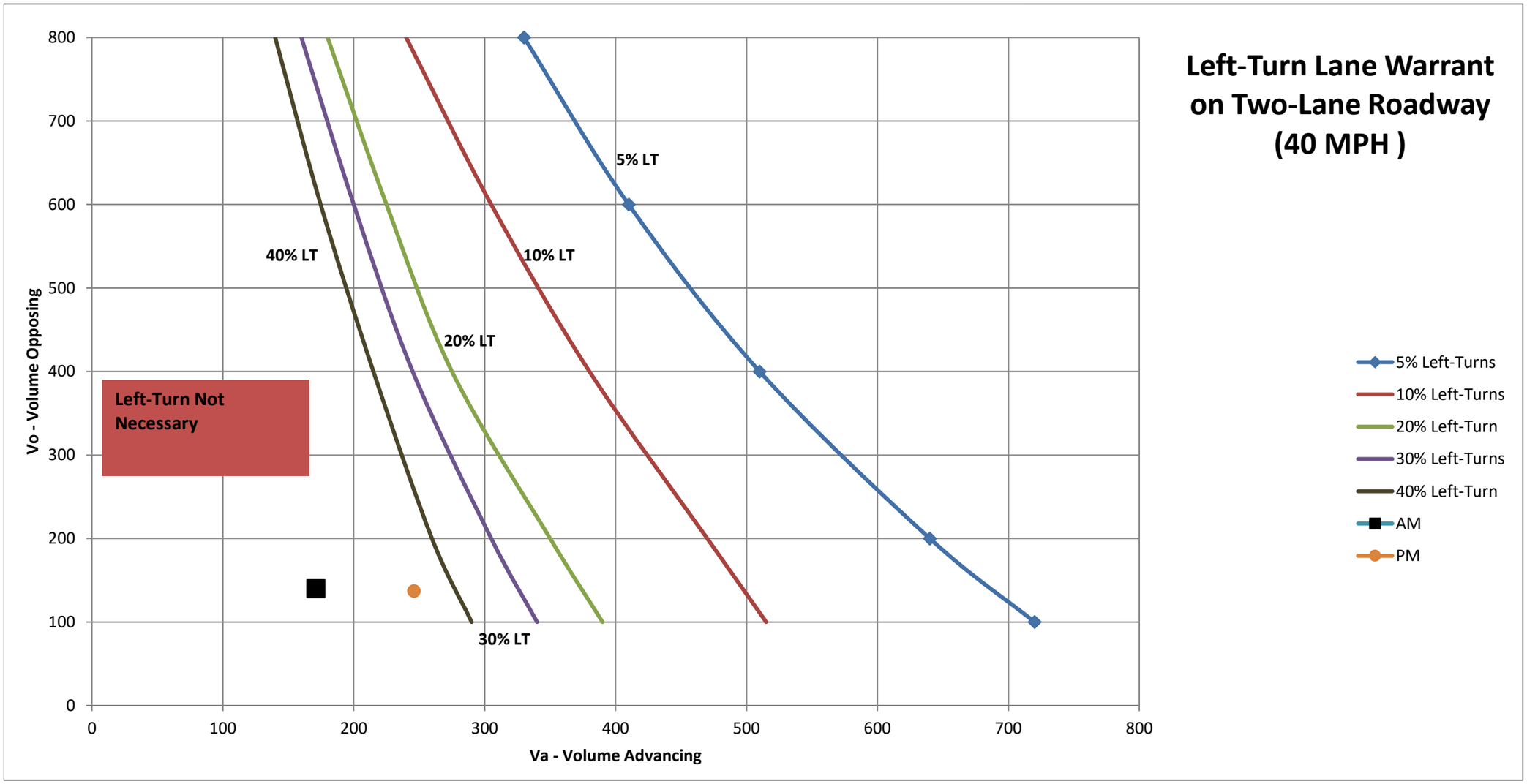



***NOTE : For highways with a design speed below 80 km/h (50 mph) with a DHV < 300 and where right turns > 40, an adjustment should be used. To read the vertical axis of the chart, subtract 20 from the actual number of right turns.***

## Frontage Road & Access Drive D

| 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 | 210 | 180 | 170 | 160 | 150 | 140 |
| | 600 | 410 | 305 | 265 | 225 | 213 | 200 | 187 | 175 |
| | 400 | 510 | 380 | 328 | 275 | 260 | 245 | 230 | 215 |
| | 200 | 640 | 470 | 410 | 350 | 328 | 305 | 282 | 260 |
| | 100 | 720 | 515 | 453 | 390 | 365 | 340 | 315 | 290 |

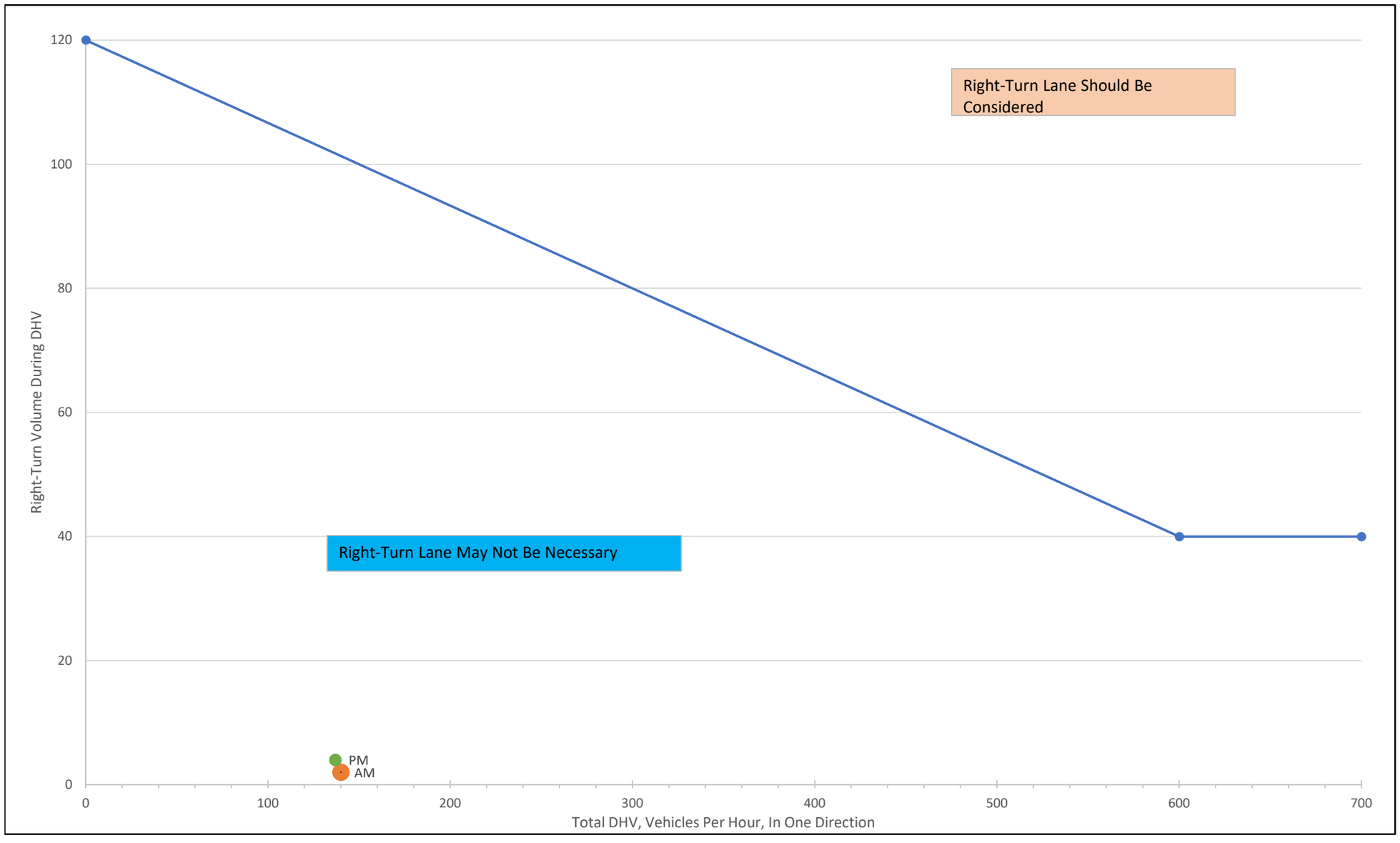
| | INPUT | | Warrant? |
|---|---|---|---|
| AM | **Advancing Volume (Va)** | 171 | NO |
| | **Opposing Volume (Vo)** | 140 | |
| | **Left-turn Volume** | 9 | |
| | **Left-turn %** | 5% | |
| PM | **Advancing Volume (Va)** | 246 | NO |
| | **Opposing Volume (Vo)** | 137 | |
| | **Left-turn Volume** | 22 | |
| | **Left-turn %** | 9% | |



| Total Volume | RT Volume |
|---|---|
| 0 | 120 |
| 600 | 40 |
| 700 | 40 |

**Frontage Road & Access Drive D**

| Time | Input | | Met? |
|---|---|---|---|
| AM | **RT Volume** | 2 | NO |
| | **Total Volume** | 140 | |
| PM | **RT Volume** | 4 | NO |
| | **Total Volume** | 137 | |

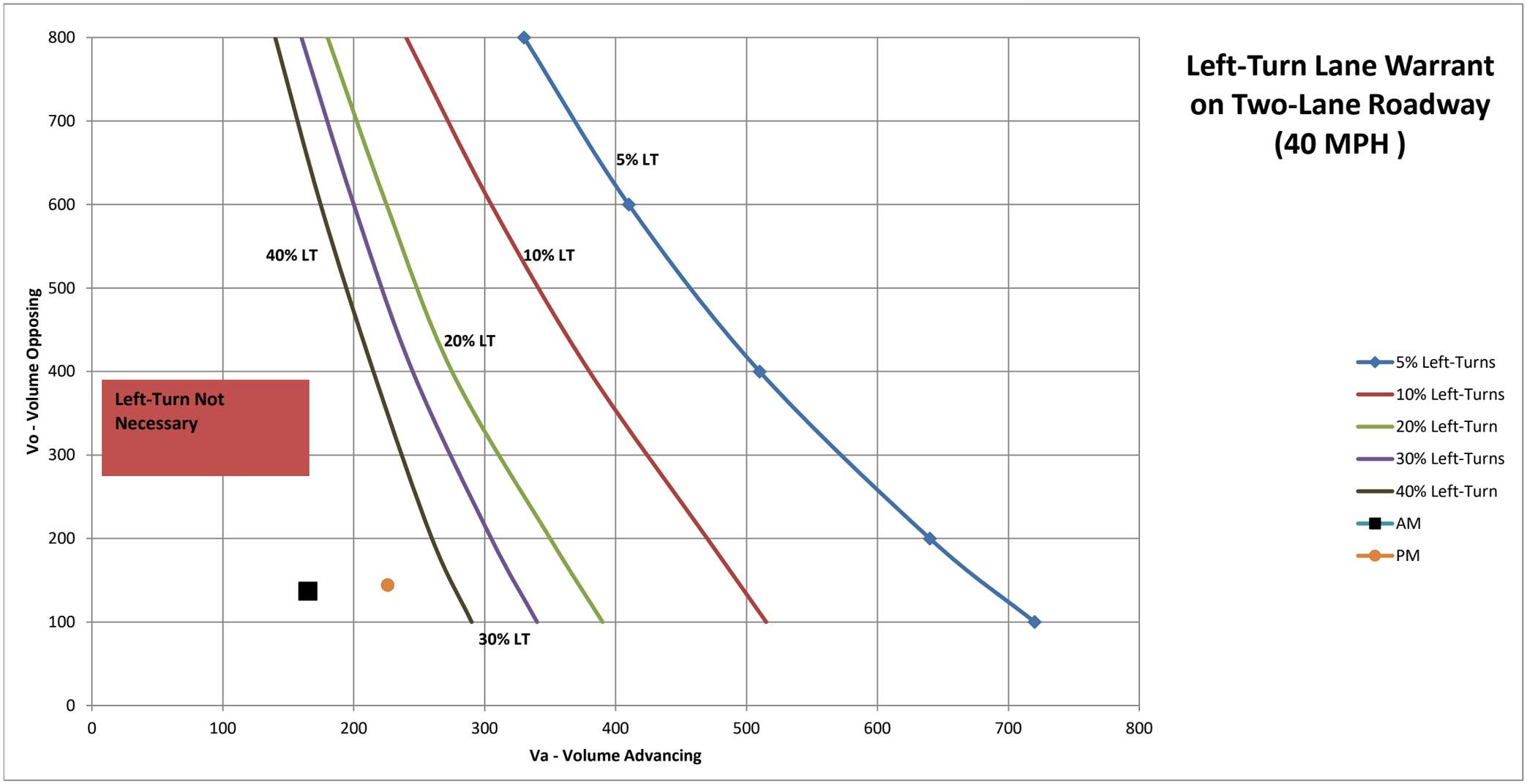



***NOTE : For highways with a design speed below 80 km/h (50 mph) with a DHV < 300 and where right turns > 40, an adjustment should be used. To read the vertical axis of the chart, subtract 20 from the actual number of right turns.***

## Frontage Road & Access Drive E

| 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 | 210 | 180 | 170 | 160 | 150 | 140 |
| | 600 | 410 | 305 | 265 | 225 | 213 | 200 | 187 | 175 |
| | 400 | 510 | 380 | 328 | 275 | 260 | 245 | 230 | 215 |
| | 200 | 640 | 470 | 410 | 350 | 328 | 305 | 282 | 260 |
| | 100 | 720 | 515 | 453 | 390 | 365 | 340 | 315 | 290 |

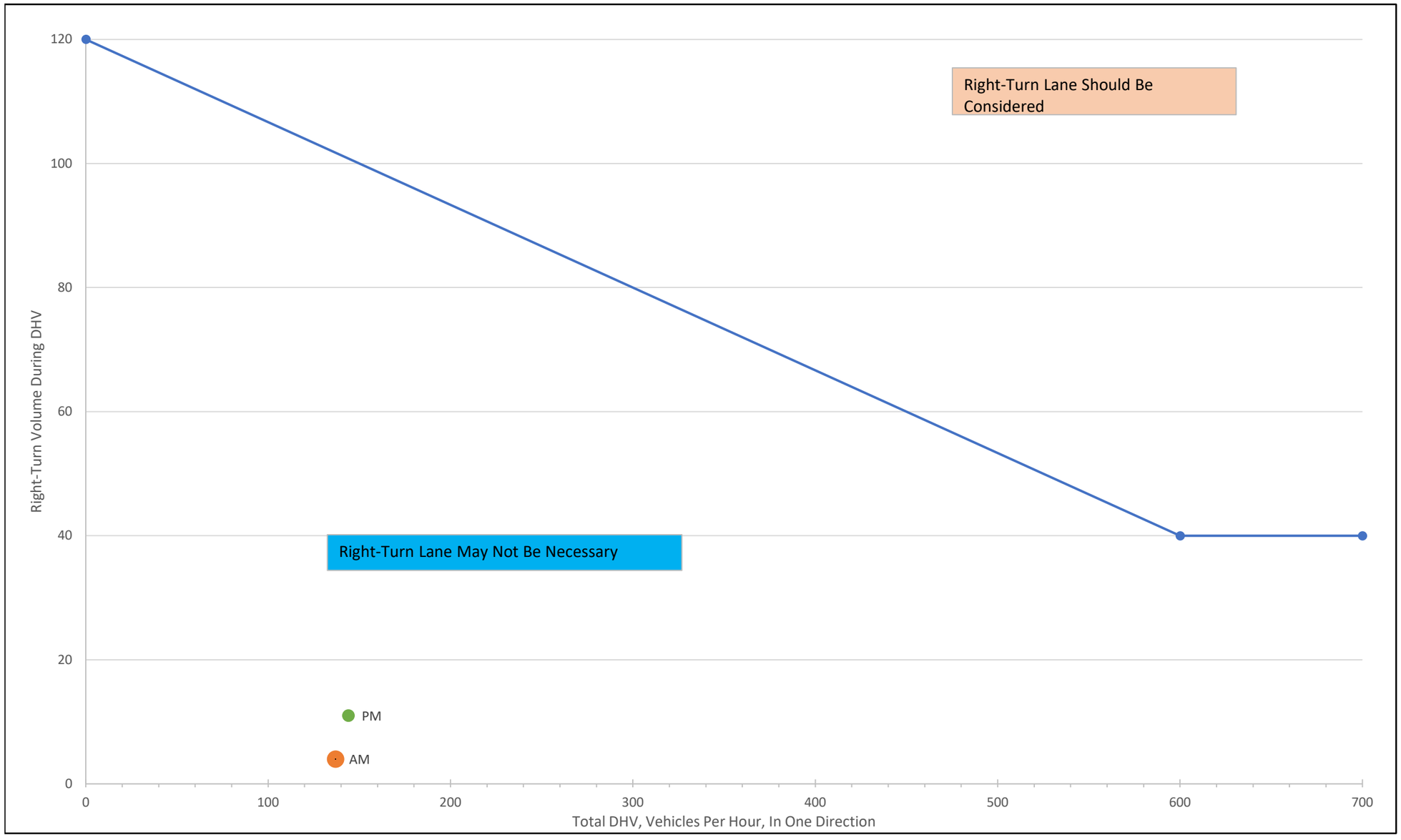
| | INPUT | | Warrant? |
|---|---|---|---|
| AM | **Advancing Volume (Va)** | 165 | NO |
| | **Opposing Volume (Vo)** | 137 | |
| | **Left-turn Volume** | 2 | |
| | **Left-turn %** | 1% | |
| PM | **Advancing Volume (Va)** | 226 | NO |
| | **Opposing Volume (Vo)** | 144 | |
| | **Left-turn Volume** | 5 | |
| | **Left-turn %** | 2% | |



| Total Volume | RT Volume |
|---|---|
| 0 | 120 |
| 600 | 40 |
| 700 | 40 |

**Frontage Road & Access Drive E**

| Time | Input | | Met? |
|---|---|---|---|
| AM | **RT Volume** | 4 | NO |
| | **Total Volume** | 137 | |
| PM | **RT Volume** | 11 | NO |
| | **Total Volume** | 144 | |

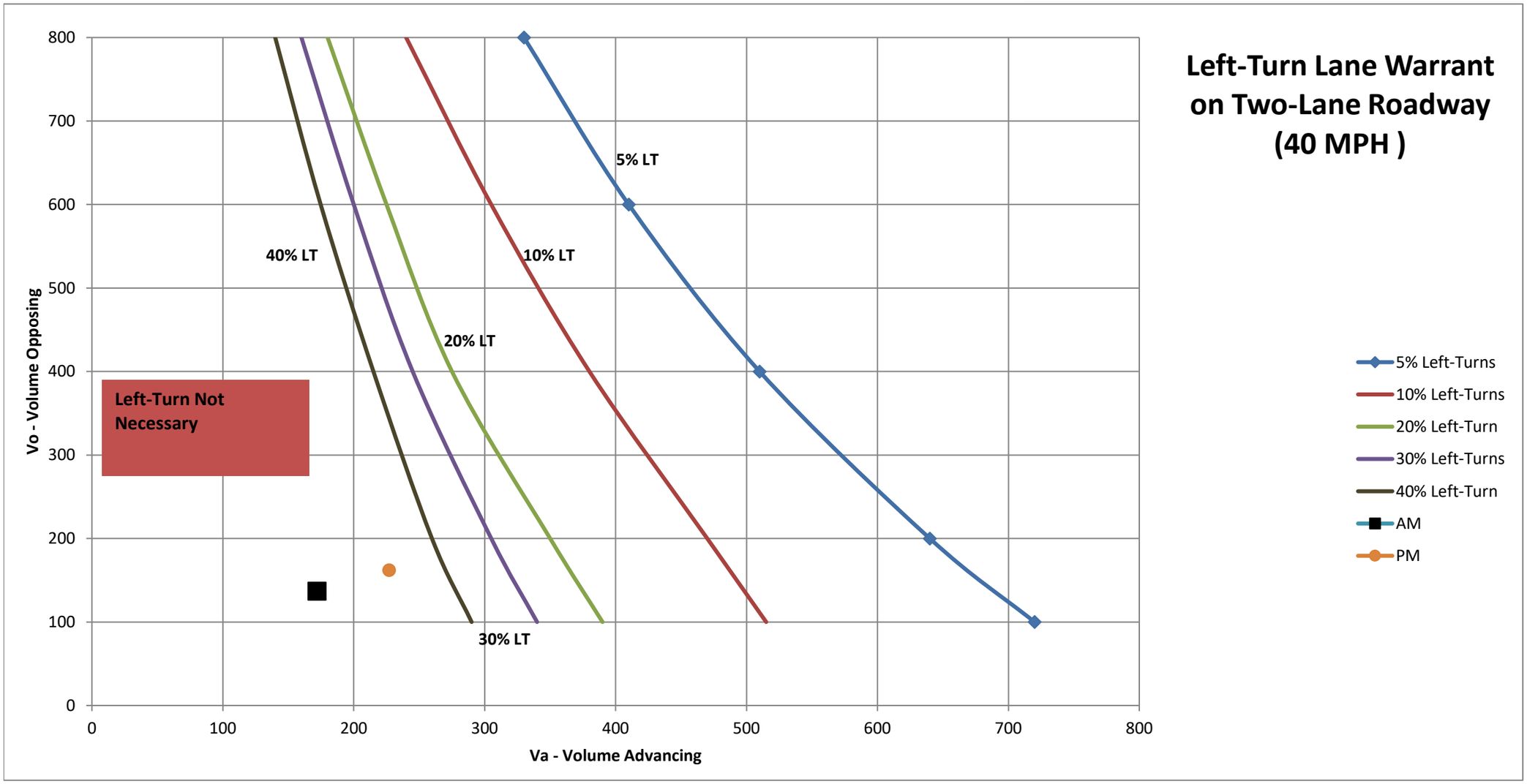



***NOTE : For highways with a design speed below 80 km/h (50 mph) with a DHV < 300 and where right turns > 40, an adjustment should be used. To read the vertical axis of the chart, subtract 20 from the actual number of right turns.***

## Frontage Road & Access Drive F

| 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 | 210 | 180 | 170 | 160 | 150 | 140 |
| | 600 | 410 | 305 | 265 | 225 | 213 | 200 | 187 | 175 |
| | 400 | 510 | 380 | 328 | 275 | 260 | 245 | 230 | 215 |
| | 200 | 640 | 470 | 410 | 350 | 328 | 305 | 282 | 260 |
| | 100 | 720 | 515 | 453 | 390 | 365 | 340 | 315 | 290 |

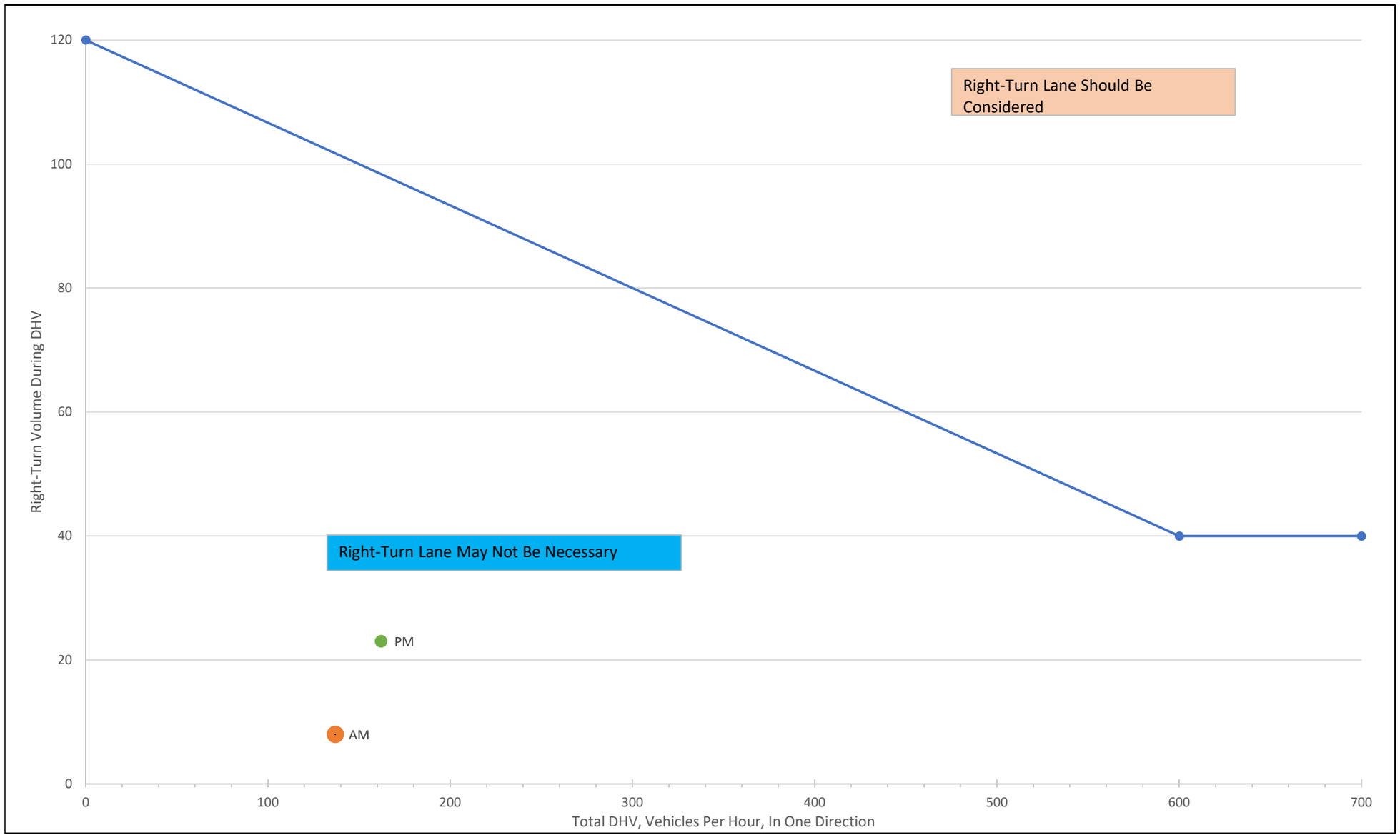
| | INPUT | | Warrant? |
|---|---|---|---|
| AM | Advancing Volume (Va) | 172 | NO |
| | Opposing Volume (Vo) | 137 | |
| | Left-turn Volume | 3 | |
| | Left-turn % | 2% | |
| PM | Advancing Volume (Va) | 227 | NO |
| | Opposing Volume (Vo) | 162 | |
| | Left-turn Volume | 8 | |
| | Left-turn % | 4% | |



| Total Volume | RT Volume |
|---|---|
| 0 | 120 |
| 600 | 40 |
| 700 | 40 |

**Frontage Road & Access Drive F**

| Time | Input | | Met? |
|---|---|---|---|
| AM | **RT Volume** | 8 | NO |
| | **Total Volume** | 137 | |
| PM | **RT Volume** | 23 | NO |
| | **Total Volume** | 162 | |

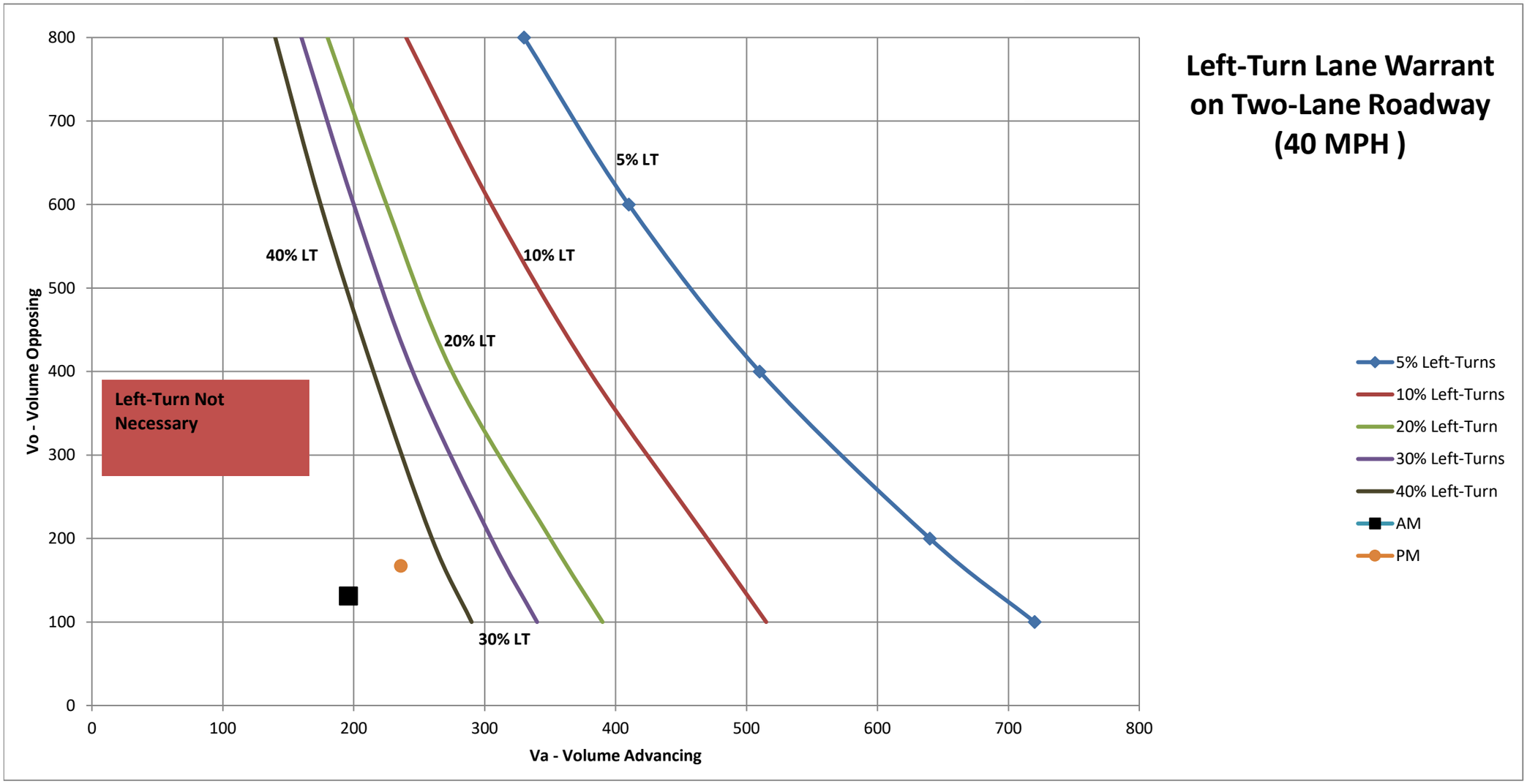



***NOTE : For highways with a design speed below 80 km/h (50 mph) with a DHV < 300 and where right turns > 40, an adjustment should be used. To read the vertical axis of the chart, subtract 20 from the actual number of right turns.***

## Frontage Road & Access Drive G

| 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 | 210 | 180 | 170 | 160 | 150 | 140 |
| | 600 | 410 | 305 | 265 | 225 | 213 | 200 | 187 | 175 |
| | 400 | 510 | 380 | 328 | 275 | 260 | 245 | 230 | 215 |
| | 200 | 640 | 470 | 410 | 350 | 328 | 305 | 282 | 260 |
| | 100 | 720 | 515 | 453 | 390 | 365 | 340 | 315 | 290 |

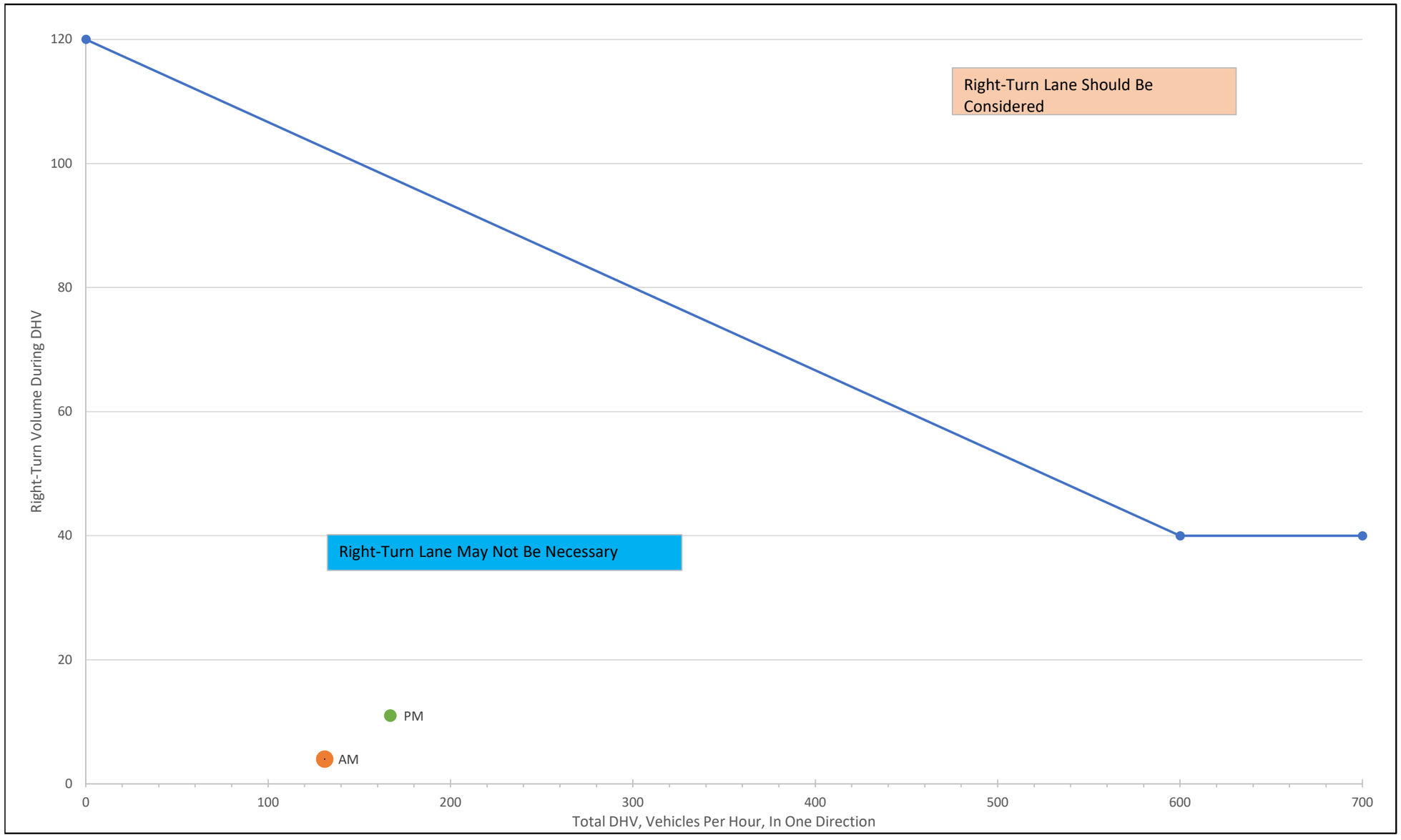
| | INPUT | | Warrant? |
|---|---|---|---|
| AM | **Advancing Volume (Va)** | 196 | NO |
| | **Opposing Volume (Vo)** | 131 | |
| | **Left-turn Volume** | 4 | |
| | **Left-turn %** | 2% | |
| PM | **Advancing Volume (Va)** | 236 | NO |
| | **Opposing Volume (Vo)** | 167 | |
| | **Left-turn Volume** | 9 | |
| | **Left-turn %** | 4% | |



| Total Volume | RT Volume |
|---|---|
| 0 | 120 |
| 600 | 40 |
| 700 | 40 |

**Frontage Road & Access Drive G**

| Time | Input | | Met? |
|---|---|---|---|
| AM | **RT Volume** | 4 | NO |
| | **Total Volume** | 131 | |
| PM | **RT Volume** | 11 | NO |
| | **Total Volume** | 167 | |

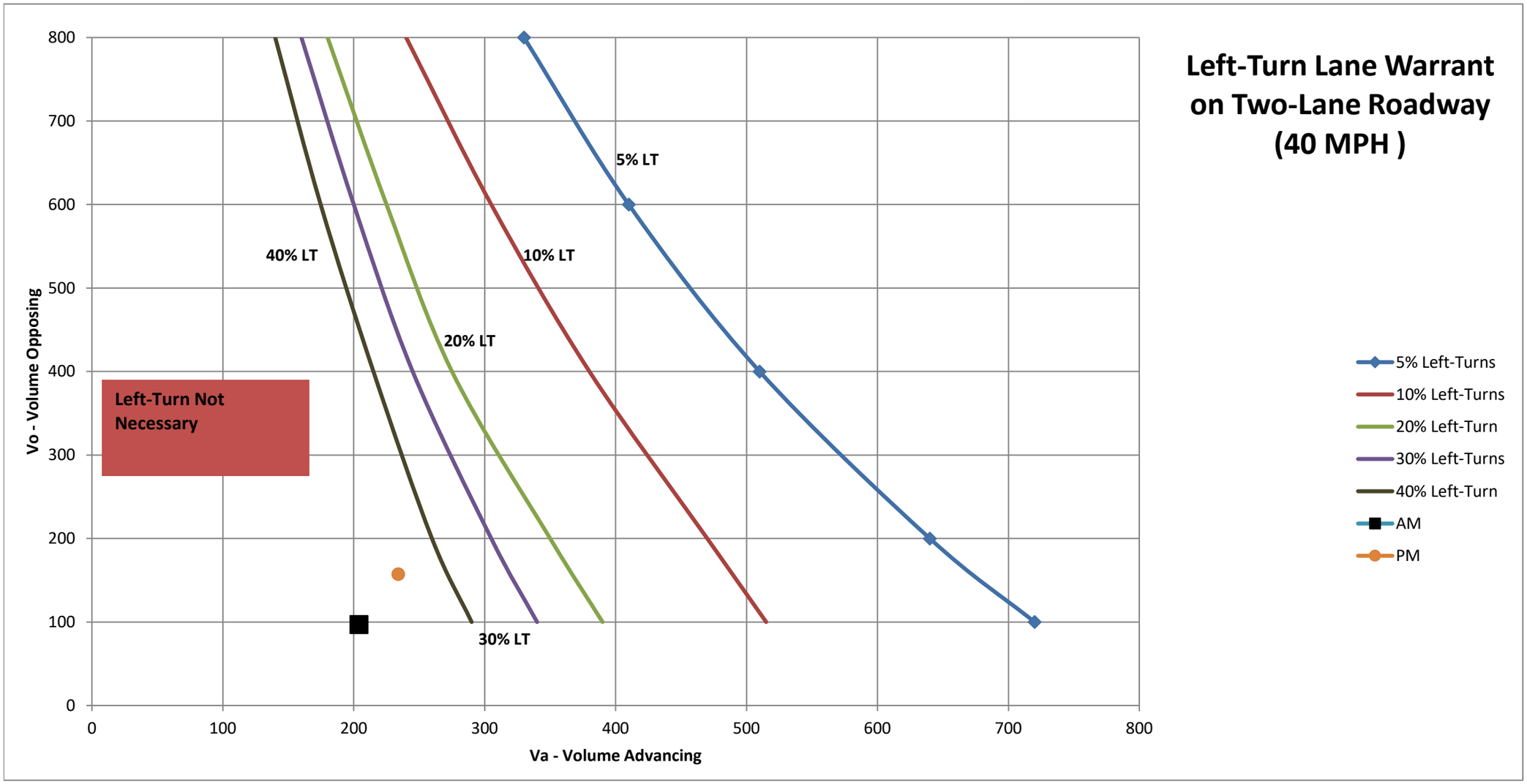



***NOTE : For highways with a design speed below 80 km/h (50 mph) with a DHV < 300 and where right turns > 40, an adjustment should be used. To read the vertical axis of the chart, subtract 20 from the actual number of right turns.***

## Frontage Road & Access Drive H

| 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 | 210 | 180 | 170 | 160 | 150 | 140 |
| | 600 | 410 | 305 | 265 | 225 | 213 | 200 | 187 | 175 |
| | 400 | 510 | 380 | 328 | 275 | 260 | 245 | 230 | 215 |
| | 200 | 640 | 470 | 410 | 350 | 328 | 305 | 282 | 260 |
| | 100 | 720 | 515 | 453 | 390 | 365 | 340 | 315 | 290 |

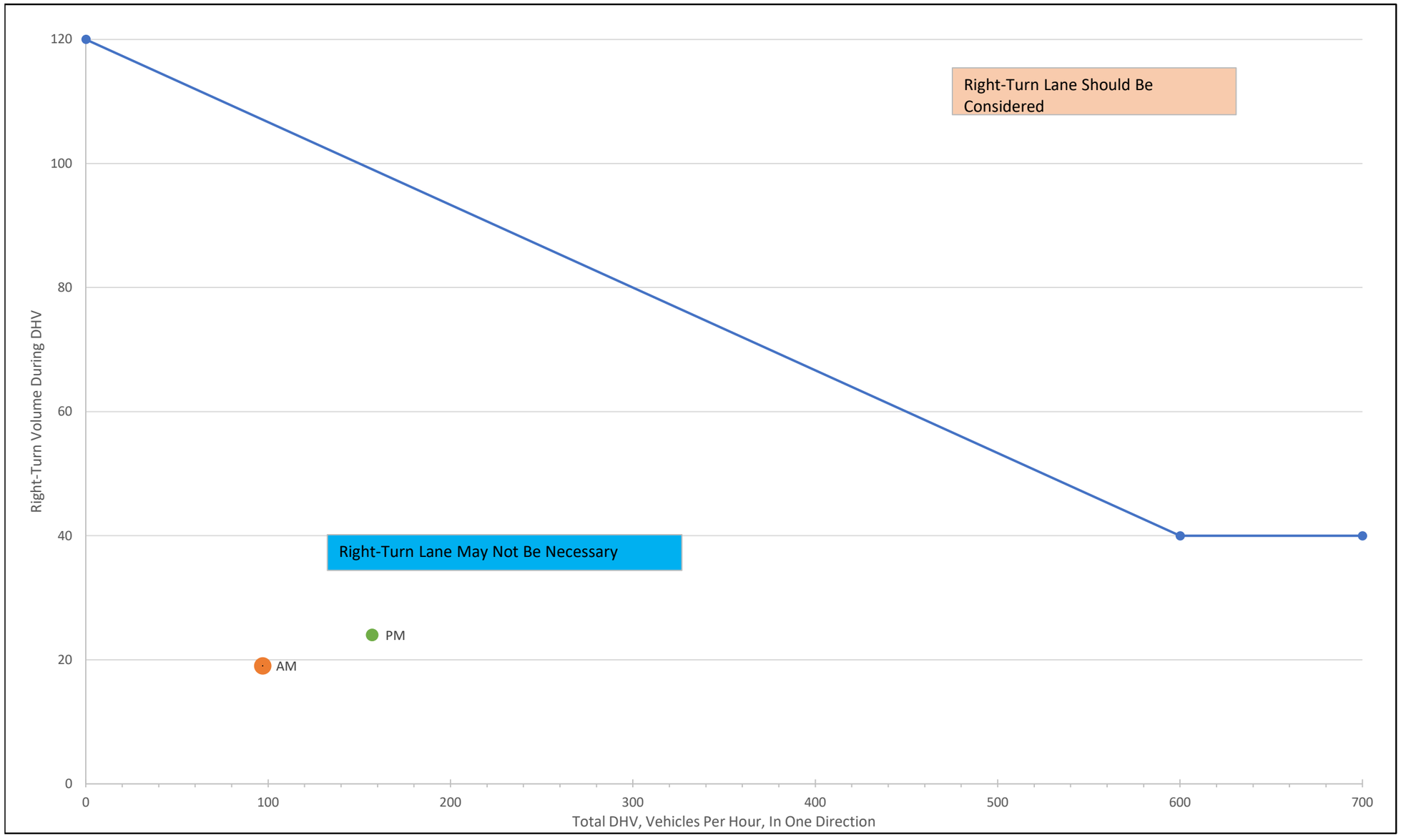
| | INPUT | | Warrant? |
|---|---|---|---|
| AM | **Advancing Volume (Va)** | 204 | NO |
| | **Opposing Volume (Vo)** | 97 | |
| | **Left-turn Volume** | 86 | |
| | **Left-turn %** | 42% | |
| PM | **Advancing Volume (Va)** | 234 | NO |
| | **Opposing Volume (Vo)** | 157 | |
| | **Left-turn Volume** | 103 | |
| | **Left-turn %** | 44% | |



| Total Volume | RT Volume |
|---|---|
| 0 | 120 |
| 600 | 40 |
| 700 | 40 |

**Frontage Road & Access Drive H**

| Time | Input | | Met? |
|---|---|---|---|
| AM | **RT Volume** | 19 | NO |
| | **Total Volume** | 97 | |
| PM | **RT Volume** | 24 | NO |
| | **Total Volume** | 157 | |

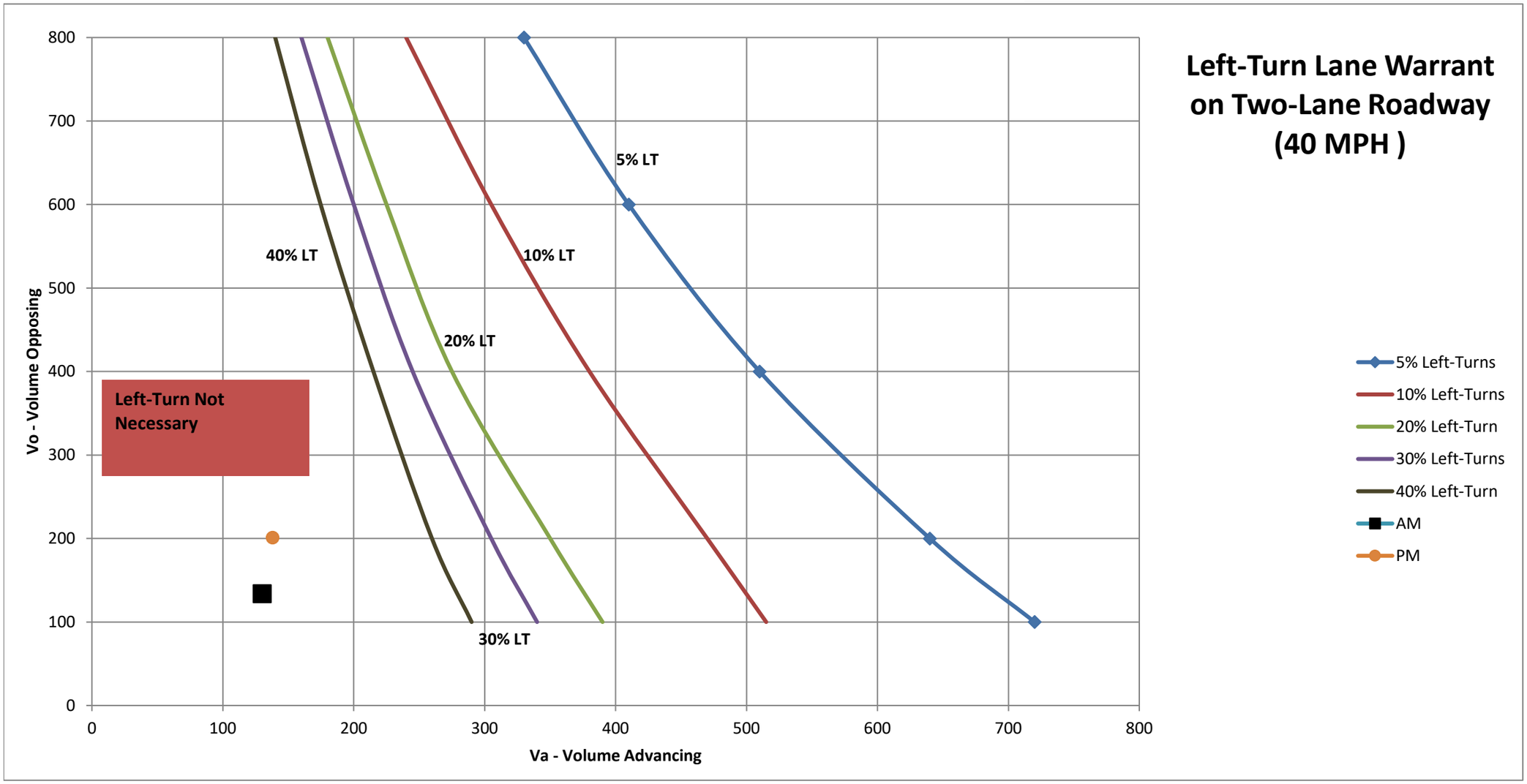



***NOTE : For highways with a design speed below 80 km/h (50 mph) with a DHV < 300 and where right turns > 40, an adjustment should be used. To read the vertical axis of the chart, subtract 20 from the actual number of right turns.***

## Frontage Road & Access Drive I

| 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 | 210 | 180 | 170 | 160 | 150 | 140 |
| | 600 | 410 | 305 | 265 | 225 | 213 | 200 | 187 | 175 |
| | 400 | 510 | 380 | 328 | 275 | 260 | 245 | 230 | 215 |
| | 200 | 640 | 470 | 410 | 350 | 328 | 305 | 282 | 260 |
| | 100 | 720 | 515 | 453 | 390 | 365 | 340 | 315 | 290 |

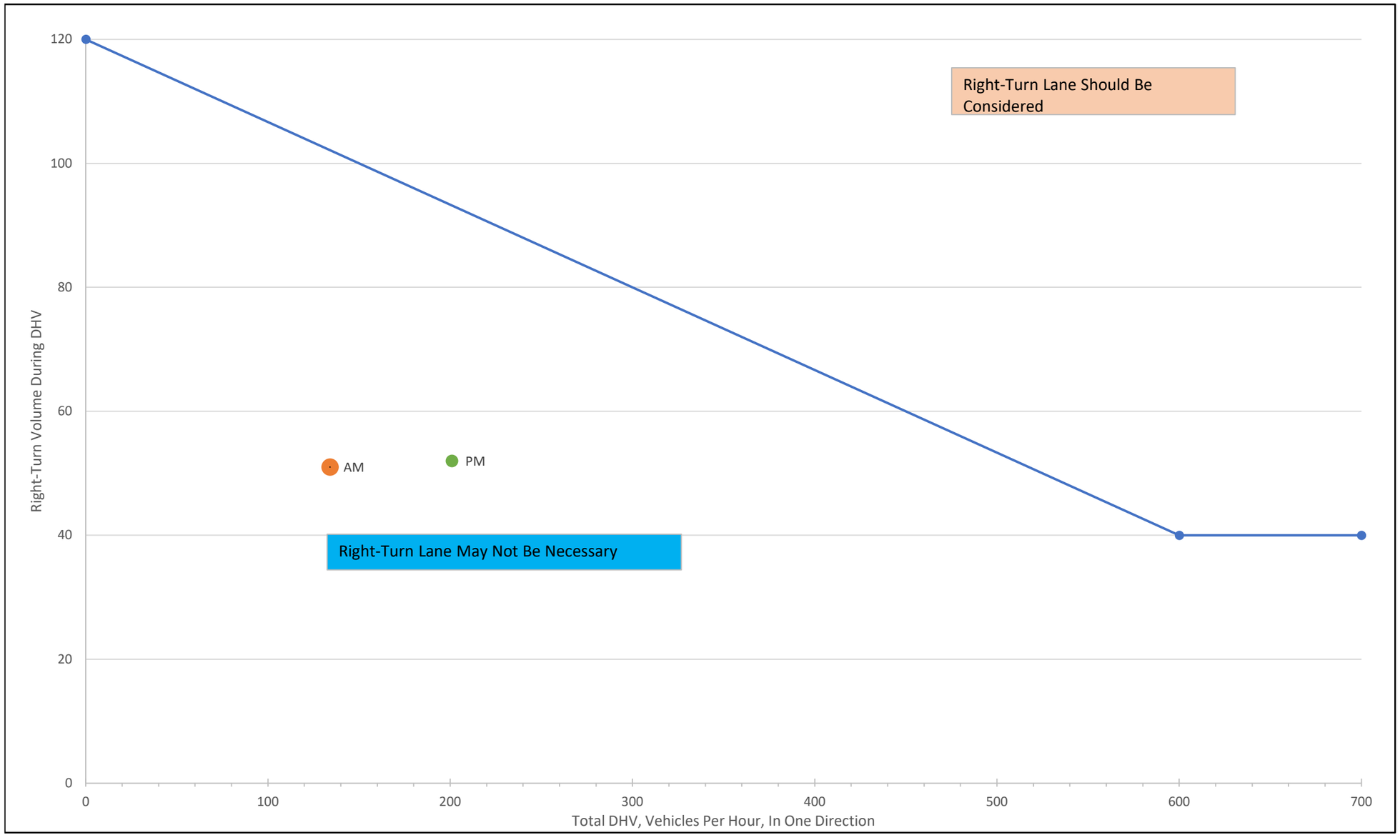
| | INPUT | | Warrant? |
|---|---|---|---|
| AM | **Advancing Volume (Va)** | 130 | NO |
| | **Opposing Volume (Vo)** | 134 | |
| | **Left-turn Volume** | 22 | |
| | **Left-turn %** | 17% | |
| PM | **Advancing Volume (Va)** | 138 | NO |
| | **Opposing Volume (Vo)** | 201 | |
| | **Left-turn Volume** | 26 | |
| | **Left-turn %** | 19% | |



| Total Volume | RT Volume |
|---|---|
| 0 | 120 |
| 600 | 40 |
| 700 | 40 |

**Frontage Road & Access Drive I**

| Time | Input | | Met? |
|---|---|---|---|
| AM | **RT Volume** | 51 | NO |
| | **Total Volume** | 134 | |
| PM | **RT Volume** | 52 | NO |
| | **Total Volume** | 201 | |




***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 from the actual number of right turns.***

# *US 40 & SMITH ROAD*

## *TRAFFIC VOLUME COUNTS*
## *CAPACITY ANALYSIS*

## SMITH RD & US 40 - TMC

Wed Jan 6, 2021
Full Length (6:30 AM-8:30 AM, 4 PM-7 PM)
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 807919, Location: 39.71619, -86.36131

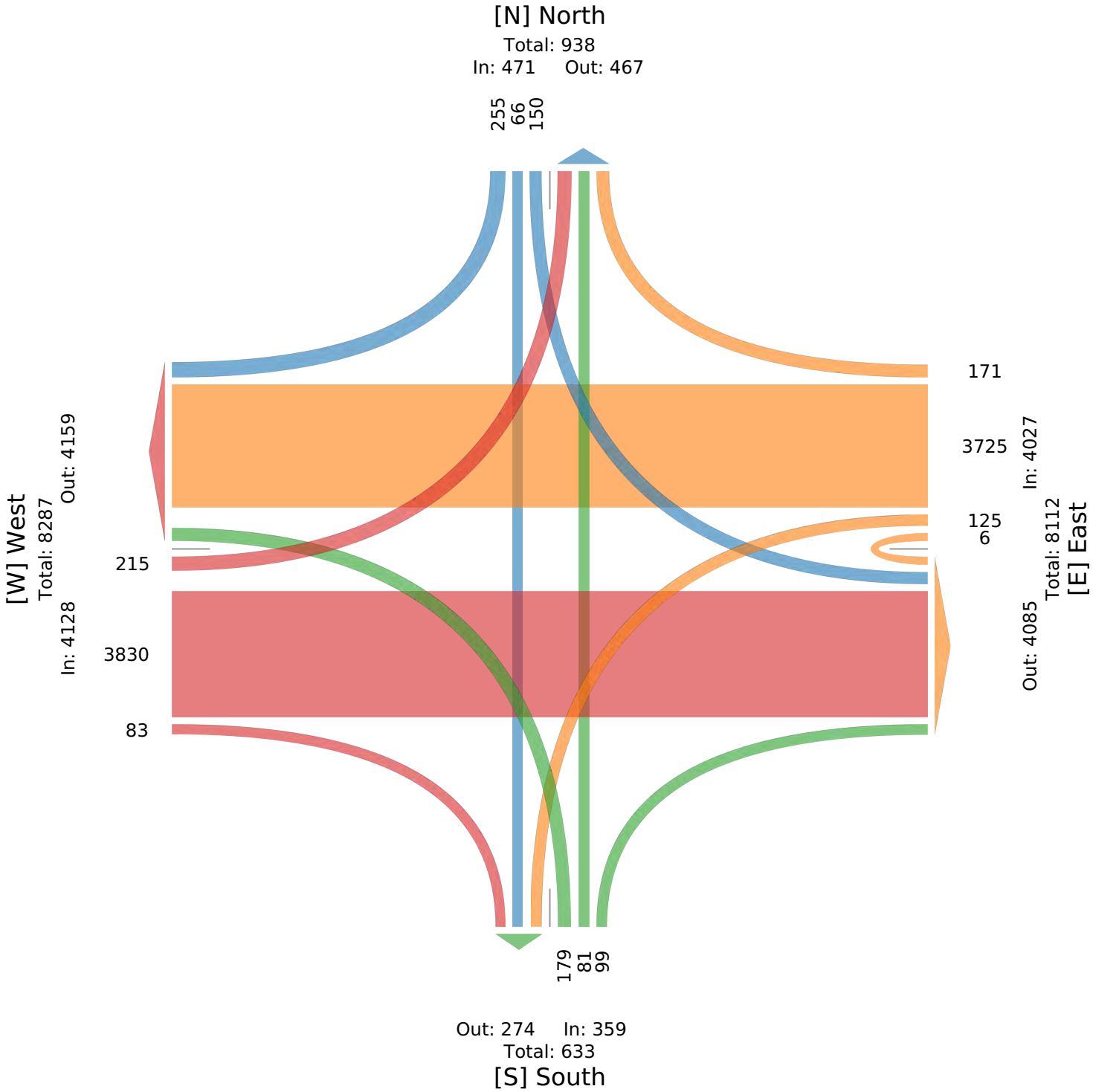
Provided by: A&F Engineering
8365 Keystone Crossing, Suite 201, Indianapolis, IN, 46240, US

| 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 |
| 2021-01-06 6:30AM | 0 | 0 | 0 | 0 | **0** | 1 | 0 | 8 | 0 | **9** | 16 | 139 | 0 | 0 | **155** | 0 | 49 | 1 | 0 | **50** | **214** |
| 6:45AM | 0 | 0 | 2 | 0 | **2** | 2 | 0 | 8 | 0 | **10** | 5 | 147 | 1 | 0 | **153** | 3 | 79 | 1 | 0 | **83** | **248** |
| Hourly Total | 0 | 0 | 2 | 0 | **2** | 3 | 0 | 16 | 0 | **19** | 21 | 286 | 1 | 0 | **308** | 3 | 128 | 2 | 0 | **133** | **462** |
| 7:00AM | 2 | 1 | 2 | 0 | **5** | 1 | 0 | 5 | 0 | **6** | 5 | 158 | 1 | 0 | **164** | 0 | 76 | 0 | 0 | **76** | **251** |
| 7:15AM | 2 | 1 | 0 | 0 | **3** | 4 | 0 | 6 | 0 | **10** | 4 | 162 | 0 | 0 | **166** | 0 | 88 | 3 | 0 | **91** | **270** |
| 7:30AM | 0 | 0 | 0 | 0 | **0** | 3 | 2 | 6 | 0 | **11** | 7 | 178 | 1 | 0 | **186** | 0 | 87 | 1 | 1 | **89** | **286** |
| 7:45AM | 2 | 0 | 0 | 0 | **2** | 3 | 1 | 6 | 0 | **10** | 4 | 159 | 0 | 0 | **163** | 3 | 112 | 1 | 0 | **116** | **291** |
| Hourly Total | 6 | 2 | 2 | 0 | **10** | 11 | 3 | 23 | 0 | **37** | 20 | 657 | 2 | 0 | **679** | 3 | 363 | 5 | 1 | **372** | **1098** |
| 8:00AM | 1 | 0 | 0 | 0 | **1** | 5 | 2 | 3 | 0 | **10** | 10 | 119 | 0 | 0 | **129** | 1 | 110 | 4 | 0 | **115** | **255** |
| 8:15AM | 3 | 0 | 0 | 0 | **3** | 5 | 0 | 6 | 0 | **11** | 5 | 149 | 0 | 0 | **154** | 5 | 109 | 3 | 0 | **117** | **285** |
| Hourly Total | 4 | 0 | 0 | 0 | **4** | 10 | 2 | 9 | 0 | **21** | 15 | 268 | 0 | 0 | **283** | 6 | 219 | 7 | 0 | **232** | **540** |
| 4:00PM | 16 | 4 | 9 | 0 | **29** | 7 | 3 | 15 | 0 | **25** | 13 | 225 | 2 | 0 | **240** | 8 | 292 | 12 | 0 | **312** | **606** |
| 4:15PM | 18 | 7 | 16 | 0 | **41** | 8 | 5 | 11 | 0 | **24** | 9 | 209 | 11 | 0 | **229** | 13 | 244 | 9 | 0 | **266** | **560** |
| 4:30PM | 16 | 6 | 5 | 0 | **27** | 7 | 4 | 14 | 0 | **25** | 13 | 234 | 11 | 0 | **258** | 11 | 287 | 9 | 0 | **307** | **617** |
| 4:45PM | 11 | 5 | 6 | 0 | **22** | 12 | 3 | 23 | 0 | **38** | 19 | 239 | 10 | 0 | **268** | 14 | 267 | 16 | 1 | **298** | **626** |
| Hourly Total | 61 | 22 | 36 | 0 | **119** | 34 | 15 | 63 | 0 | **112** | 54 | 907 | 34 | 0 | **995** | 46 | 1090 | 46 | 1 | **1183** | **2409** |
| 5:00PM | 17 | 11 | 6 | 0 | **34** | 15 | 7 | 30 | 0 | **52** | 14 | 218 | 3 | 0 | **235** | 10 | 290 | 19 | 1 | **320** | **641** |
| 5:15PM | 11 | 4 | 7 | 0 | **22** | 20 | 12 | 27 | 0 | **59** | 19 | 239 | 5 | 0 | **263** | 12 | 290 | 17 | 0 | **319** | **663** |
| 5:30PM | 15 | 16 | 7 | 0 | **38** | 11 | 7 | 14 | 0 | **32** | 16 | 244 | 9 | 0 | **269** | 8 | 246 | 14 | 1 | **269** | **608** |
| 5:45PM | 12 | 5 | 13 | 0 | **30** | 11 | 3 | 26 | 0 | **40** | 18 | 216 | 9 | 0 | **243** | 6 | 239 | 12 | 1 | **258** | **571** |
| Hourly Total | 55 | 36 | 33 | 0 | **124** | 57 | 29 | 97 | 0 | **183** | 67 | 917 | 26 | 0 | **1010** | 36 | 1065 | 62 | 3 | **1166** | **2483** |
| 6:00PM | 12 | 6 | 9 | 0 | **27** | 14 | 5 | 15 | 0 | **34** | 9 | 229 | 7 | 0 | **245** | 8 | 275 | 13 | 0 | **296** | **602** |
| 6:15PM | 13 | 6 | 10 | 0 | **29** | 12 | 6 | 12 | 0 | **30** | 14 | 233 | 7 | 0 | **254** | 7 | 194 | 13 | 0 | **214** | **527** |
| 6:30PM | 13 | 4 | 5 | 0 | **22** | 6 | 3 | 8 | 0 | **17** | 12 | 190 | 3 | 0 | **205** | 7 | 204 | 15 | 1 | **227** | **471** |
| 6:45PM | 15 | 5 | 2 | 0 | **22** | 3 | 3 | 12 | 0 | **18** | 3 | 143 | 3 | 0 | **149** | 9 | 187 | 8 | 0 | **204** | **393** |
| Hourly Total | 53 | 21 | 26 | 0 | **100** | 35 | 17 | 47 | 0 | **99** | 38 | 795 | 20 | 0 | **853** | 31 | 860 | 49 | 1 | **941** | **1993** |
| 7:00PM | 0 | 0 | 0 | 0 | **0** | 0 | 0 | 0 | 0 | **0** | 0 | 0 | 0 | 0 | **0** | 0 | 0 | 0 | 0 | **0** | **0** |
| Hourly Total | 0 | 0 | 0 | 0 | **0** | 0 | 0 | 0 | 0 | **0** | 0 | 0 | 0 | 0 | **0** | 0 | 0 | 0 | 0 | **0** | **0** |
| **Total** | 179 | 81 | 99 | 0 | **359** | 150 | 66 | 255 | 0 | **471** | 215 | 3830 | 83 | 0 | **4128** | 125 | 3725 | 171 | 6 | **4027** | **8985** |
| **% Approach** | 49.9% | 22.6% | 27.6% | 0% | **-** | 31.8% | 14.0% | 54.1% | 0% | **-** | 5.2% | 92.8% | 2.0% | 0% | **-** | 3.1% | 92.5% | 4.2% | 0.1% | **-** | **-** |
| **% Total** | 2.0% | 0.9% | 1.1% | 0% | **4.0%** | 1.7% | 0.7% | 2.8% | 0% | **5.2%** | 2.4% | 42.6% | 0.9% | 0% | **45.9%** | 1.4% | 41.5% | 1.9% | 0.1% | **44.8%** | **-** |
| **Lights and Motorcycles** | 177 | 80 | 98 | 0 | **355** | 147 | 66 | 252 | 0 | **465** | 212 | 3715 | 82 | 0 | **4009** | 124 | 3680 | 169 | 6 | **3979** | 8808 |
| **% Lights and Motorcycles** | 98.9% | 98.8% | 99.0% | 0% | **98.9%** | 98.0% | 100% | 98.8% | 0% | **98.7%** | 98.6% | 97.0% | 98.8% | 0% | **97.1%** | 99.2% | 98.8% | 98.8% | 100% | **98.8%** | 98.0% |
| **Heavy** | 2 | 1 | 1 | 0 | **4** | 3 | 0 | 3 | 0 | **6** | 3 | 115 | 1 | 0 | **119** | 1 | 45 | 2 | 0 | **48** | 177 |
| **% Heavy** | 1.1% | 1.2% | 1.0% | 0% | **1.1%** | 2.0% | 0% | 1.2% | 0% | **1.3%** | 1.4% | 3.0% | 1.2% | 0% | **2.9%** | 0.8% | 1.2% | 1.2% | 0% | **1.2%** | 2.0% |

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

**SMITH RD & US 40 - TMC**
Wed Jan 6, 2021
Full Length (6:30 AM-8:30 AM, 4 PM-7 PM)
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 807919, Location: 39.71619, -86.36131

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



## SMITH RD & US 40 - TMC

Wed Jan 6, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 807919, Location: 39.71619, -86.36131

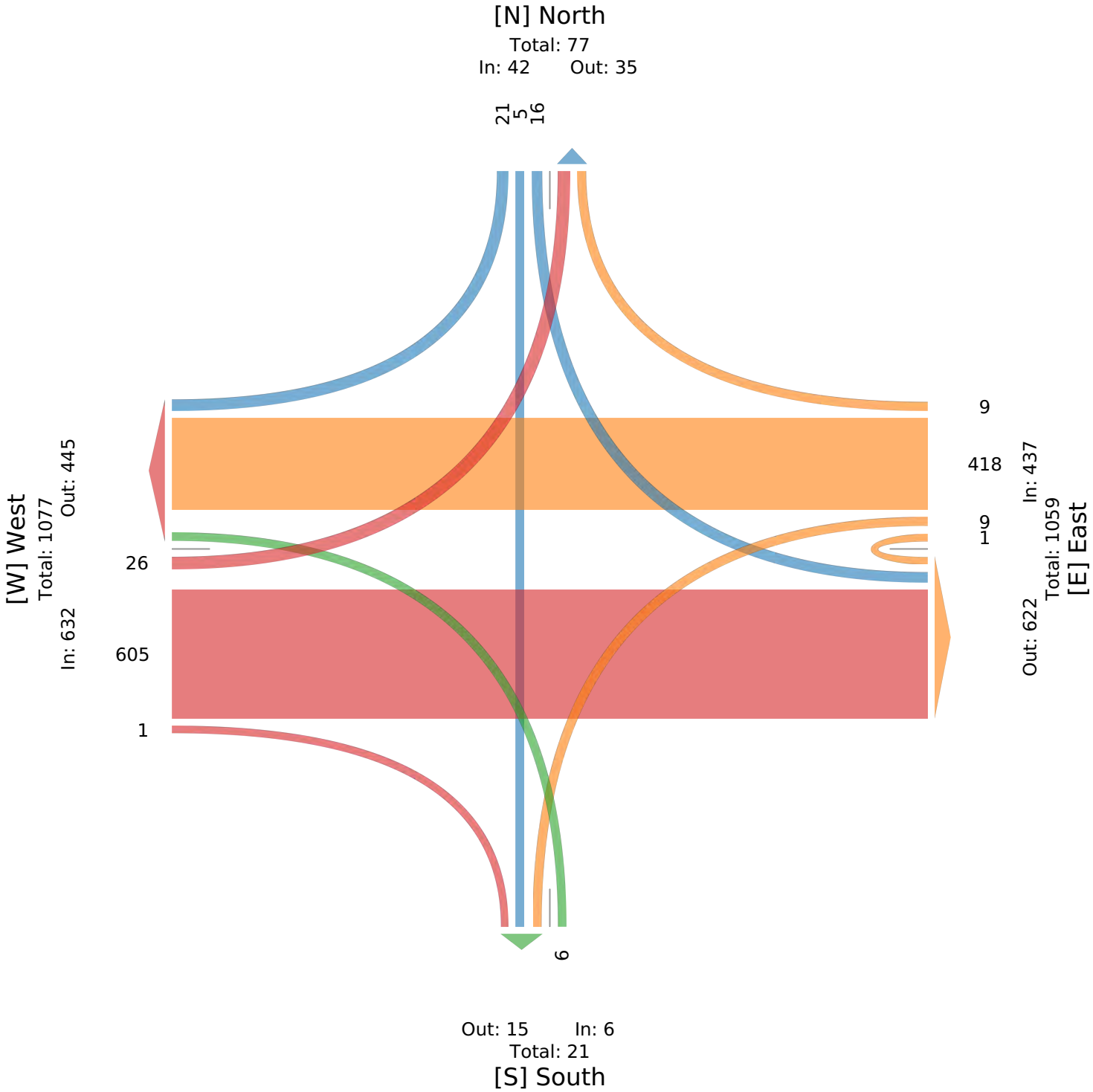
Provided by: A&F Engineering
8365 Keystone Crossing, Suite 201, Indianapolis, IN, 46240, US

| 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 |
| 2021-01-06 7:30AM | 0 | 0 | 0 | 0 | **0** | 3 | 2 | 6 | 0 | **11** | 7 | 178 | 1 | 0 | **186** | 0 | 87 | 1 | 1 | **89** | **286** |
| 7:45AM | 2 | 0 | 0 | 0 | **2** | 3 | 1 | 6 | 0 | **10** | 4 | 159 | 0 | 0 | **163** | 3 | 112 | 1 | 0 | **116** | **291** |
| 8:00AM | 1 | 0 | 0 | 0 | **1** | 5 | 2 | 3 | 0 | **10** | 10 | 119 | 0 | 0 | **129** | 1 | 110 | 4 | 0 | **115** | **255** |
| 8:15AM | 3 | 0 | 0 | 0 | **3** | 5 | 0 | 6 | 0 | **11** | 5 | 149 | 0 | 0 | **154** | 5 | 109 | 3 | 0 | **117** | **285** |
| **Total** | 6 | 0 | 0 | 0 | **6** | 16 | 5 | 21 | 0 | **42** | 26 | 605 | 1 | 0 | **632** | 9 | 418 | 9 | 1 | **437** | **1117** |
| **% Approach** | 100% | 0% | 0% | 0% | **-** | 38.1% | 11.9% | 50.0% | 0% | **-** | 4.1% | 95.7% | 0.2% | 0% | **-** | 2.1% | 95.7% | 2.1% | 0.2% | **-** | - |
| **% Total** | 0.5% | 0% | 0% | 0% | **0.5%** | 1.4% | 0.4% | 1.9% | 0% | **3.8%** | 2.3% | 54.2% | 0.1% | 0% | **56.6%** | 0.8% | 37.4% | 0.8% | 0.1% | **39.1%** | - |
| **PHF** | 0.500 | - | - | - | **0.500** | 0.800 | 0.625 | 0.875 | - | **0.955** | 0.650 | 0.850 | 0.250 | - | **0.849** | 0.450 | 0.933 | 0.563 | 0.250 | **0.934** | 0.960 |
| **Lights and Motorcycles** | 5 | 0 | 0 | 0 | **5** | 16 | 5 | 20 | 0 | **41** | 25 | 583 | 1 | 0 | **609** | 9 | 403 | 9 | 1 | **422** | 1077 |
| **% Lights and Motorcycles** | 83.3% | 0% | 0% | 0% | **83.3%** | 100% | 100% | 95.2% | 0% | **97.6%** | 96.2% | 96.4% | 100% | 0% | **96.4%** | 100% | 96.4% | 100% | 100% | **96.6%** | 96.4% |
| **Heavy** | 1 | 0 | 0 | 0 | **1** | 0 | 0 | 1 | 0 | **1** | 1 | 22 | 0 | 0 | **23** | 0 | 15 | 0 | 0 | **15** | 40 |
| **% Heavy** | 16.7% | 0% | 0% | 0% | **16.7%** | 0% | 0% | 4.8% | 0% | **2.4%** | 3.8% | 3.6% | 0% | 0% | **3.6%** | 0% | 3.6% | 0% | 0% | **3.4%** | 3.6% |

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

**SMITH RD & US 40 - TMC**
Wed Jan 6, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 807919, Location: 39.71619, -86.36131

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



## SMITH RD & US 40 - TMC

Wed Jan 6, 2021
PM Peak (4:30 PM - 5:30 PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 807919, Location: 39.71619, -86.36131

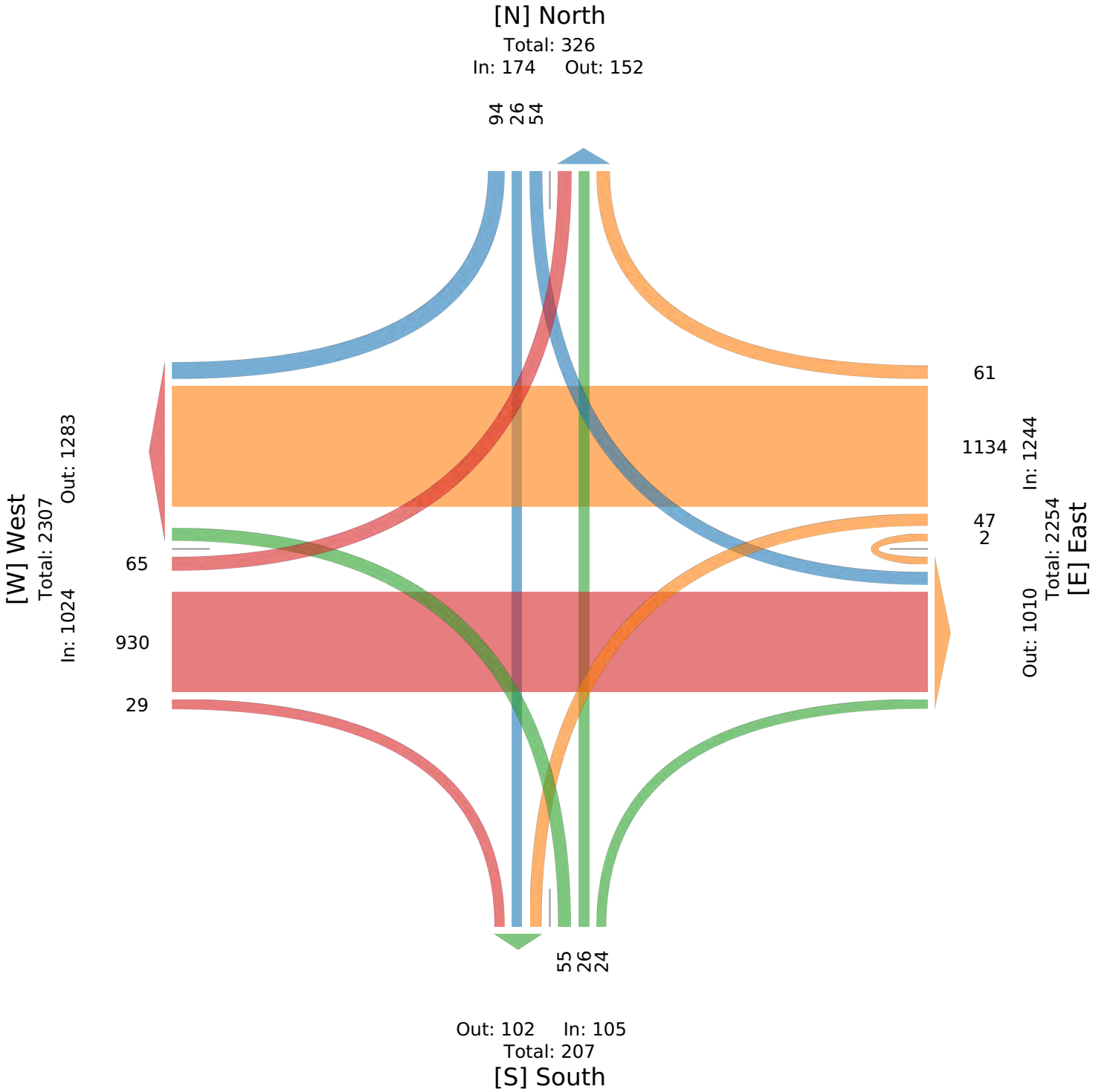

Provided by: A&F Engineering
8365 Keystone Crossing, Suite 201, Indianapolis, IN, 46240, US

| 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** |
| 2021-01-06 4:30PM | 16 | 6 | 5 | 0 | **27** | 7 | 4 | 14 | 0 | **25** | 13 | 234 | 11 | 0 | **258** | 11 | 287 | 9 | 0 | **307** | **617** |
| 4:45PM | 11 | 5 | 6 | 0 | **22** | 12 | 3 | 23 | 0 | **38** | 19 | 239 | 10 | 0 | **268** | 14 | 267 | 16 | 1 | **298** | **626** |
| 5:00PM | 17 | 11 | 6 | 0 | **34** | 15 | 7 | 30 | 0 | **52** | 14 | 218 | 3 | 0 | **235** | 10 | 290 | 19 | 1 | **320** | **641** |
| 5:15PM | 11 | 4 | 7 | 0 | **22** | 20 | 12 | 27 | 0 | **59** | 19 | 239 | 5 | 0 | **263** | 12 | 290 | 17 | 0 | **319** | **663** |
| **Total** | 55 | 26 | 24 | 0 | **105** | 54 | 26 | 94 | 0 | **174** | 65 | 930 | 29 | 0 | **1024** | 47 | 1134 | 61 | 2 | **1244** | **2547** |
| **% Approach** | 52.4% | 24.8% | 22.9% | 0% | **-** | 31.0% | 14.9% | 54.0% | 0% | **-** | 6.3% | 90.8% | 2.8% | 0% | **-** | 3.8% | 91.2% | 4.9% | 0.2% | **-** | - |
| **% Total** | 2.2% | 1.0% | 0.9% | 0% | **4.1%** | 2.1% | 1.0% | 3.7% | 0% | **6.8%** | 2.6% | 36.5% | 1.1% | 0% | **40.2%** | 1.8% | 44.5% | 2.4% | 0.1% | **48.8%** | - |
| **PHF** | 0.809 | 0.591 | 0.857 | - | **0.772** | 0.675 | 0.542 | 0.783 | - | **0.737** | 0.855 | 0.973 | 0.659 | - | **0.955** | 0.839 | 0.978 | 0.803 | 0.500 | **0.972** | 0.960 |
| **Lights and Motorcycles** | 54 | 25 | 24 | 0 | **103** | 53 | 26 | 92 | 0 | **171** | 65 | 903 | 28 | 0 | **996** | 47 | 1126 | 60 | 2 | **1235** | 2505 |
| **% Lights and Motorcycles** | 98.2% | 96.2% | 100% | 0% | **98.1%** | 98.1% | 100% | 97.9% | 0% | **98.3%** | 100% | 97.1% | 96.6% | 0% | **97.3%** | 100% | 99.3% | 98.4% | 100% | **99.3%** | 98.4% |
| **Heavy** | 1 | 1 | 0 | 0 | **2** | 1 | 0 | 2 | 0 | **3** | 0 | 27 | 1 | 0 | **28** | 0 | 8 | 1 | 0 | **9** | 42 |
| **% Heavy** | 1.8% | 3.8% | 0% | 0% | **1.9%** | 1.9% | 0% | 2.1% | 0% | **1.7%** | 0% | 2.9% | 3.4% | 0% | **2.7%** | 0% | 0.7% | 1.6% | 0% | **0.7%** | 1.6% |

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

**SMITH RD & US 40 - TMC**
Wed Jan 6, 2021
PM Peak (4:30 PM - 5:30 PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 807919, Location: 39.71619, -86.36131

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) | 35 | 817 | 1 | 12 | 564 | 12 | 8 | 0 | 0 | 22 | 7 | 28 |
| Future Volume (veh/h) | 35 | 817 | 1 | 12 | 564 | 12 | 8 | 0 | 0 | 22 | 7 | 28 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1841 | 1841 | 1900 | 1900 | 1841 | 1900 | 1648 | 1900 | 1900 | 1900 | 1900 | 1826 |
| Adj Flow Rate, veh/h | 36 | 851 | 1 | 12 | 588 | 12 | 8 | 0 | 0 | 23 | 7 | 29 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 4 | 4 | 0 | 0 | 4 | 0 | 17 | 0 | 0 | 0 | 0 | 5 |
| Cap, veh/h | 544 | 1340 | 641 | 537 | 1657 | 825 | 241 | 106 | 0 | 301 | 26 | 106 |
| Arrive On Green | 0.06 | 0.38 | 0.38 | 0.15 | 0.47 | 0.47 | 0.01 | 0.00 | 0.00 | 0.04 | 0.08 | 0.08 |
| Sat Flow, veh/h | 1753 | 3497 | 1610 | 1810 | 3497 | 1610 | 1570 | 1900 | 0 | 1810 | 323 | 1337 |
| Grp Volume(v), veh/h | 36 | 851 | 1 | 12 | 588 | 12 | 8 | 0 | 0 | 23 | 0 | 36 |
| Grp Sat Flow(s),veh/h/ln | 1753 | 1749 | 1610 | 1810 | 1749 | 1610 | 1570 | 1900 | 0 | 1810 | 0 | 1659 |
| Q Serve(g_s), s | 0.6 | 9.5 | 0.0 | 0.1 | 5.1 | 0.2 | 0.2 | 0.0 | 0.0 | 0.6 | 0.0 | 1.0 |
| Cycle Q Clear(g_c), s | 0.6 | 9.5 | 0.0 | 0.1 | 5.1 | 0.2 | 0.2 | 0.0 | 0.0 | 0.6 | 0.0 | 1.0 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.00 | 1.00 | | 0.81 |
| Lane Grp Cap(c), veh/h | 544 | 1340 | 641 | 537 | 1657 | 825 | 241 | 106 | 0 | 301 | 0 | 132 |
| V/C Ratio(X) | 0.07 | 0.64 | 0.00 | 0.02 | 0.35 | 0.01 | 0.03 | 0.00 | 0.00 | 0.08 | 0.00 | 0.27 |
| Avail Cap(c_a), veh/h | 776 | 2925 | 1370 | 612 | 2925 | 1408 | 513 | 556 | 0 | 571 | 0 | 486 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 7.7 | 12.0 | 8.7 | 5.8 | 8.0 | 5.7 | 20.8 | 0.0 | 0.0 | 19.9 | 0.0 | 20.7 |
| Incr Delay (d2), s/veh | 0.1 | 0.5 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 1.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.2 | 3.1 | 0.0 | 0.0 | 1.5 | 0.0 | 0.1 | 0.0 | 0.0 | 0.2 | 0.0 | 0.4 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 7.7 | 12.5 | 8.7 | 5.8 | 8.1 | 5.7 | 20.8 | 0.0 | 0.0 | 20.0 | 0.0 | 21.8 |
| LnGrp LOS | A | B | A | A | A | A | C | A | A | B | A | C |
| Approach Vol, veh/h | | 888 | | | 612 | | | 8 | | | 59 | |
| Approach Delay, s/veh | | 12.3 | | | 8.0 | | | 20.8 | | | 21.1 | |
| Approach LOS | | B | | | A | | | C | | | C | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 5.8 | 7.7 | 11.0 | 23.3 | 4.7 | 8.8 | 6.7 | 27.7 |
| Change Period (Y+Rc), s | 4.0 | 5.0 | 4.0 | 5.0 | 4.0 | 5.0 | 4.0 | 5.0 |
| Max Green Setting (Gmax), s | 9.0 | 14.0 | 9.0 | 40.0 | 9.0 | 14.0 | 9.0 | 40.0 |
| Max Q Clear Time (g_c+I1), s | 2.6 | 0.0 | 2.1 | 11.5 | 2.2 | 3.0 | 2.6 | 7.1 |
| Green Ext Time (p_c), s | 0.0 | 0.0 | 0.0 | 6.8 | 0.0 | 0.1 | 0.0 | 4.5 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 11.0 |
| HCM 6th LOS | B |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 72 | 1023 | 32 | 52 | 1247 | 67 | 61 | 29 | 26 | 59 | 29 | 103 |
| Future Volume (veh/h) | 72 | 1023 | 32 | 52 | 1247 | 67 | 61 | 29 | 26 | 59 | 29 | 103 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1900 | 1856 | 1856 | 1900 | 1885 | 1870 | 1870 | 1841 | 1900 | 1870 | 1900 | 1870 |
| Adj Flow Rate, veh/h | 75 | 1066 | 33 | 54 | 1299 | 70 | 64 | 30 | 27 | 61 | 30 | 107 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 0 | 3 | 3 | 0 | 1 | 2 | 2 | 4 | 0 | 2 | 0 | 2 |
| Cap, veh/h | 317 | 1594 | 824 | 400 | 1707 | 866 | 274 | 103 | 92 | 342 | 41 | 147 |
| Arrive On Green | 0.08 | 0.45 | 0.45 | 0.10 | 0.48 | 0.48 | 0.07 | 0.11 | 0.11 | 0.07 | 0.11 | 0.11 |
| Sat Flow, veh/h | 1810 | 3526 | 1572 | 1810 | 3582 | 1585 | 1781 | 893 | 803 | 1781 | 365 | 1301 |
| Grp Volume(v), veh/h | 75 | 1066 | 33 | 54 | 1299 | 70 | 64 | 0 | 57 | 61 | 0 | 137 |
| Grp Sat Flow(s),veh/h/ln | 1810 | 1763 | 1572 | 1810 | 1791 | 1585 | 1781 | 0 | 1696 | 1781 | 0 | 1666 |
| Q Serve(g_s), s | 1.4 | 16.4 | 0.7 | 0.9 | 20.5 | 1.4 | 2.1 | 0.0 | 2.1 | 2.0 | 0.0 | 5.5 |
| Cycle Q Clear(g_c), s | 1.4 | 16.4 | 0.7 | 0.9 | 20.5 | 1.4 | 2.1 | 0.0 | 2.1 | 2.0 | 0.0 | 5.5 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.47 | 1.00 | | 0.78 |
| Lane Grp Cap(c), veh/h | 317 | 1594 | 824 | 400 | 1707 | 866 | 274 | 0 | 195 | 342 | 0 | 188 |
| V/C Ratio(X) | 0.24 | 0.67 | 0.04 | 0.13 | 0.76 | 0.08 | 0.23 | 0.00 | 0.29 | 0.18 | 0.00 | 0.73 |
| Avail Cap(c_a), veh/h | 360 | 2201 | 1094 | 400 | 2236 | 1100 | 328 | 0 | 369 | 399 | 0 | 363 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 11.1 | 14.8 | 8.0 | 9.2 | 14.8 | 7.4 | 24.0 | 0.0 | 27.9 | 23.8 | 0.0 | 29.5 |
| Incr Delay (d2), s/veh | 0.4 | 0.5 | 0.0 | 0.2 | 1.1 | 0.0 | 0.4 | 0.0 | 0.8 | 0.2 | 0.0 | 5.3 |
| 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 | 5.9 | 0.2 | 0.3 | 7.5 | 0.4 | 0.9 | 0.0 | 0.9 | 0.8 | 0.0 | 2.4 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 11.5 | 15.3 | 8.0 | 9.4 | 16.0 | 7.5 | 24.4 | 0.0 | 28.7 | 24.1 | 0.0 | 34.8 |
| LnGrp LOS | B | B | A | A | B | A | C | A | C | C | A | C |
| Approach Vol, veh/h | | 1174 | | | 1423 | | | 121 | | | 198 | |
| Approach Delay, s/veh | | 14.9 | | | 15.3 | | | 26.4 | | | 31.5 | |
| Approach LOS | | B | | | B | | | C | | | C | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 8.8 | 12.9 | 11.0 | 36.2 | 8.9 | 12.8 | 9.3 | 37.8 |
| Change Period (Y+Rc), s | 4.0 | 5.0 | 4.0 | 5.0 | 4.0 | 5.0 | 4.0 | 5.0 |
| Max Green Setting (Gmax), s | 7.0 | 15.0 | 7.0 | 43.0 | 7.0 | 15.0 | 7.0 | 43.0 |
| Max Q Clear Time (g_c+I1), s | 4.0 | 4.1 | 2.9 | 18.4 | 4.1 | 7.5 | 3.4 | 22.5 |
| Green Ext Time (p_c), s | 0.0 | 0.1 | 0.0 | 8.8 | 0.0 | 0.4 | 0.0 | 10.3 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 16.7 |
| HCM 6th LOS | B |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 39 | 899 | 1 | 13 | 620 | 13 | 9 | 0 | 0 | 24 | 8 | 31 |
| Future Volume (veh/h) | 39 | 899 | 1 | 13 | 620 | 13 | 9 | 0 | 0 | 24 | 8 | 31 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1841 | 1841 | 1900 | 1900 | 1841 | 1900 | 1648 | 1900 | 1900 | 1900 | 1900 | 1826 |
| Adj Flow Rate, veh/h | 41 | 936 | 1 | 14 | 646 | 14 | 9 | 0 | 0 | 25 | 8 | 32 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 4 | 4 | 0 | 0 | 4 | 0 | 17 | 0 | 0 | 0 | 0 | 5 |
| Cap, veh/h | 530 | 1434 | 687 | 508 | 1703 | 850 | 237 | 110 | 0 | 299 | 27 | 110 |
| Arrive On Green | 0.06 | 0.41 | 0.41 | 0.14 | 0.49 | 0.49 | 0.02 | 0.00 | 0.00 | 0.04 | 0.08 | 0.08 |
| Sat Flow, veh/h | 1753 | 3497 | 1610 | 1810 | 3497 | 1610 | 1570 | 1900 | 0 | 1810 | 332 | 1329 |
| Grp Volume(v), veh/h | 41 | 936 | 1 | 14 | 646 | 14 | 9 | 0 | 0 | 25 | 0 | 40 |
| Grp Sat Flow(s),veh/h/ln | 1753 | 1749 | 1610 | 1810 | 1749 | 1610 | 1570 | 1900 | 0 | 1810 | 0 | 1661 |
| Q Serve(g_s), s | 0.6 | 11.0 | 0.0 | 0.2 | 5.9 | 0.2 | 0.3 | 0.0 | 0.0 | 0.6 | 0.0 | 1.2 |
| Cycle Q Clear(g_c), s | 0.6 | 11.0 | 0.0 | 0.2 | 5.9 | 0.2 | 0.3 | 0.0 | 0.0 | 0.6 | 0.0 | 1.2 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.00 | 1.00 | | 0.80 |
| Lane Grp Cap(c), veh/h | 530 | 1434 | 687 | 508 | 1703 | 850 | 237 | 110 | 0 | 299 | 0 | 137 |
| V/C Ratio(X) | 0.08 | 0.65 | 0.00 | 0.03 | 0.38 | 0.02 | 0.04 | 0.00 | 0.00 | 0.08 | 0.00 | 0.29 |
| Avail Cap(c_a), veh/h | 699 | 3022 | 1418 | 508 | 2953 | 1426 | 427 | 522 | 0 | 474 | 0 | 457 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 7.4 | 12.1 | 8.4 | 6.1 | 8.2 | 5.7 | 21.9 | 0.0 | 0.0 | 21.0 | 0.0 | 22.0 |
| Incr Delay (d2), s/veh | 0.1 | 0.5 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 1.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.2 | 3.6 | 0.0 | 0.0 | 1.8 | 0.1 | 0.1 | 0.0 | 0.0 | 0.3 | 0.0 | 0.5 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 7.4 | 12.6 | 8.4 | 6.1 | 8.4 | 5.7 | 22.0 | 0.0 | 0.0 | 21.1 | 0.0 | 23.1 |
| LnGrp LOS | A | B | A | A | A | A | C | A | A | C | A | C |
| Approach Vol, veh/h | | 978 | | | 674 | | | 9 | | | 65 | |
| Approach Delay, s/veh | | 12.4 | | | 8.3 | | | 22.0 | | | 22.3 | |
| Approach LOS | | B | | | A | | | C | | | C | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 6.1 | 8.0 | 11.0 | 25.9 | 4.8 | 9.2 | 7.1 | 29.8 |
| Change Period (Y+Rc), s | 4.0 | 5.0 | 4.0 | 5.0 | 4.0 | 5.0 | 4.0 | 5.0 |
| Max Green Setting (Gmax), s | 7.0 | 14.0 | 7.0 | 44.0 | 7.0 | 14.0 | 8.0 | 43.0 |
| Max Q Clear Time (g_c+I1), s | 2.6 | 0.0 | 2.2 | 13.0 | 2.3 | 3.2 | 2.6 | 7.9 |
| Green Ext Time (p_c), s | 0.0 | 0.0 | 0.0 | 7.9 | 0.0 | 0.1 | 0.0 | 5.1 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 11.2 |
| HCM 6th LOS | B |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 79 | 1125 | 35 | 57 | 1372 | 74 | 67 | 32 | 29 | 65 | 32 | 113 |
| Future Volume (veh/h) | 79 | 1125 | 35 | 57 | 1372 | 74 | 67 | 32 | 29 | 65 | 32 | 113 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1900 | 1856 | 1856 | 1900 | 1885 | 1885 | 1870 | 1841 | 1900 | 1870 | 1900 | 1870 |
| Adj Flow Rate, veh/h | 82 | 1172 | 36 | 59 | 1429 | 77 | 70 | 33 | 30 | 68 | 33 | 118 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 0 | 3 | 3 | 0 | 1 | 1 | 2 | 4 | 0 | 2 | 0 | 2 |
| Cap, veh/h | 290 | 1687 | 865 | 366 | 1774 | 904 | 260 | 106 | 96 | 335 | 43 | 154 |
| Arrive On Green | 0.08 | 0.48 | 0.48 | 0.09 | 0.50 | 0.50 | 0.07 | 0.12 | 0.12 | 0.07 | 0.12 | 0.12 |
| Sat Flow, veh/h | 1810 | 3526 | 1572 | 1810 | 3582 | 1598 | 1781 | 888 | 807 | 1781 | 364 | 1302 |
| Grp Volume(v), veh/h | 82 | 1172 | 36 | 59 | 1429 | 77 | 70 | 0 | 63 | 68 | 0 | 151 |
| Grp Sat Flow(s),veh/h/ln | 1810 | 1763 | 1572 | 1810 | 1791 | 1598 | 1781 | 0 | 1695 | 1781 | 0 | 1666 |
| Q Serve(g_s), s | 1.6 | 19.6 | 0.8 | 1.1 | 25.3 | 1.7 | 2.5 | 0.0 | 2.6 | 2.4 | 0.0 | 6.6 |
| Cycle Q Clear(g_c), s | 1.6 | 19.6 | 0.8 | 1.1 | 25.3 | 1.7 | 2.5 | 0.0 | 2.6 | 2.4 | 0.0 | 6.6 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.48 | 1.00 | | 0.78 |
| Lane Grp Cap(c), veh/h | 290 | 1687 | 865 | 366 | 1774 | 904 | 260 | 0 | 202 | 335 | 0 | 197 |
| V/C Ratio(X) | 0.28 | 0.69 | 0.04 | 0.16 | 0.81 | 0.09 | 0.27 | 0.00 | 0.31 | 0.20 | 0.00 | 0.77 |
| Avail Cap(c_a), veh/h | 320 | 2057 | 1030 | 366 | 2090 | 1045 | 299 | 0 | 315 | 375 | 0 | 309 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 12.8 | 15.4 | 7.8 | 10.1 | 16.0 | 7.5 | 26.1 | 0.0 | 30.4 | 25.8 | 0.0 | 32.2 |
| Incr Delay (d2), s/veh | 0.5 | 0.8 | 0.0 | 0.2 | 2.1 | 0.0 | 0.5 | 0.0 | 0.9 | 0.3 | 0.0 | 6.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.6 | 7.2 | 0.2 | 0.4 | 9.6 | 0.5 | 1.1 | 0.0 | 1.1 | 1.0 | 0.0 | 2.9 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 13.3 | 16.1 | 7.8 | 10.3 | 18.1 | 7.5 | 26.6 | 0.0 | 31.2 | 26.1 | 0.0 | 38.3 |
| LnGrp LOS | B | B | A | B | B | A | C | A | C | C | A | D |
| Approach Vol, veh/h | | 1290 | | | 1565 | | | 133 | | | 219 | |
| Approach Delay, s/veh | | 15.7 | | | 17.2 | | | 28.8 | | | 34.5 | |
| Approach LOS | | B | | | B | | | C | | | C | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 9.3 | 14.0 | 11.0 | 41.1 | 9.4 | 13.9 | 9.7 | 42.3 |
| Change Period (Y+Rc), s | 4.0 | 5.0 | 4.0 | 5.0 | 4.0 | 5.0 | 4.0 | 5.0 |
| Max Green Setting (Gmax), s | 7.3 | 14.0 | 7.0 | 44.0 | 7.0 | 14.0 | 7.0 | 44.0 |
| Max Q Clear Time (g_c+I1), s | 4.4 | 4.6 | 3.1 | 21.6 | 4.5 | 8.6 | 3.6 | 27.3 |
| Green Ext Time (p_c), s | 0.0 | 0.1 | 0.0 | 9.5 | 0.0 | 0.3 | 0.0 | 10.1 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 18.3 |
| HCM 6th LOS | B |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 75 | 907 | 1 | 12 | 656 | 12 | 8 | 0 | 0 | 22 | 7 | 94 |
| Future Volume (veh/h) | 75 | 907 | 1 | 12 | 656 | 12 | 8 | 0 | 0 | 22 | 7 | 94 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1885 | 1841 | 1900 | 1900 | 1841 | 1900 | 1722 | 1900 | 1900 | 1900 | 1900 | 1885 |
| Adj Flow Rate, veh/h | 78 | 945 | 1 | 12 | 683 | 12 | 8 | 0 | 0 | 23 | 7 | 98 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 1 | 4 | 0 | 0 | 4 | 0 | 12 | 0 | 0 | 0 | 0 | 1 |
| Cap, veh/h | 532 | 1411 | 673 | 484 | 1556 | 778 | 219 | 168 | 0 | 331 | 12 | 170 |
| Arrive On Green | 0.09 | 0.40 | 0.40 | 0.13 | 0.45 | 0.45 | 0.01 | 0.00 | 0.00 | 0.04 | 0.11 | 0.11 |
| Sat Flow, veh/h | 1795 | 3497 | 1610 | 1810 | 3497 | 1610 | 1640 | 1900 | 0 | 1810 | 108 | 1518 |
| Grp Volume(v), veh/h | 78 | 945 | 1 | 12 | 683 | 12 | 8 | 0 | 0 | 23 | 0 | 105 |
| Grp Sat Flow(s),veh/h/ln | 1795 | 1749 | 1610 | 1810 | 1749 | 1610 | 1640 | 1900 | 0 | 1810 | 0 | 1627 |
| Q Serve(g_s), s | 1.2 | 11.7 | 0.0 | 0.2 | 7.2 | 0.2 | 0.2 | 0.0 | 0.0 | 0.6 | 0.0 | 3.3 |
| Cycle Q Clear(g_c), s | 1.2 | 11.7 | 0.0 | 0.2 | 7.2 | 0.2 | 0.2 | 0.0 | 0.0 | 0.6 | 0.0 | 3.3 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.00 | 1.00 | | 0.93 |
| Lane Grp Cap(c), veh/h | 532 | 1411 | 673 | 484 | 1556 | 778 | 219 | 168 | 0 | 331 | 0 | 182 |
| V/C Ratio(X) | 0.15 | 0.67 | 0.00 | 0.02 | 0.44 | 0.02 | 0.04 | 0.00 | 0.00 | 0.07 | 0.00 | 0.58 |
| Avail Cap(c_a), veh/h | 674 | 2697 | 1265 | 484 | 2565 | 1242 | 411 | 607 | 0 | 501 | 0 | 520 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 7.4 | 13.0 | 9.0 | 7.1 | 10.2 | 7.2 | 21.5 | 0.0 | 0.0 | 20.6 | 0.0 | 22.4 |
| Incr Delay (d2), s/veh | 0.1 | 0.6 | 0.0 | 0.0 | 0.2 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 2.9 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.4 | 4.0 | 0.0 | 0.0 | 2.3 | 0.1 | 0.1 | 0.0 | 0.0 | 0.2 | 0.0 | 1.3 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 7.5 | 13.5 | 9.0 | 7.1 | 10.4 | 7.2 | 21.6 | 0.0 | 0.0 | 20.6 | 0.0 | 25.3 |
| LnGrp LOS | A | B | A | A | B | A | C | A | A | C | A | C |
| Approach Vol, veh/h | | 1024 | | | 707 | | | 8 | | | 128 | |
| Approach Delay, s/veh | | 13.1 | | | 10.3 | | | 21.6 | | | 24.5 | |
| Approach LOS | | B | | | B | | | C | | | C | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 6.0 | 9.7 | 11.0 | 26.5 | 4.8 | 10.9 | 8.8 | 28.7 |
| Change Period (Y+Rc), s | 4.0 | 5.0 | 4.0 | 5.0 | 4.0 | 5.0 | 4.0 | 5.0 |
| Max Green Setting (Gmax), s | 7.0 | 17.0 | 7.0 | 41.0 | 7.0 | 17.0 | 9.0 | 39.0 |
| Max Q Clear Time (g_c+I1), s | 2.2 | 0.0 | 2.2 | 13.7 | 2.2 | 5.3 | 3.2 | 9.2 |
| Green Ext Time (p_c), s | 0.0 | 0.0 | 0.0 | 7.7 | 0.0 | 0.4 | 0.1 | 5.3 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 12.8 |
| HCM 6th LOS | B |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 153 | 1139 | 32 | 52 | 1326 | 67 | 61 | 29 | 26 | 59 | 29 | 175 |
| Future Volume (veh/h) | 153 | 1139 | 32 | 52 | 1326 | 67 | 61 | 29 | 26 | 59 | 29 | 175 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1900 | 1856 | 1856 | 1900 | 1885 | 1870 | 1870 | 1856 | 1900 | 1870 | 1900 | 1885 |
| Adj Flow Rate, veh/h | 159 | 1186 | 33 | 54 | 1381 | 70 | 64 | 30 | 27 | 61 | 30 | 182 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 0 | 3 | 3 | 0 | 1 | 2 | 2 | 3 | 0 | 2 | 0 | 1 |
| Cap, veh/h | 295 | 1644 | 838 | 341 | 1680 | 846 | 242 | 139 | 125 | 375 | 36 | 216 |
| Arrive On Green | 0.09 | 0.47 | 0.47 | 0.09 | 0.47 | 0.47 | 0.07 | 0.15 | 0.15 | 0.07 | 0.15 | 0.15 |
| Sat Flow, veh/h | 1810 | 3526 | 1572 | 1810 | 3582 | 1585 | 1781 | 900 | 810 | 1781 | 233 | 1413 |
| Grp Volume(v), veh/h | 159 | 1186 | 33 | 54 | 1381 | 70 | 64 | 0 | 57 | 61 | 0 | 212 |
| Grp Sat Flow(s),veh/h/ln | 1810 | 1763 | 1572 | 1810 | 1791 | 1585 | 1781 | 0 | 1710 | 1781 | 0 | 1646 |
| Q Serve(g_s), s | 3.4 | 21.5 | 0.8 | 1.1 | 26.5 | 1.7 | 2.3 | 0.0 | 2.3 | 2.2 | 0.0 | 10.0 |
| Cycle Q Clear(g_c), s | 3.4 | 21.5 | 0.8 | 1.1 | 26.5 | 1.7 | 2.3 | 0.0 | 2.3 | 2.2 | 0.0 | 10.0 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.47 | 1.00 | | 0.86 |
| Lane Grp Cap(c), veh/h | 295 | 1644 | 838 | 341 | 1680 | 846 | 242 | 0 | 264 | 375 | 0 | 252 |
| V/C Ratio(X) | 0.54 | 0.72 | 0.04 | 0.16 | 0.82 | 0.08 | 0.26 | 0.00 | 0.22 | 0.16 | 0.00 | 0.84 |
| Avail Cap(c_a), veh/h | 323 | 1948 | 974 | 341 | 1934 | 959 | 280 | 0 | 301 | 416 | 0 | 289 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 15.7 | 17.1 | 8.9 | 11.5 | 18.3 | 9.0 | 25.8 | 0.0 | 29.4 | 25.2 | 0.0 | 32.8 |
| Incr Delay (d2), s/veh | 1.5 | 1.1 | 0.0 | 0.2 | 2.6 | 0.0 | 0.6 | 0.0 | 0.4 | 0.2 | 0.0 | 17.6 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.3 | 8.2 | 0.3 | 0.4 | 10.6 | 0.6 | 1.0 | 0.0 | 1.0 | 0.9 | 0.0 | 5.1 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 17.2 | 18.2 | 8.9 | 11.7 | 20.9 | 9.1 | 26.4 | 0.0 | 29.8 | 25.4 | 0.0 | 50.4 |
| LnGrp LOS | B | B | A | B | C | A | C | A | C | C | A | D |
| Approach Vol, veh/h | | 1378 | | | 1505 | | | 121 | | | 273 | |
| Approach Delay, s/veh | | 17.8 | | | 20.0 | | | 28.0 | | | 44.8 | |
| Approach LOS | | B | | | C | | | C | | | D | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 9.2 | 17.3 | 11.0 | 42.1 | 9.3 | 17.2 | 10.8 | 42.3 |
| Change Period (Y+Rc), s | 4.0 | 5.0 | 4.0 | 5.0 | 4.0 | 5.0 | 4.0 | 5.0 |
| Max Green Setting (Gmax), s | 7.0 | 14.0 | 7.0 | 44.0 | 7.0 | 14.0 | 8.0 | 43.0 |
| Max Q Clear Time (g_c+I1), s | 4.4 | 4.3 | 3.1 | 23.5 | 4.3 | 12.0 | 5.4 | 28.5 |
| Green Ext Time (p_c), s | 0.0 | 0.1 | 0.0 | 9.2 | 0.0 | 0.2 | 0.1 | 8.8 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 21.5 |
| HCM 6th LOS | C |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 79 | 989 | 1 | 13 | 712 | 13 | 9 | 0 | 0 | 24 | 8 | 97 |
| Future Volume (veh/h) | 79 | 989 | 1 | 13 | 712 | 13 | 9 | 0 | 0 | 24 | 8 | 97 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1885 | 1841 | 1900 | 1900 | 1841 | 1900 | 1737 | 1900 | 1900 | 1900 | 1900 | 1885 |
| Adj Flow Rate, veh/h | 82 | 1030 | 1 | 14 | 742 | 14 | 9 | 0 | 0 | 25 | 8 | 101 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 1 | 4 | 0 | 0 | 4 | 0 | 11 | 0 | 0 | 0 | 0 | 1 |
| Cap, veh/h | 518 | 1498 | 716 | 460 | 1620 | 811 | 210 | 162 | 0 | 324 | 13 | 165 |
| Arrive On Green | 0.09 | 0.43 | 0.43 | 0.12 | 0.46 | 0.46 | 0.02 | 0.00 | 0.00 | 0.04 | 0.11 | 0.11 |
| Sat Flow, veh/h | 1795 | 3497 | 1610 | 1810 | 3497 | 1610 | 1654 | 1900 | 0 | 1810 | 120 | 1509 |
| Grp Volume(v), veh/h | 82 | 1030 | 1 | 14 | 742 | 14 | 9 | 0 | 0 | 25 | 0 | 109 |
| Grp Sat Flow(s),veh/h/ln | 1795 | 1749 | 1610 | 1810 | 1749 | 1610 | 1654 | 1900 | 0 | 1810 | 0 | 1628 |
| Q Serve(g_s), s | 1.3 | 13.4 | 0.0 | 0.2 | 8.1 | 0.2 | 0.3 | 0.0 | 0.0 | 0.7 | 0.0 | 3.6 |
| Cycle Q Clear(g_c), s | 1.3 | 13.4 | 0.0 | 0.2 | 8.1 | 0.2 | 0.3 | 0.0 | 0.0 | 0.7 | 0.0 | 3.6 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.00 | 1.00 | | 0.93 |
| Lane Grp Cap(c), veh/h | 518 | 1498 | 716 | 460 | 1620 | 811 | 210 | 162 | 0 | 324 | 0 | 178 |
| V/C Ratio(X) | 0.16 | 0.69 | 0.00 | 0.03 | 0.46 | 0.02 | 0.04 | 0.00 | 0.00 | 0.08 | 0.00 | 0.61 |
| Avail Cap(c_a), veh/h | 580 | 2682 | 1261 | 460 | 2682 | 1300 | 389 | 508 | 0 | 477 | 0 | 436 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 7.2 | 13.0 | 8.6 | 7.3 | 10.3 | 7.0 | 22.8 | 0.0 | 0.0 | 21.7 | 0.0 | 23.8 |
| Incr Delay (d2), s/veh | 0.1 | 0.6 | 0.0 | 0.0 | 0.2 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 3.4 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.4 | 4.5 | 0.0 | 0.1 | 2.6 | 0.1 | 0.1 | 0.0 | 0.0 | 0.3 | 0.0 | 1.5 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 7.3 | 13.5 | 8.6 | 7.3 | 10.5 | 7.0 | 22.9 | 0.0 | 0.0 | 21.8 | 0.0 | 27.2 |
| LnGrp LOS | A | B | A | A | B | A | C | A | A | C | A | C |
| Approach Vol, veh/h | | 1113 | | | 770 | | | 9 | | | 134 | |
| Approach Delay, s/veh | | 13.1 | | | 10.3 | | | 22.9 | | | 26.2 | |
| Approach LOS | | B | | | B | | | C | | | C | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 6.3 | 9.8 | 11.0 | 29.0 | 4.9 | 11.1 | 9.0 | 31.0 |
| Change Period (Y+Rc), s | 4.0 | 5.0 | 4.0 | 5.0 | 4.0 | 5.0 | 4.0 | 5.0 |
| Max Green Setting (Gmax), s | 7.3 | 15.0 | 7.0 | 43.0 | 7.0 | 15.0 | 7.0 | 43.0 |
| Max Q Clear Time (g_c+I1), s | 2.7 | 0.0 | 2.2 | 15.4 | 2.3 | 5.6 | 3.3 | 10.1 |
| Green Ext Time (p_c), s | 0.0 | 0.0 | 0.0 | 8.6 | 0.0 | 0.3 | 0.0 | 6.0 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 13.0 |
| HCM 6th LOS | B |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 160 | 1241 | 35 | 57 | 1451 | 74 | 67 | 32 | 29 | 65 | 32 | 185 |
| Future Volume (veh/h) | 160 | 1241 | 35 | 57 | 1451 | 74 | 67 | 32 | 29 | 65 | 32 | 185 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1900 | 1856 | 1856 | 1900 | 1885 | 1885 | 1870 | 1856 | 1900 | 1870 | 1900 | 1885 |
| Adj Flow Rate, veh/h | 167 | 1293 | 36 | 59 | 1511 | 77 | 70 | 33 | 30 | 68 | 33 | 193 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 0 | 3 | 3 | 0 | 1 | 1 | 2 | 3 | 0 | 2 | 0 | 1 |
| Cap, veh/h | 265 | 1700 | 863 | 309 | 1732 | 878 | 231 | 142 | 129 | 371 | 38 | 223 |
| Arrive On Green | 0.08 | 0.48 | 0.48 | 0.08 | 0.48 | 0.48 | 0.07 | 0.16 | 0.16 | 0.07 | 0.16 | 0.16 |
| Sat Flow, veh/h | 1810 | 3526 | 1572 | 1810 | 3582 | 1598 | 1781 | 895 | 814 | 1781 | 240 | 1406 |
| Grp Volume(v), veh/h | 167 | 1293 | 36 | 59 | 1511 | 77 | 70 | 0 | 63 | 68 | 0 | 226 |
| Grp Sat Flow(s),veh/h/ln | 1810 | 1763 | 1572 | 1810 | 1791 | 1598 | 1781 | 0 | 1709 | 1781 | 0 | 1647 |
| Q Serve(g_s), s | 3.8 | 25.6 | 0.9 | 1.3 | 32.1 | 1.9 | 2.7 | 0.0 | 2.7 | 2.6 | 0.0 | 11.4 |
| Cycle Q Clear(g_c), s | 3.8 | 25.6 | 0.9 | 1.3 | 32.1 | 1.9 | 2.7 | 0.0 | 2.7 | 2.6 | 0.0 | 11.4 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.48 | 1.00 | | 0.85 |
| Lane Grp Cap(c), veh/h | 265 | 1700 | 863 | 309 | 1732 | 878 | 231 | 0 | 272 | 371 | 0 | 261 |
| V/C Ratio(X) | 0.63 | 0.76 | 0.04 | 0.19 | 0.87 | 0.09 | 0.30 | 0.00 | 0.23 | 0.18 | 0.00 | 0.87 |
| Avail Cap(c_a), veh/h | 268 | 1861 | 934 | 309 | 1848 | 929 | 259 | 0 | 281 | 400 | 0 | 270 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 17.9 | 18.1 | 8.9 | 12.8 | 19.7 | 9.1 | 27.5 | 0.0 | 31.3 | 26.7 | 0.0 | 35.0 |
| Incr Delay (d2), s/veh | 4.6 | 1.7 | 0.0 | 0.3 | 4.7 | 0.0 | 0.7 | 0.0 | 0.4 | 0.2 | 0.0 | 23.9 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.8 | 10.0 | 0.3 | 0.5 | 13.3 | 0.6 | 1.2 | 0.0 | 1.1 | 1.1 | 0.0 | 6.2 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 22.5 | 19.8 | 8.9 | 13.1 | 24.3 | 9.1 | 28.2 | 0.0 | 31.7 | 27.0 | 0.0 | 59.0 |
| LnGrp LOS | C | B | A | B | C | A | C | A | C | C | A | E |
| Approach Vol, veh/h | | 1496 | | | 1647 | | | 133 | | | 294 | |
| Approach Delay, s/veh | | 19.8 | | | 23.2 | | | 29.9 | | | 51.6 | |
| Approach LOS | | B | | | C | | | C | | | D | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 9.6 | 18.6 | 11.0 | 46.1 | 9.7 | 18.5 | 10.9 | 46.2 |
| Change Period (Y+Rc), s | 4.0 | 5.0 | 4.0 | 5.0 | 4.0 | 5.0 | 4.0 | 5.0 |
| Max Green Setting (Gmax), s | 7.0 | 14.0 | 7.0 | 45.0 | 7.0 | 14.0 | 7.0 | 44.0 |
| Max Q Clear Time (g_c+I1), s | 4.6 | 4.7 | 3.3 | 27.6 | 4.7 | 13.4 | 5.8 | 34.1 |
| Green Ext Time (p_c), s | 0.0 | 0.1 | 0.0 | 9.2 | 0.0 | 0.1 | 0.1 | 7.1 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 24.4 |
| HCM 6th LOS | C |

# *US 40 & PERRY ROAD*

## *TRAFFIC VOLUME COUNTS*
## *CAPACITY ANALYSIS*

## PERRY RD & US 40 - TMC

Wed Jan 6, 2021
Full Length (6:30 AM-8:30 AM, 4 PM-7 PM)
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 807911, Location: 39.71764, -86.357651

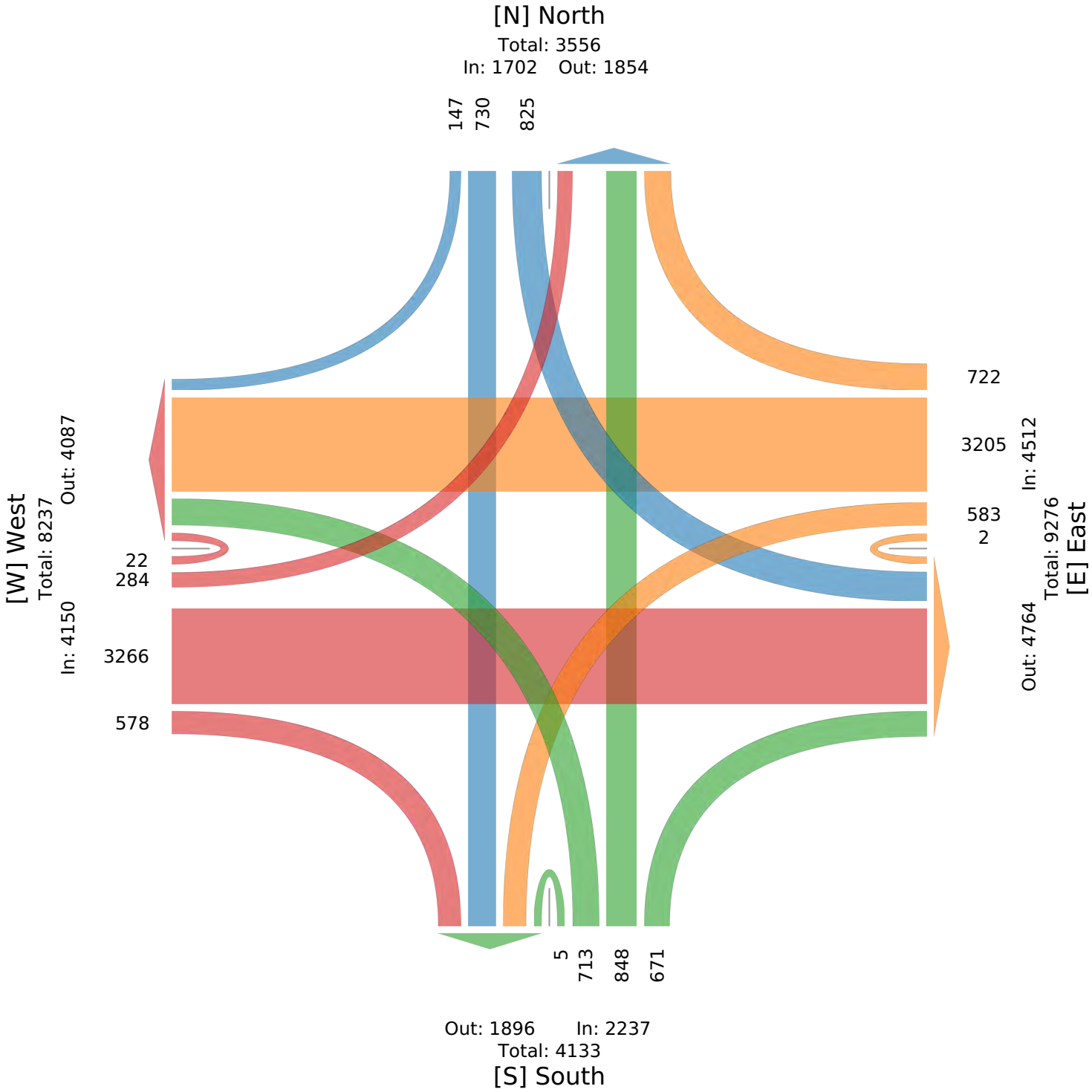
Provided by: A&F Engineering
8365 Keystone Crossing, Suite 201, Indianapolis, IN, 46240, US

| 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** |
| 2021-01-06 6:30AM | 7 | 1 | 17 | 0 | **25** | 33 | 31 | 1 | 0 | **65** | 3 | 121 | 8 | 0 | **132** | 35 | 48 | 10 | 0 | **93** | **315** |
| 6:45AM | 11 | 13 | 13 | 0 | **37** | 36 | 44 | 2 | 0 | **82** | 2 | 132 | 14 | 0 | **148** | 31 | 86 | 7 | 0 | **124** | **391** |
| Hourly Total | 18 | 14 | 30 | 0 | **62** | 69 | 75 | 3 | 0 | **147** | 5 | 253 | 22 | 0 | **280** | 66 | 134 | 17 | 0 | **217** | **706** |
| 7:00AM | 18 | 14 | 21 | 0 | **53** | 32 | 35 | 0 | 0 | **67** | 1 | 151 | 9 | 1 | **162** | 20 | 77 | 7 | 0 | **104** | **386** |
| 7:15AM | 7 | 10 | 11 | 0 | **28** | 56 | 24 | 4 | 0 | **84** | 2 | 160 | 7 | 0 | **169** | 20 | 78 | 10 | 0 | **108** | **389** |
| 7:30AM | 9 | 8 | 15 | 0 | **32** | 38 | 25 | 2 | 0 | **65** | 6 | 162 | 12 | 1 | **181** | 22 | 88 | 11 | 0 | **121** | **399** |
| 7:45AM | 13 | 22 | 27 | 0 | **62** | 50 | 47 | 2 | 0 | **99** | 4 | 131 | 8 | 1 | **144** | 29 | 115 | 20 | 0 | **164** | **469** |
| Hourly Total | 47 | 54 | 74 | 0 | **175** | 176 | 131 | 8 | 0 | **315** | 13 | 604 | 36 | 3 | **656** | 91 | 358 | 48 | 0 | **497** | **1643** |
| 8:00AM | 18 | 12 | 22 | 0 | **52** | 55 | 25 | 3 | 0 | **83** | 4 | 117 | 6 | 1 | **128** | 18 | 98 | 15 | 0 | **131** | **394** |
| 8:15AM | 18 | 20 | 15 | 0 | **53** | 43 | 21 | 2 | 0 | **66** | 7 | 129 | 10 | 0 | **146** | 11 | 96 | 12 | 1 | **120** | **385** |
| 8:30AM | 0 | 0 | 0 | 0 | **0** | 0 | 0 | 0 | 0 | **0** | 0 | 0 | 0 | 0 | **0** | 0 | 0 | 0 | 0 | **0** | **0** |
| Hourly Total | 36 | 32 | 37 | 0 | **105** | 98 | 46 | 5 | 0 | **149** | 11 | 246 | 16 | 1 | **274** | 29 | 194 | 27 | 1 | **251** | **779** |
| 4:00PM | 56 | 48 | 48 | 0 | **152** | 45 | 26 | 16 | 0 | **87** | 22 | 204 | 35 | 3 | **264** | 34 | 250 | 61 | 0 | **345** | **848** |
| 4:15PM | 49 | 44 | 51 | 0 | **144** | 39 | 40 | 13 | 0 | **92** | 21 | 148 | 44 | 3 | **216** | 47 | 203 | 39 | 0 | **289** | **741** |
| 4:30PM | 48 | 63 | 55 | 0 | **166** | 33 | 24 | 6 | 0 | **63** | 11 | 194 | 44 | 1 | **250** | 31 | 258 | 57 | 0 | **346** | **825** |
| 4:45PM | 48 | 77 | 60 | 1 | **186** | 51 | 43 | 10 | 0 | **104** | 19 | 191 | 45 | 1 | **256** | 33 | 220 | 66 | 0 | **319** | **865** |
| Hourly Total | 201 | 232 | 214 | 1 | **648** | 168 | 133 | 45 | 0 | **346** | 73 | 737 | 168 | 8 | **986** | 145 | 931 | 223 | 0 | **1299** | **3279** |
| 5:00PM | 58 | 63 | 52 | 1 | **174** | 39 | 43 | 14 | 0 | **96** | 20 | 207 | 40 | 0 | **267** | 37 | 252 | 70 | 0 | **359** | **896** |
| 5:15PM | 57 | 98 | 44 | 0 | **199** | 57 | 64 | 6 | 0 | **127** | 25 | 194 | 43 | 2 | **264** | 31 | 251 | 58 | 1 | **341** | **931** |
| 5:30PM | 45 | 69 | 58 | 0 | **172** | 48 | 48 | 10 | 0 | **106** | 21 | 207 | 47 | 1 | **276** | 32 | 230 | 69 | 0 | **331** | **885** |
| 5:45PM | 57 | 64 | 33 | 1 | **155** | 51 | 47 | 16 | 0 | **114** | 27 | 168 | 45 | 1 | **241** | 37 | 187 | 47 | 0 | **271** | **781** |
| Hourly Total | 217 | 294 | 187 | 2 | **700** | 195 | 202 | 46 | 0 | **443** | 93 | 776 | 175 | 4 | **1048** | 137 | 920 | 244 | 1 | **1302** | **3493** |
| 6:00PM | 52 | 67 | 41 | 1 | **161** | 28 | 29 | 14 | 0 | **71** | 28 | 210 | 43 | 1 | **282** | 35 | 221 | 44 | 0 | **300** | **814** |
| 6:15PM | 47 | 68 | 30 | 0 | **145** | 35 | 49 | 7 | 0 | **91** | 23 | 169 | 43 | 4 | **239** | 36 | 143 | 44 | 0 | **223** | **698** |
| 6:30PM | 45 | 49 | 28 | 0 | **122** | 23 | 26 | 9 | 0 | **58** | 18 | 155 | 51 | 0 | **224** | 26 | 154 | 51 | 0 | **231** | **635** |
| 6:45PM | 50 | 38 | 30 | 1 | **119** | 33 | 39 | 10 | 0 | **82** | 20 | 116 | 24 | 1 | **161** | 18 | 149 | 24 | 0 | **191** | **553** |
| Hourly Total | 194 | 222 | 129 | 2 | **547** | 119 | 143 | 40 | 0 | **302** | 89 | 650 | 161 | 6 | **906** | 115 | 667 | 163 | 0 | **945** | **2700** |
| 7:00PM | 0 | 0 | 0 | 0 | **0** | 0 | 0 | 0 | 0 | **0** | 0 | 0 | 0 | 0 | **0** | 0 | 1 | 0 | 0 | **1** | **1** |
| Hourly Total | 0 | 0 | 0 | 0 | **0** | 0 | 0 | 0 | 0 | **0** | 0 | 0 | 0 | 0 | **0** | 0 | 1 | 0 | 0 | **1** | **1** |
| **Total** | 713 | 848 | 671 | 5 | **2237** | 825 | 730 | 147 | 0 | **1702** | 284 | 3266 | 578 | 22 | **4150** | 583 | 3205 | 722 | 2 | **4512** | **12601** |
| **% Approach** | 31.9% | 37.9% | 30.0% | 0.2% | **-** | 48.5% | 42.9% | 8.6% | 0% | **-** | 6.8% | 78.7% | 13.9% | 0.5% | **-** | 12.9% | 71.0% | 16.0% | 0% | **-** | - |
| **% Total** | 5.7% | 6.7% | 5.3% | 0% | **17.8%** | 6.5% | 5.8% | 1.2% | 0% | **13.5%** | 2.3% | 25.9% | 4.6% | 0.2% | **32.9%** | 4.6% | 25.4% | 5.7% | 0% | **35.8%** | - |
| **Lights and Motorcycles** | 708 | 844 | 638 | 5 | **2195** | 818 | 727 | 144 | 0 | **1689** | 283 | 3164 | 565 | 22 | **4034** | 564 | 3162 | 708 | 2 | **4436** | 12354 |
| **% Lights and Motorcycles** | 99.3% | 99.5% | 95.1% | 100% | **98.1%** | 99.2% | 99.6% | 98.0% | 0% | **99.2%** | 99.6% | 96.9% | 97.8% | 100% | **97.2%** | 96.7% | 98.7% | 98.1% | 100% | **98.3%** | 98.0% |
| **Heavy** | 5 | 4 | 33 | 0 | **42** | 7 | 3 | 3 | 0 | **13** | 1 | 102 | 13 | 0 | **116** | 19 | 43 | 14 | 0 | **76** | 247 |
| **% Heavy** | 0.7% | 0.5% | 4.9% | 0% | **1.9%** | 0.8% | 0.4% | 2.0% | 0% | **0.8%** | 0.4% | 3.1% | 2.2% | 0% | **2.8%** | 3.3% | 1.3% | 1.9% | 0% | **1.7%** | 2.0% |

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

**PERRY RD & US 40 - TMC**
Wed Jan 6, 2021
Full Length (6:30 AM-8:30 AM, 4 PM-7 PM)
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 807911, Location: 39.71764, -86.357651

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



## PERRY RD & US 40 - TMC

Wed Jan 6, 2021
AM Peak (7:15 AM - 8:15 AM)
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 807911, Location: 39.71764, -86.357651

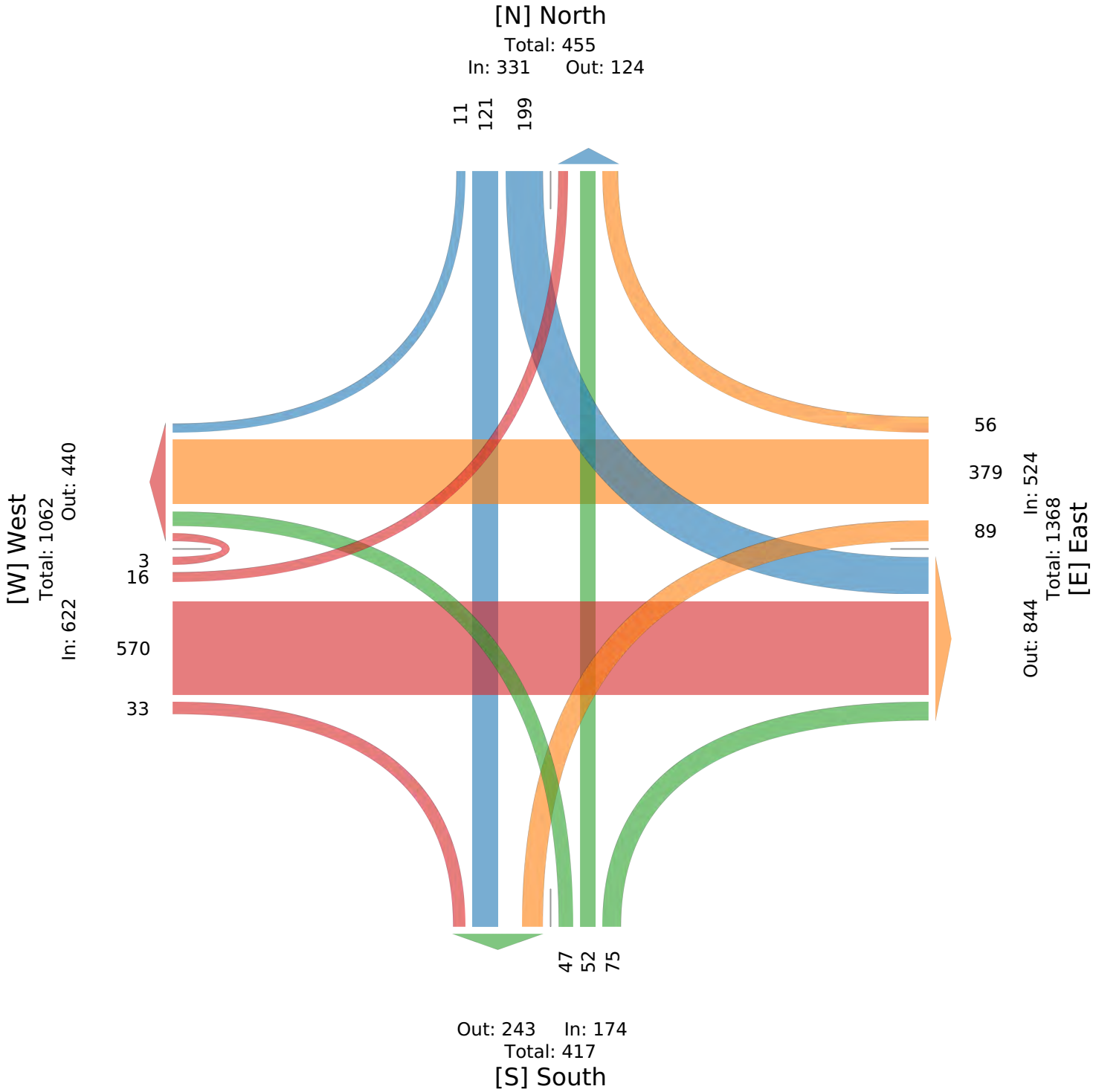
Provided by: A&F Engineering
8365 Keystone Crossing, Suite 201, Indianapolis, IN, 46240, US

| 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** |
| 2021-01-06 7:15AM | 7 | 10 | 11 | 0 | **28** | 56 | 24 | 4 | 0 | **84** | 2 | 160 | 7 | 0 | **169** | 20 | 78 | 10 | 0 | **108** | **389** |
| 7:30AM | 9 | 8 | 15 | 0 | **32** | 38 | 25 | 2 | 0 | **65** | 6 | 162 | 12 | 1 | **181** | 22 | 88 | 11 | 0 | **121** | **399** |
| 7:45AM | 13 | 22 | 27 | 0 | **62** | 50 | 47 | 2 | 0 | **99** | 4 | 131 | 8 | 1 | **144** | 29 | 115 | 20 | 0 | **164** | **469** |
| 8:00AM | 18 | 12 | 22 | 0 | **52** | 55 | 25 | 3 | 0 | **83** | 4 | 117 | 6 | 1 | **128** | 18 | 98 | 15 | 0 | **131** | **394** |
| **Total** | 47 | 52 | 75 | 0 | **174** | 199 | 121 | 11 | 0 | **331** | 16 | 570 | 33 | 3 | **622** | 89 | 379 | 56 | 0 | **524** | **1651** |
| **% Approach** | 27.0% | 29.9% | 43.1% | 0% | **-** | 60.1% | 36.6% | 3.3% | 0% | **-** | 2.6% | 91.6% | 5.3% | 0.5% | **-** | 17.0% | 72.3% | 10.7% | 0% | **-** | - |
| **% Total** | 2.8% | 3.1% | 4.5% | 0% | **10.5%** | 12.1% | 7.3% | 0.7% | 0% | **20.0%** | 1.0% | 34.5% | 2.0% | 0.2% | **37.7%** | 5.4% | 23.0% | 3.4% | 0% | **31.7%** | - |
| **PHF** | 0.653 | 0.591 | 0.694 | - | **0.702** | 0.888 | 0.644 | 0.688 | - | **0.836** | 0.667 | 0.880 | 0.688 | 0.750 | **0.859** | 0.767 | 0.824 | 0.700 | - | **0.799** | 0.880 |
| **Lights and Motorcycles** | 47 | 50 | 68 | 0 | **165** | 195 | 121 | 9 | 0 | **325** | 16 | 547 | 32 | 3 | **598** | 87 | 368 | 54 | 0 | **509** | 1597 |
| **% Lights and Motorcycles** | 100% | 96.2% | 90.7% | 0% | **94.8%** | 98.0% | 100% | 81.8% | 0% | **98.2%** | 100% | 96.0% | 97.0% | 100% | **96.1%** | 97.8% | 97.1% | 96.4% | 0% | **97.1%** | 96.7% |
| **Heavy** | 0 | 2 | 7 | 0 | **9** | 4 | 0 | 2 | 0 | **6** | 0 | 23 | 1 | 0 | **24** | 2 | 11 | 2 | 0 | **15** | 54 |
| **% Heavy** | 0% | 3.8% | 9.3% | 0% | **5.2%** | 2.0% | 0% | 18.2% | 0% | **1.8%** | 0% | 4.0% | 3.0% | 0% | **3.9%** | 2.2% | 2.9% | 3.6% | 0% | **2.9%** | 3.3% |

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

**PERRY RD & US 40 - TMC**
Wed Jan 6, 2021
AM Peak (7:15 AM - 8:15 AM)
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 807911, Location: 39.71764, -86.357651

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



## PERRY RD & US 40 - TMC

Wed Jan 6, 2021
PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 807911, Location: 39.71764, -86.357651

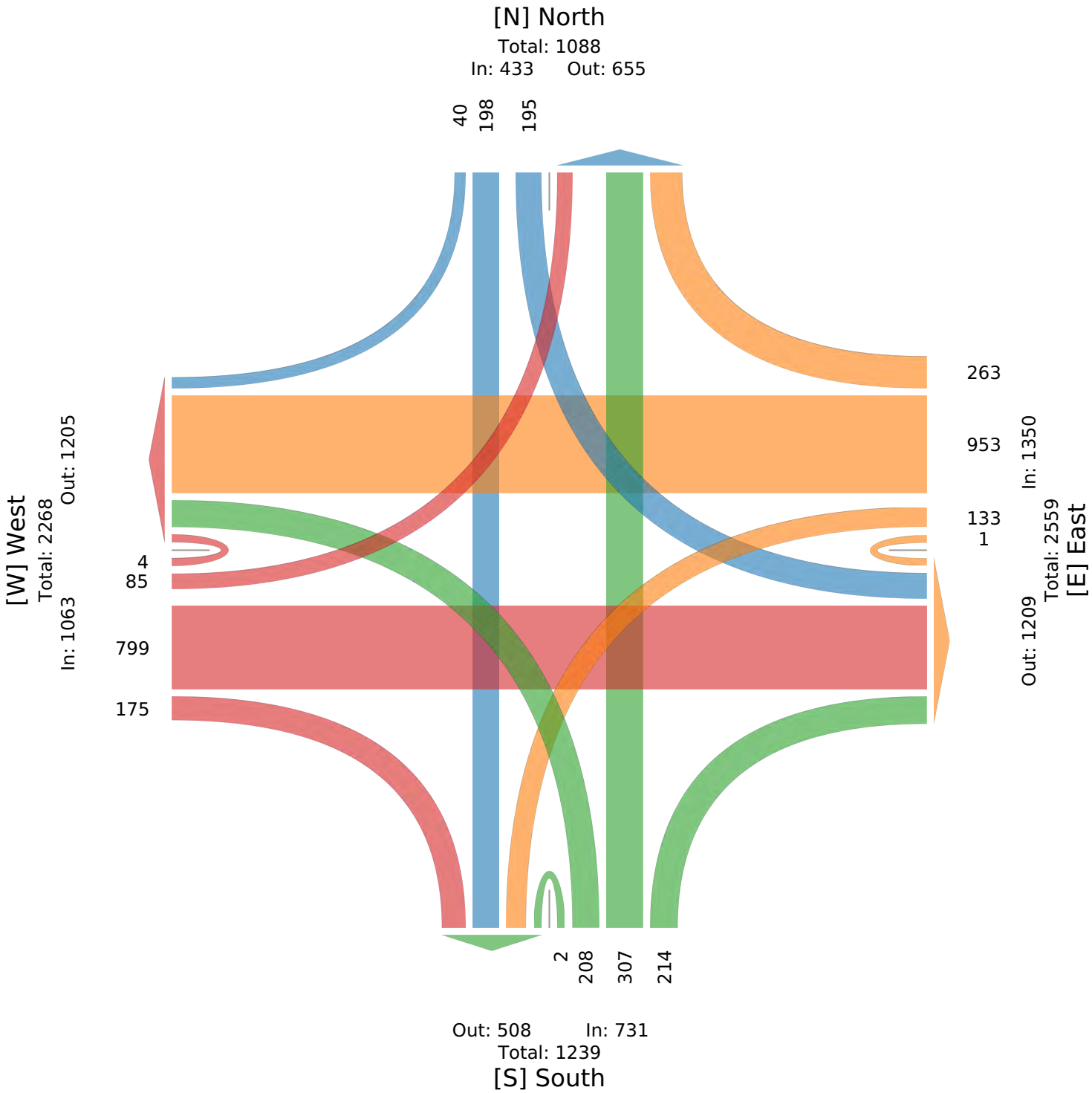
Provided by: A&F Engineering
8365 Keystone Crossing, Suite 201, Indianapolis, IN, 46240, US

| 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** |
| 2021-01-06 4:45PM | 48 | 77 | 60 | 1 | **186** | 51 | 43 | 10 | 0 | **104** | 19 | 191 | 45 | 1 | **256** | 33 | 220 | 66 | 0 | **319** | **865** |
| 5:00PM | 58 | 63 | 52 | 1 | **174** | 39 | 43 | 14 | 0 | **96** | 20 | 207 | 40 | 0 | **267** | 37 | 252 | 70 | 0 | **359** | **896** |
| 5:15PM | 57 | 98 | 44 | 0 | **199** | 57 | 64 | 6 | 0 | **127** | 25 | 194 | 43 | 2 | **264** | 31 | 251 | 58 | 1 | **341** | **931** |
| 5:30PM | 45 | 69 | 58 | 0 | **172** | 48 | 48 | 10 | 0 | **106** | 21 | 207 | 47 | 1 | **276** | 32 | 230 | 69 | 0 | **331** | **885** |
| **Total** | 208 | 307 | 214 | 2 | **731** | 195 | 198 | 40 | 0 | **433** | 85 | 799 | 175 | 4 | **1063** | 133 | 953 | 263 | 1 | **1350** | **3577** |
| **% Approach** | 28.5% | 42.0% | 29.3% | 0.3% | **-** | 45.0% | 45.7% | 9.2% | 0% | **-** | 8.0% | 75.2% | 16.5% | 0.4% | **-** | 9.9% | 70.6% | 19.5% | 0.1% | **-** | - |
| **% Total** | 5.8% | 8.6% | 6.0% | 0.1% | **20.4%** | 5.5% | 5.5% | 1.1% | 0% | **12.1%** | 2.4% | 22.3% | 4.9% | 0.1% | **29.7%** | 3.7% | 26.6% | 7.4% | 0% | **37.7%** | - |
| **PHF** | 0.897 | 0.783 | 0.892 | 0.500 | **0.918** | 0.855 | 0.773 | 0.714 | - | **0.852** | 0.850 | 0.965 | 0.931 | 0.500 | **0.963** | 0.899 | 0.945 | 0.939 | 0.250 | **0.940** | 0.961 |
| **Lights and Motorcycles** | 207 | 307 | 203 | 2 | **719** | 195 | 196 | 40 | 0 | **431** | 85 | 777 | 169 | 4 | **1035** | 127 | 944 | 262 | 1 | **1334** | 3519 |
| **% Lights and Motorcycles** | 99.5% | 100% | 94.9% | 100% | **98.4%** | 100% | 99.0% | 100% | 0% | **99.5%** | 100% | 97.2% | 96.6% | 100% | **97.4%** | 95.5% | 99.1% | 99.6% | 100% | **98.8%** | 98.4% |
| **Heavy** | 1 | 0 | 11 | 0 | **12** | 0 | 2 | 0 | 0 | **2** | 0 | 22 | 6 | 0 | **28** | 6 | 9 | 1 | 0 | **16** | 58 |
| **% Heavy** | 0.5% | 0% | 5.1% | 0% | **1.6%** | 0% | 1.0% | 0% | 0% | **0.5%** | 0% | 2.8% | 3.4% | 0% | **2.6%** | 4.5% | 0.9% | 0.4% | 0% | **1.2%** | 1.6% |

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

**PERRY RD & US 40 - TMC**
Wed Jan 6, 2021
PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 807911, Location: 39.71764, -86.357651

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) | 22 | 770 | 45 | 120 | 512 | 76 | 63 | 70 | 101 | 269 | 163 | 15 |
| Future Volume (veh/h) | 22 | 770 | 45 | 120 | 512 | 76 | 63 | 70 | 101 | 269 | 163 | 15 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1900 | 1841 | 1856 | 1870 | 1856 | 1841 | 1900 | 1841 | 1767 | 1870 | 1900 | 1633 |
| Adj Flow Rate, veh/h | 25 | 875 | 51 | 136 | 582 | 86 | 72 | 80 | 115 | 306 | 185 | 17 |
| Peak Hour Factor | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 |
| Percent Heavy Veh, % | 0 | 4 | 3 | 2 | 3 | 4 | 0 | 4 | 9 | 2 | 0 | 18 |
| Cap, veh/h | 72 | 1224 | 679 | 186 | 1463 | 848 | 286 | 408 | 331 | 444 | 590 | 281 |
| Arrive On Green | 0.04 | 0.35 | 0.35 | 0.10 | 0.41 | 0.41 | 0.08 | 0.12 | 0.12 | 0.13 | 0.16 | 0.16 |
| Sat Flow, veh/h | 1810 | 3497 | 1572 | 1781 | 3526 | 1560 | 3510 | 3497 | 1497 | 3456 | 3610 | 1384 |
| Grp Volume(v), veh/h | 25 | 875 | 51 | 136 | 582 | 86 | 72 | 80 | 115 | 306 | 185 | 17 |
| Grp Sat Flow(s),veh/h/ln | 1810 | 1749 | 1572 | 1781 | 1763 | 1560 | 1755 | 1749 | 1497 | 1728 | 1805 | 1384 |
| Q Serve(g_s), s | 0.8 | 13.0 | 1.1 | 4.4 | 6.9 | 1.6 | 1.2 | 1.2 | 3.9 | 5.1 | 2.7 | 0.6 |
| Cycle Q Clear(g_c), s | 0.8 | 13.0 | 1.1 | 4.4 | 6.9 | 1.6 | 1.2 | 1.2 | 3.9 | 5.1 | 2.7 | 0.6 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 72 | 1224 | 679 | 186 | 1463 | 848 | 286 | 408 | 331 | 444 | 590 | 281 |
| V/C Ratio(X) | 0.35 | 0.71 | 0.08 | 0.73 | 0.40 | 0.10 | 0.25 | 0.20 | 0.35 | 0.69 | 0.31 | 0.06 |
| Avail Cap(c_a), veh/h | 211 | 1867 | 967 | 446 | 2352 | 1241 | 468 | 583 | 406 | 865 | 1024 | 447 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 28.0 | 16.9 | 10.0 | 26.0 | 12.3 | 6.6 | 25.8 | 23.9 | 19.7 | 25.0 | 22.1 | 19.3 |
| Incr Delay (d2), s/veh | 2.9 | 0.8 | 0.0 | 5.4 | 0.2 | 0.1 | 0.5 | 0.2 | 0.6 | 1.9 | 0.3 | 0.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.4 | 4.8 | 0.4 | 2.0 | 2.4 | 0.4 | 0.5 | 0.5 | 1.3 | 2.1 | 1.1 | 0.2 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 30.9 | 17.7 | 10.1 | 31.4 | 12.5 | 6.7 | 26.3 | 24.2 | 20.3 | 26.9 | 22.4 | 19.4 |
| LnGrp LOS | C | B | B | C | B | A | C | C | C | C | C | B |
| Approach Vol, veh/h | | 951 | | | 804 | | | 267 | | | 508 | |
| Approach Delay, s/veh | | 17.6 | | | 15.1 | | | 23.1 | | | 25.0 | |
| Approach LOS | | B | | | B | | | C | | | C | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 11.7 | 12.0 | 10.3 | 26.0 | 8.9 | 14.8 | 6.4 | 29.9 |
| Change Period (Y+Rc), s | 4.0 | 5.0 | 4.0 | 5.0 | 4.0 | 5.0 | 4.0 | 5.0 |
| Max Green Setting (Gmax), s | 15.0 | 10.0 | 15.0 | 32.0 | 8.0 | 17.0 | 7.0 | 40.0 |
| Max Q Clear Time (g_c+I1), s | 7.1 | 5.9 | 6.4 | 15.0 | 3.2 | 4.7 | 2.8 | 8.9 |
| Green Ext Time (p_c), s | 0.7 | 0.3 | 0.2 | 6.0 | 0.1 | 0.9 | 0.0 | 4.7 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 18.9 |
| HCM 6th LOS | B |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 94 | 879 | 193 | 146 | 1048 | 289 | 229 | 338 | 235 | 215 | 218 | 44 |
| Future Volume (veh/h) | 94 | 879 | 193 | 146 | 1048 | 289 | 229 | 338 | 235 | 215 | 218 | 44 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1900 | 1856 | 1856 | 1826 | 1885 | 1900 | 1885 | 1900 | 1826 | 1900 | 1885 | 1900 |
| Adj Flow Rate, veh/h | 98 | 916 | 201 | 152 | 1092 | 301 | 239 | 352 | 245 | 224 | 227 | 46 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 0 | 3 | 3 | 5 | 1 | 0 | 1 | 0 | 5 | 0 | 1 | 0 |
| Cap, veh/h | 145 | 1275 | 718 | 190 | 1399 | 775 | 332 | 635 | 441 | 319 | 615 | 406 |
| Arrive On Green | 0.08 | 0.36 | 0.36 | 0.11 | 0.39 | 0.39 | 0.10 | 0.18 | 0.18 | 0.09 | 0.17 | 0.17 |
| Sat Flow, veh/h | 1810 | 3526 | 1572 | 1739 | 3582 | 1610 | 3483 | 3610 | 1547 | 3510 | 3582 | 1610 |
| Grp Volume(v), veh/h | 98 | 916 | 201 | 152 | 1092 | 301 | 239 | 352 | 245 | 224 | 227 | 46 |
| Grp Sat Flow(s),veh/h/ln | 1810 | 1763 | 1572 | 1739 | 1791 | 1610 | 1742 | 1805 | 1547 | 1755 | 1791 | 1610 |
| Q Serve(g_s), s | 4.0 | 17.1 | 6.1 | 6.5 | 20.4 | 9.1 | 5.1 | 6.8 | 10.3 | 4.7 | 4.3 | 1.7 |
| Cycle Q Clear(g_c), s | 4.0 | 17.1 | 6.1 | 6.5 | 20.4 | 9.1 | 5.1 | 6.8 | 10.3 | 4.7 | 4.3 | 1.7 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 145 | 1275 | 718 | 190 | 1399 | 775 | 332 | 635 | 441 | 319 | 615 | 406 |
| V/C Ratio(X) | 0.67 | 0.72 | 0.28 | 0.80 | 0.78 | 0.39 | 0.72 | 0.55 | 0.56 | 0.70 | 0.37 | 0.11 |
| Avail Cap(c_a), veh/h | 214 | 1433 | 789 | 319 | 1691 | 907 | 457 | 758 | 494 | 414 | 705 | 446 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 34.1 | 21.0 | 12.9 | 33.1 | 20.4 | 12.6 | 33.5 | 28.7 | 23.1 | 33.6 | 27.9 | 22.0 |
| Incr Delay (d2), s/veh | 5.4 | 1.5 | 0.2 | 7.6 | 2.0 | 0.3 | 3.4 | 0.8 | 1.1 | 3.6 | 0.4 | 0.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.9 | 6.9 | 2.0 | 3.1 | 8.3 | 3.1 | 2.2 | 2.9 | 3.7 | 2.1 | 1.8 | 0.6 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 39.4 | 22.5 | 13.1 | 40.7 | 22.4 | 12.9 | 36.9 | 29.5 | 24.2 | 37.2 | 28.3 | 22.1 |
| LnGrp LOS | D | C | B | D | C | B | D | C | C | D | C | C |
| Approach Vol, veh/h | | 1215 | | | 1545 | | | 836 | | | 497 | |
| Approach Delay, s/veh | | 22.3 | | | 22.3 | | | 30.1 | | | 31.8 | |
| Approach LOS | | C | | | C | | | C | | | C | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 11.9 | 18.4 | 13.3 | 32.6 | 12.3 | 18.1 | 11.1 | 34.8 |
| Change Period (Y+Rc), s | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Max Green Setting (Gmax), s | 9.0 | 16.0 | 14.0 | 31.0 | 10.0 | 15.0 | 9.0 | 36.0 |
| Max Q Clear Time (g_c+I1), s | 10.7 | 12.3 | 8.5 | 19.1 | 7.1 | 6.3 | 6.0 | 22.4 |
| Green Ext Time (p_c), s | 0.2 | 1.2 | 0.2 | 5.6 | 0.2 | 1.0 | 0.1 | 7.4 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 25.1 |
| HCM 6th LOS | C |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 24 | 847 | 50 | 132 | 563 | 84 | 69 | 77 | 111 | 296 | 179 | 17 |
| Future Volume (veh/h) | 24 | 847 | 50 | 132 | 563 | 84 | 69 | 77 | 111 | 296 | 179 | 17 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1900 | 1841 | 1856 | 1870 | 1856 | 1841 | 1900 | 1841 | 1767 | 1870 | 1900 | 1633 |
| Adj Flow Rate, veh/h | 27 | 962 | 57 | 150 | 640 | 95 | 78 | 88 | 126 | 336 | 203 | 19 |
| Peak Hour Factor | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 |
| Percent Heavy Veh, % | 0 | 4 | 3 | 2 | 3 | 4 | 0 | 4 | 9 | 2 | 0 | 18 |
| Cap, veh/h | 74 | 1274 | 697 | 192 | 1519 | 877 | 278 | 360 | 315 | 454 | 560 | 271 |
| Arrive On Green | 0.04 | 0.36 | 0.36 | 0.11 | 0.43 | 0.43 | 0.08 | 0.10 | 0.10 | 0.13 | 0.16 | 0.16 |
| Sat Flow, veh/h | 1810 | 3497 | 1572 | 1781 | 3526 | 1560 | 3510 | 3497 | 1497 | 3456 | 3610 | 1384 |
| Grp Volume(v), veh/h | 27 | 962 | 57 | 150 | 640 | 95 | 78 | 88 | 126 | 336 | 203 | 19 |
| Grp Sat Flow(s),veh/h/ln | 1810 | 1749 | 1572 | 1781 | 1763 | 1560 | 1755 | 1749 | 1497 | 1728 | 1805 | 1384 |
| Q Serve(g_s), s | 1.0 | 16.4 | 1.4 | 5.6 | 8.6 | 1.9 | 1.4 | 1.6 | 4.9 | 6.4 | 3.4 | 0.8 |
| Cycle Q Clear(g_c), s | 1.0 | 16.4 | 1.4 | 5.6 | 8.6 | 1.9 | 1.4 | 1.6 | 4.9 | 6.4 | 3.4 | 0.8 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 74 | 1274 | 697 | 192 | 1519 | 877 | 278 | 360 | 315 | 454 | 560 | 271 |
| V/C Ratio(X) | 0.36 | 0.76 | 0.08 | 0.78 | 0.42 | 0.11 | 0.28 | 0.24 | 0.40 | 0.74 | 0.36 | 0.07 |
| Avail Cap(c_a), veh/h | 186 | 1747 | 910 | 392 | 2175 | 1167 | 361 | 360 | 315 | 711 | 742 | 342 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 31.8 | 19.0 | 10.9 | 29.6 | 13.5 | 6.9 | 29.5 | 28.1 | 23.2 | 28.4 | 25.8 | 22.3 |
| Incr Delay (d2), s/veh | 2.9 | 1.3 | 0.0 | 6.8 | 0.2 | 0.1 | 0.5 | 0.4 | 0.8 | 2.4 | 0.4 | 0.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.5 | 6.3 | 0.5 | 2.7 | 3.1 | 0.6 | 0.6 | 0.7 | 1.7 | 2.7 | 1.4 | 0.2 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 34.7 | 20.3 | 11.0 | 36.4 | 13.7 | 7.0 | 30.1 | 28.5 | 24.0 | 30.8 | 26.1 | 22.4 |
| LnGrp LOS | C | C | B | D | B | A | C | C | C | C | C | C |
| Approach Vol, veh/h | | 1046 | | | 885 | | | 292 | | | 558 | |
| Approach Delay, s/veh | | 20.1 | | | 16.8 | | | 27.0 | | | 28.8 | |
| Approach LOS | | C | | | B | | | C | | | C | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 14.0 | 12.0 | 12.3 | 29.8 | 10.4 | 15.6 | 7.8 | 34.3 |
| Change Period (Y+Rc), s | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Max Green Setting (Gmax), s | 14.0 | 7.0 | 15.0 | 34.0 | 7.0 | 14.0 | 7.0 | 42.0 |
| Max Q Clear Time (g_c+I1), s | 10.4 | 6.9 | 7.6 | 18.4 | 3.4 | 5.4 | 3.0 | 10.6 |
| Green Ext Time (p_c), s | 0.6 | 0.0 | 0.2 | 6.4 | 0.1 | 0.8 | 0.0 | 5.3 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 21.5 |
| HCM 6th LOS | C |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 103 | 967 | 212 | 161 | 1153 | 318 | 252 | 372 | 259 | 237 | 240 | 48 |
| Future Volume (veh/h) | 103 | 967 | 212 | 161 | 1153 | 318 | 252 | 372 | 259 | 237 | 240 | 48 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1900 | 1856 | 1856 | 1826 | 1885 | 1900 | 1885 | 1900 | 1826 | 1900 | 1885 | 1900 |
| Adj Flow Rate, veh/h | 107 | 1007 | 221 | 168 | 1201 | 331 | 262 | 388 | 270 | 247 | 250 | 50 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 0 | 3 | 3 | 5 | 1 | 0 | 1 | 0 | 5 | 0 | 1 | 0 |
| Cap, veh/h | 142 | 1247 | 712 | 204 | 1405 | 784 | 345 | 680 | 473 | 331 | 658 | 422 |
| Arrive On Green | 0.08 | 0.35 | 0.35 | 0.12 | 0.39 | 0.39 | 0.10 | 0.19 | 0.19 | 0.09 | 0.18 | 0.18 |
| Sat Flow, veh/h | 1810 | 3526 | 1572 | 1739 | 3582 | 1610 | 3483 | 3610 | 1547 | 3510 | 3582 | 1610 |
| Grp Volume(v), veh/h | 107 | 1007 | 221 | 168 | 1201 | 331 | 262 | 388 | 270 | 247 | 250 | 50 |
| Grp Sat Flow(s),veh/h/ln | 1810 | 1763 | 1572 | 1739 | 1791 | 1610 | 1742 | 1805 | 1547 | 1755 | 1791 | 1610 |
| Q Serve(g_s), s | 4.7 | 21.0 | 7.3 | 7.7 | 24.9 | 10.8 | 5.9 | 7.9 | 11.9 | 5.6 | 5.0 | 1.9 |
| Cycle Q Clear(g_c), s | 4.7 | 21.0 | 7.3 | 7.7 | 24.9 | 10.8 | 5.9 | 7.9 | 11.9 | 5.6 | 5.0 | 1.9 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 142 | 1247 | 712 | 204 | 1405 | 784 | 345 | 680 | 473 | 331 | 658 | 422 |
| V/C Ratio(X) | 0.75 | 0.81 | 0.31 | 0.83 | 0.85 | 0.42 | 0.76 | 0.57 | 0.57 | 0.75 | 0.38 | 0.12 |
| Avail Cap(c_a), veh/h | 201 | 1390 | 776 | 236 | 1501 | 827 | 386 | 801 | 524 | 389 | 795 | 484 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 36.6 | 23.7 | 14.1 | 35.0 | 22.5 | 13.5 | 35.6 | 29.9 | 23.7 | 35.8 | 29.1 | 22.8 |
| Incr Delay (d2), s/veh | 9.5 | 3.3 | 0.2 | 18.6 | 4.8 | 0.4 | 7.7 | 0.8 | 1.2 | 6.4 | 0.4 | 0.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 2.4 | 8.8 | 2.5 | 4.2 | 10.7 | 3.7 | 2.8 | 3.4 | 4.3 | 2.6 | 2.1 | 0.7 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 46.1 | 27.0 | 14.4 | 53.6 | 27.4 | 13.8 | 43.3 | 30.7 | 24.9 | 42.2 | 29.4 | 22.9 |
| LnGrp LOS | D | C | B | D | C | B | D | C | C | D | C | C |
| Approach Vol, veh/h | | 1335 | | | 1700 | | | 920 | | | 547 | |
| Approach Delay, s/veh | | 26.5 | | | 27.3 | | | 32.6 | | | 34.6 | |
| Approach LOS | | C | | | C | | | C | | | C | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 12.7 | 20.3 | 14.5 | 33.7 | 13.0 | 19.9 | 11.4 | 36.8 |
| Change Period (Y+Rc), s | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Max Green Setting (Gmax), s | 9.0 | 18.0 | 11.0 | 32.0 | 9.0 | 18.0 | 9.0 | 34.0 |
| Max Q Clear Time (g_c+I1), s | 7.7 | 13.9 | 9.7 | 23.0 | 7.9 | 7.0 | 6.7 | 26.9 |
| Green Ext Time (p_c), s | 0.1 | 1.4 | 0.1 | 5.0 | 0.1 | 1.2 | 0.0 | 4.9 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 29.0 |
| HCM 6th LOS | C |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 108 | 774 | 45 | 128 | 543 | 91 | 63 | 114 | 101 | 288 | 215 | 76 |
| Future Volume (veh/h) | 108 | 774 | 45 | 128 | 543 | 91 | 63 | 114 | 101 | 288 | 215 | 76 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1900 | 1841 | 1870 | 1870 | 1841 | 1841 | 1900 | 1856 | 1767 | 1870 | 1900 | 1841 |
| Adj Flow Rate, veh/h | 123 | 880 | 51 | 145 | 617 | 103 | 72 | 130 | 115 | 327 | 244 | 86 |
| Peak Hour Factor | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 |
| Percent Heavy Veh, % | 0 | 4 | 2 | 2 | 4 | 4 | 0 | 3 | 9 | 2 | 0 | 4 |
| Cap, veh/h | 175 | 1199 | 668 | 187 | 1227 | 752 | 277 | 385 | 320 | 453 | 583 | 403 |
| Arrive On Green | 0.10 | 0.34 | 0.34 | 0.10 | 0.35 | 0.35 | 0.08 | 0.11 | 0.11 | 0.13 | 0.16 | 0.16 |
| Sat Flow, veh/h | 1810 | 3497 | 1585 | 1781 | 3497 | 1560 | 3510 | 3526 | 1497 | 3456 | 3610 | 1560 |
| Grp Volume(v), veh/h | 123 | 880 | 51 | 145 | 617 | 103 | 72 | 130 | 115 | 327 | 244 | 86 |
| Grp Sat Flow(s),veh/h/ln | 1810 | 1749 | 1585 | 1781 | 1749 | 1560 | 1755 | 1763 | 1497 | 1728 | 1805 | 1560 |
| Q Serve(g_s), s | 4.2 | 14.2 | 1.2 | 5.1 | 8.9 | 2.3 | 1.2 | 2.2 | 4.2 | 5.8 | 3.9 | 2.8 |
| Cycle Q Clear(g_c), s | 4.2 | 14.2 | 1.2 | 5.1 | 8.9 | 2.3 | 1.2 | 2.2 | 4.2 | 5.8 | 3.9 | 2.8 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 175 | 1199 | 668 | 187 | 1227 | 752 | 277 | 385 | 320 | 453 | 583 | 403 |
| V/C Ratio(X) | 0.70 | 0.73 | 0.08 | 0.78 | 0.50 | 0.14 | 0.26 | 0.34 | 0.36 | 0.72 | 0.42 | 0.21 |
| Avail Cap(c_a), veh/h | 339 | 1745 | 916 | 389 | 1854 | 1032 | 383 | 550 | 391 | 754 | 957 | 565 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 28.1 | 18.5 | 11.1 | 28.0 | 16.4 | 9.2 | 27.8 | 26.4 | 21.5 | 26.7 | 24.2 | 18.7 |
| Incr Delay (d2), s/veh | 5.0 | 0.9 | 0.0 | 6.8 | 0.3 | 0.1 | 0.5 | 0.5 | 0.7 | 2.2 | 0.5 | 0.3 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 2.0 | 5.3 | 0.4 | 2.4 | 3.3 | 0.7 | 0.5 | 0.9 | 1.4 | 2.4 | 1.6 | 1.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 33.1 | 19.4 | 11.1 | 34.7 | 16.7 | 9.3 | 28.3 | 26.9 | 22.1 | 28.9 | 24.7 | 18.9 |
| LnGrp LOS | C | B | B | C | B | A | C | C | C | C | C | B |
| Approach Vol, veh/h | | 1054 | | | 865 | | | 317 | | | 657 | |
| Approach Delay, s/veh | | 20.6 | | | 18.9 | | | 25.5 | | | 26.0 | |
| Approach LOS | | C | | | B | | | C | | | C | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 13.4 | 12.0 | 11.7 | 27.0 | 10.1 | 15.4 | 11.2 | 27.5 |
| Change Period (Y+Rc), s | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Max Green Setting (Gmax), s | 14.0 | 10.0 | 14.0 | 32.0 | 7.0 | 17.0 | 12.0 | 34.0 |
| Max Q Clear Time (g_c+I1), s | 7.8 | 6.2 | 7.1 | 16.2 | 3.2 | 5.9 | 6.2 | 10.9 |
| Green Ext Time (p_c), s | 0.6 | 0.4 | 0.2 | 5.8 | 0.0 | 1.3 | 0.1 | 4.7 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 21.9 |
| HCM 6th LOS | C |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 209 | 880 | 193 | 151 | 1065 | 312 | 229 | 410 | 235 | 255 | 268 | 106 |
| Future Volume (veh/h) | 209 | 880 | 193 | 151 | 1065 | 312 | 229 | 410 | 235 | 255 | 268 | 106 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1900 | 1856 | 1841 | 1826 | 1885 | 1900 | 1900 | 1900 | 1826 | 1900 | 1885 | 1900 |
| Adj Flow Rate, veh/h | 218 | 917 | 201 | 157 | 1109 | 325 | 239 | 427 | 245 | 266 | 279 | 110 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 0 | 3 | 4 | 5 | 1 | 0 | 0 | 0 | 5 | 0 | 1 | 0 |
| Cap, veh/h | 255 | 1348 | 740 | 191 | 1257 | 723 | 322 | 627 | 439 | 345 | 644 | 517 |
| Arrive On Green | 0.14 | 0.38 | 0.38 | 0.11 | 0.35 | 0.35 | 0.09 | 0.17 | 0.17 | 0.10 | 0.18 | 0.18 |
| Sat Flow, veh/h | 1810 | 3526 | 1560 | 1739 | 3582 | 1610 | 3510 | 3610 | 1547 | 3510 | 3582 | 1610 |
| Grp Volume(v), veh/h | 218 | 917 | 201 | 157 | 1109 | 325 | 239 | 427 | 245 | 266 | 279 | 110 |
| Grp Sat Flow(s),veh/h/ln | 1810 | 1763 | 1560 | 1739 | 1791 | 1610 | 1755 | 1805 | 1547 | 1755 | 1791 | 1610 |
| Q Serve(g_s), s | 10.0 | 18.4 | 6.6 | 7.5 | 24.7 | 11.8 | 5.6 | 9.4 | 11.4 | 6.3 | 5.9 | 4.2 |
| Cycle Q Clear(g_c), s | 10.0 | 18.4 | 6.6 | 7.5 | 24.7 | 11.8 | 5.6 | 9.4 | 11.4 | 6.3 | 5.9 | 4.2 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 255 | 1348 | 740 | 191 | 1257 | 723 | 322 | 627 | 439 | 345 | 644 | 517 |
| V/C Ratio(X) | 0.85 | 0.68 | 0.27 | 0.82 | 0.88 | 0.45 | 0.74 | 0.68 | 0.56 | 0.77 | 0.43 | 0.21 |
| Avail Cap(c_a), veh/h | 278 | 1373 | 751 | 226 | 1310 | 747 | 414 | 724 | 480 | 373 | 676 | 531 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 35.5 | 21.8 | 13.4 | 36.9 | 25.8 | 16.1 | 37.5 | 32.8 | 25.9 | 37.3 | 30.9 | 21.0 |
| Incr Delay (d2), s/veh | 20.7 | 1.3 | 0.2 | 18.5 | 7.2 | 0.4 | 5.2 | 2.2 | 1.2 | 8.9 | 0.5 | 0.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 5.8 | 7.5 | 2.2 | 4.1 | 11.2 | 4.2 | 2.6 | 4.2 | 4.2 | 3.1 | 2.5 | 1.6 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 56.2 | 23.2 | 13.6 | 55.4 | 33.0 | 16.5 | 42.7 | 35.0 | 27.0 | 46.2 | 31.4 | 21.2 |
| LnGrp LOS | E | C | B | E | C | B | D | C | C | D | C | C |
| Approach Vol, veh/h | | 1336 | | | 1591 | | | 911 | | | 655 | |
| Approach Delay, s/veh | | 27.1 | | | 31.9 | | | 34.9 | | | 35.7 | |
| Approach LOS | | C | | | C | | | C | | | D | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 13.3 | 19.7 | 14.3 | 37.4 | 12.8 | 20.2 | 17.0 | 34.7 |
| Change Period (Y+Rc), s | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Max Green Setting (Gmax), s | 9.0 | 17.0 | 11.0 | 33.0 | 10.0 | 16.0 | 13.0 | 31.0 |
| Max Q Clear Time (g_c+I1), s | 8.3 | 13.4 | 9.5 | 20.4 | 7.6 | 7.9 | 12.0 | 26.7 |
| Green Ext Time (p_c), s | 0.1 | 1.3 | 0.1 | 5.8 | 0.2 | 1.3 | 0.1 | 3.1 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 31.6 |
| HCM 6th LOS | C |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 110 | 851 | 50 | 140 | 594 | 99 | 69 | 121 | 111 | 315 | 231 | 78 |
| Future Volume (veh/h) | 110 | 851 | 50 | 140 | 594 | 99 | 69 | 121 | 111 | 315 | 231 | 78 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1900 | 1841 | 1870 | 1870 | 1841 | 1856 | 1900 | 1870 | 1767 | 1870 | 1900 | 1841 |
| Adj Flow Rate, veh/h | 125 | 967 | 57 | 159 | 675 | 112 | 78 | 138 | 126 | 358 | 262 | 89 |
| Peak Hour Factor | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 |
| Percent Heavy Veh, % | 0 | 4 | 2 | 2 | 4 | 3 | 0 | 2 | 9 | 2 | 0 | 4 |
| Cap, veh/h | 165 | 1257 | 694 | 201 | 1333 | 814 | 275 | 370 | 325 | 473 | 587 | 396 |
| Arrive On Green | 0.09 | 0.36 | 0.36 | 0.11 | 0.38 | 0.38 | 0.08 | 0.10 | 0.10 | 0.14 | 0.16 | 0.16 |
| Sat Flow, veh/h | 1810 | 3497 | 1585 | 1781 | 3497 | 1572 | 3510 | 3554 | 1497 | 3456 | 3610 | 1560 |
| Grp Volume(v), veh/h | 125 | 967 | 57 | 159 | 675 | 112 | 78 | 138 | 126 | 358 | 262 | 89 |
| Grp Sat Flow(s),veh/h/ln | 1810 | 1749 | 1585 | 1781 | 1749 | 1572 | 1755 | 1777 | 1497 | 1728 | 1805 | 1560 |
| Q Serve(g_s), s | 4.7 | 17.1 | 1.5 | 6.1 | 10.3 | 2.6 | 1.5 | 2.5 | 5.0 | 7.0 | 4.6 | 3.1 |
| Cycle Q Clear(g_c), s | 4.7 | 17.1 | 1.5 | 6.1 | 10.3 | 2.6 | 1.5 | 2.5 | 5.0 | 7.0 | 4.6 | 3.1 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 165 | 1257 | 694 | 201 | 1333 | 814 | 275 | 370 | 325 | 473 | 587 | 396 |
| V/C Ratio(X) | 0.76 | 0.77 | 0.08 | 0.79 | 0.51 | 0.14 | 0.28 | 0.37 | 0.39 | 0.76 | 0.45 | 0.22 |
| Avail Cap(c_a), veh/h | 311 | 1654 | 874 | 357 | 1754 | 1004 | 352 | 458 | 362 | 693 | 828 | 500 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 30.9 | 19.8 | 11.4 | 30.1 | 16.6 | 8.7 | 30.3 | 29.1 | 23.4 | 29.0 | 26.4 | 20.6 |
| Incr Delay (d2), s/veh | 6.8 | 1.6 | 0.1 | 6.8 | 0.3 | 0.1 | 0.6 | 0.6 | 0.8 | 2.8 | 0.5 | 0.3 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 2.3 | 6.7 | 0.5 | 2.9 | 3.9 | 0.8 | 0.6 | 1.1 | 1.8 | 2.9 | 1.9 | 1.1 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 37.8 | 21.4 | 11.5 | 36.9 | 16.9 | 8.8 | 30.9 | 29.8 | 24.1 | 31.8 | 26.9 | 20.9 |
| LnGrp LOS | D | C | B | D | B | A | C | C | C | C | C | C |
| Approach Vol, veh/h | | 1149 | | | 946 | | | 342 | | | 709 | |
| Approach Delay, s/veh | | 22.7 | | | 19.3 | | | 27.9 | | | 28.6 | |
| Approach LOS | | C | | | B | | | C | | | C | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 14.6 | 12.3 | 12.9 | 30.1 | 10.5 | 16.4 | 11.4 | 31.6 |
| Change Period (Y+Rc), s | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Max Green Setting (Gmax), s | 14.0 | 9.0 | 14.0 | 33.0 | 7.0 | 16.0 | 12.0 | 35.0 |
| Max Q Clear Time (g_c+I1), s | 9.0 | 7.0 | 8.1 | 19.1 | 3.5 | 6.6 | 6.7 | 12.3 |
| Green Ext Time (p_c), s | 0.6 | 0.2 | 0.2 | 6.0 | 0.0 | 1.3 | 0.1 | 5.2 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 23.6 |
| HCM 6th LOS | C |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 218 | 968 | 212 | 166 | 1170 | 341 | 252 | 444 | 259 | 277 | 290 | 110 |
| Future Volume (veh/h) | 218 | 968 | 212 | 166 | 1170 | 341 | 252 | 444 | 259 | 277 | 290 | 110 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1900 | 1856 | 1841 | 1826 | 1885 | 1900 | 1900 | 1900 | 1826 | 1900 | 1885 | 1900 |
| Adj Flow Rate, veh/h | 227 | 1008 | 221 | 173 | 1219 | 355 | 262 | 462 | 270 | 289 | 302 | 115 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 0 | 3 | 4 | 5 | 1 | 0 | 0 | 0 | 5 | 0 | 1 | 0 |
| Cap, veh/h | 262 | 1359 | 751 | 207 | 1288 | 724 | 337 | 649 | 462 | 317 | 623 | 513 |
| Arrive On Green | 0.14 | 0.39 | 0.39 | 0.12 | 0.36 | 0.36 | 0.10 | 0.18 | 0.18 | 0.09 | 0.17 | 0.17 |
| Sat Flow, veh/h | 1810 | 3526 | 1560 | 1739 | 3582 | 1610 | 3510 | 3610 | 1547 | 3510 | 3582 | 1610 |
| Grp Volume(v), veh/h | 227 | 1008 | 221 | 173 | 1219 | 355 | 262 | 462 | 270 | 289 | 302 | 115 |
| Grp Sat Flow(s),veh/h/ln | 1810 | 1763 | 1560 | 1739 | 1791 | 1610 | 1755 | 1805 | 1547 | 1755 | 1791 | 1610 |
| Q Serve(g_s), s | 10.9 | 21.8 | 7.6 | 8.6 | 29.3 | 13.8 | 6.5 | 10.7 | 13.1 | 7.2 | 6.7 | 4.6 |
| Cycle Q Clear(g_c), s | 10.9 | 21.8 | 7.6 | 8.6 | 29.3 | 13.8 | 6.5 | 10.7 | 13.1 | 7.2 | 6.7 | 4.6 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 262 | 1359 | 751 | 207 | 1288 | 724 | 337 | 649 | 462 | 317 | 623 | 513 |
| V/C Ratio(X) | 0.87 | 0.74 | 0.29 | 0.84 | 0.95 | 0.49 | 0.78 | 0.71 | 0.58 | 0.91 | 0.48 | 0.22 |
| Avail Cap(c_a), veh/h | 265 | 1359 | 751 | 235 | 1293 | 727 | 356 | 692 | 481 | 317 | 647 | 524 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 37.1 | 23.4 | 13.9 | 38.2 | 27.6 | 17.2 | 39.1 | 34.2 | 26.4 | 40.0 | 33.0 | 22.1 |
| Incr Delay (d2), s/veh | 24.5 | 2.2 | 0.2 | 20.4 | 14.2 | 0.5 | 10.0 | 3.2 | 1.7 | 29.2 | 0.6 | 0.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 6.5 | 9.1 | 2.6 | 4.8 | 14.4 | 5.0 | 3.2 | 4.9 | 4.9 | 4.4 | 2.9 | 1.7 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 61.5 | 25.7 | 14.1 | 58.6 | 41.7 | 17.7 | 49.1 | 37.4 | 28.1 | 69.2 | 33.6 | 22.4 |
| LnGrp LOS | E | C | B | E | D | B | D | D | C | E | C | C |
| Approach Vol, veh/h | | 1456 | | | 1747 | | | 994 | | | 706 | |
| Approach Delay, s/veh | | 29.5 | | | 38.5 | | | 38.0 | | | 46.4 | |
| Approach LOS | | C | | | D | | | D | | | D | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 13.0 | 20.9 | 15.5 | 39.2 | 13.5 | 20.4 | 17.8 | 36.9 |
| Change Period (Y+Rc), s | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Max Green Setting (Gmax), s | 8.0 | 17.0 | 12.0 | 33.0 | 9.0 | 16.0 | 13.0 | 32.0 |
| Max Q Clear Time (g_c+I1), s | 9.2 | 15.1 | 10.6 | 23.8 | 8.5 | 8.7 | 12.9 | 31.3 |
| Green Ext Time (p_c), s | 0.0 | 0.8 | 0.1 | 5.1 | 0.1 | 1.3 | 0.0 | 0.6 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 36.9 |
| HCM 6th LOS | D |

# US 40 & PLAINFIELD COMMONS DRIVE/WILLIAMS TRACE

## TRAFFIC VOLUME COUNTS
## CAPACITY ANALYSIS

## PLAINFIELD COMMONS DRIVE & US 40 - TMC

Wed Jan 6, 2021
Full Length (6:30 AM-8:30 AM, 4 PM-7 PM)
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 807915, Location: 39.718683, -86.355034

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

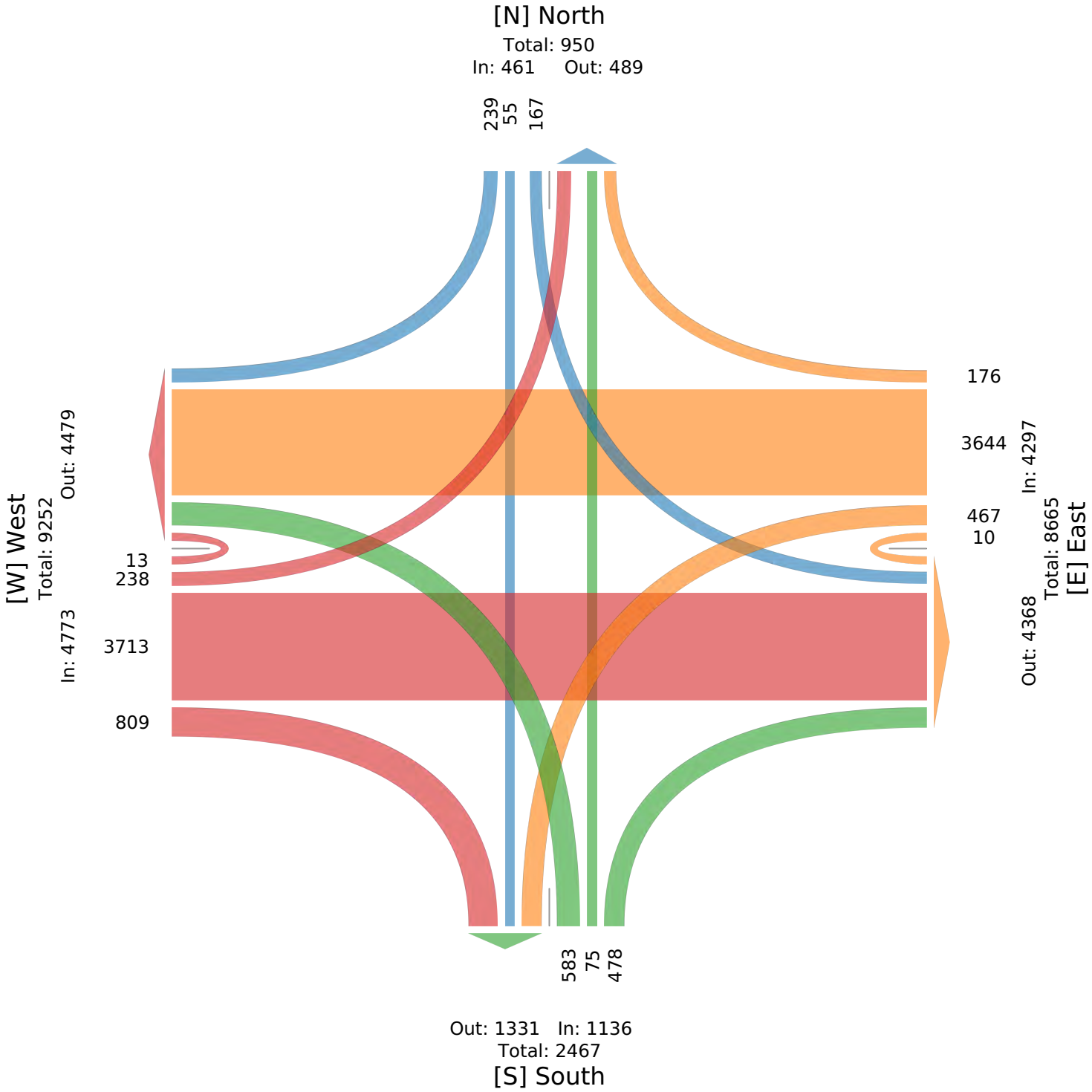
| Leg | South | | | | | North | | | | | West | | | | | East | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Direction | Northbound | | | | | Southbound | | | | | Eastbound | | | | | Westbound | | | | | |
| Time | L | T | R | U | App | L | T | R | U | App | L | T | R | U | App | L | T | R | U | App | Int |
| 2021-01-06 6:30AM | 3 | 0 | 17 | 0 | **20** | 1 | 0 | 1 | 0 | **2** | 1 | 146 | 15 | 0 | **162** | 14 | 93 | 1 | 0 | **108** | **292** |
| 6:45AM | 5 | 5 | 12 | 0 | **22** | 0 | 1 | 0 | 0 | **1** | 2 | 154 | 34 | 0 | **190** | 15 | 120 | 1 | 0 | **136** | **349** |
| Hourly Total | 8 | 5 | 29 | 0 | **42** | 1 | 1 | 1 | 0 | **3** | 3 | 300 | 49 | 0 | **352** | 29 | 213 | 2 | 0 | **244** | **641** |
| 7:00AM | 7 | 2 | 17 | 0 | **26** | 5 | 1 | 6 | 0 | **12** | 11 | 148 | 33 | 0 | **192** | 8 | 82 | 6 | 0 | **96** | **326** |
| 7:15AM | 5 | 4 | 12 | 0 | **21** | 6 | 1 | 12 | 0 | **19** | 7 | 185 | 30 | 0 | **222** | 17 | 98 | 10 | 0 | **125** | **387** |
| 7:30AM | 10 | 1 | 14 | 0 | **25** | 9 | 1 | 1 | 0 | **11** | 11 | 181 | 30 | 0 | **222** | 9 | 106 | 9 | 0 | **124** | **382** |
| 7:45AM | 15 | 5 | 16 | 0 | **36** | 6 | 1 | 7 | 0 | **14** | 7 | 174 | 30 | 0 | **211** | 14 | 143 | 4 | 0 | **161** | **422** |
| Hourly Total | 37 | 12 | 59 | 0 | **108** | 26 | 4 | 26 | 0 | **56** | 36 | 688 | 123 | 0 | **847** | 48 | 429 | 29 | 0 | **506** | **1517** |
| 8:00AM | 12 | 0 | 20 | 0 | **32** | 6 | 0 | 8 | 0 | **14** | 13 | 148 | 30 | 0 | **191** | 11 | 105 | 2 | 0 | **118** | **355** |
| 8:15AM | 8 | 3 | 17 | 0 | **28** | 3 | 2 | 7 | 0 | **12** | 13 | 145 | 31 | 1 | **190** | 8 | 109 | 4 | 0 | **121** | **351** |
| Hourly Total | 20 | 3 | 37 | 0 | **60** | 9 | 2 | 15 | 0 | **26** | 26 | 293 | 61 | 1 | **381** | 19 | 214 | 6 | 0 | **239** | **706** |
| 4:00PM | 36 | 1 | 27 | 0 | **64** | 9 | 8 | 22 | 0 | **39** | 17 | 234 | 39 | 0 | **290** | 38 | 280 | 12 | 3 | **333** | **726** |
| 4:15PM | 37 | 3 | 27 | 0 | **67** | 7 | 4 | 17 | 0 | **28** | 14 | 211 | 28 | 0 | **253** | 27 | 237 | 18 | 0 | **282** | **630** |
| 4:30PM | 40 | 7 | 29 | 0 | **76** | 18 | 3 | 25 | 0 | **46** | 20 | 208 | 42 | 0 | **270** | 32 | 282 | 21 | 2 | **337** | **729** |
| 4:45PM | 54 | 9 | 32 | 0 | **95** | 12 | 8 | 21 | 0 | **41** | 24 | 238 | 51 | 2 | **315** | 22 | 245 | 10 | 0 | **277** | **728** |
| Hourly Total | 167 | 20 | 115 | 0 | **302** | 46 | 23 | 85 | 0 | **154** | 75 | 891 | 160 | 2 | **1128** | 119 | 1044 | 61 | 5 | **1229** | **2813** |
| 5:00PM | 42 | 8 | 26 | 0 | **76** | 12 | 4 | 24 | 0 | **40** | 16 | 216 | 52 | 1 | **285** | 30 | 292 | 17 | 2 | **341** | **742** |
| 5:15PM | 40 | 8 | 29 | 0 | **77** | 9 | 4 | 27 | 0 | **40** | 13 | 253 | 49 | 1 | **316** | 23 | 269 | 12 | 0 | **304** | **737** |
| 5:30PM | 44 | 1 | 27 | 0 | **72** | 11 | 3 | 16 | 0 | **30** | 24 | 211 | 55 | 3 | **293** | 39 | 252 | 11 | 0 | **302** | **697** |
| 5:45PM | 49 | 2 | 34 | 0 | **85** | 13 | 5 | 12 | 0 | **30** | 15 | 187 | 68 | 0 | **270** | 34 | 211 | 16 | 1 | **262** | **647** |
| Hourly Total | 175 | 19 | 116 | 0 | **310** | 45 | 16 | 79 | 0 | **140** | 68 | 867 | 224 | 5 | **1164** | 126 | 1024 | 56 | 3 | **1209** | **2823** |
| 6:00PM | 42 | 5 | 37 | 0 | **84** | 18 | 3 | 13 | 0 | **34** | 12 | 199 | 52 | 4 | **267** | 35 | 234 | 5 | 1 | **275** | **660** |
| 6:15PM | 44 | 3 | 28 | 0 | **75** | 7 | 1 | 9 | 0 | **17** | 8 | 196 | 48 | 1 | **253** | 38 | 164 | 4 | 0 | **206** | **551** |
| 6:30PM | 53 | 3 | 28 | 0 | **84** | 10 | 3 | 6 | 0 | **19** | 7 | 152 | 46 | 0 | **205** | 30 | 171 | 8 | 0 | **209** | **517** |
| 6:45PM | 37 | 5 | 29 | 0 | **71** | 5 | 2 | 5 | 0 | **12** | 3 | 127 | 46 | 0 | **176** | 23 | 150 | 5 | 1 | **179** | **438** |
| Hourly Total | 176 | 16 | 122 | 0 | **314** | 40 | 9 | 33 | 0 | **82** | 30 | 674 | 192 | 5 | **901** | 126 | 719 | 22 | 2 | **869** | **2166** |
| 7:00PM | 0 | 0 | 0 | 0 | **0** | 0 | 0 | 0 | 0 | **0** | 0 | 0 | 0 | 0 | **0** | 0 | 1 | 0 | 0 | **1** | **1** |
| Hourly Total | 0 | 0 | 0 | 0 | **0** | 0 | 0 | 0 | 0 | **0** | 0 | 0 | 0 | 0 | **0** | 0 | 1 | 0 | 0 | **1** | **1** |
| **Total** | 583 | 75 | 478 | 0 | **1136** | 167 | 55 | 239 | 0 | **461** | 238 | 3713 | 809 | 13 | **4773** | 467 | 3644 | 176 | 10 | **4297** | **10667** |
| **% Approach** | 51.3% | 6.6% | 42.1% | 0% | - | 36.2% | 11.9% | 51.8% | 0% | - | 5.0% | 77.8% | 16.9% | 0.3% | - | 10.9% | 84.8% | 4.1% | 0.2% | - | - |
| **% Total** | 5.5% | 0.7% | 4.5% | 0% | **10.6%** | 1.6% | 0.5% | 2.2% | 0% | **4.3%** | 2.2% | 34.8% | 7.6% | 0.1% | **44.7%** | 4.4% | 34.2% | 1.6% | 0.1% | **40.3%** | - |
| **Lights and Motorcycles** | 578 | 75 | 475 | 0 | **1128** | 164 | 54 | 239 | 0 | **457** | 238 | 3574 | 806 | 13 | **4631** | 463 | 3564 | 171 | 10 | **4208** | 10424 |
| **% Lights and Motorcycles** | 99.1% | 100% | 99.4% | 0% | **99.3%** | 98.2% | 98.2% | 100% | 0% | **99.1%** | 100% | 96.3% | 99.6% | 100% | **97.0%** | 99.1% | 97.8% | 97.2% | 100% | **97.9%** | 97.7% |
| **Heavy** | 5 | 0 | 3 | 0 | **8** | 3 | 1 | 0 | 0 | **4** | 0 | 139 | 3 | 0 | **142** | 4 | 80 | 5 | 0 | **89** | 243 |
| **% Heavy** | 0.9% | 0% | 0.6% | 0% | **0.7%** | 1.8% | 1.8% | 0% | 0% | **0.9%** | 0% | 3.7% | 0.4% | 0% | **3.0%** | 0.9% | 2.2% | 2.8% | 0% | **2.1%** | 2.3% |

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

## PLAINFIELD COMMONS DRIVE & US 40 - TMC

Wed Jan 6, 2021
Full Length (6:30 AM-8:30 AM, 4 PM-7 PM)
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 807915, Location: 39.718683, -86.355034

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



## PLAINFIELD COMMONS DRIVE & US 40 - TMC

Wed Jan 6, 2021
AM Peak (7:15 AM - 8:15 AM)
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 807915, Location: 39.718683, -86.355034

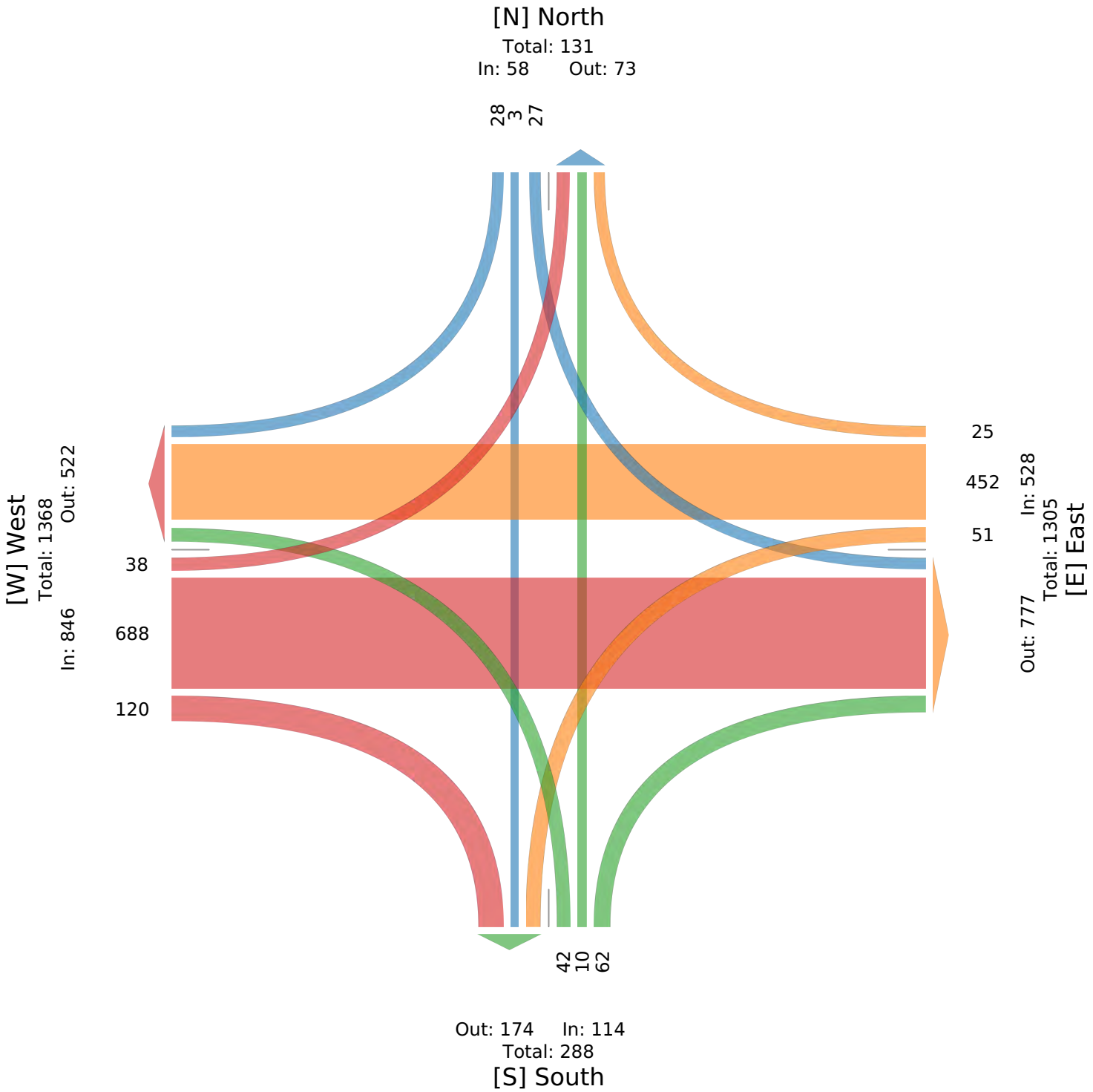

Provided by: A&F Engineering
8365 Keystone Crossing, Suite 201, Indianapolis, IN, 46240, US

| 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** |
| 2021-01-06 7:15AM | 5 | 4 | 12 | 0 | **21** | 6 | 1 | 12 | 0 | **19** | 7 | 185 | 30 | 0 | **222** | 17 | 98 | 10 | 0 | **125** | **387** |
| 7:30AM | 10 | 1 | 14 | 0 | **25** | 9 | 1 | 1 | 0 | **11** | 11 | 181 | 30 | 0 | **222** | 9 | 106 | 9 | 0 | **124** | **382** |
| 7:45AM | 15 | 5 | 16 | 0 | **36** | 6 | 1 | 7 | 0 | **14** | 7 | 174 | 30 | 0 | **211** | 14 | 143 | 4 | 0 | **161** | **422** |
| 8:00AM | 12 | 0 | 20 | 0 | **32** | 6 | 0 | 8 | 0 | **14** | 13 | 148 | 30 | 0 | **191** | 11 | 105 | 2 | 0 | **118** | **355** |
| **Total** | 42 | 10 | 62 | 0 | **114** | 27 | 3 | 28 | 0 | **58** | 38 | 688 | 120 | 0 | **846** | 51 | 452 | 25 | 0 | **528** | **1546** |
| **% Approach** | 36.8% | 8.8% | 54.4% | 0% | **-** | 46.6% | 5.2% | 48.3% | 0% | **-** | 4.5% | 81.3% | 14.2% | 0% | **-** | 9.7% | 85.6% | 4.7% | 0% | **-** | - |
| **% Total** | 2.7% | 0.6% | 4.0% | 0% | **7.4%** | 1.7% | 0.2% | 1.8% | 0% | **3.8%** | 2.5% | 44.5% | 7.8% | 0% | **54.7%** | 3.3% | 29.2% | 1.6% | 0% | **34.2%** | - |
| **PHF** | 0.700 | 0.500 | 0.775 | - | **0.792** | 0.750 | 0.750 | 0.583 | - | **0.763** | 0.731 | 0.930 | 1.000 | - | **0.953** | 0.750 | 0.790 | 0.625 | - | **0.820** | 0.916 |
| **Lights and Motorcycles** | 40 | 10 | 62 | 0 | **112** | 25 | 3 | 28 | 0 | **56** | 38 | 657 | 119 | 0 | **814** | 50 | 437 | 25 | 0 | **512** | 1494 |
| **% Lights and Motorcycles** | 95.2% | 100% | 100% | 0% | **98.2%** | 92.6% | 100% | 100% | 0% | **96.6%** | 100% | 95.5% | 99.2% | 0% | **96.2%** | 98.0% | 96.7% | 100% | 0% | **97.0%** | 96.6% |
| **Heavy** | 2 | 0 | 0 | 0 | **2** | 2 | 0 | 0 | 0 | **2** | 0 | 31 | 1 | 0 | **32** | 1 | 15 | 0 | 0 | **16** | 52 |
| **% Heavy** | 4.8% | 0% | 0% | 0% | **1.8%** | 7.4% | 0% | 0% | 0% | **3.4%** | 0% | 4.5% | 0.8% | 0% | **3.8%** | 2.0% | 3.3% | 0% | 0% | **3.0%** | 3.4% |

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

**PLAINFIELD COMMONS DRIVE & US 40 - TMC**
Wed Jan 6, 2021
AM Peak (7:15 AM - 8:15 AM)
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 807915, Location: 39.718683, -86.355034

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



## PLAINFIELD COMMONS DRIVE & US 40 - TMC

Wed Jan 6, 2021
PM Peak (4:30 PM - 5:30 PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 807915, Location: 39.718683, -86.355034

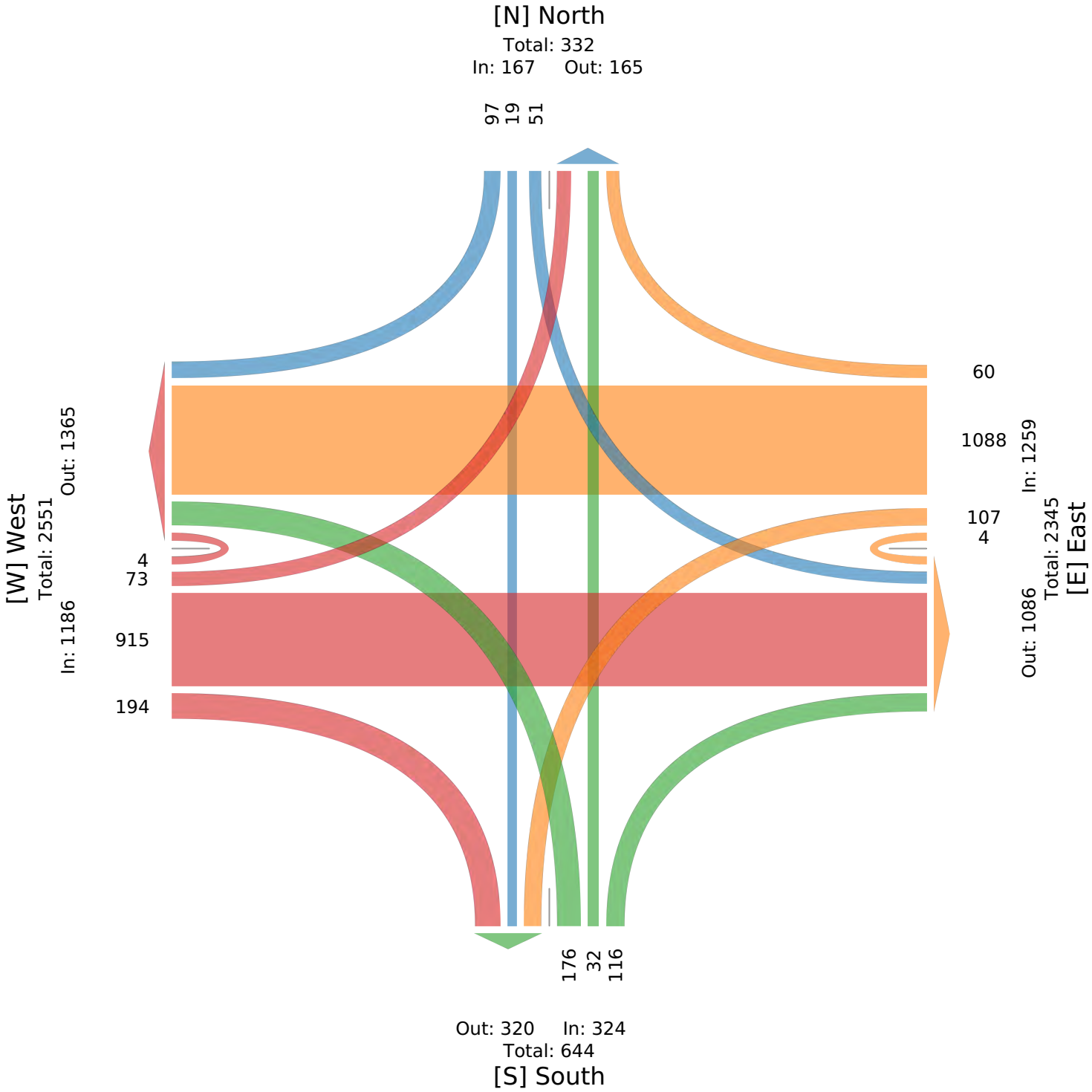
Provided by: A&F Engineering
8365 Keystone Crossing, Suite 201, Indianapolis, IN, 46240, US

| 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** |
| 2021-01-06 4:30PM | 40 | 7 | 29 | 0 | **76** | 18 | 3 | 25 | 0 | **46** | 20 | 208 | 42 | 0 | **270** | 32 | 282 | 21 | 2 | **337** | **729** |
| 4:45PM | 54 | 9 | 32 | 0 | **95** | 12 | 8 | 21 | 0 | **41** | 24 | 238 | 51 | 2 | **315** | 22 | 245 | 10 | 0 | **277** | **728** |
| 5:00PM | 42 | 8 | 26 | 0 | **76** | 12 | 4 | 24 | 0 | **40** | 16 | 216 | 52 | 1 | **285** | 30 | 292 | 17 | 2 | **341** | **742** |
| 5:15PM | 40 | 8 | 29 | 0 | **77** | 9 | 4 | 27 | 0 | **40** | 13 | 253 | 49 | 1 | **316** | 23 | 269 | 12 | 0 | **304** | **737** |
| **Total** | 176 | 32 | 116 | 0 | **324** | 51 | 19 | 97 | 0 | **167** | 73 | 915 | 194 | 4 | **1186** | 107 | 1088 | 60 | 4 | **1259** | **2936** |
| **% Approach** | 54.3% | 9.9% | 35.8% | 0% | **-** | 30.5% | 11.4% | 58.1% | 0% | **-** | 6.2% | 77.2% | 16.4% | 0.3% | **-** | 8.5% | 86.4% | 4.8% | 0.3% | **-** | - |
| **% Total** | 6.0% | 1.1% | 4.0% | 0% | **11.0%** | 1.7% | 0.6% | 3.3% | 0% | **5.7%** | 2.5% | 31.2% | 6.6% | 0.1% | **40.4%** | 3.6% | 37.1% | 2.0% | 0.1% | **42.9%** | - |
| **PHF** | 0.815 | 0.889 | 0.906 | - | **0.853** | 0.708 | 0.594 | 0.898 | - | **0.908** | 0.760 | 0.904 | 0.933 | 0.500 | **0.938** | 0.836 | 0.932 | 0.714 | 0.500 | **0.923** | 0.989 |
| **Lights and Motorcycles** | 176 | 32 | 115 | 0 | **323** | 51 | 18 | 97 | 0 | **166** | 73 | 884 | 194 | 4 | **1155** | 107 | 1073 | 58 | 4 | **1242** | 2886 |
| **% Lights and Motorcycles** | 100% | 100% | 99.1% | 0% | **99.7%** | 100% | 94.7% | 100% | 0% | **99.4%** | 100% | 96.6% | 100% | 100% | **97.4%** | 100% | 98.6% | 96.7% | 100% | **98.6%** | 98.3% |
| **Heavy** | 0 | 0 | 1 | 0 | **1** | 0 | 1 | 0 | 0 | **1** | 0 | 31 | 0 | 0 | **31** | 0 | 15 | 2 | 0 | **17** | 50 |
| **% Heavy** | 0% | 0% | 0.9% | 0% | **0.3%** | 0% | 5.3% | 0% | 0% | **0.6%** | 0% | 3.4% | 0% | 0% | **2.6%** | 0% | 1.4% | 3.3% | 0% | **1.4%** | 1.7% |

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

**PLAINFIELD COMMONS DRIVE & US 40 - TMC**
Wed Jan 6, 2021
PM Peak (4:30 PM - 5:30 PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 807915, Location: 39.718683, -86.355034

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) | 51 | 929 | 162 | 69 | 610 | 34 | 57 | 14 | 84 | 36 | 4 | 38 |
| Future Volume (veh/h) | 51 | 929 | 162 | 69 | 610 | 34 | 57 | 14 | 84 | 36 | 4 | 38 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1900 | 1826 | 1885 | 1870 | 1856 | 1900 | 1826 | 1900 | 1900 | 1796 | 1900 | 1900 |
| Adj Flow Rate, veh/h | 55 | 1010 | 176 | 75 | 663 | 37 | 62 | 15 | 91 | 39 | 4 | 41 |
| 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 | 5 | 1 | 2 | 3 | 0 | 5 | 0 | 0 | 7 | 0 | 0 |
| Cap, veh/h | 484 | 1472 | 678 | 361 | 1544 | 705 | 94 | 243 | 341 | 69 | 17 | 169 |
| Arrive On Green | 0.07 | 0.42 | 0.42 | 0.08 | 0.44 | 0.44 | 0.05 | 0.13 | 0.13 | 0.04 | 0.11 | 0.11 |
| Sat Flow, veh/h | 1810 | 3469 | 1598 | 1781 | 3526 | 1610 | 1739 | 1900 | 1610 | 1711 | 145 | 1487 |
| Grp Volume(v), veh/h | 55 | 1010 | 176 | 75 | 663 | 37 | 62 | 15 | 91 | 39 | 0 | 45 |
| Grp Sat Flow(s),veh/h/ln | 1810 | 1735 | 1598 | 1781 | 1763 | 1610 | 1739 | 1900 | 1610 | 1711 | 0 | 1632 |
| Q Serve(g_s), s | 0.9 | 13.9 | 4.2 | 1.3 | 7.6 | 0.8 | 2.1 | 0.4 | 2.8 | 1.3 | 0.0 | 1.5 |
| Cycle Q Clear(g_c), s | 0.9 | 13.9 | 4.2 | 1.3 | 7.6 | 0.8 | 2.1 | 0.4 | 2.8 | 1.3 | 0.0 | 1.5 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.91 |
| Lane Grp Cap(c), veh/h | 484 | 1472 | 678 | 361 | 1544 | 705 | 94 | 243 | 341 | 69 | 0 | 186 |
| V/C Ratio(X) | 0.11 | 0.69 | 0.26 | 0.21 | 0.43 | 0.05 | 0.66 | 0.06 | 0.27 | 0.57 | 0.00 | 0.24 |
| Avail Cap(c_a), veh/h | 571 | 2481 | 1143 | 454 | 2581 | 1179 | 326 | 453 | 519 | 204 | 0 | 278 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 8.2 | 13.7 | 10.9 | 9.4 | 11.4 | 9.5 | 27.2 | 22.5 | 19.3 | 27.7 | 0.0 | 23.7 |
| Incr Delay (d2), s/veh | 0.1 | 0.6 | 0.2 | 0.3 | 0.2 | 0.0 | 7.6 | 0.1 | 0.4 | 7.2 | 0.0 | 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 | 4.8 | 1.3 | 0.4 | 2.6 | 0.2 | 1.0 | 0.2 | 1.0 | 0.6 | 0.0 | 0.6 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 8.3 | 14.3 | 11.1 | 9.6 | 11.6 | 9.5 | 34.8 | 22.6 | 19.7 | 34.9 | 0.0 | 24.4 |
| LnGrp LOS | A | B | B | A | B | A | C | C | B | C | A | C |
| Approach Vol, veh/h | | 1241 | | | 775 | | | 168 | | | 84 | |
| Approach Delay, s/veh | | 13.6 | | | 11.3 | | | 25.6 | | | 29.3 | |
| Approach LOS | | B | | | B | | | C | | | C | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 7.4 | 12.5 | 8.9 | 29.9 | 8.2 | 11.7 | 8.1 | 30.7 |
| Change Period (Y+Rc), s | 5.0 | 5.0 | 4.0 | 5.0 | 5.0 | 5.0 | 4.0 | 5.0 |
| Max Green Setting (Gmax), s | 7.0 | 14.0 | 8.0 | 42.0 | 11.0 | 10.0 | 7.0 | 43.0 |
| Max Q Clear Time (g_c+I1), s | 3.3 | 4.8 | 3.3 | 15.9 | 4.1 | 3.5 | 2.9 | 9.6 |
| Green Ext Time (p_c), s | 0.0 | 0.2 | 0.1 | 9.0 | 0.1 | 0.1 | 0.0 | 5.3 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 14.3 |
| HCM 6th LOS | B |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 80 | 1007 | 213 | 118 | 1197 | 66 | 194 | 35 | 128 | 56 | 21 | 107 |
| Future Volume (veh/h) | 80 | 1007 | 213 | 118 | 1197 | 66 | 194 | 35 | 128 | 56 | 21 | 107 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1900 | 1856 | 1900 | 1900 | 1885 | 1856 | 1900 | 1900 | 1885 | 1900 | 1826 | 1900 |
| Adj Flow Rate, veh/h | 81 | 1017 | 215 | 119 | 1209 | 67 | 196 | 35 | 129 | 57 | 21 | 108 |
| Peak Hour Factor | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 |
| Percent Heavy Veh, % | 0 | 3 | 0 | 0 | 1 | 3 | 0 | 0 | 1 | 0 | 5 | 0 |
| Cap, veh/h | 295 | 1504 | 687 | 335 | 1561 | 685 | 241 | 371 | 447 | 83 | 28 | 144 |
| Arrive On Green | 0.08 | 0.43 | 0.43 | 0.08 | 0.44 | 0.44 | 0.13 | 0.20 | 0.20 | 0.05 | 0.11 | 0.11 |
| Sat Flow, veh/h | 1810 | 3526 | 1610 | 1810 | 3582 | 1572 | 1810 | 1900 | 1598 | 1810 | 258 | 1328 |
| Grp Volume(v), veh/h | 81 | 1017 | 215 | 119 | 1209 | 67 | 196 | 35 | 129 | 57 | 0 | 129 |
| Grp Sat Flow(s),veh/h/ln | 1810 | 1763 | 1610 | 1810 | 1791 | 1572 | 1810 | 1900 | 1598 | 1810 | 0 | 1587 |
| Q Serve(g_s), s | 1.8 | 17.8 | 6.8 | 2.6 | 22.0 | 1.9 | 8.1 | 1.2 | 4.8 | 2.4 | 0.0 | 6.0 |
| Cycle Q Clear(g_c), s | 1.8 | 17.8 | 6.8 | 2.6 | 22.0 | 1.9 | 8.1 | 1.2 | 4.8 | 2.4 | 0.0 | 6.0 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.84 |
| Lane Grp Cap(c), veh/h | 295 | 1504 | 687 | 335 | 1561 | 685 | 241 | 371 | 447 | 83 | 0 | 172 |
| V/C Ratio(X) | 0.27 | 0.68 | 0.31 | 0.35 | 0.77 | 0.10 | 0.81 | 0.09 | 0.29 | 0.69 | 0.00 | 0.75 |
| Avail Cap(c_a), veh/h | 325 | 1932 | 882 | 396 | 2057 | 903 | 401 | 545 | 593 | 189 | 0 | 269 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 13.6 | 17.7 | 14.5 | 12.6 | 18.4 | 12.7 | 32.3 | 25.3 | 21.6 | 36.0 | 0.0 | 33.2 |
| Incr Delay (d2), s/veh | 0.5 | 0.6 | 0.3 | 0.6 | 1.4 | 0.1 | 6.5 | 0.1 | 0.4 | 9.6 | 0.0 | 6.5 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.7 | 6.8 | 2.4 | 1.0 | 8.6 | 0.6 | 3.9 | 0.5 | 1.8 | 1.2 | 0.0 | 2.6 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 14.1 | 18.3 | 14.8 | 13.2 | 19.8 | 12.8 | 38.8 | 25.4 | 22.0 | 45.6 | 0.0 | 39.6 |
| LnGrp LOS | B | B | B | B | B | B | D | C | C | D | A | D |
| Approach Vol, veh/h | | 1313 | | | 1395 | | | 360 | | | 186 | |
| Approach Delay, s/veh | | 17.5 | | | 18.9 | | | 31.5 | | | 41.5 | |
| Approach LOS | | B | | | B | | | C | | | D | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 8.5 | 20.0 | 10.4 | 37.7 | 15.2 | 13.3 | 9.8 | 38.4 |
| Change Period (Y+Rc), s | 5.0 | 5.0 | 4.0 | 5.0 | 5.0 | 5.0 | 4.0 | 5.0 |
| Max Green Setting (Gmax), s | 3.6 | 22.0 | 9.0 | 42.0 | 17.0 | 13.0 | 7.0 | 44.0 |
| Max Q Clear Time (g_c+I1), s | 4.4 | 6.8 | 4.6 | 19.8 | 10.1 | 8.0 | 3.8 | 24.0 |
| Green Ext Time (p_c), s | 0.0 | 0.5 | 0.1 | 8.7 | 0.3 | 0.2 | 0.0 | 9.4 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 21.0 |
| HCM 6th LOS | C |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 56 | 1022 | 178 | 76 | 671 | 37 | 63 | 15 | 92 | 40 | 4 | 42 |
| Future Volume (veh/h) | 56 | 1022 | 178 | 76 | 671 | 37 | 63 | 15 | 92 | 40 | 4 | 42 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1900 | 1826 | 1885 | 1870 | 1856 | 1900 | 1826 | 1900 | 1900 | 1796 | 1900 | 1900 |
| Adj Flow Rate, veh/h | 61 | 1111 | 193 | 83 | 729 | 40 | 68 | 16 | 100 | 43 | 4 | 46 |
| 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 | 5 | 1 | 2 | 3 | 0 | 5 | 0 | 0 | 7 | 0 | 0 |
| Cap, veh/h | 475 | 1564 | 720 | 347 | 1633 | 746 | 96 | 230 | 332 | 72 | 14 | 162 |
| Arrive On Green | 0.07 | 0.45 | 0.45 | 0.09 | 0.46 | 0.46 | 0.06 | 0.12 | 0.12 | 0.04 | 0.11 | 0.11 |
| Sat Flow, veh/h | 1810 | 3469 | 1598 | 1781 | 3526 | 1610 | 1739 | 1900 | 1610 | 1711 | 130 | 1500 |
| Grp Volume(v), veh/h | 61 | 1111 | 193 | 83 | 729 | 40 | 68 | 16 | 100 | 43 | 0 | 50 |
| Grp Sat Flow(s),veh/h/ln | 1810 | 1735 | 1598 | 1781 | 1763 | 1610 | 1739 | 1900 | 1610 | 1711 | 0 | 1630 |
| Q Serve(g_s), s | 1.0 | 16.3 | 4.8 | 1.4 | 8.8 | 0.9 | 2.4 | 0.5 | 3.3 | 1.6 | 0.0 | 1.8 |
| Cycle Q Clear(g_c), s | 1.0 | 16.3 | 4.8 | 1.4 | 8.8 | 0.9 | 2.4 | 0.5 | 3.3 | 1.6 | 0.0 | 1.8 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.92 |
| Lane Grp Cap(c), veh/h | 475 | 1564 | 720 | 347 | 1633 | 746 | 96 | 230 | 332 | 72 | 0 | 176 |
| V/C Ratio(X) | 0.13 | 0.71 | 0.27 | 0.24 | 0.45 | 0.05 | 0.71 | 0.07 | 0.30 | 0.60 | 0.00 | 0.28 |
| Avail Cap(c_a), veh/h | 544 | 2418 | 1113 | 393 | 2457 | 1122 | 275 | 421 | 494 | 163 | 0 | 258 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 8.0 | 14.0 | 10.8 | 9.8 | 11.5 | 9.3 | 29.3 | 24.6 | 21.2 | 29.7 | 0.0 | 25.9 |
| Incr Delay (d2), s/veh | 0.1 | 0.6 | 0.2 | 0.4 | 0.2 | 0.0 | 9.2 | 0.1 | 0.5 | 7.8 | 0.0 | 0.9 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.4 | 5.6 | 1.5 | 0.5 | 3.1 | 0.3 | 1.2 | 0.2 | 1.2 | 0.8 | 0.0 | 0.7 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 8.1 | 14.6 | 11.0 | 10.1 | 11.7 | 9.4 | 38.6 | 24.7 | 21.7 | 37.5 | 0.0 | 26.8 |
| LnGrp LOS | A | B | B | B | B | A | D | C | C | D | A | C |
| Approach Vol, veh/h | | 1365 | | | 852 | | | 184 | | | 93 | |
| Approach Delay, s/veh | | 13.8 | | | 11.4 | | | 28.2 | | | 31.7 | |
| Approach LOS | | B | | | B | | | C | | | C | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 7.6 | 12.7 | 9.4 | 33.5 | 8.5 | 11.8 | 8.6 | 34.2 |
| Change Period (Y+Rc), s | 5.0 | 5.0 | 4.0 | 5.0 | 5.0 | 5.0 | 4.0 | 5.0 |
| Max Green Setting (Gmax), s | 6.6 | 14.0 | 7.0 | 44.0 | 10.0 | 10.0 | 7.0 | 44.0 |
| Max Q Clear Time (g_c+I1), s | 3.6 | 5.3 | 3.4 | 18.3 | 4.4 | 3.8 | 3.0 | 10.8 |
| Green Ext Time (p_c), s | 0.0 | 0.2 | 0.0 | 10.1 | 0.1 | 0.1 | 0.0 | 6.0 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 14.7 |
| HCM 6th LOS | B |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 88 | 1108 | 234 | 130 | 1317 | 73 | 213 | 39 | 141 | 62 | 23 | 118 |
| Future Volume (veh/h) | 88 | 1108 | 234 | 130 | 1317 | 73 | 213 | 39 | 141 | 62 | 23 | 118 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1900 | 1856 | 1900 | 1900 | 1885 | 1856 | 1900 | 1900 | 1885 | 1900 | 1826 | 1900 |
| Adj Flow Rate, veh/h | 91 | 1142 | 241 | 134 | 1358 | 75 | 220 | 40 | 145 | 64 | 24 | 122 |
| 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 | 3 | 0 | 0 | 1 | 3 | 0 | 0 | 1 | 0 | 5 | 0 |
| Cap, veh/h | 256 | 1559 | 712 | 294 | 1606 | 705 | 261 | 405 | 465 | 83 | 30 | 152 |
| Arrive On Green | 0.07 | 0.44 | 0.44 | 0.08 | 0.45 | 0.45 | 0.14 | 0.21 | 0.21 | 0.05 | 0.11 | 0.11 |
| Sat Flow, veh/h | 1810 | 3526 | 1610 | 1810 | 3582 | 1572 | 1810 | 1900 | 1598 | 1810 | 261 | 1326 |
| Grp Volume(v), veh/h | 91 | 1142 | 241 | 134 | 1358 | 75 | 220 | 40 | 145 | 64 | 0 | 146 |
| Grp Sat Flow(s),veh/h/ln | 1810 | 1763 | 1610 | 1810 | 1791 | 1572 | 1810 | 1900 | 1598 | 1810 | 0 | 1587 |
| Q Serve(g_s), s | 2.2 | 23.0 | 8.5 | 3.3 | 29.0 | 2.4 | 10.2 | 1.5 | 6.1 | 3.0 | 0.0 | 7.7 |
| Cycle Q Clear(g_c), s | 2.2 | 23.0 | 8.5 | 3.3 | 29.0 | 2.4 | 10.2 | 1.5 | 6.1 | 3.0 | 0.0 | 7.7 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.84 |
| Lane Grp Cap(c), veh/h | 256 | 1559 | 712 | 294 | 1606 | 705 | 261 | 405 | 465 | 83 | 0 | 182 |
| V/C Ratio(X) | 0.36 | 0.73 | 0.34 | 0.46 | 0.85 | 0.11 | 0.84 | 0.10 | 0.31 | 0.77 | 0.00 | 0.80 |
| Avail Cap(c_a), veh/h | 294 | 1760 | 804 | 321 | 1789 | 785 | 378 | 463 | 514 | 189 | 0 | 221 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 16.9 | 19.8 | 15.7 | 15.3 | 21.1 | 13.8 | 35.9 | 27.2 | 23.8 | 40.6 | 0.0 | 37.2 |
| Incr Delay (d2), s/veh | 0.8 | 1.4 | 0.3 | 1.1 | 3.6 | 0.1 | 10.9 | 0.1 | 0.4 | 13.8 | 0.0 | 15.9 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.9 | 9.1 | 3.0 | 1.3 | 12.1 | 0.8 | 5.2 | 0.7 | 2.3 | 1.6 | 0.0 | 3.7 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 17.7 | 21.2 | 16.0 | 16.4 | 24.7 | 13.8 | 46.8 | 27.3 | 24.2 | 54.5 | 0.0 | 53.1 |
| LnGrp LOS | B | C | B | B | C | B | D | C | C | D | A | D |
| Approach Vol, veh/h | | 1474 | | | 1567 | | | 405 | | | 210 | |
| Approach Delay, s/veh | | 20.1 | | | 23.5 | | | 36.8 | | | 53.5 | |
| Approach LOS | | C | | | C | | | D | | | D | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 9.0 | 23.4 | 10.7 | 43.1 | 17.4 | 14.9 | 10.2 | 43.6 |
| Change Period (Y+Rc), s | 5.0 | 5.0 | 4.0 | 5.0 | 5.0 | 5.0 | 4.0 | 5.0 |
| Max Green Setting (Gmax), s | 4.0 | 21.0 | 8.0 | 43.0 | 18.0 | 12.0 | 8.0 | 43.0 |
| Max Q Clear Time (g_c+I1), s | 5.0 | 8.1 | 5.3 | 25.0 | 12.2 | 9.7 | 4.2 | 31.0 |
| Green Ext Time (p_c), s | 0.0 | 0.5 | 0.1 | 8.9 | 0.3 | 0.1 | 0.1 | 7.6 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 25.4 |
| HCM 6th LOS | C |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 51 | 952 | 162 | 69 | 664 | 34 | 57 | 14 | 84 | 36 | 4 | 38 |
| Future Volume (veh/h) | 51 | 952 | 162 | 69 | 664 | 34 | 57 | 14 | 84 | 36 | 4 | 38 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1900 | 1826 | 1885 | 1885 | 1841 | 1900 | 1826 | 1900 | 1900 | 1781 | 1900 | 1900 |
| Adj Flow Rate, veh/h | 55 | 1035 | 176 | 75 | 722 | 37 | 62 | 15 | 91 | 39 | 4 | 41 |
| 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 | 5 | 1 | 1 | 4 | 0 | 5 | 0 | 0 | 8 | 0 | 0 |
| Cap, veh/h | 452 | 1476 | 680 | 349 | 1533 | 706 | 129 | 244 | 339 | 94 | 16 | 163 |
| Arrive On Green | 0.07 | 0.43 | 0.43 | 0.08 | 0.44 | 0.44 | 0.07 | 0.13 | 0.13 | 0.06 | 0.11 | 0.11 |
| Sat Flow, veh/h | 1810 | 3469 | 1598 | 1795 | 3497 | 1610 | 1739 | 1900 | 1610 | 1697 | 145 | 1487 |
| Grp Volume(v), veh/h | 55 | 1035 | 176 | 75 | 722 | 37 | 62 | 15 | 91 | 39 | 0 | 45 |
| Grp Sat Flow(s),veh/h/ln | 1810 | 1735 | 1598 | 1795 | 1749 | 1610 | 1739 | 1900 | 1610 | 1697 | 0 | 1632 |
| Q Serve(g_s), s | 1.0 | 15.0 | 4.4 | 1.3 | 9.0 | 0.8 | 2.1 | 0.4 | 2.9 | 1.4 | 0.0 | 1.6 |
| Cycle Q Clear(g_c), s | 1.0 | 15.0 | 4.4 | 1.3 | 9.0 | 0.8 | 2.1 | 0.4 | 2.9 | 1.4 | 0.0 | 1.6 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.91 |
| Lane Grp Cap(c), veh/h | 452 | 1476 | 680 | 349 | 1533 | 706 | 129 | 244 | 339 | 94 | 0 | 178 |
| V/C Ratio(X) | 0.12 | 0.70 | 0.26 | 0.22 | 0.47 | 0.05 | 0.48 | 0.06 | 0.27 | 0.42 | 0.00 | 0.25 |
| Avail Cap(c_a), veh/h | 532 | 2368 | 1090 | 405 | 2387 | 1099 | 311 | 463 | 525 | 193 | 0 | 292 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 8.7 | 14.5 | 11.4 | 10.0 | 12.2 | 9.9 | 27.3 | 23.6 | 20.3 | 28.1 | 0.0 | 25.1 |
| Incr Delay (d2), s/veh | 0.1 | 0.6 | 0.2 | 0.3 | 0.2 | 0.0 | 2.7 | 0.1 | 0.4 | 2.9 | 0.0 | 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 | 5.2 | 1.4 | 0.5 | 3.1 | 0.3 | 0.9 | 0.2 | 1.1 | 0.6 | 0.0 | 0.6 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 8.8 | 15.1 | 11.6 | 10.3 | 12.5 | 10.0 | 30.1 | 23.7 | 20.7 | 31.0 | 0.0 | 25.8 |
| LnGrp LOS | A | B | B | B | B | A | C | C | C | C | A | C |
| Approach Vol, veh/h | | 1266 | | | 834 | | | 168 | | | 84 | |
| Approach Delay, s/veh | | 14.3 | | | 12.2 | | | 24.5 | | | 28.2 | |
| Approach LOS | | B | | | B | | | C | | | C | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 8.4 | 12.9 | 9.1 | 31.2 | 9.6 | 11.7 | 8.3 | 32.0 |
| Change Period (Y+Rc), s | 5.0 | 5.0 | 4.0 | 5.0 | 5.0 | 5.0 | 4.0 | 5.0 |
| Max Green Setting (Gmax), s | 7.0 | 15.0 | 7.0 | 42.0 | 11.0 | 11.0 | 7.0 | 42.0 |
| Max Q Clear Time (g_c+I1), s | 3.4 | 4.9 | 3.3 | 17.0 | 4.1 | 3.6 | 3.0 | 11.0 |
| Green Ext Time (p_c), s | 0.0 | 0.2 | 0.0 | 9.1 | 0.1 | 0.1 | 0.0 | 5.8 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 14.8 |
| HCM 6th LOS | B |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 80 | 1047 | 214 | 118 | 1242 | 66 | 194 | 35 | 128 | 56 | 21 | 107 |
| Future Volume (veh/h) | 80 | 1047 | 214 | 118 | 1242 | 66 | 194 | 35 | 128 | 56 | 21 | 107 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1900 | 1856 | 1900 | 1900 | 1885 | 1856 | 1900 | 1900 | 1885 | 1900 | 1826 | 1900 |
| Adj Flow Rate, veh/h | 81 | 1058 | 216 | 119 | 1255 | 67 | 196 | 35 | 129 | 57 | 21 | 108 |
| Peak Hour Factor | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 |
| Percent Heavy Veh, % | 0 | 3 | 0 | 0 | 1 | 3 | 0 | 0 | 1 | 0 | 5 | 0 |
| Cap, veh/h | 286 | 1499 | 685 | 327 | 1556 | 683 | 240 | 332 | 415 | 117 | 28 | 142 |
| Arrive On Green | 0.08 | 0.43 | 0.43 | 0.08 | 0.43 | 0.43 | 0.13 | 0.17 | 0.17 | 0.06 | 0.11 | 0.11 |
| Sat Flow, veh/h | 1810 | 3526 | 1610 | 1810 | 3582 | 1572 | 1810 | 1900 | 1598 | 1810 | 258 | 1328 |
| Grp Volume(v), veh/h | 81 | 1058 | 216 | 119 | 1255 | 67 | 196 | 35 | 129 | 57 | 0 | 129 |
| Grp Sat Flow(s),veh/h/ln | 1810 | 1763 | 1610 | 1810 | 1791 | 1572 | 1810 | 1900 | 1598 | 1810 | 0 | 1587 |
| Q Serve(g_s), s | 1.8 | 18.7 | 6.8 | 2.6 | 23.1 | 1.9 | 8.0 | 1.2 | 4.9 | 2.3 | 0.0 | 6.0 |
| Cycle Q Clear(g_c), s | 1.8 | 18.7 | 6.8 | 2.6 | 23.1 | 1.9 | 8.0 | 1.2 | 4.9 | 2.3 | 0.0 | 6.0 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.84 |
| Lane Grp Cap(c), veh/h | 286 | 1499 | 685 | 327 | 1556 | 683 | 240 | 332 | 415 | 117 | 0 | 169 |
| V/C Ratio(X) | 0.28 | 0.71 | 0.32 | 0.36 | 0.81 | 0.10 | 0.82 | 0.11 | 0.31 | 0.49 | 0.00 | 0.76 |
| Avail Cap(c_a), veh/h | 317 | 1721 | 786 | 389 | 1843 | 809 | 358 | 451 | 515 | 167 | 0 | 209 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 14.0 | 17.9 | 14.5 | 12.9 | 18.7 | 12.7 | 32.0 | 26.3 | 22.6 | 34.2 | 0.0 | 32.9 |
| Incr Delay (d2), s/veh | 0.5 | 1.1 | 0.3 | 0.7 | 2.3 | 0.1 | 8.8 | 0.1 | 0.4 | 3.1 | 0.0 | 12.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.7 | 7.2 | 2.3 | 1.0 | 9.2 | 0.6 | 4.0 | 0.5 | 1.8 | 1.1 | 0.0 | 2.8 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 14.5 | 19.0 | 14.7 | 13.6 | 21.0 | 12.7 | 40.8 | 26.4 | 23.0 | 37.4 | 0.0 | 45.0 |
| LnGrp LOS | B | B | B | B | C | B | D | C | C | D | A | D |
| Approach Vol, veh/h | | 1355 | | | 1441 | | | 360 | | | 186 | |
| Approach Delay, s/veh | | 18.1 | | | 20.0 | | | 33.0 | | | 42.7 | |
| Approach LOS | | B | | | C | | | C | | | D | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 9.9 | 18.3 | 10.4 | 37.2 | 15.1 | 13.1 | 9.7 | 37.9 |
| Change Period (Y+Rc), s | 5.0 | 5.0 | 4.0 | 5.0 | 5.0 | 5.0 | 4.0 | 5.0 |
| Max Green Setting (Gmax), s | 7.0 | 18.0 | 9.0 | 37.0 | 15.0 | 10.0 | 7.0 | 39.0 |
| Max Q Clear Time (g_c+I1), s | 4.3 | 6.9 | 4.6 | 20.7 | 10.0 | 8.0 | 3.8 | 25.1 |
| Green Ext Time (p_c), s | 0.0 | 0.4 | 0.1 | 7.7 | 0.2 | 0.1 | 0.0 | 7.8 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 21.9 |
| HCM 6th LOS | C |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 56 | 1045 | 178 | 76 | 725 | 37 | 63 | 15 | 92 | 40 | 4 | 42 |
| Future Volume (veh/h) | 56 | 1045 | 178 | 76 | 725 | 37 | 63 | 15 | 92 | 40 | 4 | 42 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1900 | 1826 | 1885 | 1885 | 1841 | 1900 | 1826 | 1900 | 1900 | 1781 | 1900 | 1900 |
| Adj Flow Rate, veh/h | 61 | 1136 | 193 | 83 | 788 | 40 | 68 | 16 | 100 | 43 | 4 | 46 |
| 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 | 5 | 1 | 1 | 4 | 0 | 5 | 0 | 0 | 8 | 0 | 0 |
| Cap, veh/h | 444 | 1565 | 721 | 334 | 1618 | 745 | 131 | 230 | 328 | 98 | 13 | 155 |
| Arrive On Green | 0.07 | 0.45 | 0.45 | 0.08 | 0.46 | 0.46 | 0.08 | 0.12 | 0.12 | 0.06 | 0.10 | 0.10 |
| Sat Flow, veh/h | 1810 | 3469 | 1598 | 1795 | 3497 | 1610 | 1739 | 1900 | 1610 | 1697 | 130 | 1500 |
| Grp Volume(v), veh/h | 61 | 1136 | 193 | 83 | 788 | 40 | 68 | 16 | 100 | 43 | 0 | 50 |
| Grp Sat Flow(s),veh/h/ln | 1810 | 1735 | 1598 | 1795 | 1749 | 1610 | 1739 | 1900 | 1610 | 1697 | 0 | 1630 |
| Q Serve(g_s), s | 1.1 | 17.7 | 5.0 | 1.5 | 10.3 | 0.9 | 2.5 | 0.5 | 3.5 | 1.6 | 0.0 | 1.9 |
| Cycle Q Clear(g_c), s | 1.1 | 17.7 | 5.0 | 1.5 | 10.3 | 0.9 | 2.5 | 0.5 | 3.5 | 1.6 | 0.0 | 1.9 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.92 |
| Lane Grp Cap(c), veh/h | 444 | 1565 | 721 | 334 | 1618 | 745 | 131 | 230 | 328 | 98 | 0 | 169 |
| V/C Ratio(X) | 0.14 | 0.73 | 0.27 | 0.25 | 0.49 | 0.05 | 0.52 | 0.07 | 0.30 | 0.44 | 0.00 | 0.30 |
| Avail Cap(c_a), veh/h | 506 | 2307 | 1062 | 375 | 2326 | 1071 | 263 | 373 | 450 | 179 | 0 | 246 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 8.6 | 14.8 | 11.3 | 10.5 | 12.3 | 9.8 | 29.4 | 25.8 | 22.4 | 30.1 | 0.0 | 27.4 |
| Incr Delay (d2), s/veh | 0.1 | 0.7 | 0.2 | 0.4 | 0.2 | 0.0 | 3.1 | 0.1 | 0.5 | 3.1 | 0.0 | 1.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.4 | 6.2 | 1.6 | 0.5 | 3.6 | 0.3 | 1.1 | 0.2 | 1.3 | 0.7 | 0.0 | 0.7 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 8.7 | 15.5 | 11.5 | 10.9 | 12.6 | 9.8 | 32.6 | 25.9 | 22.9 | 33.2 | 0.0 | 28.4 |
| LnGrp LOS | A | B | B | B | B | A | C | C | C | C | A | C |
| Approach Vol, veh/h | | 1390 | | | 911 | | | 184 | | | 93 | |
| Approach Delay, s/veh | | 14.6 | | | 12.3 | | | 26.7 | | | 30.6 | |
| Approach LOS | | B | | | B | | | C | | | C | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 8.8 | 13.0 | 9.5 | 34.8 | 10.0 | 11.8 | 8.7 | 35.6 |
| Change Period (Y+Rc), s | 5.0 | 5.0 | 4.0 | 5.0 | 5.0 | 5.0 | 4.0 | 5.0 |
| Max Green Setting (Gmax), s | 7.0 | 13.0 | 7.0 | 44.0 | 10.0 | 10.0 | 7.0 | 44.0 |
| Max Q Clear Time (g_c+I1), s | 3.6 | 5.5 | 3.5 | 19.7 | 4.5 | 3.9 | 3.1 | 12.3 |
| Green Ext Time (p_c), s | 0.0 | 0.2 | 0.0 | 10.2 | 0.1 | 0.1 | 0.0 | 6.5 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 15.2 |
| HCM 6th LOS | B |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 88 | 1148 | 235 | 130 | 1362 | 73 | 213 | 39 | 141 | 62 | 23 | 118 |
| Future Volume (veh/h) | 88 | 1148 | 235 | 130 | 1362 | 73 | 213 | 39 | 141 | 62 | 23 | 118 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1900 | 1856 | 1900 | 1900 | 1885 | 1856 | 1900 | 1900 | 1885 | 1900 | 1841 | 1900 |
| Adj Flow Rate, veh/h | 89 | 1160 | 237 | 131 | 1376 | 74 | 215 | 39 | 142 | 63 | 23 | 119 |
| Peak Hour Factor | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 |
| Percent Heavy Veh, % | 0 | 3 | 0 | 0 | 1 | 3 | 0 | 0 | 1 | 0 | 4 | 0 |
| Cap, veh/h | 257 | 1559 | 712 | 296 | 1607 | 706 | 254 | 356 | 426 | 116 | 29 | 149 |
| Arrive On Green | 0.07 | 0.44 | 0.44 | 0.08 | 0.45 | 0.45 | 0.14 | 0.19 | 0.19 | 0.06 | 0.11 | 0.11 |
| Sat Flow, veh/h | 1810 | 3526 | 1610 | 1810 | 3582 | 1572 | 1810 | 1900 | 1598 | 1810 | 259 | 1340 |
| Grp Volume(v), veh/h | 89 | 1160 | 237 | 131 | 1376 | 74 | 215 | 39 | 142 | 63 | 0 | 142 |
| Grp Sat Flow(s),veh/h/ln | 1810 | 1763 | 1610 | 1810 | 1791 | 1572 | 1810 | 1900 | 1598 | 1810 | 0 | 1599 |
| Q Serve(g_s), s | 2.1 | 22.9 | 8.1 | 3.1 | 28.8 | 2.3 | 9.7 | 1.4 | 6.0 | 2.8 | 0.0 | 7.3 |
| Cycle Q Clear(g_c), s | 2.1 | 22.9 | 8.1 | 3.1 | 28.8 | 2.3 | 9.7 | 1.4 | 6.0 | 2.8 | 0.0 | 7.3 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.84 |
| Lane Grp Cap(c), veh/h | 257 | 1559 | 712 | 296 | 1607 | 706 | 254 | 356 | 426 | 116 | 0 | 178 |
| V/C Ratio(X) | 0.35 | 0.74 | 0.33 | 0.44 | 0.86 | 0.10 | 0.85 | 0.11 | 0.33 | 0.54 | 0.00 | 0.80 |
| Avail Cap(c_a), veh/h | 276 | 1725 | 788 | 303 | 1753 | 770 | 302 | 363 | 432 | 173 | 0 | 191 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 16.6 | 19.4 | 15.3 | 15.0 | 20.7 | 13.4 | 35.1 | 28.3 | 24.7 | 38.0 | 0.0 | 36.3 |
| Incr Delay (d2), s/veh | 0.8 | 1.6 | 0.3 | 1.0 | 4.2 | 0.1 | 17.1 | 0.1 | 0.5 | 3.9 | 0.0 | 19.8 |
| 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 | 0.8 | 9.1 | 2.9 | 1.2 | 12.0 | 0.8 | 5.4 | 0.7 | 2.3 | 1.4 | 0.0 | 3.8 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 17.4 | 21.0 | 15.6 | 16.1 | 24.8 | 13.4 | 52.2 | 28.4 | 25.2 | 41.9 | 0.0 | 56.1 |
| LnGrp LOS | B | C | B | B | C | B | D | C | C | D | A | E |
| Approach Vol, veh/h | | 1486 | | | 1581 | | | 396 | | | 205 | |
| Approach Delay, s/veh | | 20.0 | | | 23.6 | | | 40.2 | | | 51.8 | |
| Approach LOS | | B | | | C | | | D | | | D | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 10.4 | 20.7 | 10.7 | 42.0 | 16.8 | 14.3 | 10.1 | 42.6 |
| Change Period (Y+Rc), s | 5.0 | 5.0 | 4.0 | 5.0 | 5.0 | 5.0 | 4.0 | 5.0 |
| Max Green Setting (Gmax), s | 8.0 | 16.0 | 7.0 | 41.0 | 14.0 | 10.0 | 7.0 | 41.0 |
| Max Q Clear Time (g_c+I1), s | 4.3 | 8.0 | 5.1 | 24.9 | 11.7 | 9.3 | 4.1 | 30.8 |
| Green Ext Time (p_c), s | 0.0 | 0.4 | 0.1 | 8.5 | 0.1 | 0.0 | 0.0 | 6.8 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 25.5 |
| HCM 6th LOS | C |

# US 40 & PLAINFIELD VILLAGE DRIVE

## TRAFFIC VOLUME COUNTS
## CAPACITY ANALYSIS

## PLAINFIELD VILLAGE DRIVE & US 40 - TMC

Wed Jan 6, 2021
Full Length (6:30 AM-8:30 AM, 4 PM-7 PM)
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 807916, Location: 39.720872, -86.349558

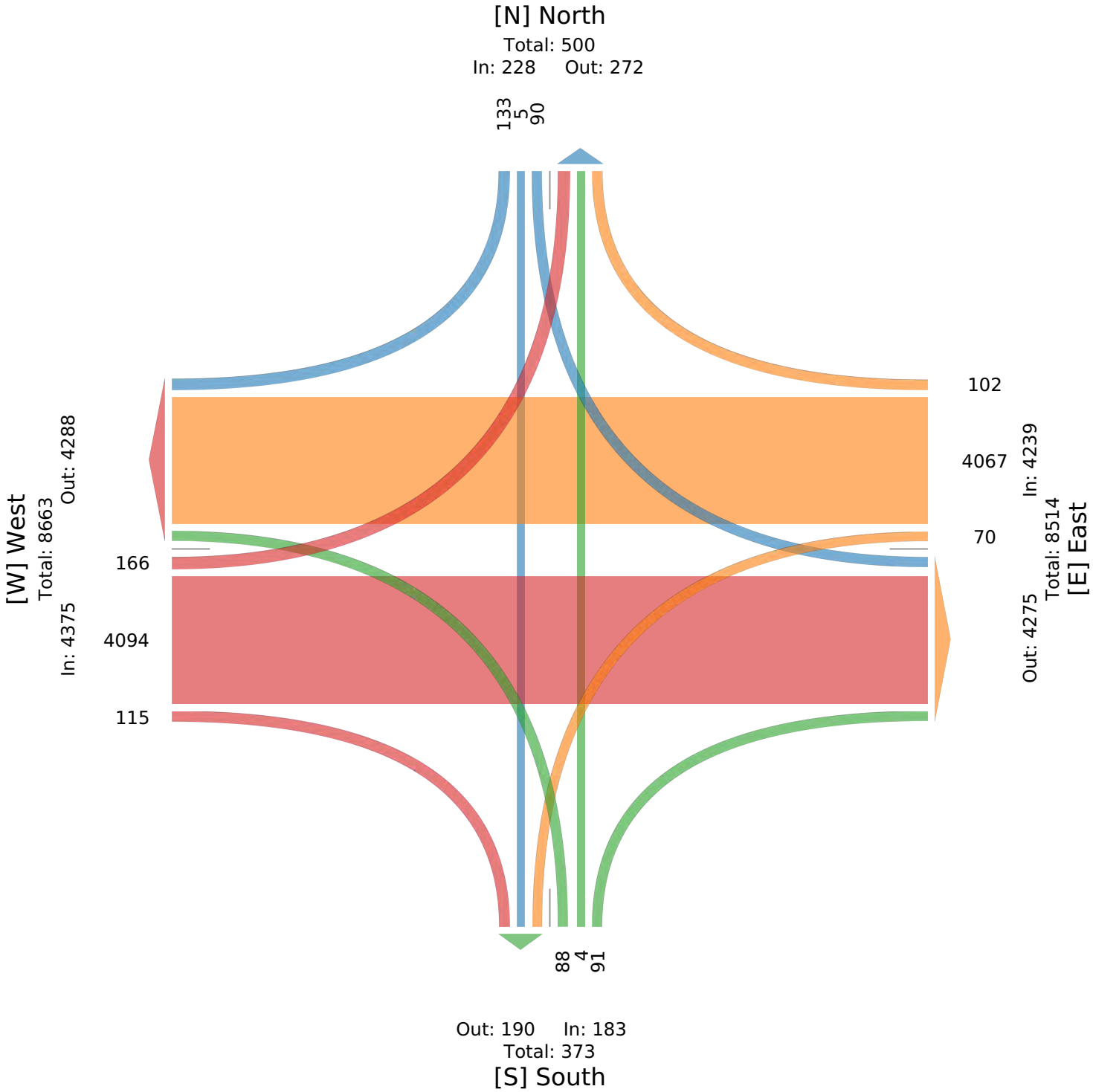
Provided by: A&F Engineering
8365 Keystone Crossing, Suite 201, Indianapolis, IN, 46240, US

| 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 |
| 2021-01-06 6:30AM | 0 | 0 | 0 | 0 | **0** | 0 | 0 | 0 | 0 | **0** | 3 | 159 | 0 | 0 | **162** | 1 | 106 | 2 | 0 | **109** | **271** |
| 6:45AM | 0 | 0 | 1 | 0 | **1** | 0 | 0 | 0 | 0 | **0** | 13 | 158 | 1 | 0 | **172** | 2 | 136 | 1 | 0 | **139** | **312** |
| Hourly Total | 0 | 0 | 1 | 0 | **1** | 0 | 0 | 0 | 0 | **0** | 16 | 317 | 1 | 0 | **334** | 3 | 242 | 3 | 0 | **248** | **583** |
| 7:00AM | 1 | 0 | 0 | 0 | **1** | 2 | 0 | 1 | 0 | **3** | 2 | 147 | 7 | 0 | **156** | 3 | 99 | 3 | 0 | **105** | **265** |
| 7:15AM | 3 | 0 | 0 | 0 | **3** | 0 | 1 | 0 | 0 | **1** | 6 | 179 | 9 | 0 | **194** | 4 | 126 | 1 | 0 | **131** | **329** |
| 7:30AM | 0 | 0 | 0 | 0 | **0** | 2 | 0 | 1 | 0 | **3** | 14 | 162 | 9 | 0 | **185** | 1 | 136 | 5 | 0 | **142** | **330** |
| 7:45AM | 3 | 0 | 2 | 0 | **5** | 4 | 0 | 4 | 0 | **8** | 31 | 148 | 9 | 0 | **188** | 8 | 173 | 6 | 0 | **187** | **388** |
| Hourly Total | 7 | 0 | 2 | 0 | **9** | 8 | 1 | 6 | 0 | **15** | 53 | 636 | 34 | 0 | **723** | 16 | 534 | 15 | 0 | **565** | **1312** |
| 8:00AM | 2 | 0 | 0 | 0 | **2** | 1 | 0 | 1 | 0 | **2** | 12 | 141 | 6 | 0 | **159** | 5 | 114 | 3 | 0 | **122** | **285** |
| 8:15AM | 3 | 0 | 3 | 0 | **6** | 3 | 1 | 2 | 0 | **6** | 13 | 140 | 12 | 0 | **165** | 7 | 134 | 11 | 0 | **152** | **329** |
| 8:30AM | 0 | 0 | 0 | 0 | **0** | 0 | 0 | 0 | 0 | **0** | 1 | 0 | 0 | 0 | **1** | 0 | 0 | 0 | 0 | **0** | **1** |
| Hourly Total | 5 | 0 | 3 | 0 | **8** | 4 | 1 | 3 | 0 | **8** | 26 | 281 | 18 | 0 | **325** | 12 | 248 | 14 | 0 | **274** | **615** |
| 4:00PM | 5 | 0 | 7 | 0 | **12** | 10 | 0 | 22 | 0 | **32** | 9 | 283 | 5 | 0 | **297** | 4 | 283 | 12 | 0 | **299** | **640** |
| 4:15PM | 4 | 1 | 6 | 0 | **11** | 6 | 0 | 3 | 0 | **9** | 6 | 218 | 5 | 0 | **229** | 4 | 282 | 10 | 0 | **296** | **545** |
| 4:30PM | 17 | 1 | 10 | 0 | **28** | 11 | 0 | 18 | 0 | **29** | 6 | 274 | 3 | 0 | **283** | 4 | 295 | 8 | 0 | **307** | **647** |
| 4:45PM | 4 | 0 | 9 | 0 | **13** | 11 | 1 | 12 | 0 | **24** | 6 | 226 | 10 | 0 | **242** | 4 | 269 | 11 | 0 | **284** | **563** |
| Hourly Total | 30 | 2 | 32 | 0 | **64** | 38 | 1 | 55 | 0 | **94** | 27 | 1001 | 23 | 0 | **1051** | 16 | 1129 | 41 | 0 | **1186** | **2395** |
| 5:00PM | 15 | 0 | 11 | 0 | **26** | 4 | 0 | 17 | 0 | **21** | 3 | 272 | 13 | 0 | **288** | 4 | 282 | 8 | 0 | **294** | **629** |
| 5:15PM | 5 | 0 | 4 | 0 | **9** | 5 | 0 | 11 | 0 | **16** | 9 | 259 | 7 | 0 | **275** | 4 | 314 | 1 | 0 | **319** | **619** |
| 5:30PM | 5 | 1 | 12 | 0 | **18** | 3 | 0 | 11 | 0 | **14** | 11 | 259 | 6 | 0 | **276** | 4 | 262 | 7 | 0 | **273** | **581** |
| 5:45PM | 6 | 0 | 2 | 0 | **8** | 4 | 0 | 3 | 0 | **7** | 5 | 221 | 2 | 0 | **228** | 5 | 258 | 3 | 0 | **266** | **509** |
| Hourly Total | 31 | 1 | 29 | 0 | **61** | 16 | 0 | 42 | 0 | **58** | 28 | 1011 | 28 | 0 | **1067** | 17 | 1116 | 19 | 0 | **1152** | **2338** |
| 6:00PM | 6 | 0 | 8 | 0 | **14** | 6 | 0 | 7 | 0 | **13** | 8 | 274 | 3 | 0 | **285** | 1 | 225 | 1 | 0 | **227** | **539** |
| 6:15PM | 2 | 0 | 6 | 0 | **8** | 5 | 0 | 7 | 0 | **12** | 3 | 219 | 3 | 0 | **225** | 2 | 204 | 4 | 0 | **210** | **455** |
| 6:30PM | 3 | 0 | 7 | 0 | **10** | 7 | 1 | 11 | 0 | **19** | 2 | 198 | 2 | 0 | **202** | 1 | 183 | 2 | 0 | **186** | **417** |
| 6:45PM | 4 | 1 | 3 | 0 | **8** | 6 | 1 | 2 | 0 | **9** | 3 | 157 | 3 | 0 | **163** | 2 | 186 | 3 | 0 | **191** | **371** |
| Hourly Total | 15 | 1 | 24 | 0 | **40** | 24 | 2 | 27 | 0 | **53** | 16 | 848 | 11 | 0 | **875** | 6 | 798 | 10 | 0 | **814** | **1782** |
| 7:00PM | 0 | 0 | 0 | 0 | **0** | 0 | 0 | 0 | 0 | **0** | 0 | 0 | 0 | 0 | **0** | 0 | 0 | 0 | 0 | **0** | **0** |
| Hourly Total | 0 | 0 | 0 | 0 | **0** | 0 | 0 | 0 | 0 | **0** | 0 | 0 | 0 | 0 | **0** | 0 | 0 | 0 | 0 | **0** | **0** |
| **Total** | 88 | 4 | 91 | 0 | **183** | 90 | 5 | 133 | 0 | **228** | 166 | 4094 | 115 | 0 | **4375** | 70 | 4067 | 102 | 0 | **4239** | **9025** |
| **% Approach** | 48.1% | 2.2% | 49.7% | 0% | **-** | 39.5% | 2.2% | 58.3% | 0% | **-** | 3.8% | 93.6% | 2.6% | 0% | **-** | 1.7% | 95.9% | 2.4% | 0% | **-** | - |
| **% Total** | 1.0% | 0% | 1.0% | 0% | **2.0%** | 1.0% | 0.1% | 1.5% | 0% | **2.5%** | 1.8% | 45.4% | 1.3% | 0% | **48.5%** | 0.8% | 45.1% | 1.1% | 0% | **47.0%** | - |
| **Lights and Motorcycles** | 86 | 4 | 90 | 0 | **180** | 89 | 3 | 132 | 0 | **224** | 165 | 3950 | 115 | 0 | **4230** | 69 | 3979 | 98 | 0 | **4146** | 8780 |
| **% Lights and Motorcycles** | 97.7% | 100% | 98.9% | 0% | **98.4%** | 98.9% | 60.0% | 99.2% | 0% | **98.2%** | 99.4% | 96.5% | 100% | 0% | **96.7%** | 98.6% | 97.8% | 96.1% | 0% | **97.8%** | 97.3% |
| **Heavy** | 2 | 0 | 1 | 0 | **3** | 1 | 2 | 1 | 0 | **4** | 1 | 144 | 0 | 0 | **145** | 1 | 88 | 4 | 0 | **93** | 245 |
| **% Heavy** | 2.3% | 0% | 1.1% | 0% | **1.6%** | 1.1% | 40.0% | 0.8% | 0% | **1.8%** | 0.6% | 3.5% | 0% | 0% | **3.3%** | 1.4% | 2.2% | 3.9% | 0% | **2.2%** | 2.7% |

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

**PLAINFIELD VILLAGE DRIVE & US 40 - TMC**
Wed Jan 6, 2021
Full Length (6:30 AM-8:30 AM, 4 PM-7 PM)
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 807916, Location: 39.720872, -86.349558

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



## PLAINFIELD VILLAGE DRIVE & US 40 - TMC

Wed Jan 6, 2021
AM Peak (7:15 AM - 8:15 AM)
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 807916, Location: 39.720872, -86.349558

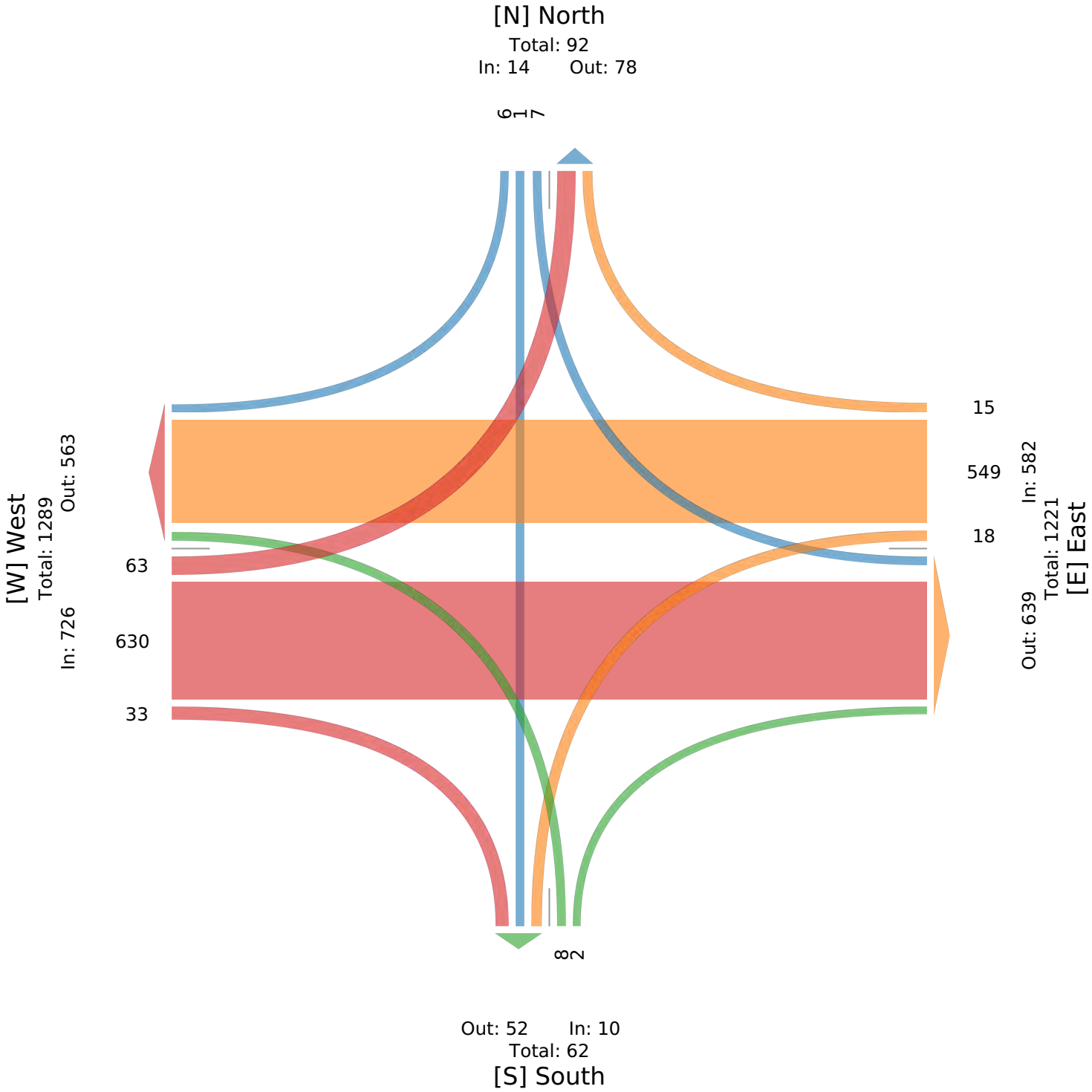
Provided by: A&F Engineering
8365 Keystone Crossing, Suite 201, Indianapolis, IN, 46240, US

| 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** |
| 2021-01-06 7:15AM | 3 | 0 | 0 | 0 | **3** | 0 | 1 | 0 | 0 | **1** | 6 | 179 | 9 | 0 | **194** | 4 | 126 | 1 | 0 | **131** | **329** |
| 7:30AM | 0 | 0 | 0 | 0 | **0** | 2 | 0 | 1 | 0 | **3** | 14 | 162 | 9 | 0 | **185** | 1 | 136 | 5 | 0 | **142** | **330** |
| 7:45AM | 3 | 0 | 2 | 0 | **5** | 4 | 0 | 4 | 0 | **8** | 31 | 148 | 9 | 0 | **188** | 8 | 173 | 6 | 0 | **187** | **388** |
| 8:00AM | 2 | 0 | 0 | 0 | **2** | 1 | 0 | 1 | 0 | **2** | 12 | 141 | 6 | 0 | **159** | 5 | 114 | 3 | 0 | **122** | **285** |
| **Total** | 8 | 0 | 2 | 0 | **10** | 7 | 1 | 6 | 0 | **14** | 63 | 630 | 33 | 0 | **726** | 18 | 549 | 15 | 0 | **582** | **1332** |
| **% Approach** | 80.0% | 0% | 20.0% | 0% | **-** | 50.0% | 7.1% | 42.9% | 0% | **-** | 8.7% | 86.8% | 4.5% | 0% | **-** | 3.1% | 94.3% | 2.6% | 0% | **-** | - |
| **% Total** | 0.6% | 0% | 0.2% | 0% | **0.8%** | 0.5% | 0.1% | 0.5% | 0% | **1.1%** | 4.7% | 47.3% | 2.5% | 0% | **54.5%** | 1.4% | 41.2% | 1.1% | 0% | **43.7%** | - |
| **PHF** | 0.667 | - | 0.250 | - | **0.500** | 0.438 | 0.250 | 0.375 | - | **0.438** | 0.508 | 0.880 | 0.917 | - | **0.936** | 0.563 | 0.793 | 0.625 | - | **0.778** | 0.858 |
| **Lights and Motorcycles** | 6 | 0 | 2 | 0 | **8** | 7 | 0 | 6 | 0 | **13** | 63 | 599 | 33 | 0 | **695** | 17 | 532 | 15 | 0 | **564** | 1280 |
| **% Lights and Motorcycles** | 75.0% | 0% | 100% | 0% | **80.0%** | 100% | 0% | 100% | 0% | **92.9%** | 100% | 95.1% | 100% | 0% | **95.7%** | 94.4% | 96.9% | 100% | 0% | **96.9%** | 96.1% |
| **Heavy** | 2 | 0 | 0 | 0 | **2** | 0 | 1 | 0 | 0 | **1** | 0 | 31 | 0 | 0 | **31** | 1 | 17 | 0 | 0 | **18** | 52 |
| **% Heavy** | 25.0% | 0% | 0% | 0% | **20.0%** | 0% | 100% | 0% | 0% | **7.1%** | 0% | 4.9% | 0% | 0% | **4.3%** | 5.6% | 3.1% | 0% | 0% | **3.1%** | 3.9% |

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

**PLAINFIELD VILLAGE DRIVE & US 40 - TMC**
Wed Jan 6, 2021
AM Peak (7:15 AM - 8:15 AM)
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 807916, Location: 39.720872, -86.349558

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



## PLAINFIELD VILLAGE DRIVE & US 40 - TMC

Wed Jan 6, 2021
PM Peak (4:30 PM - 5:30 PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 807916, Location: 39.720872, -86.349558

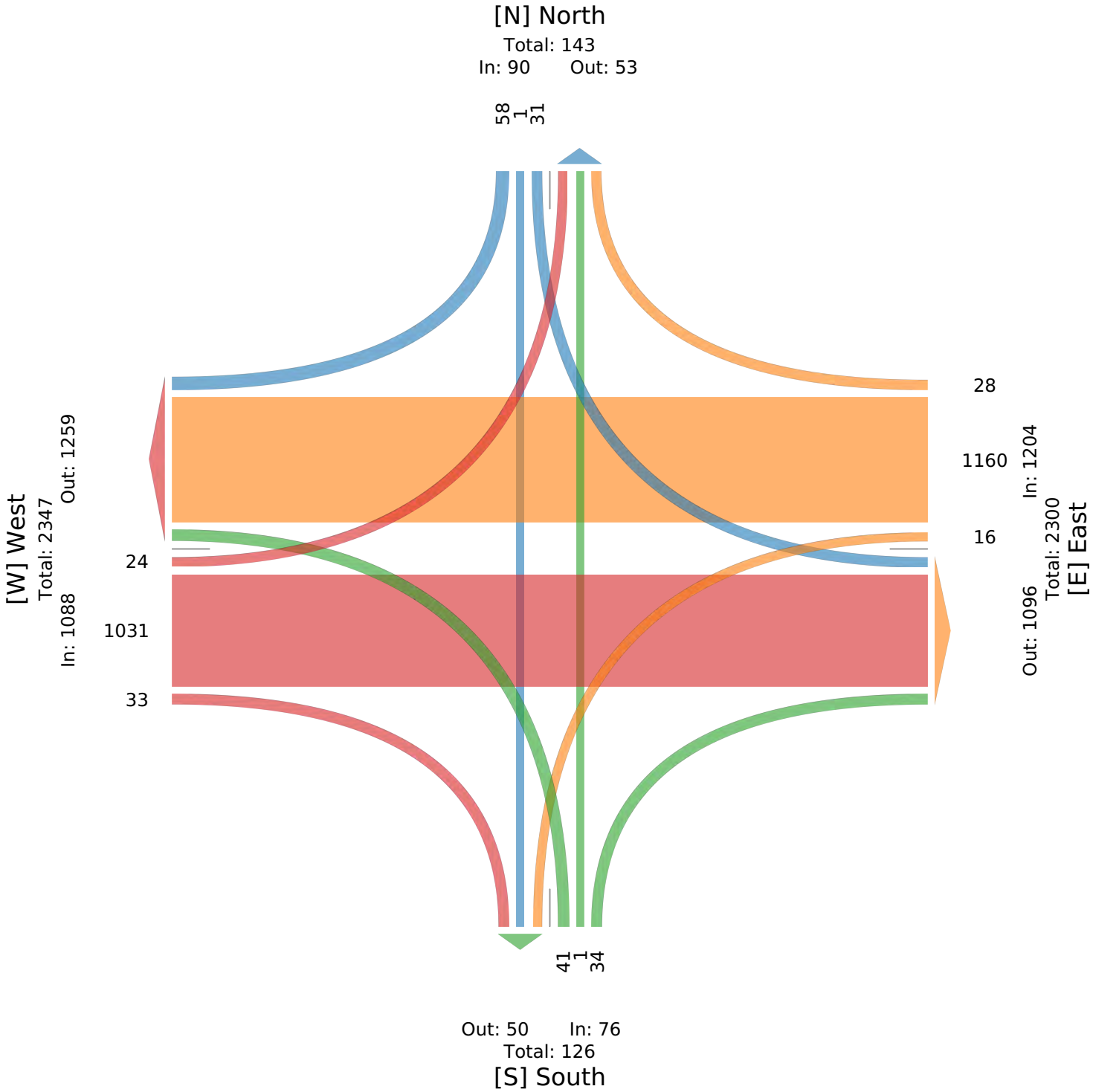
Provided by: A&F Engineering
8365 Keystone Crossing, Suite 201, Indianapolis, IN, 46240, US

| 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** |
| 2021-01-06 4:30PM | 17 | 1 | 10 | 0 | **28** | 11 | 0 | 18 | 0 | **29** | 6 | 274 | 3 | 0 | **283** | 4 | 295 | 8 | 0 | **307** | **647** |
| 4:45PM | 4 | 0 | 9 | 0 | **13** | 11 | 1 | 12 | 0 | **24** | 6 | 226 | 10 | 0 | **242** | 4 | 269 | 11 | 0 | **284** | **563** |
| 5:00PM | 15 | 0 | 11 | 0 | **26** | 4 | 0 | 17 | 0 | **21** | 3 | 272 | 13 | 0 | **288** | 4 | 282 | 8 | 0 | **294** | **629** |
| 5:15PM | 5 | 0 | 4 | 0 | **9** | 5 | 0 | 11 | 0 | **16** | 9 | 259 | 7 | 0 | **275** | 4 | 314 | 1 | 0 | **319** | **619** |
| **Total** | 41 | 1 | 34 | 0 | **76** | 31 | 1 | 58 | 0 | **90** | 24 | 1031 | 33 | 0 | **1088** | 16 | 1160 | 28 | 0 | **1204** | **2458** |
| **% Approach** | 53.9% | 1.3% | 44.7% | 0% | **-** | 34.4% | 1.1% | 64.4% | 0% | **-** | 2.2% | 94.8% | 3.0% | 0% | **-** | 1.3% | 96.3% | 2.3% | 0% | **-** | - |
| **% Total** | 1.7% | 0% | 1.4% | 0% | **3.1%** | 1.3% | 0% | 2.4% | 0% | **3.7%** | 1.0% | 41.9% | 1.3% | 0% | **44.3%** | 0.7% | 47.2% | 1.1% | 0% | **49.0%** | - |
| **PHF** | 0.603 | 0.250 | 0.773 | - | **0.679** | 0.705 | 0.250 | 0.806 | - | **0.776** | 0.667 | 0.941 | 0.635 | - | **0.944** | 1.000 | 0.924 | 0.636 | - | **0.944** | 0.950 |
| **Lights and Motorcycles** | 41 | 1 | 34 | 0 | **76** | 31 | 1 | 58 | 0 | **90** | 24 | 1001 | 33 | 0 | **1058** | 16 | 1144 | 28 | 0 | **1188** | 2412 |
| **% Lights and Motorcycles** | 100% | 100% | 100% | 0% | **100%** | 100% | 100% | 100% | 0% | **100%** | 100% | 97.1% | 100% | 0% | **97.2%** | 100% | 98.6% | 100% | 0% | **98.7%** | 98.1% |
| **Heavy** | 0 | 0 | 0 | 0 | **0** | 0 | 0 | 0 | 0 | **0** | 0 | 30 | 0 | 0 | **30** | 0 | 16 | 0 | 0 | **16** | 46 |
| **% Heavy** | 0% | 0% | 0% | 0% | **0%** | 0% | 0% | 0% | 0% | **0%** | 0% | 2.9% | 0% | 0% | **2.8%** | 0% | 1.4% | 0% | 0% | **1.3%** | 1.9% |

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

**PLAINFIELD VILLAGE DRIVE & US 40 - TMC**
Wed Jan 6, 2021
PM Peak (4:30 PM - 5:30 PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 807916, Location: 39.720872, -86.349558

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



| Intersection | |
|---|---|
| Int Delay, s/veh | 1.1 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 85 | 851 | 45 | 24 | 741 | 20 | 11 | 0 | 3 | 9 | 1 | 8 |
| Future Vol, veh/h | 85 | 851 | 45 | 24 | 741 | 20 | 11 | 0 | 3 | 9 | 1 | 8 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 100 | - | 0 | 100 | - | 30 | - | - | 30 | 195 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 1 | - | - | 1 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 |
| Heavy Vehicles, % | 0 | 5 | 0 | 6 | 3 | 0 | 25 | 0 | 0 | 0 | 100 | 0 |
| Mvmt Flow | 99 | 990 | 52 | 28 | 862 | 23 | 13 | 0 | 3 | 10 | 1 | 9 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 885 | 0 | 0 | 1042 | 0 | 0 | 1676 | 2129 | 495 | 1611 | 2158 | 431 |
| Stage 1 | - | - | - | - | - | - | 1188 | 1188 | - | 918 | 918 | - |
| Stage 2 | - | - | - | - | - | - | 488 | 941 | - | 693 | 1240 | - |
| Critical Hdwy | 4.1 | - | - | 4.22 | - | - | 8 | 6.5 | 6.9 | 7.5 | 8.5 | 6.9 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 7 | 5.5 | - | 6.5 | 7.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 7 | 5.5 | - | 6.5 | 7.5 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.26 | - | - | 3.75 | 4 | 3.3 | 3.5 | 5 | 3.3 |
| Pot Cap-1 Maneuver | 773 | - | - | 640 | - | - | 49 | 50 | 525 | 71 | 14 | 578 |
| Stage 1 | - | - | - | - | - | - | 166 | 264 | - | 296 | 188 | - |
| Stage 2 | - | - | - | - | - | - | 474 | 345 | - | 405 | 114 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 773 | - | - | 640 | - | - | 41 | 42 | 525 | 62 | 12 | 578 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 108 | 124 | - | 159 | 51 | - |
| Stage 1 | - | - | - | - | - | - | 145 | 230 | - | 258 | 180 | - |
| Stage 2 | - | - | - | - | - | - | 443 | 330 | - | 351 | 99 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.9 | 0.3 | 36.2 | 24.1 |
| HCM LOS | | | E | C |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 | SBLn2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 108 | 525 | 773 | - | - | 640 | - | - | 159 | 269 |
| HCM Lane V/C Ratio | 0.118 | 0.007 | 0.128 | - | - | 0.044 | - | - | 0.066 | 0.039 |
| HCM Control Delay (s) | 42.8 | 11.9 | 10.3 | - | - | 10.9 | - | - | 29.2 | 18.9 |
| HCM Lane LOS | E | B | B | - | - | B | - | - | D | C |
| HCM 95th %tile Q(veh) | 0.4 | 0 | 0.4 | - | - | 0.1 | - | - | 0.2 | 0.1 |

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

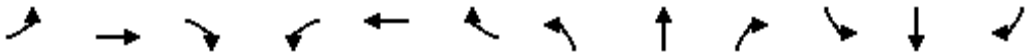
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 26 | 1134 | 36 | 18 | 1276 | 31 | 45 | 1 | 37 | 34 | 1 | 64 |
| Future Vol, veh/h | 26 | 1134 | 36 | 18 | 1276 | 31 | 45 | 1 | 37 | 34 | 1 | 64 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 100 | - | 0 | 100 | - | 30 | - | - | 30 | 195 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 1 | - | - | 1 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 |
| Heavy Vehicles, % | 0 | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 27 | 1194 | 38 | 19 | 1343 | 33 | 47 | 1 | 39 | 36 | 1 | 67 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 1376 | 0 | 0 | 1232 | 0 | 0 | 1958 | 2662 | 597 | 2033 | 2667 | 672 |
| Stage 1 | - | - | - | - | - | - | 1248 | 1248 | - | 1381 | 1381 | - |
| Stage 2 | - | - | - | - | - | - | 710 | 1414 | - | 652 | 1286 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.5 | 6.5 | 6.9 | 7.5 | 6.5 | 6.9 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.5 | 5.5 | - | 6.5 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.5 | 5.5 | - | 6.5 | 5.5 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.2 | - | - | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 505 | - | - | 573 | - | - | ~ 39 | 23 | 451 | ~ 34 | 23 | 403 |
| Stage 1 | - | - | - | - | - | - | 187 | 247 | - | 154 | 213 | - |
| Stage 2 | - | - | - | - | - | - | 395 | 206 | - | 428 | 237 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 505 | - | - | 573 | - | - | ~ 30 | 21 | 451 | ~ 29 | 21 | 403 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 113 | 100 | - | 105 | 103 | - |
| Stage 1 | - | - | - | - | - | - | 177 | 234 | - | 146 | 206 | - |
| Stage 2 | - | - | - | - | - | - | 316 | 199 | - | 368 | 224 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.3 | 0.2 | 38.8 | 30 |
| HCM LOS | | | E | D |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 | SBLn2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 113 | 451 | 505 | - | - | 573 | - | - | 105 | 386 |
| HCM Lane V/C Ratio | 0.429 | 0.086 | 0.054 | - | - | 0.033 | - | - | 0.341 | 0.177 |
| HCM Control Delay (s) | 58.9 | 13.7 | 12.5 | - | - | 11.5 | - | - | 56.1 | 16.3 |
| HCM Lane LOS | F | B | B | - | - | B | - | - | F | C |
| HCM 95th %tile Q(veh) | 1.8 | 0.3 | 0.2 | - | - | 0.1 | - | - | 1.3 | 0.6 |

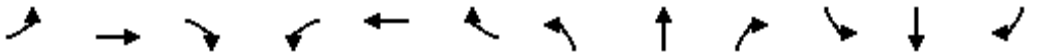
| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 85 | 851 | 45 | 24 | 741 | 20 | 11 | 0 | 3 | 9 | 1 | 8 |
| Future Volume (veh/h) | 85 | 851 | 45 | 24 | 741 | 20 | 11 | 0 | 3 | 9 | 1 | 8 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1900 | 1826 | 1900 | 1811 | 1856 | 1900 | 1530 | 1900 | 1900 | 1900 | 418 | 1900 |
| Adj Flow Rate, veh/h | 99 | 990 | 52 | 28 | 862 | 23 | 13 | 0 | 3 | 10 | 1 | 9 |
| Peak Hour Factor | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 |
| Percent Heavy Veh, % | 0 | 5 | 0 | 6 | 3 | 0 | 25 | 0 | 0 | 0 | 100 | 0 |
| Cap, veh/h | 467 | 1567 | 727 | 351 | 1376 | 628 | 274 | 0 | 176 | 333 | 4 | 34 |
| Arrive On Green | 0.11 | 0.45 | 0.45 | 0.05 | 0.39 | 0.39 | 0.02 | 0.00 | 0.11 | 0.02 | 0.10 | 0.10 |
| Sat Flow, veh/h | 1810 | 3469 | 1610 | 1725 | 3526 | 1610 | 1457 | 0 | 1610 | 1810 | 36 | 324 |
| Grp Volume(v), veh/h | 99 | 990 | 52 | 28 | 862 | 23 | 13 | 0 | 3 | 10 | 0 | 10 |
| Grp Sat Flow(s),veh/h/ln | 1810 | 1735 | 1610 | 1725 | 1763 | 1610 | 1457 | 0 | 1610 | 1810 | 0 | 360 |
| Q Serve(g_s), s | 1.3 | 10.5 | 0.9 | 0.4 | 9.5 | 0.4 | 0.4 | 0.0 | 0.1 | 0.2 | 0.0 | 1.2 |
| Cycle Q Clear(g_c), s | 1.3 | 10.5 | 0.9 | 0.4 | 9.5 | 0.4 | 0.4 | 0.0 | 0.1 | 0.2 | 0.0 | 1.2 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.90 |
| Lane Grp Cap(c), veh/h | 467 | 1567 | 727 | 351 | 1376 | 628 | 274 | 0 | 176 | 333 | 0 | 38 |
| V/C Ratio(X) | 0.21 | 0.63 | 0.07 | 0.08 | 0.63 | 0.04 | 0.05 | 0.00 | 0.02 | 0.03 | 0.00 | 0.27 |
| Avail Cap(c_a), veh/h | 613 | 3328 | 1545 | 524 | 3235 | 1477 | 453 | 0 | 403 | 564 | 0 | 90 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 7.3 | 10.1 | 7.4 | 8.4 | 11.8 | 9.0 | 18.4 | 0.0 | 19.1 | 18.6 | 0.0 | 19.8 |
| Incr Delay (d2), s/veh | 0.2 | 0.4 | 0.0 | 0.1 | 0.5 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 3.7 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.4 | 3.1 | 0.2 | 0.1 | 3.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 7.5 | 10.5 | 7.5 | 8.5 | 12.3 | 9.1 | 18.5 | 0.0 | 19.1 | 18.6 | 0.0 | 23.5 |
| LnGrp LOS | A | B | A | A | B | A | B | A | B | B | A | C |
| Approach Vol, veh/h | | 1141 | | | 913 | | | 16 | | | 20 | |
| Approach Delay, s/veh | | 10.1 | | | 12.1 | | | 18.6 | | | 21.1 | |
| Approach LOS | | B | | | B | | | B | | | C | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 4.9 | 10.2 | 6.2 | 26.7 | 5.1 | 10.0 | 9.1 | 23.7 |
| Change Period (Y+Rc), s | 4.0 | 5.0 | 4.0 | 5.0 | 4.0 | 5.0 | 4.0 | 5.0 |
| Max Green Setting (Gmax), s | 7.0 | 12.0 | 7.0 | 46.0 | 7.0 | 12.0 | 9.0 | 44.0 |
| Max Q Clear Time (g_c+I1), s | 2.2 | 2.1 | 2.4 | 12.5 | 2.4 | 3.2 | 3.3 | 11.5 |
| Green Ext Time (p_c), s | 0.0 | 0.0 | 0.0 | 8.9 | 0.0 | 0.0 | 0.1 | 7.3 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 11.1 |
| HCM 6th LOS | B |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 26 | 1134 | 36 | 18 | 1276 | 31 | 45 | 1 | 37 | 34 | 1 | 64 |
| Future Volume (veh/h) | 26 | 1134 | 36 | 18 | 1276 | 31 | 45 | 1 | 37 | 34 | 1 | 64 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1900 | 1856 | 1900 | 1900 | 1885 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adj Flow Rate, veh/h | 27 | 1194 | 38 | 19 | 1343 | 33 | 47 | 1 | 39 | 36 | 1 | 67 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Percent Heavy Veh, % | 0 | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cap, veh/h | 287 | 1877 | 857 | 309 | 1869 | 840 | 286 | 4 | 144 | 307 | 2 | 129 |
| Arrive On Green | 0.04 | 0.53 | 0.53 | 0.03 | 0.52 | 0.52 | 0.06 | 0.09 | 0.09 | 0.05 | 0.08 | 0.08 |
| Sat Flow, veh/h | 1810 | 3526 | 1610 | 1810 | 3582 | 1610 | 1810 | 40 | 1576 | 1810 | 24 | 1590 |
| Grp Volume(v), veh/h | 27 | 1194 | 38 | 19 | 1343 | 33 | 47 | 0 | 40 | 36 | 0 | 68 |
| Grp Sat Flow(s),veh/h/ln | 1810 | 1763 | 1610 | 1810 | 1791 | 1610 | 1810 | 0 | 1616 | 1810 | 0 | 1614 |
| Q Serve(g_s), s | 0.4 | 14.8 | 0.7 | 0.3 | 17.7 | 0.6 | 1.4 | 0.0 | 1.4 | 1.1 | 0.0 | 2.5 |
| Cycle Q Clear(g_c), s | 0.4 | 14.8 | 0.7 | 0.3 | 17.7 | 0.6 | 1.4 | 0.0 | 1.4 | 1.1 | 0.0 | 2.5 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.98 | 1.00 | | 0.99 |
| Lane Grp Cap(c), veh/h | 287 | 1877 | 857 | 309 | 1869 | 840 | 286 | 0 | 148 | 307 | 0 | 131 |
| V/C Ratio(X) | 0.09 | 0.64 | 0.04 | 0.06 | 0.72 | 0.04 | 0.16 | 0.00 | 0.27 | 0.12 | 0.00 | 0.52 |
| Avail Cap(c_a), veh/h | 417 | 2746 | 1254 | 457 | 2790 | 1254 | 378 | 0 | 262 | 418 | 0 | 262 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 8.7 | 10.2 | 6.9 | 7.9 | 11.3 | 7.2 | 23.2 | 0.0 | 26.1 | 23.6 | 0.0 | 27.2 |
| Incr Delay (d2), s/veh | 0.1 | 0.4 | 0.0 | 0.1 | 0.5 | 0.0 | 0.3 | 0.0 | 1.0 | 0.2 | 0.0 | 3.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.1 | 4.7 | 0.2 | 0.1 | 5.8 | 0.2 | 0.6 | 0.0 | 0.6 | 0.5 | 0.0 | 1.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 8.8 | 10.5 | 6.9 | 8.0 | 11.8 | 7.2 | 23.5 | 0.0 | 27.0 | 23.8 | 0.0 | 30.3 |
| LnGrp LOS | A | B | A | A | B | A | C | A | C | C | A | C |
| Approach Vol, veh/h | | 1259 | | | 1395 | | | 87 | | | 104 | |
| Approach Delay, s/veh | | 10.4 | | | 11.6 | | | 25.1 | | | 28.1 | |
| Approach LOS | | B | | | B | | | C | | | C | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 7.2 | 10.6 | 5.9 | 37.8 | 7.9 | 10.0 | 6.6 | 37.2 |
| Change Period (Y+Rc), s | 4.0 | 5.0 | 4.0 | 5.0 | 4.0 | 5.0 | 4.0 | 5.0 |
| Max Green Setting (Gmax), s | 7.0 | 10.0 | 7.0 | 48.0 | 7.0 | 10.0 | 7.0 | 48.0 |
| Max Q Clear Time (g_c+I1), s | 3.1 | 3.4 | 2.3 | 16.8 | 3.4 | 4.5 | 2.4 | 19.7 |
| Green Ext Time (p_c), s | 0.0 | 0.1 | 0.0 | 11.1 | 0.0 | 0.1 | 0.0 | 12.5 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 12.1 |
| HCM 6th LOS | B |

| 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 | 94 | 936 | 50 | 26 | 815 | 22 | 12 | 0 | 3 | 10 | 1 | 9 |
| Future Vol, veh/h | 94 | 936 | 50 | 26 | 815 | 22 | 12 | 0 | 3 | 10 | 1 | 9 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 100 | - | 0 | 100 | - | 30 | - | - | 30 | 195 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 1 | - | - | 1 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 |
| Heavy Vehicles, % | 0 | 5 | 0 | 6 | 3 | 0 | 25 | 0 | 0 | 0 | 100 | 0 |
| Mvmt Flow | 109 | 1088 | 58 | 30 | 948 | 26 | 14 | 0 | 3 | 12 | 1 | 10 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 974 | 0 | 0 | 1146 | 0 | 0 | 1841 | 2340 | 544 | 1770 | 2372 | 474 |
| Stage 1 | - | - | - | - | - | - | 1306 | 1306 | - | 1008 | 1008 | - |
| Stage 2 | - | - | - | - | - | - | 535 | 1034 | - | 762 | 1364 | - |
| Critical Hdwy | 4.1 | - | - | 4.22 | - | - | 8 | 6.5 | 6.9 | 7.5 | 8.5 | 6.9 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 7 | 5.5 | - | 6.5 | 7.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 7 | 5.5 | - | 6.5 | 7.5 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.26 | - | - | 3.75 | 4 | 3.3 | 3.5 | 5 | 3.3 |
| Pot Cap-1 Maneuver | 716 | - | - | 583 | - | - | 36 | 37 | 488 | 54 | 9 | 542 |
| Stage 1 | - | - | - | - | - | - | 139 | 232 | - | 261 | 164 | - |
| Stage 2 | - | - | - | - | - | - | 442 | 312 | - | 368 | 94 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 716 | - | - | 583 | - | - | 29 | 30 | 488 | 46 | 7 | 542 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 88 | 101 | - | 133 | 37 | - |
| Stage 1 | - | - | - | - | - | - | 118 | 197 | - | 221 | 156 | - |
| Stage 2 | - | - | - | - | - | - | 408 | 296 | - | 310 | 80 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 1 | 0.3 | 45.3 | 28.1 |
| HCM LOS | | | E | D |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 | SBLn2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 88 | 488 | 716 | - | - | 583 | - | - | 133 | 229 |
| HCM Lane V/C Ratio | 0.159 | 0.007 | 0.153 | - | - | 0.052 | - | - | 0.087 | 0.051 |
| HCM Control Delay (s) | 53.5 | 12.4 | 10.9 | - | - | 11.5 | - | - | 34.6 | 21.6 |
| HCM Lane LOS | F | B | B | - | - | B | - | - | D | C |
| HCM 95th %tile Q(veh) | 0.5 | 0 | 0.5 | - | - | 0.2 | - | - | 0.3 | 0.2 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 3.4 |

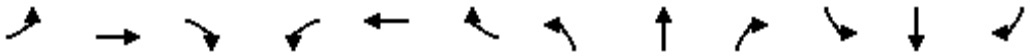
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 29 | 1247 | 40 | 20 | 1404 | 34 | 50 | 1 | 41 | 37 | 1 | 70 |
| Future Vol, veh/h | 29 | 1247 | 40 | 20 | 1404 | 34 | 50 | 1 | 41 | 37 | 1 | 70 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 100 | - | 0 | 100 | - | 30 | - | - | 30 | 195 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 1 | - | - | 1 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 |
| Heavy Vehicles, % | 0 | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 31 | 1313 | 42 | 21 | 1478 | 36 | 53 | 1 | 43 | 39 | 1 | 74 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 1514 | 0 | 0 | 1355 | 0 | 0 | 2157 | 2931 | 657 | 2239 | 2937 | 739 |
| Stage 1 | - | - | - | - | - | - | 1375 | 1375 | - | 1520 | 1520 | - |
| Stage 2 | - | - | - | - | - | - | 782 | 1556 | - | 719 | 1417 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.5 | 6.5 | 6.9 | 7.5 | 6.5 | 6.9 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.5 | 5.5 | - | 6.5 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.5 | 5.5 | - | 6.5 | 5.5 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.2 | - | - | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 447 | - | - | 514 | - | - | ~ 27 | 15 | 412 | ~ 24 | 15 | 364 |
| Stage 1 | - | - | - | - | - | - | 156 | 215 | - | 127 | 183 | - |
| Stage 2 | - | - | - | - | - | - | 358 | 176 | - | 390 | 205 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 447 | - | - | 514 | - | - | ~ 20 | 13 | 412 | ~ 20 | 13 | 364 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 91 | 80 | - | 85 | 85 | - |
| Stage 1 | - | - | - | - | - | - | 145 | 200 | - | 118 | 175 | - |
| Stage 2 | - | - | - | - | - | - | 272 | 169 | - | 323 | 191 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.3 | 0.2 | 56.6 | 39.1 |
| HCM LOS | | | F | E |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 | SBLn2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 91 | 412 | 447 | - | - | 514 | - | - | 85 | 348 |
| HCM Lane V/C Ratio | 0.59 | 0.105 | 0.068 | - | - | 0.041 | - | - | 0.458 | 0.215 |
| HCM Control Delay (s) | 90.2 | 14.8 | 13.6 | - | - | 12.3 | - | - | 79.1 | 18.2 |
| HCM Lane LOS | F | B | B | - | - | B | - | - | F | C |
| HCM 95th %tile Q(veh) | 2.7 | 0.3 | 0.2 | - | - | 0.1 | - | - | 1.9 | 0.8 |

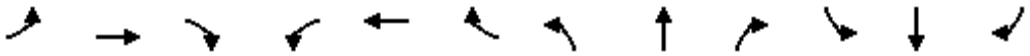
| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 94 | 936 | 50 | 26 | 815 | 22 | 12 | 0 | 3 | 10 | 1 | 9 |
| Future Volume (veh/h) | 94 | 936 | 50 | 26 | 815 | 22 | 12 | 0 | 3 | 10 | 1 | 9 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1900 | 1826 | 1900 | 1811 | 1856 | 1900 | 1530 | 1900 | 1900 | 1900 | 418 | 1900 |
| Adj Flow Rate, veh/h | 109 | 1088 | 58 | 30 | 948 | 26 | 14 | 0 | 3 | 12 | 1 | 10 |
| Peak Hour Factor | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 |
| Percent Heavy Veh, % | 0 | 5 | 0 | 6 | 3 | 0 | 25 | 0 | 0 | 0 | 100 | 0 |
| Cap, veh/h | 434 | 1614 | 749 | 319 | 1438 | 657 | 286 | 0 | 214 | 358 | 4 | 42 |
| Arrive On Green | 0.10 | 0.47 | 0.47 | 0.05 | 0.41 | 0.41 | 0.02 | 0.00 | 0.13 | 0.02 | 0.13 | 0.13 |
| Sat Flow, veh/h | 1810 | 3469 | 1610 | 1725 | 3526 | 1610 | 1457 | 0 | 1610 | 1810 | 33 | 327 |
| Grp Volume(v), veh/h | 109 | 1088 | 58 | 30 | 948 | 26 | 14 | 0 | 3 | 12 | 0 | 11 |
| Grp Sat Flow(s),veh/h/ln | 1810 | 1735 | 1610 | 1725 | 1763 | 1610 | 1457 | 0 | 1610 | 1810 | 0 | 359 |
| Q Serve(g_s), s | 1.6 | 13.2 | 1.1 | 0.5 | 11.8 | 0.5 | 0.4 | 0.0 | 0.1 | 0.3 | 0.0 | 1.5 |
| Cycle Q Clear(g_c), s | 1.6 | 13.2 | 1.1 | 0.5 | 11.8 | 0.5 | 0.4 | 0.0 | 0.1 | 0.3 | 0.0 | 1.5 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.91 |
| Lane Grp Cap(c), veh/h | 434 | 1614 | 749 | 319 | 1438 | 657 | 286 | 0 | 214 | 358 | 0 | 47 |
| V/C Ratio(X) | 0.25 | 0.67 | 0.08 | 0.09 | 0.66 | 0.04 | 0.05 | 0.00 | 0.01 | 0.03 | 0.00 | 0.24 |
| Avail Cap(c_a), veh/h | 480 | 2957 | 1372 | 494 | 3070 | 1402 | 440 | 0 | 328 | 554 | 0 | 73 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 8.2 | 11.2 | 8.0 | 9.2 | 12.9 | 9.6 | 19.5 | 0.0 | 20.3 | 19.6 | 0.0 | 21.1 |
| Incr Delay (d2), s/veh | 0.3 | 0.5 | 0.0 | 0.1 | 0.5 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 2.6 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.5 | 4.2 | 0.3 | 0.2 | 4.0 | 0.2 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 8.5 | 11.7 | 8.0 | 9.3 | 13.5 | 9.6 | 19.6 | 0.0 | 20.4 | 19.6 | 0.0 | 23.6 |
| LnGrp LOS | A | B | A | A | B | A | B | A | C | B | A | C |
| Approach Vol, veh/h | | 1255 | | | 1004 | | | 17 | | | 23 | |
| Approach Delay, s/veh | | 11.3 | | | 13.2 | | | 19.7 | | | 21.5 | |
| Approach LOS | | B | | | B | | | B | | | C | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 5.2 | 12.2 | 6.5 | 30.1 | 5.3 | 12.0 | 9.6 | 27.0 |
| Change Period (Y+Rc), s | 4.0 | 5.0 | 4.0 | 5.0 | 4.0 | 5.0 | 4.0 | 5.0 |
| Max Green Setting (Gmax), s | 7.0 | 11.0 | 8.0 | 46.0 | 7.0 | 11.0 | 7.0 | 47.0 |
| Max Q Clear Time (g_c+I1), s | 2.3 | 2.1 | 2.5 | 15.2 | 2.4 | 3.5 | 3.6 | 13.8 |
| Green Ext Time (p_c), s | 0.0 | 0.0 | 0.0 | 9.9 | 0.0 | 0.0 | 0.1 | 8.3 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 12.3 |
| HCM 6th LOS | B |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 29 | 1247 | 40 | 20 | 1404 | 34 | 50 | 1 | 41 | 37 | 1 | 70 |
| Future Volume (veh/h) | 29 | 1247 | 40 | 20 | 1404 | 34 | 50 | 1 | 41 | 37 | 1 | 70 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1900 | 1856 | 1900 | 1900 | 1885 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adj Flow Rate, veh/h | 31 | 1313 | 42 | 21 | 1478 | 36 | 53 | 1 | 43 | 39 | 1 | 74 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Percent Heavy Veh, % | 0 | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cap, veh/h | 258 | 1941 | 886 | 278 | 1930 | 868 | 291 | 4 | 173 | 314 | 2 | 157 |
| Arrive On Green | 0.05 | 0.55 | 0.55 | 0.03 | 0.54 | 0.54 | 0.06 | 0.11 | 0.11 | 0.05 | 0.10 | 0.10 |
| Sat Flow, veh/h | 1810 | 3526 | 1610 | 1810 | 3582 | 1610 | 1810 | 37 | 1579 | 1810 | 22 | 1592 |
| Grp Volume(v), veh/h | 31 | 1313 | 42 | 21 | 1478 | 36 | 53 | 0 | 44 | 39 | 0 | 75 |
| Grp Sat Flow(s),veh/h/ln | 1810 | 1763 | 1610 | 1810 | 1791 | 1610 | 1810 | 0 | 1616 | 1810 | 0 | 1613 |
| Q Serve(g_s), s | 0.5 | 18.9 | 0.9 | 0.4 | 23.0 | 0.7 | 1.8 | 0.0 | 1.8 | 1.3 | 0.0 | 3.1 |
| Cycle Q Clear(g_c), s | 0.5 | 18.9 | 0.9 | 0.4 | 23.0 | 0.7 | 1.8 | 0.0 | 1.8 | 1.3 | 0.0 | 3.1 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.98 | 1.00 | | 0.99 |
| Lane Grp Cap(c), veh/h | 258 | 1941 | 886 | 278 | 1930 | 868 | 291 | 0 | 177 | 314 | 0 | 159 |
| V/C Ratio(X) | 0.12 | 0.68 | 0.05 | 0.08 | 0.77 | 0.04 | 0.18 | 0.00 | 0.25 | 0.12 | 0.00 | 0.47 |
| Avail Cap(c_a), veh/h | 355 | 2483 | 1134 | 396 | 2523 | 1134 | 353 | 0 | 182 | 397 | 0 | 182 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 10.3 | 11.4 | 7.4 | 9.0 | 12.9 | 7.7 | 25.7 | 0.0 | 28.9 | 26.1 | 0.0 | 30.2 |
| Incr Delay (d2), s/veh | 0.2 | 0.5 | 0.0 | 0.1 | 1.1 | 0.0 | 0.3 | 0.0 | 0.7 | 0.2 | 0.0 | 2.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.2 | 6.4 | 0.3 | 0.1 | 8.1 | 0.2 | 0.8 | 0.0 | 0.7 | 0.6 | 0.0 | 1.3 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 10.5 | 11.9 | 7.4 | 9.1 | 13.9 | 7.7 | 26.0 | 0.0 | 29.7 | 26.3 | 0.0 | 32.4 |
| LnGrp LOS | B | B | A | A | B | A | C | A | C | C | A | C |
| Approach Vol, veh/h | | 1386 | | | 1535 | | | 97 | | | 114 | |
| Approach Delay, s/veh | | 11.8 | | | 13.7 | | | 27.7 | | | 30.3 | |
| Approach LOS | | B | | | B | | | C | | | C | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 7.8 | 12.8 | 6.4 | 44.1 | 8.5 | 12.0 | 7.2 | 43.3 |
| Change Period (Y+Rc), s | 4.0 | 5.0 | 4.0 | 5.0 | 4.0 | 5.0 | 4.0 | 5.0 |
| Max Green Setting (Gmax), s | 7.0 | 8.0 | 7.0 | 50.0 | 7.0 | 8.0 | 7.0 | 50.0 |
| Max Q Clear Time (g_c+I1), s | 3.3 | 3.8 | 2.4 | 20.9 | 3.8 | 5.1 | 2.5 | 25.0 |
| Green Ext Time (p_c), s | 0.0 | 0.0 | 0.0 | 12.3 | 0.0 | 0.1 | 0.0 | 13.3 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 13.9 |
| HCM 6th LOS | B |

| Intersection | |
|---|---|
| Int Delay, s/veh | 2.3 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 85 | 874 | 45 | 24 | 758 | 114 | 11 | 0 | 3 | 51 | 1 | 45 |
| Future Vol, veh/h | 85 | 874 | 45 | 24 | 758 | 114 | 11 | 0 | 3 | 51 | 1 | 45 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 100 | - | 0 | 100 | - | 30 | - | - | 30 | 195 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 1 | - | - | 1 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 |
| Heavy Vehicles, % | 0 | 5 | 0 | 4 | 3 | 4 | 27 | 0 | 0 | 0 | 100 | 4 |
| Mvmt Flow | 99 | 1016 | 52 | 28 | 881 | 133 | 13 | 0 | 3 | 59 | 1 | 52 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 1014 | 0 | 0 | 1068 | 0 | 0 | 1711 | 2284 | 508 | 1643 | 2203 | 441 |
| Stage 1 | - | - | - | - | - | - | 1214 | 1214 | - | 937 | 937 | - |
| Stage 2 | - | - | - | - | - | - | 497 | 1070 | - | 706 | 1266 | - |
| Critical Hdwy | 4.1 | - | - | 4.18 | - | - | 8.04 | 6.5 | 6.9 | 7.5 | 8.5 | 6.98 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 7.04 | 5.5 | - | 6.5 | 7.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 7.04 | 5.5 | - | 6.5 | 7.5 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.24 | - | - | 3.77 | 4 | 3.3 | 3.5 | 5 | 3.34 |
| Pot Cap-1 Maneuver | 692 | - | - | 637 | - | - | 45 | 40 | 515 | 67 | 13 | 559 |
| Stage 1 | - | - | - | - | - | - | 157 | 257 | - | 289 | 183 | - |
| Stage 2 | - | - | - | - | - | - | 463 | 300 | - | 397 | 109 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 692 | - | - | 637 | - | - | 34 | 33 | 515 | ~ 57 | 11 | 559 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 98 | 107 | - | 151 | 47 | - |
| Stage 1 | - | - | - | - | - | - | 135 | 220 | - | 248 | 175 | - |
| Stage 2 | - | - | - | - | - | - | 399 | 287 | - | 338 | 93 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.9 | 0.3 | 39.7 | 29.5 |
| HCM LOS | | | E | D |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 | SBLn2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 98 | 515 | 692 | - | - | 637 | - | - | 151 | 452 |
| HCM Lane V/C Ratio | 0.131 | 0.007 | 0.143 | - | - | 0.044 | - | - | 0.393 | 0.118 |
| HCM Control Delay (s) | 47.2 | 12 | 11.1 | - | - | 10.9 | - | - | 43.5 | 14 |
| HCM Lane LOS | E | B | B | - | - | B | - | - | E | B |
| HCM 95th %tile Q(veh) | 0.4 | 0 | 0.5 | - | - | 0.1 | - | - | 1.7 | 0.4 |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Intersection | |
|---|---|
| Int Delay, s/veh | 4.7 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 26 | 1174 | 36 | 18 | 1298 | 167 | 45 | 1 | 37 | 73 | 1 | 87 |
| Future Vol, veh/h | 26 | 1174 | 36 | 18 | 1298 | 167 | 45 | 1 | 37 | 73 | 1 | 87 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 100 | - | 0 | 100 | - | 30 | - | - | 30 | 195 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 1 | - | - | 1 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 |
| Heavy Vehicles, % | 0 | 3 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 27 | 1236 | 38 | 19 | 1366 | 176 | 47 | 1 | 39 | 77 | 1 | 92 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 1542 | 0 | 0 | 1274 | 0 | 0 | 2012 | 2870 | 618 | 2077 | 2732 | 683 |
| Stage 1 | - | - | - | - | - | - | 1290 | 1290 | - | 1404 | 1404 | - |
| Stage 2 | - | - | - | - | - | - | 722 | 1580 | - | 673 | 1328 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.5 | 6.5 | 6.9 | 7.5 | 6.5 | 6.9 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.5 | 5.5 | - | 6.5 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.5 | 5.5 | - | 6.5 | 5.5 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.2 | - | - | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 436 | - | - | 552 | - | - | ~ 35 | 17 | 437 | ~ 32 | 21 | 396 |
| Stage 1 | - | - | - | - | - | - | 176 | 236 | - | 149 | 208 | - |
| Stage 2 | - | - | - | - | - | - | 389 | 171 | - | 416 | 226 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 436 | - | - | 552 | - | - | ~ 25 | 15 | 437 | ~ 27 | 19 | 396 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 103 | 84 | - | 100 | 99 | - |
| Stage 1 | - | - | - | - | - | - | 165 | 221 | - | 140 | 201 | - |
| Stage 2 | - | - | - | - | - | - | 287 | 165 | - | 354 | 212 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.3 | 0.1 | 44.4 | 60.3 |
| HCM LOS | | | E | F |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 | SBLn2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 102 | 437 | 436 | - | - | 552 | - | - | 100 | 383 |
| HCM Lane V/C Ratio | 0.475 | 0.089 | 0.063 | - | - | 0.034 | - | - | 0.768 | 0.242 |
| HCM Control Delay (s) | 68.8 | 14 | 13.8 | - | - | 11.8 | - | - | 112 | 17.4 |
| HCM Lane LOS | F | B | B | - | - | B | - | - | F | C |
| HCM 95th %tile Q(veh) | 2.1 | 0.3 | 0.2 | - | - | 0.1 | - | - | 4.1 | 0.9 |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

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

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 94 | 959 | 50 | 26 | 832 | 116 | 12 | 0 | 3 | 52 | 1 | 46 |
| Future Vol, veh/h | 94 | 959 | 50 | 26 | 832 | 116 | 12 | 0 | 3 | 52 | 1 | 46 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 100 | - | 0 | 100 | - | 30 | - | - | 30 | 195 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 1 | - | - | 1 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 |
| Heavy Vehicles, % | 0 | 5 | 0 | 4 | 3 | 3 | 25 | 0 | 0 | 0 | 100 | 4 |
| Mvmt Flow | 109 | 1115 | 58 | 30 | 967 | 135 | 14 | 0 | 3 | 60 | 1 | 53 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 1102 | 0 | 0 | 1173 | 0 | 0 | 1877 | 2495 | 558 | 1803 | 2418 | 484 |
| Stage 1 | - | - | - | - | - | - | 1333 | 1333 | - | 1027 | 1027 | - |
| Stage 2 | - | - | - | - | - | - | 544 | 1162 | - | 776 | 1391 | - |
| Critical Hdwy | 4.1 | - | - | 4.18 | - | - | 8 | 6.5 | 6.9 | 7.5 | 8.5 | 6.98 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 7 | 5.5 | - | 6.5 | 7.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 7 | 5.5 | - | 6.5 | 7.5 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.24 | - | - | 3.75 | 4 | 3.3 | 3.5 | 5 | 3.34 |
| Pot Cap-1 Maneuver | 641 | - | - | 580 | - | - | 34 | 29 | 478 | ~ 51 | 8 | 523 |
| Stage 1 | - | - | - | - | - | - | 133 | 225 | - | 255 | 159 | - |
| Stage 2 | - | - | - | - | - | - | 437 | 272 | - | 361 | 90 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 641 | - | - | 580 | - | - | 25 | 23 | 478 | ~ 42 | 6 | 523 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 80 | 86 | - | 127 | 34 | - |
| Stage 1 | - | - | - | - | - | - | 110 | 187 | - | 212 | 151 | - |
| Stage 2 | - | - | - | - | - | - | 369 | 258 | - | 297 | 75 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 1 | 0.3 | 50 | 37.1 |
| HCM LOS | | | F | E |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 | SBLn2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 80 | 478 | 641 | - | - | 580 | - | - | 127 | 400 |
| HCM Lane V/C Ratio | 0.174 | 0.007 | 0.171 | - | - | 0.052 | - | - | 0.476 | 0.137 |
| HCM Control Delay (s) | 59.3 | 12.6 | 11.8 | - | - | 11.5 | - | - | 56.8 | 15.4 |
| HCM Lane LOS | F | B | B | - | - | B | - | - | F | C |
| HCM 95th %tile Q(veh) | 0.6 | 0 | 0.6 | - | - | 0.2 | - | - | 2.2 | 0.5 |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Intersection | |
|---|---|
| Int Delay, s/veh | 7.2 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 29 | 1287 | 40 | 20 | 1426 | 170 | 50 | 1 | 41 | 76 | 1 | 93 |
| Future Vol, veh/h | 29 | 1287 | 40 | 20 | 1426 | 170 | 50 | 1 | 41 | 76 | 1 | 93 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 100 | - | 0 | 100 | - | 30 | - | - | 30 | 195 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 1 | - | - | 1 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 |
| Heavy Vehicles, % | 0 | 3 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 31 | 1355 | 42 | 21 | 1501 | 179 | 53 | 1 | 43 | 80 | 1 | 98 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 1680 | 0 | 0 | 1397 | 0 | 0 | 2210 | 3139 | 678 | 2283 | 3002 | 751 |
| Stage 1 | - | - | - | - | - | - | 1417 | 1417 | - | 1543 | 1543 | - |
| Stage 2 | - | - | - | - | - | - | 793 | 1722 | - | 740 | 1459 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.5 | 6.5 | 6.9 | 7.5 | 6.5 | 6.9 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.5 | 5.5 | - | 6.5 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.5 | 5.5 | - | 6.5 | 5.5 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.2 | - | - | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 386 | - | - | 496 | - | - | ~ 25 | 11 | 399 | ~ 22 | 14 | 358 |
| Stage 1 | - | - | - | - | - | - | 147 | 205 | - | 122 | 178 | - |
| Stage 2 | - | - | - | - | - | - | 352 | 145 | - | 379 | 196 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 386 | - | - | 496 | - | - | ~ 16 | 10 | 399 | ~ 18 | 12 | 358 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 82 | 67 | - | 80 | 81 | - |
| Stage 1 | - | - | - | - | - | - | 135 | 189 | - | 112 | 171 | - |
| Stage 2 | - | - | - | - | - | - | 243 | 139 | - | 309 | 180 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.3 | 0.2 | 67.1 | 96.8 |
| HCM LOS | | | F | F |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 | SBLn2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 82 | 399 | 386 | - | - | 496 | - | - | 80 | 345 |
| HCM Lane V/C Ratio | 0.655 | 0.108 | 0.079 | - | - | 0.042 | - | - | 1 | 0.287 |
| HCM Control Delay (s) | 108.9 | 15.1 | 15.1 | - | - | 12.6 | - | - | 192.3 | 19.6 |
| HCM Lane LOS | F | C | C | - | - | B | - | - | F | C |
| HCM 95th %tile Q(veh) | 3.1 | 0.4 | 0.3 | - | - | 0.1 | - | - | 5.5 | 1.2 |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

# SMITH ROAD & PERRY ROAD

## TRAFFIC VOLUME COUNTS
## CAPACITY ANALYSIS

## PERRY RD & SMITH RD - TMC

Wed Jan 6, 2021
Full Length (6:30 AM-8:30 AM, 4 PM-7 PM)
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 807914, Location: 39.720297, -86.361133

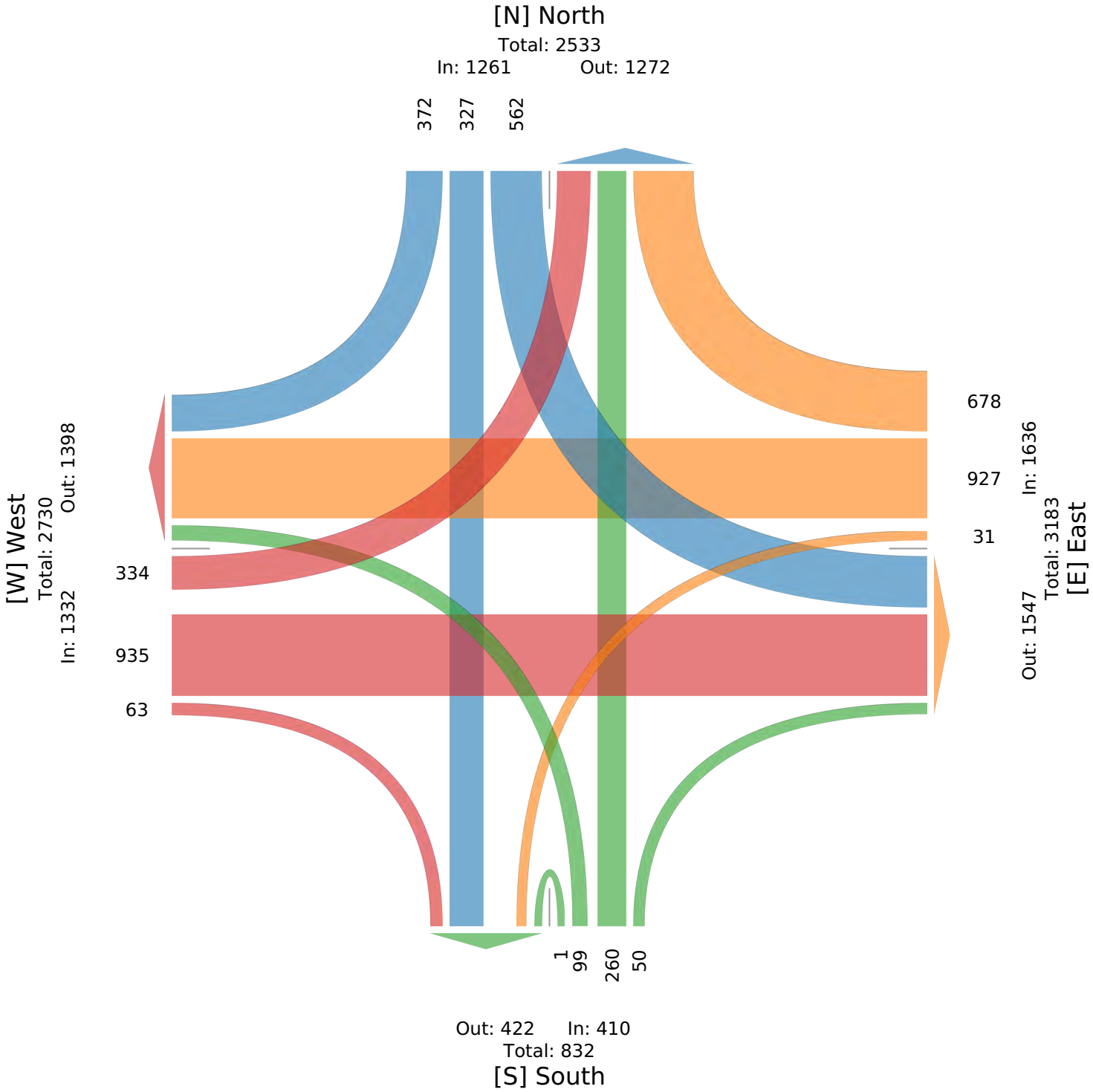
Provided by: A&F Engineering
8365 Keystone Crossing, Suite 201, Indianapolis, IN, 46240, US

| 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 |
| 2021-01-06 6:30AM | 2 | 17 | 2 | 0 | **21** | 19 | 10 | 5 | 0 | **34** | 17 | 56 | 0 | 0 | **73** | 1 | 5 | 4 | 0 | **10** | **138** |
| 6:45AM | 0 | 6 | 0 | 0 | **6** | 20 | 8 | 8 | 0 | **36** | 8 | 44 | 2 | 0 | **54** | 0 | 11 | 9 | 0 | **20** | **116** |
| Hourly Total | 2 | 23 | 2 | 0 | **27** | 39 | 18 | 13 | 0 | **70** | 25 | 100 | 2 | 0 | **127** | 1 | 16 | 13 | 0 | **30** | **254** |
| 7:00AM | 0 | 6 | 2 | 0 | **8** | 25 | 7 | 9 | 0 | **41** | 5 | 46 | 0 | 0 | **51** | 1 | 10 | 9 | 0 | **20** | **120** |
| 7:15AM | 4 | 6 | 1 | 0 | **11** | 24 | 6 | 10 | 0 | **40** | 11 | 50 | 1 | 0 | **62** | 1 | 12 | 6 | 0 | **19** | **132** |
| 7:30AM | 1 | 7 | 1 | 0 | **9** | 24 | 9 | 10 | 0 | **43** | 10 | 60 | 0 | 0 | **70** | 0 | 10 | 10 | 0 | **20** | **142** |
| 7:45AM | 0 | 5 | 3 | 0 | **8** | 27 | 10 | 8 | 0 | **45** | 10 | 61 | 2 | 0 | **73** | 0 | 22 | 17 | 0 | **39** | **165** |
| Hourly Total | 5 | 24 | 7 | 0 | **36** | 100 | 32 | 37 | 0 | **169** | 36 | 217 | 3 | 0 | **256** | 2 | 54 | 42 | 0 | **98** | **559** |
| 8:00AM | 0 | 6 | 2 | 0 | **8** | 21 | 5 | 9 | 0 | **35** | 12 | 58 | 4 | 0 | **74** | 0 | 10 | 13 | 0 | **23** | **140** |
| 8:15AM | 0 | 6 | 2 | 0 | **8** | 19 | 6 | 9 | 0 | **34** | 5 | 42 | 2 | 0 | **49** | 1 | 26 | 11 | 0 | **38** | **129** |
| 8:30AM | 0 | 0 | 0 | 0 | **0** | 0 | 0 | 0 | 0 | **0** | 0 | 0 | 0 | 0 | **0** | 0 | 0 | 0 | 0 | **0** | **0** |
| Hourly Total | 0 | 12 | 4 | 0 | **16** | 40 | 11 | 18 | 0 | **69** | 17 | 100 | 6 | 0 | **123** | 1 | 36 | 24 | 0 | **61** | **269** |
| 4:00PM | 4 | 17 | 4 | 0 | **25** | 28 | 18 | 17 | 0 | **63** | 24 | 40 | 3 | 0 | **67** | 3 | 62 | 50 | 0 | **115** | **270** |
| 4:15PM | 6 | 17 | 2 | 0 | **25** | 30 | 17 | 39 | 0 | **86** | 17 | 43 | 3 | 0 | **63** | 1 | 55 | 45 | 0 | **101** | **275** |
| 4:30PM | 10 | 12 | 2 | 0 | **24** | 20 | 24 | 26 | 0 | **70** | 28 | 37 | 1 | 0 | **66** | 2 | 73 | 48 | 0 | **123** | **283** |
| 4:45PM | 10 | 17 | 5 | 0 | **32** | 39 | 26 | 26 | 0 | **91** | 36 | 45 | 7 | 0 | **88** | 0 | 87 | 57 | 0 | **144** | **355** |
| Hourly Total | 30 | 63 | 13 | 0 | **106** | 117 | 85 | 108 | 0 | **310** | 105 | 165 | 14 | 0 | **284** | 6 | 277 | 200 | 0 | **483** | **1183** |
| 5:00PM | 9 | 21 | 4 | 0 | **34** | 41 | 36 | 39 | 0 | **116** | 21 | 49 | 10 | 0 | **80** | 4 | 80 | 57 | 0 | **141** | **371** |
| 5:15PM | 8 | 23 | 2 | 0 | **33** | 49 | 44 | 31 | 0 | **124** | 24 | 52 | 5 | 0 | **81** | 2 | 94 | 57 | 0 | **153** | **391** |
| 5:30PM | 10 | 21 | 4 | 0 | **35** | 39 | 24 | 28 | 0 | **91** | 23 | 54 | 3 | 0 | **80** | 3 | 81 | 69 | 0 | **153** | **359** |
| 5:45PM | 5 | 24 | 2 | 0 | **31** | 35 | 21 | 26 | 0 | **82** | 17 | 54 | 2 | 0 | **73** | 4 | 77 | 56 | 0 | **137** | **323** |
| Hourly Total | 32 | 89 | 12 | 0 | **133** | 164 | 125 | 124 | 0 | **413** | 85 | 209 | 20 | 0 | **314** | 13 | 332 | 239 | 0 | **584** | **1444** |
| 6:00PM | 6 | 10 | 3 | 0 | **19** | 26 | 16 | 20 | 0 | **62** | 16 | 40 | 5 | 0 | **61** | 1 | 60 | 39 | 0 | **100** | **242** |
| 6:15PM | 7 | 20 | 2 | 1 | **30** | 32 | 19 | 18 | 0 | **69** | 14 | 34 | 6 | 0 | **54** | 1 | 56 | 54 | 0 | **111** | **264** |
| 6:30PM | 7 | 12 | 4 | 0 | **23** | 22 | 9 | 17 | 0 | **48** | 20 | 39 | 6 | 0 | **65** | 3 | 61 | 38 | 0 | **102** | **238** |
| 6:45PM | 10 | 7 | 3 | 0 | **20** | 22 | 12 | 17 | 0 | **51** | 16 | 31 | 1 | 0 | **48** | 3 | 35 | 29 | 0 | **67** | **186** |
| Hourly Total | 30 | 49 | 12 | 1 | **92** | 102 | 56 | 72 | 0 | **230** | 66 | 144 | 18 | 0 | **228** | 8 | 212 | 160 | 0 | **380** | **930** |
| 7:00PM | 0 | 0 | 0 | 0 | **0** | 0 | 0 | 0 | 0 | **0** | 0 | 0 | 0 | 0 | **0** | 0 | 0 | 0 | 0 | **0** | **0** |
| Hourly Total | 0 | 0 | 0 | 0 | **0** | 0 | 0 | 0 | 0 | **0** | 0 | 0 | 0 | 0 | **0** | 0 | 0 | 0 | 0 | **0** | **0** |
| **Total** | 99 | 260 | 50 | 1 | **410** | 562 | 327 | 372 | 0 | **1261** | 334 | 935 | 63 | 0 | **1332** | 31 | 927 | 678 | 0 | **1636** | **4639** |
| **% Approach** | 24.1% | 63.4% | 12.2% | 0.2% | - | 44.6% | 25.9% | 29.5% | 0% | - | 25.1% | 70.2% | 4.7% | 0% | - | 1.9% | 56.7% | 41.4% | 0% | - | - |
| **% Total** | 2.1% | 5.6% | 1.1% | 0% | **8.8%** | 12.1% | 7.0% | 8.0% | 0% | **27.2%** | 7.2% | 20.2% | 1.4% | 0% | **28.7%** | 0.7% | 20.0% | 14.6% | 0% | **35.3%** | - |
| **Lights and Motorcycles** | 99 | 258 | 49 | 0 | **406** | 560 | 323 | 372 | 0 | **1255** | 331 | 929 | 60 | 0 | **1320** | 28 | 922 | 671 | 0 | **1621** | 4602 |
| **% Lights and Motorcycles** | 100% | 99.2% | 98.0% | 0% | **99.0%** | 99.6% | 98.8% | 100% | 0% | **99.5%** | 99.1% | 99.4% | 95.2% | 0% | **99.1%** | 90.3% | 99.5% | 99.0% | 0% | **99.1%** | 99.2% |
| **Heavy** | 0 | 2 | 1 | 1 | **4** | 2 | 4 | 0 | 0 | **6** | 3 | 6 | 3 | 0 | **12** | 3 | 5 | 7 | 0 | **15** | 37 |
| **% Heavy** | 0% | 0.8% | 2.0% | 100% | **1.0%** | 0.4% | 1.2% | 0% | 0% | **0.5%** | 0.9% | 0.6% | 4.8% | 0% | **0.9%** | 9.7% | 0.5% | 1.0% | 0% | **0.9%** | 0.8% |

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

**PERRY RD & SMITH RD - TMC**
Wed Jan 6, 2021
Full Length (6:30 AM-8:30 AM, 4 PM-7 PM)
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 807914, Location: 39.720297, -86.361133

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



## PERRY RD & SMITH RD - TMC

Wed Jan 6, 2021
AM Peak (7:15 AM - 8:15 AM)
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 807914, Location: 39.720297, -86.361133

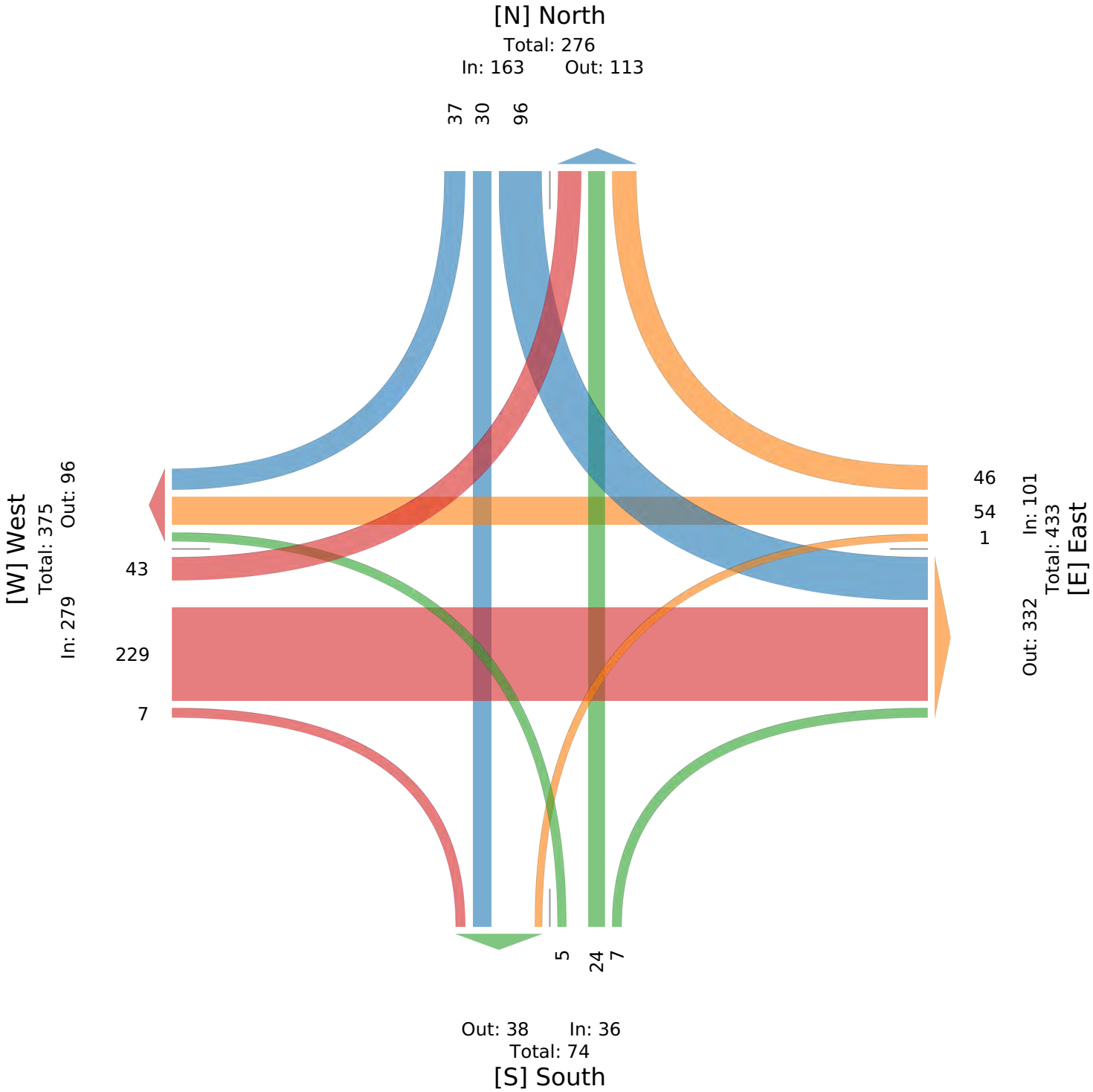
Provided by: A&F Engineering
8365 Keystone Crossing, Suite 201, Indianapolis, IN, 46240, US

| 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** |
| 2021-01-06 7:15AM | 4 | 6 | 1 | 0 | **11** | 24 | 6 | 10 | 0 | **40** | 11 | 50 | 1 | 0 | **62** | 1 | 12 | 6 | 0 | **19** | **132** |
| 7:30AM | 1 | 7 | 1 | 0 | **9** | 24 | 9 | 10 | 0 | **43** | 10 | 60 | 0 | 0 | **70** | 0 | 10 | 10 | 0 | **20** | **142** |
| 7:45AM | 0 | 5 | 3 | 0 | **8** | 27 | 10 | 8 | 0 | **45** | 10 | 61 | 2 | 0 | **73** | 0 | 22 | 17 | 0 | **39** | **165** |
| 8:00AM | 0 | 6 | 2 | 0 | **8** | 21 | 5 | 9 | 0 | **35** | 12 | 58 | 4 | 0 | **74** | 0 | 10 | 13 | 0 | **23** | **140** |
| **Total** | 5 | 24 | 7 | 0 | **36** | 96 | 30 | 37 | 0 | **163** | 43 | 229 | 7 | 0 | **279** | 1 | 54 | 46 | 0 | **101** | **579** |
| **% Approach** | 13.9% | 66.7% | 19.4% | 0% | **-** | 58.9% | 18.4% | 22.7% | 0% | **-** | 15.4% | 82.1% | 2.5% | 0% | **-** | 1.0% | 53.5% | 45.5% | 0% | **-** | - |
| **% Total** | 0.9% | 4.1% | 1.2% | 0% | **6.2%** | 16.6% | 5.2% | 6.4% | 0% | **28.2%** | 7.4% | 39.6% | 1.2% | 0% | **48.2%** | 0.2% | 9.3% | 7.9% | 0% | **17.4%** | - |
| **PHF** | 0.313 | 0.857 | 0.583 | - | **0.818** | 0.889 | 0.750 | 0.925 | - | **0.906** | 0.896 | 0.939 | 0.438 | - | **0.943** | 0.250 | 0.614 | 0.676 | - | **0.647** | 0.877 |
| **Lights and Motorcycles** | 5 | 24 | 6 | 0 | **35** | 95 | 29 | 37 | 0 | **161** | 43 | 226 | 6 | 0 | **275** | 1 | 53 | 44 | 0 | **98** | 569 |
| **% Lights and Motorcycles** | 100% | 100% | 85.7% | 0% | **97.2%** | 99.0% | 96.7% | 100% | 0% | **98.8%** | 100% | 98.7% | 85.7% | 0% | **98.6%** | 100% | 98.1% | 95.7% | 0% | **97.0%** | 98.3% |
| **Heavy** | 0 | 0 | 1 | 0 | **1** | 1 | 1 | 0 | 0 | **2** | 0 | 3 | 1 | 0 | **4** | 0 | 1 | 2 | 0 | **3** | 10 |
| **% Heavy** | 0% | 0% | 14.3% | 0% | **2.8%** | 1.0% | 3.3% | 0% | 0% | **1.2%** | 0% | 1.3% | 14.3% | 0% | **1.4%** | 0% | 1.9% | 4.3% | 0% | **3.0%** | 1.7% |

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

**PERRY RD & SMITH RD - TMC**
Wed Jan 6, 2021
AM Peak (7:15 AM - 8:15 AM)
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 807914, Location: 39.720297, -86.361133

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



## PERRY RD & SMITH RD - TMC

Wed Jan 6, 2021
PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 807914, Location: 39.720297, -86.361133

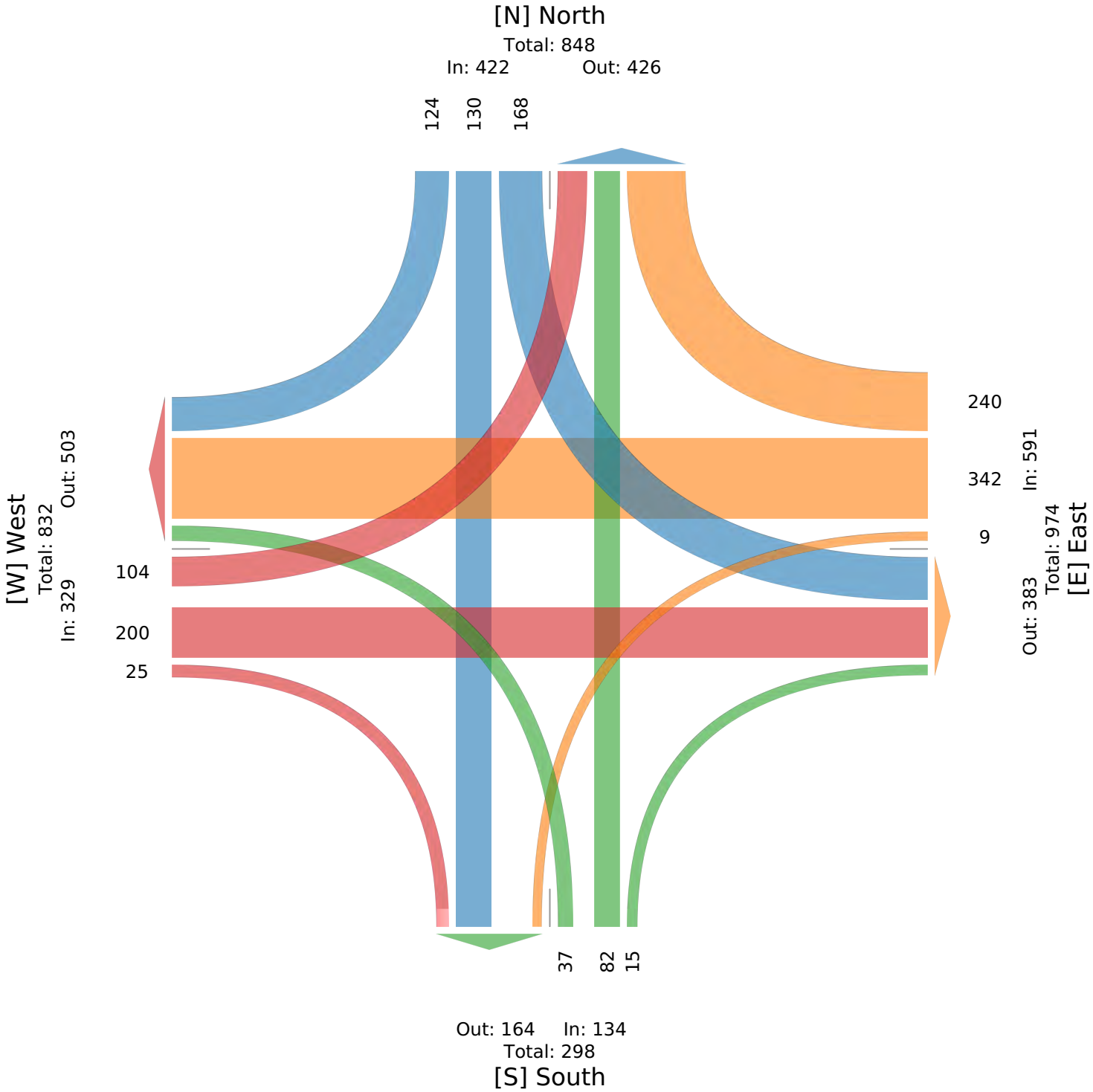

Provided by: A&F Engineering
8365 Keystone Crossing, Suite 201, Indianapolis, IN, 46240, US

| 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** |
| 2021-01-06 4:45PM | 10 | 17 | 5 | 0 | **32** | 39 | 26 | 26 | 0 | **91** | 36 | 45 | 7 | 0 | **88** | 0 | 87 | 57 | 0 | **144** | **355** |
| 5:00PM | 9 | 21 | 4 | 0 | **34** | 41 | 36 | 39 | 0 | **116** | 21 | 49 | 10 | 0 | **80** | 4 | 80 | 57 | 0 | **141** | **371** |
| 5:15PM | 8 | 23 | 2 | 0 | **33** | 49 | 44 | 31 | 0 | **124** | 24 | 52 | 5 | 0 | **81** | 2 | 94 | 57 | 0 | **153** | **391** |
| 5:30PM | 10 | 21 | 4 | 0 | **35** | 39 | 24 | 28 | 0 | **91** | 23 | 54 | 3 | 0 | **80** | 3 | 81 | 69 | 0 | **153** | **359** |
| **Total** | 37 | 82 | 15 | 0 | **134** | 168 | 130 | 124 | 0 | **422** | 104 | 200 | 25 | 0 | **329** | 9 | 342 | 240 | 0 | **591** | **1476** |
| **% Approach** | 27.6% | 61.2% | 11.2% | 0% | - | 39.8% | 30.8% | 29.4% | 0% | - | 31.6% | 60.8% | 7.6% | 0% | - | 1.5% | 57.9% | 40.6% | 0% | - | - |
| **% Total** | 2.5% | 5.6% | 1.0% | 0% | **9.1%** | 11.4% | 8.8% | 8.4% | 0% | **28.6%** | 7.0% | 13.6% | 1.7% | 0% | **22.3%** | 0.6% | 23.2% | 16.3% | 0% | **40.0%** | - |
| **PHF** | 0.925 | 0.891 | 0.750 | - | **0.957** | 0.857 | 0.739 | 0.795 | - | **0.851** | 0.722 | 0.926 | 0.625 | - | **0.935** | 0.563 | 0.910 | 0.870 | - | **0.966** | 0.944 |
| **Lights and Motorcycles** | 37 | 81 | 15 | 0 | **133** | 168 | 128 | 124 | 0 | **420** | 104 | 199 | 25 | 0 | **328** | 9 | 341 | 240 | 0 | **590** | 1471 |
| **% Lights and Motorcycles** | 100% | 98.8% | 100% | 0% | **99.3%** | 100% | 98.5% | 100% | 0% | **99.5%** | 100% | 99.5% | 100% | 0% | **99.7%** | 100% | 99.7% | 100% | 0% | **99.8%** | 99.7% |
| **Heavy** | 0 | 1 | 0 | 0 | **1** | 0 | 2 | 0 | 0 | **2** | 0 | 1 | 0 | 0 | **1** | 0 | 1 | 0 | 0 | **1** | 5 |
| **% Heavy** | 0% | 1.2% | 0% | 0% | **0.7%** | 0% | 1.5% | 0% | 0% | **0.5%** | 0% | 0.5% | 0% | 0% | **0.3%** | 0% | 0.3% | 0% | 0% | **0.2%** | 0.3% |

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

**PERRY RD & SMITH RD - TMC**
Wed Jan 6, 2021
PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 807914, Location: 39.720297, -86.361133

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



| Intersection | |
|---|---|
| Intersection Delay, s/veh | 4.4 |
| Intersection LOS | A |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Entry Lanes | 2 | 2 | 1 | 1 |
| Conflicting Circle Lanes | 2 | 2 | 2 | 2 |
| Adj Approach Flow, veh/h | 427 | 154 | 54 | 252 |
| Demand Flow Rate, veh/h | 432 | 159 | 55 | 254 |
| Vehicles Circulating, veh/h | 198 | 110 | 570 | 94 |
| Vehicles Exiting, veh/h | 150 | 515 | 60 | 175 |
| Ped Vol Crossing Leg, #/h | 0 | 0 | 0 | 0 |
| Ped Cap Adj | 1.000 | 1.000 | 1.000 | 1.000 |
| Approach Delay, s/veh | 4.8 | 3.5 | 4.8 | 4.4 |
| Approach LOS | A | A | A | A |

| Lane | Left | Right | Left | Right | Left | Left |
|---|---|---|---|---|---|---|
| Designated Moves | LT | TR | LT | TR | LTR | LTR |
| Assumed Moves | LT | TR | LT | TR | LTR | LTR |
| RT Channelized | | | | | | |
| Lane Util | 0.470 | 0.530 | 0.472 | 0.528 | 1.000 | 1.000 |
| Follow-Up Headway, s | 2.667 | 2.535 | 2.667 | 2.535 | 2.535 | 2.535 |
| Critical Headway, s | 4.645 | 4.328 | 4.645 | 4.328 | 4.328 | 4.328 |
| Entry Flow, veh/h | 203 | 229 | 75 | 84 | 55 | 254 |
| Cap Entry Lane, veh/h | 1125 | 1200 | 1220 | 1293 | 875 | 1311 |
| Entry HV Adj Factor | 0.990 | 0.989 | 0.967 | 0.974 | 0.982 | 0.991 |
| Flow Entry, veh/h | 201 | 227 | 73 | 82 | 54 | 252 |
| Cap Entry, veh/h | 1114 | 1187 | 1180 | 1259 | 859 | 1299 |
| V/C Ratio | 0.180 | 0.191 | 0.061 | 0.065 | 0.063 | 0.194 |
| Control Delay, s/veh | 4.8 | 4.7 | 3.6 | 3.4 | 4.8 | 4.4 |
| LOS | A | A | A | A | A | A |
| 95th %tile Queue, veh | 1 | 1 | 0 | 0 | 0 | 1 |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 7.2 |
| Intersection LOS | A |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Entry Lanes | 2 | 2 | 1 | 1 |
| Conflicting Circle Lanes | 2 | 2 | 2 | 2 |
| Adj Approach Flow, veh/h | 385 | 692 | 158 | 494 |
| Demand Flow Rate, veh/h | 387 | 692 | 159 | 497 |
| Vehicles Circulating, veh/h | 363 | 262 | 554 | 455 |
| Vehicles Exiting, veh/h | 589 | 451 | 196 | 499 |
| Ped Vol Crossing Leg, #/h | 0 | 0 | 0 | 0 |
| Ped Cap Adj | 1.000 | 1.000 | 1.000 | 1.000 |
| Approach Delay, s/veh | 5.4 | 6.3 | 5.9 | 10.3 |
| Approach LOS | A | A | A | B |

| Lane | Left | Right | Left | Right | Left | Left |
|---|---|---|---|---|---|---|
| Designated Moves | LT | TR | LT | TR | LTR | LTR |
| Assumed Moves | LT | TR | LT | TR | LTR | LTR |
| RT Channelized | | | | | | |
| Lane Util | 0.470 | 0.530 | 0.470 | 0.530 | 1.000 | 1.000 |
| Follow-Up Headway, s | 2.667 | 2.535 | 2.667 | 2.535 | 2.535 | 2.535 |
| Critical Headway, s | 4.645 | 4.328 | 4.645 | 4.328 | 4.328 | 4.328 |
| Entry Flow, veh/h | 182 | 205 | 325 | 367 | 159 | 497 |
| Cap Entry Lane, veh/h | 967 | 1043 | 1061 | 1137 | 887 | 965 |
| Entry HV Adj Factor | 0.993 | 0.994 | 1.001 | 0.999 | 0.994 | 0.994 |
| Flow Entry, veh/h | 181 | 204 | 325 | 367 | 158 | 494 |
| Cap Entry, veh/h | 960 | 1037 | 1062 | 1136 | 881 | 959 |
| V/C Ratio | 0.188 | 0.197 | 0.306 | 0.323 | 0.179 | 0.515 |
| Control Delay, s/veh | 5.6 | 5.3 | 6.4 | 6.3 | 5.9 | 10.3 |
| LOS | A | A | A | A | A | B |
| 95th %tile Queue, veh | 1 | 1 | 1 | 1 | 1 | 3 |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 4.7 |
| Intersection LOS | A |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Entry Lanes | 2 | 2 | 1 | 1 |
| Conflicting Circle Lanes | 2 | 2 | 2 | 2 |
| Adj Approach Flow, veh/h | 470 | 169 | 60 | 275 |
| Demand Flow Rate, veh/h | 476 | 174 | 62 | 279 |
| Vehicles Circulating, veh/h | 218 | 122 | 627 | 103 |
| Vehicles Exiting, veh/h | 164 | 567 | 67 | 193 |
| Ped Vol Crossing Leg, #/h | 0 | 0 | 0 | 0 |
| Ped Cap Adj | 1.000 | 1.000 | 1.000 | 1.000 |
| Approach Delay, s/veh | 5.1 | 3.5 | 5.2 | 4.6 |
| Approach LOS | A | A | A | A |

| Lane | Left | Right | Left | Right | Left | Left |
|---|---|---|---|---|---|---|
| Designated Moves | LT | TR | LT | TR | LTR | LTR |
| Assumed Moves | LT | TR | LT | TR | LTR | LTR |
| RT Channelized | | | | | | |
| Lane Util | 0.471 | 0.529 | 0.471 | 0.529 | 1.000 | 1.000 |
| Follow-Up Headway, s | 2.667 | 2.535 | 2.667 | 2.535 | 2.535 | 2.535 |
| Critical Headway, s | 4.645 | 4.328 | 4.645 | 4.328 | 4.328 | 4.328 |
| Entry Flow, veh/h | 224 | 252 | 82 | 92 | 62 | 279 |
| Cap Entry Lane, veh/h | 1105 | 1180 | 1207 | 1280 | 833 | 1301 |
| Entry HV Adj Factor | 0.986 | 0.989 | 0.970 | 0.975 | 0.968 | 0.987 |
| Flow Entry, veh/h | 221 | 249 | 80 | 90 | 60 | 275 |
| Cap Entry, veh/h | 1090 | 1167 | 1170 | 1248 | 806 | 1285 |
| V/C Ratio | 0.203 | 0.214 | 0.068 | 0.072 | 0.074 | 0.214 |
| Control Delay, s/veh | 5.2 | 5.0 | 3.6 | 3.5 | 5.2 | 4.6 |
| LOS | A | A | A | A | A | A |
| 95th %tile Queue, veh | 1 | 1 | 0 | 0 | 0 | 1 |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 8.2 |
| Intersection LOS | A |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Entry Lanes | 2 | 2 | 1 | 1 |
| Conflicting Circle Lanes | 2 | 2 | 2 | 2 |
| Adj Approach Flow, veh/h | 423 | 761 | 173 | 544 |
| Demand Flow Rate, veh/h | 423 | 761 | 174 | 546 |
| Vehicles Circulating, veh/h | 398 | 287 | 607 | 500 |
| Vehicles Exiting, veh/h | 648 | 494 | 214 | 548 |
| Ped Vol Crossing Leg, #/h | 0 | 0 | 0 | 0 |
| Ped Cap Adj | 1.000 | 1.000 | 1.000 | 1.000 |
| Approach Delay, s/veh | 5.8 | 6.9 | 6.4 | 12.2 |
| Approach LOS | A | A | A | B |

| Lane | Left | Right | Left | Right | Left | Left |
|---|---|---|---|---|---|---|
| Designated Moves | LT | TR | LT | TR | LTR | LTR |
| Assumed Moves | LT | TR | LT | TR | LTR | LTR |
| RT Channelized | | | | | | |
| Lane Util | 0.470 | 0.530 | 0.470 | 0.530 | 1.000 | 1.000 |
| Follow-Up Headway, s | 2.667 | 2.535 | 2.667 | 2.535 | 2.535 | 2.535 |
| Critical Headway, s | 4.645 | 4.328 | 4.645 | 4.328 | 4.328 | 4.328 |
| Entry Flow, veh/h | 199 | 224 | 358 | 403 | 174 | 546 |
| Cap Entry Lane, veh/h | 936 | 1012 | 1037 | 1113 | 848 | 928 |
| Entry HV Adj Factor | 0.999 | 1.001 | 0.999 | 1.001 | 0.994 | 0.997 |
| Flow Entry, veh/h | 199 | 224 | 358 | 403 | 173 | 544 |
| Cap Entry, veh/h | 935 | 1013 | 1036 | 1114 | 843 | 926 |
| V/C Ratio | 0.213 | 0.221 | 0.345 | 0.362 | 0.205 | 0.588 |
| Control Delay, s/veh | 5.9 | 5.7 | 7.0 | 6.9 | 6.4 | 12.2 |
| LOS | A | A | A | A | A | B |
| 95th %tile Queue, veh | 1 | 1 | 2 | 2 | 1 | 4 |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 5.2 |
| Intersection LOS | A |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Entry Lanes | 2 | 2 | 1 | 1 |
| Conflicting Circle Lanes | 2 | 2 | 2 | 2 |
| Adj Approach Flow, veh/h | 473 | 204 | 100 | 375 |
| Demand Flow Rate, veh/h | 478 | 209 | 101 | 378 |
| Vehicles Circulating, veh/h | 293 | 172 | 636 | 124 |
| Vehicles Exiting, veh/h | 209 | 565 | 135 | 257 |
| Ped Vol Crossing Leg, #/h | 0 | 0 | 0 | 0 |
| Ped Cap Adj | 1.000 | 1.000 | 1.000 | 1.000 |
| Approach Delay, s/veh | 5.5 | 3.8 | 5.6 | 5.5 |
| Approach LOS | A | A | A | A |

| Lane | Left | Right | Left | Right | Left | Left |
|---|---|---|---|---|---|---|
| Designated Moves | LT | TR | LT | TR | LTR | LTR |
| Assumed Moves | LT | TR | LT | TR | LTR | LTR |
| RT Channelized | | | | | | |
| Lane Util | 0.471 | 0.529 | 0.469 | 0.531 | 1.000 | 1.000 |
| Follow-Up Headway, s | 2.667 | 2.535 | 2.667 | 2.535 | 2.535 | 2.535 |
| Critical Headway, s | 4.645 | 4.328 | 4.645 | 4.328 | 4.328 | 4.328 |
| Entry Flow, veh/h | 225 | 253 | 98 | 111 | 101 | 378 |
| Cap Entry Lane, veh/h | 1031 | 1107 | 1152 | 1227 | 827 | 1278 |
| Entry HV Adj Factor | 0.988 | 0.991 | 0.978 | 0.973 | 0.990 | 0.991 |
| Flow Entry, veh/h | 222 | 251 | 96 | 108 | 100 | 375 |
| Cap Entry, veh/h | 1019 | 1097 | 1127 | 1194 | 819 | 1267 |
| V/C Ratio | 0.218 | 0.229 | 0.085 | 0.090 | 0.122 | 0.296 |
| Control Delay, s/veh | 5.6 | 5.4 | 3.9 | 3.8 | 5.6 | 5.5 |
| LOS | A | A | A | A | A | A |
| 95th %tile Queue, veh | 1 | 1 | 0 | 0 | 0 | 1 |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 9.2 |
| Intersection LOS | A |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Entry Lanes | 2 | 2 | 1 | 1 |
| Conflicting Circle Lanes | 2 | 2 | 2 | 2 |
| Adj Approach Flow, veh/h | 454 | 717 | 244 | 613 |
| Demand Flow Rate, veh/h | 454 | 717 | 246 | 615 |
| Vehicles Circulating, veh/h | 458 | 382 | 640 | 474 |
| Vehicles Exiting, veh/h | 631 | 504 | 272 | 625 |
| Ped Vol Crossing Leg, #/h | 0 | 0 | 0 | 0 |
| Ped Cap Adj | 1.000 | 1.000 | 1.000 | 1.000 |
| Approach Delay, s/veh | 6.4 | 7.5 | 7.8 | 13.8 |
| Approach LOS | A | A | A | B |

| Lane | Left | Right | Left | Right | Left | Left |
|---|---|---|---|---|---|---|
| Designated Moves | LT | TR | LT | TR | LTR | LTR |
| Assumed Moves | LT | TR | LT | TR | LTR | LTR |
| RT Channelized | | | | | | |
| Lane Util | 0.469 | 0.531 | 0.470 | 0.530 | 1.000 | 1.000 |
| Follow-Up Headway, s | 2.667 | 2.535 | 2.667 | 2.535 | 2.535 | 2.535 |
| Critical Headway, s | 4.645 | 4.328 | 4.645 | 4.328 | 4.328 | 4.328 |
| Entry Flow, veh/h | 213 | 241 | 337 | 380 | 246 | 615 |
| Cap Entry Lane, veh/h | 886 | 962 | 950 | 1026 | 824 | 949 |
| Entry HV Adj Factor | 1.002 | 0.998 | 1.000 | 1.000 | 0.993 | 0.996 |
| Flow Entry, veh/h | 213 | 241 | 337 | 380 | 244 | 613 |
| Cap Entry, veh/h | 887 | 961 | 950 | 1026 | 818 | 946 |
| V/C Ratio | 0.240 | 0.250 | 0.355 | 0.370 | 0.298 | 0.648 |
| Control Delay, s/veh | 6.5 | 6.2 | 7.6 | 7.4 | 7.8 | 13.8 |
| LOS | A | A | A | A | A | B |
| 95th %tile Queue, veh | 1 | 1 | 2 | 2 | 1 | 5 |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 5.5 |
| Intersection LOS | A |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Entry Lanes | 2 | 2 | 1 | 1 |
| Conflicting Circle Lanes | 2 | 2 | 2 | 2 |
| Adj Approach Flow, veh/h | 516 | 218 | 105 | 400 |
| Demand Flow Rate, veh/h | 521 | 223 | 105 | 403 |
| Vehicles Circulating, veh/h | 312 | 183 | 693 | 133 |
| Vehicles Exiting, veh/h | 224 | 615 | 140 | 273 |
| Ped Vol Crossing Leg, #/h | 0 | 0 | 0 | 0 |
| Ped Cap Adj | 1.000 | 1.000 | 1.000 | 1.000 |
| Approach Delay, s/veh | 5.8 | 3.9 | 5.9 | 5.8 |
| Approach LOS | A | A | A | A |

| Lane | Left | Right | Left | Right | Left | Left |
|---|---|---|---|---|---|---|
| Designated Moves | LT | TR | LT | TR | LTR | LTR |
| Assumed Moves | LT | TR | LT | TR | LTR | LTR |
| RT Channelized | | | | | | |
| Lane Util | 0.470 | 0.530 | 0.471 | 0.529 | 1.000 | 1.000 |
| Follow-Up Headway, s | 2.667 | 2.535 | 2.667 | 2.535 | 2.535 | 2.535 |
| Critical Headway, s | 4.645 | 4.328 | 4.645 | 4.328 | 4.328 | 4.328 |
| Entry Flow, veh/h | 245 | 276 | 105 | 118 | 105 | 403 |
| Cap Entry Lane, veh/h | 1013 | 1089 | 1141 | 1216 | 788 | 1268 |
| Entry HV Adj Factor | 0.990 | 0.991 | 0.975 | 0.978 | 1.000 | 0.992 |
| Flow Entry, veh/h | 242 | 273 | 102 | 115 | 105 | 400 |
| Cap Entry, veh/h | 1003 | 1079 | 1112 | 1189 | 788 | 1258 |
| V/C Ratio | 0.242 | 0.253 | 0.092 | 0.097 | 0.133 | 0.318 |
| Control Delay, s/veh | 5.9 | 5.7 | 4.0 | 3.8 | 5.9 | 5.8 |
| LOS | A | A | A | A | A | A |
| 95th %tile Queue, veh | 1 | 1 | 0 | 0 | 0 | 1 |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 10.8 |
| Intersection LOS | B |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Entry Lanes | 2 | 2 | 1 | 1 |
| Conflicting Circle Lanes | 2 | 2 | 2 | 2 |
| Adj Approach Flow, veh/h | 493 | 787 | 259 | 663 |
| Demand Flow Rate, veh/h | 493 | 787 | 261 | 665 |
| Vehicles Circulating, veh/h | 494 | 407 | 696 | 520 |
| Vehicles Exiting, veh/h | 691 | 550 | 291 | 674 |
| Ped Vol Crossing Leg, #/h | 0 | 0 | 0 | 0 |
| Ped Cap Adj | 1.000 | 1.000 | 1.000 | 1.000 |
| Approach Delay, s/veh | 6.9 | 8.3 | 8.6 | 17.4 |
| Approach LOS | A | A | A | C |

| Lane | Left | Right | Left | Right | Left | Left |
|---|---|---|---|---|---|---|
| Designated Moves | LT | TR | LT | TR | LTR | LTR |
| Assumed Moves | LT | TR | LT | TR | LTR | LTR |
| RT Channelized | | | | | | |
| Lane Util | 0.471 | 0.529 | 0.470 | 0.530 | 1.000 | 1.000 |
| Follow-Up Headway, s | 2.667 | 2.535 | 2.667 | 2.535 | 2.535 | 2.535 |
| Critical Headway, s | 4.645 | 4.328 | 4.645 | 4.328 | 4.328 | 4.328 |
| Entry Flow, veh/h | 232 | 261 | 370 | 417 | 261 | 665 |
| Cap Entry Lane, veh/h | 857 | 933 | 928 | 1005 | 786 | 913 |
| Entry HV Adj Factor | 0.999 | 1.001 | 1.000 | 1.000 | 0.993 | 0.996 |
| Flow Entry, veh/h | 232 | 261 | 370 | 417 | 259 | 663 |
| Cap Entry, veh/h | 856 | 934 | 928 | 1005 | 780 | 909 |
| V/C Ratio | 0.271 | 0.280 | 0.399 | 0.415 | 0.332 | 0.729 |
| Control Delay, s/veh | 7.1 | 6.7 | 8.4 | 8.2 | 8.6 | 17.4 |
| LOS | A | A | A | A | A | C |
| 95th %tile Queue, veh | 1 | 1 | 2 | 2 | 1 | 7 |

# KLONDIKE ROAD & FRONTAGE ROAD

## TRAFFIC VOLUME COUNTS
## CAPACITY ANALYSIS

## KLONDIKE RD & FRONTAGE RD - TMC

Wed Jan 6, 2021
Full Length (6:30 AM-8:30 AM, 4 PM-7 PM)
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 807907, Location: 39.725154, -86.34383

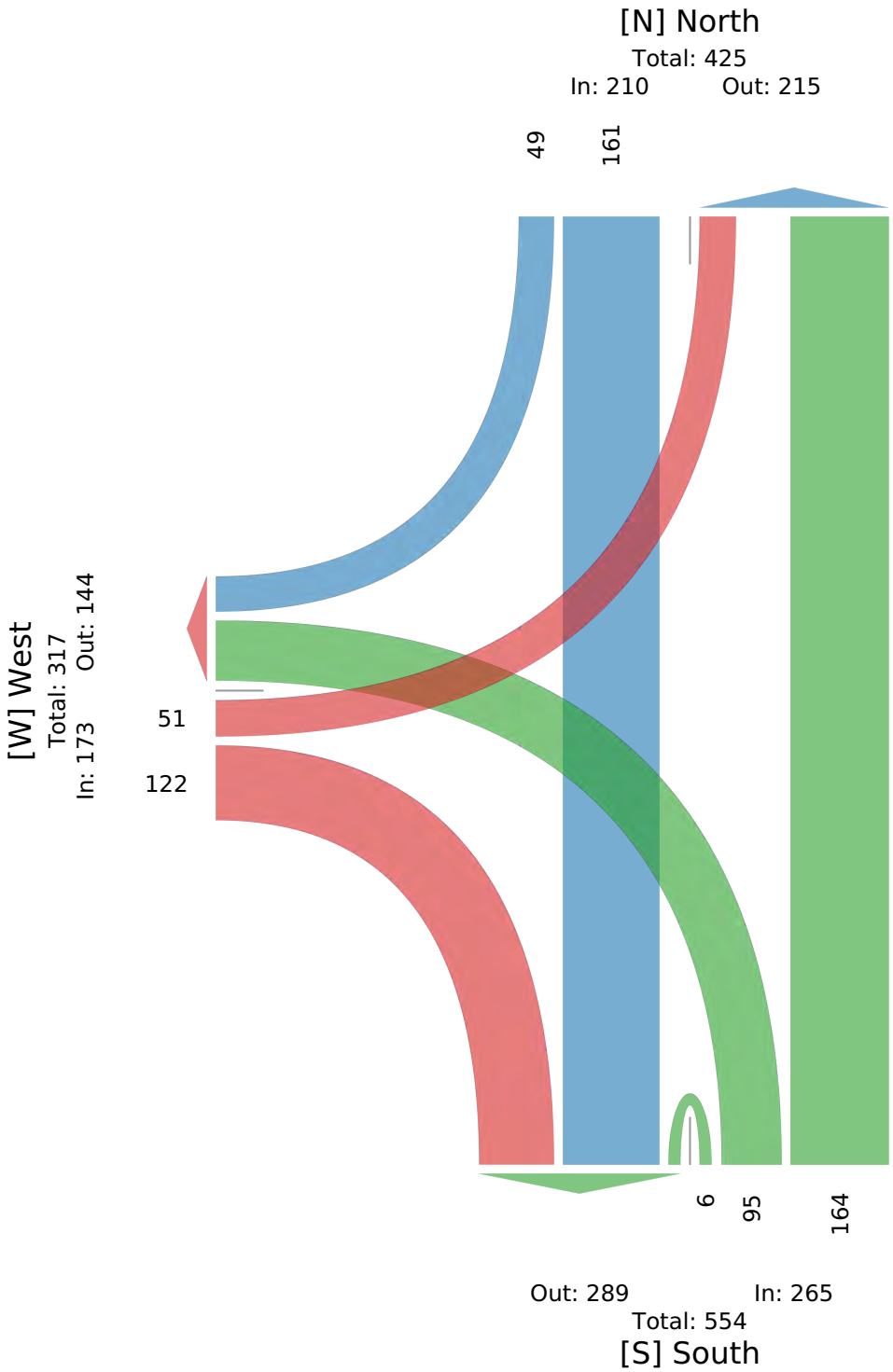
Provided by: A&F Engineering
8365 Keystone Crossing, Suite 201, Indianapolis, IN, 46240, US

| Leg | South | | | | North | | | | West | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Direction | Northbound | | | | Southbound | | | | Eastbound | | | | |
| Time | L | T | U | **App** | T | R | U | **App** | L | R | U | **App** | **Int** |
| 2021-01-06 6:30AM | 5 | 11 | 0 | **16** | 8 | 0 | 0 | **8** | 0 | 0 | 0 | **0** | **24** |
| 6:45AM | 5 | 16 | 0 | **21** | 6 | 4 | 0 | **10** | 0 | 0 | 0 | **0** | **31** |
| Hourly Total | 10 | 27 | 0 | **37** | 14 | 4 | 0 | **18** | 0 | 0 | 0 | **0** | **55** |
| 7:00AM | 3 | 4 | 0 | **7** | 6 | 1 | 0 | **7** | 0 | 0 | 0 | **0** | **14** |
| 7:15AM | 6 | 3 | 0 | **9** | 4 | 1 | 0 | **5** | 0 | 4 | 0 | **4** | **18** |
| 7:30AM | 13 | 4 | 0 | **17** | 2 | 5 | 0 | **7** | 0 | 4 | 0 | **4** | **28** |
| 7:45AM | 13 | 6 | 0 | **19** | 7 | 15 | 0 | **22** | 0 | 3 | 0 | **3** | **44** |
| Hourly Total | 35 | 17 | 0 | **52** | 19 | 22 | 0 | **41** | 0 | 11 | 0 | **11** | **104** |
| 8:00AM | 5 | 6 | 0 | **11** | 3 | 6 | 0 | **9** | 0 | 3 | 0 | **3** | **23** |
| 8:15AM | 9 | 9 | 3 | **21** | 12 | 6 | 0 | **18** | 3 | 10 | 0 | **13** | **52** |
| Hourly Total | 14 | 15 | 3 | **32** | 15 | 12 | 0 | **27** | 3 | 13 | 0 | **16** | **75** |
| 4:00PM | 11 | 7 | 0 | **18** | 10 | 0 | 0 | **10** | 5 | 17 | 0 | **22** | **50** |
| 4:15PM | 1 | 6 | 0 | **7** | 8 | 1 | 0 | **9** | 3 | 9 | 0 | **12** | **28** |
| 4:30PM | 3 | 6 | 0 | **9** | 5 | 0 | 0 | **5** | 3 | 11 | 0 | **14** | **28** |
| 4:45PM | 5 | 16 | 1 | **22** | 8 | 0 | 0 | **8** | 4 | 17 | 0 | **21** | **51** |
| Hourly Total | 20 | 35 | 1 | **56** | 31 | 1 | 0 | **32** | 15 | 54 | 0 | **69** | **157** |
| 5:00PM | 3 | 13 | 1 | **17** | 24 | 2 | 0 | **26** | 10 | 16 | 0 | **26** | **69** |
| 5:15PM | 2 | 13 | 1 | **16** | 18 | 0 | 0 | **18** | 3 | 6 | 0 | **9** | **43** |
| 5:30PM | 2 | 12 | 0 | **14** | 9 | 0 | 0 | **9** | 6 | 7 | 0 | **13** | **36** |
| 5:45PM | 3 | 6 | 0 | **9** | 9 | 3 | 0 | **12** | 4 | 4 | 0 | **8** | **29** |
| Hourly Total | 10 | 44 | 2 | **56** | 60 | 5 | 0 | **65** | 23 | 33 | 0 | **56** | **177** |
| 6:00PM | 1 | 7 | 0 | **8** | 3 | 3 | 0 | **6** | 5 | 1 | 0 | **6** | **20** |
| 6:15PM | 2 | 11 | 0 | **13** | 8 | 1 | 0 | **9** | 0 | 4 | 0 | **4** | **26** |
| 6:30PM | 2 | 4 | 0 | **6** | 7 | 1 | 0 | **8** | 2 | 2 | 0 | **4** | **18** |
| 6:45PM | 1 | 4 | 0 | **5** | 4 | 0 | 0 | **4** | 3 | 4 | 0 | **7** | **16** |
| Hourly Total | 6 | 26 | 0 | **32** | 22 | 5 | 0 | **27** | 10 | 11 | 0 | **21** | **80** |
| 7:00PM | 0 | 0 | 0 | **0** | 0 | 0 | 0 | **0** | 0 | 0 | 0 | **0** | **0** |
| Hourly Total | 0 | 0 | 0 | **0** | 0 | 0 | 0 | **0** | 0 | 0 | 0 | **0** | **0** |
| **Total** | 95 | 164 | 6 | **265** | 161 | 49 | 0 | **210** | 51 | 122 | 0 | **173** | **648** |
| **% Approach** | 35.8% | 61.9% | 2.3% | **-** | 76.7% | 23.3% | 0% | **-** | 29.5% | 70.5% | 0% | **-** | - |
| **% Total** | 14.7% | 25.3% | 0.9% | **40.9%** | 24.8% | 7.6% | 0% | **32.4%** | 7.9% | 18.8% | 0% | **26.7%** | - |
| **Lights and Motorcycles** | 81 | 143 | 5 | **229** | 138 | 49 | 0 | **187** | 50 | 112 | 0 | **162** | 578 |
| **% Lights and Motorcycles** | 85.3% | 87.2% | 83.3% | **86.4%** | 85.7% | 100% | 0% | **89.0%** | 98.0% | 91.8% | 0% | **93.6%** | 89.2% |
| **Heavy** | 14 | 21 | 1 | **36** | 23 | 0 | 0 | **23** | 1 | 10 | 0 | **11** | 70 |
| **% Heavy** | 14.7% | 12.8% | 16.7% | **13.6%** | 14.3% | 0% | 0% | **11.0%** | 2.0% | 8.2% | 0% | **6.4%** | 10.8% |

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

**KLONDIKE RD & FRONTAGE RD - TMC**
Wed Jan 6, 2021
Full Length (6:30 AM-8:30 AM, 4 PM-7 PM)
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 807907, Location: 39.725154, -86.34383

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



## KLONDIKE RD & FRONTAGE RD - TMC

Wed Jan 6, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 807907, Location: 39.725154, -86.34383

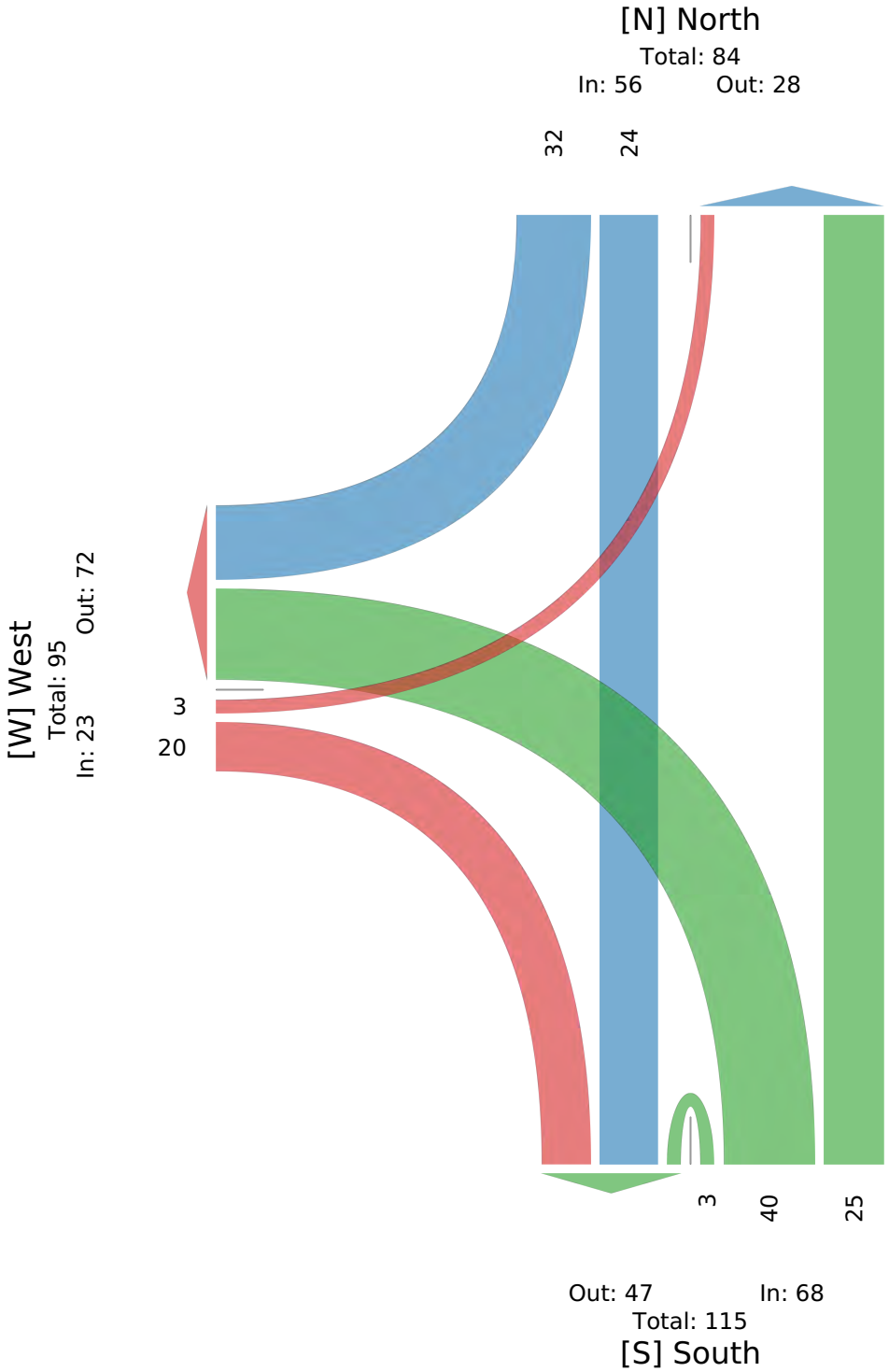
Provided by: A&F Engineering
8365 Keystone Crossing, Suite 201, Indianapolis, IN, 46240, US

| Leg | South | | | | North | | | | West | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Direction | Northbound | | | | Southbound | | | | Eastbound | | | | |
| Time | L | T | U | **App** | T | R | U | **App** | L | R | U | **App** | **Int** |
| 2021-01-06 7:30AM | 13 | 4 | 0 | **17** | 2 | 5 | 0 | **7** | 0 | 4 | 0 | **4** | **28** |
| 7:45AM | 13 | 6 | 0 | **19** | 7 | 15 | 0 | **22** | 0 | 3 | 0 | **3** | **44** |
| 8:00AM | 5 | 6 | 0 | **11** | 3 | 6 | 0 | **9** | 0 | 3 | 0 | **3** | **23** |
| 8:15AM | 9 | 9 | 3 | **21** | 12 | 6 | 0 | **18** | 3 | 10 | 0 | **13** | **52** |
| **Total** | 40 | 25 | 3 | **68** | 24 | 32 | 0 | **56** | 3 | 20 | 0 | **23** | **147** |
| **% Approach** | 58.8% | 36.8% | 4.4% | **-** | 42.9% | 57.1% | 0% | **-** | 13.0% | 87.0% | 0% | **-** | - |
| **% Total** | 27.2% | 17.0% | 2.0% | **46.3%** | 16.3% | 21.8% | 0% | **38.1%** | 2.0% | 13.6% | 0% | **15.6%** | - |
| **PHF** | 0.769 | 0.694 | 0.250 | **0.810** | 0.500 | 0.533 | - | **0.636** | 0.250 | 0.500 | - | **0.442** | 0.707 |
| **Lights and Motorcycles** | 36 | 24 | 3 | **63** | 20 | 32 | 0 | **52** | 3 | 19 | 0 | **22** | 137 |
| **% Lights and Motorcycles** | 90.0% | 96.0% | 100% | **92.6%** | 83.3% | 100% | 0% | **92.9%** | 100% | 95.0% | 0% | **95.7%** | 93.2% |
| **Heavy** | 4 | 1 | 0 | **5** | 4 | 0 | 0 | **4** | 0 | 1 | 0 | **1** | 10 |
| **% Heavy** | 10.0% | 4.0% | 0% | **7.4%** | 16.7% | 0% | 0% | **7.1%** | 0% | 5.0% | 0% | **4.3%** | 6.8% |

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

KLONDIKE RD & FRONTAGE RD - TMC
Wed Jan 6, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 807907, Location: 39.725154, -86.34383

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



## KLONDIKE RD & FRONTAGE RD - TMC

Wed Jan 6, 2021
PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 807907, Location: 39.725154, -86.34383

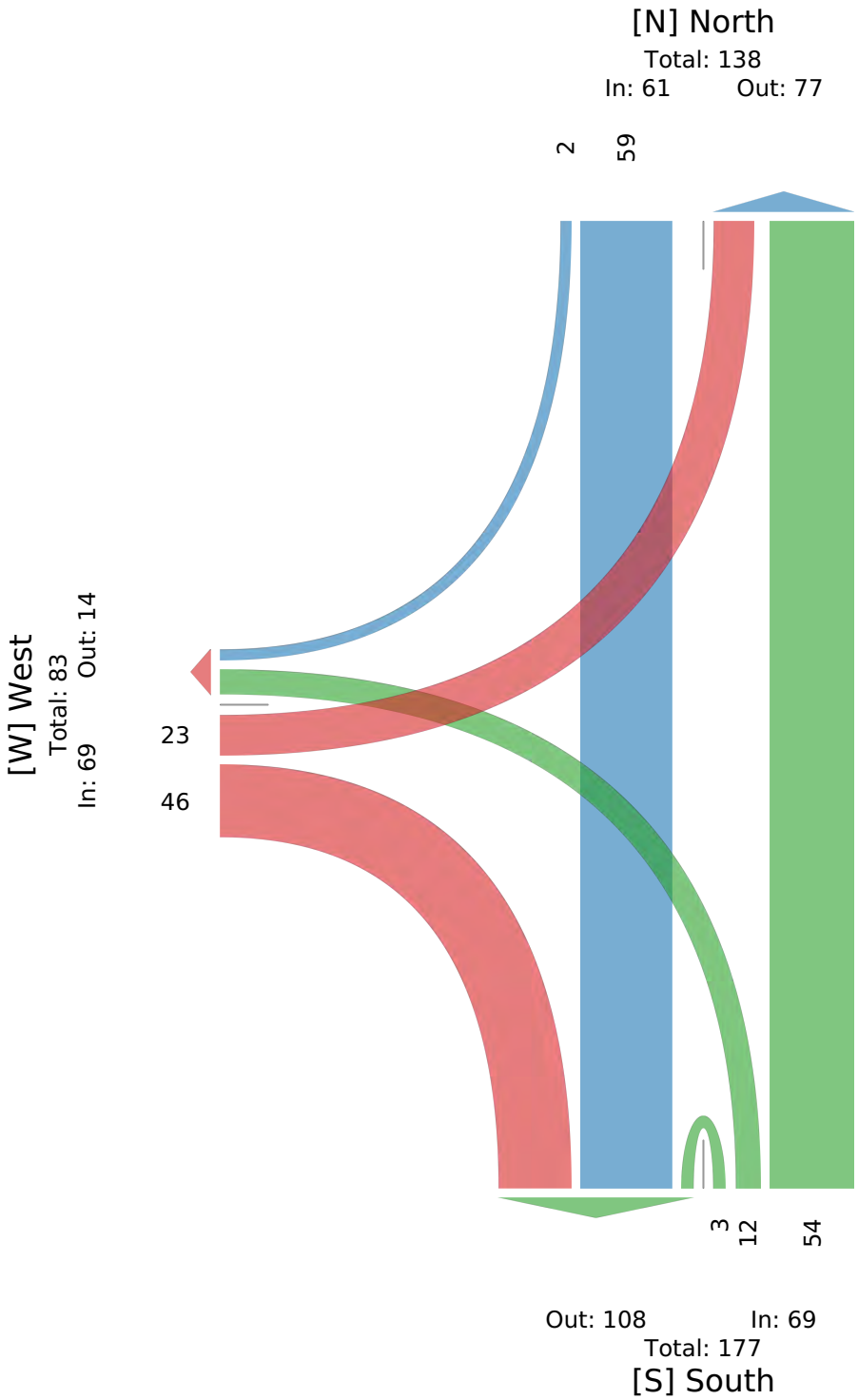
Provided by: A&F Engineering
8365 Keystone Crossing, Suite 201, Indianapolis, IN, 46240, US

| Leg | South | | | | North | | | | West | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Direction | Northbound | | | | Southbound | | | | Eastbound | | | | |
| Time | L | T | U | **App** | T | R | U | **App** | L | R | U | **App** | **Int** |
| 2021-01-06 4:45PM | 5 | 16 | 1 | **22** | 8 | 0 | 0 | **8** | 4 | 17 | 0 | **21** | **51** |
| 5:00PM | 3 | 13 | 1 | **17** | 24 | 2 | 0 | **26** | 10 | 16 | 0 | **26** | **69** |
| 5:15PM | 2 | 13 | 1 | **16** | 18 | 0 | 0 | **18** | 3 | 6 | 0 | **9** | **43** |
| 5:30PM | 2 | 12 | 0 | **14** | 9 | 0 | 0 | **9** | 6 | 7 | 0 | **13** | **36** |
| **Total** | 12 | 54 | 3 | **69** | 59 | 2 | 0 | **61** | 23 | 46 | 0 | **69** | **199** |
| **% Approach** | 17.4% | 78.3% | 4.3% | **-** | 96.7% | 3.3% | 0% | **-** | 33.3% | 66.7% | 0% | **-** | - |
| **% Total** | 6.0% | 27.1% | 1.5% | **34.7%** | 29.6% | 1.0% | 0% | **30.7%** | 11.6% | 23.1% | 0% | **34.7%** | - |
| **PHF** | 0.600 | 0.844 | 0.750 | **0.784** | 0.615 | 0.250 | - | **0.587** | 0.575 | 0.676 | - | **0.663** | 0.721 |
| **Lights and Motorcycles** | 9 | 48 | 2 | **59** | 51 | 2 | 0 | **53** | 23 | 42 | 0 | **65** | 177 |
| **% Lights and Motorcycles** | 75.0% | 88.9% | 66.7% | **85.5%** | 86.4% | 100% | 0% | **86.9%** | 100% | 91.3% | 0% | **94.2%** | 88.9% |
| **Heavy** | 3 | 6 | 1 | **10** | 8 | 0 | 0 | **8** | 0 | 4 | 0 | **4** | 22 |
| **% Heavy** | 25.0% | 11.1% | 33.3% | **14.5%** | 13.6% | 0% | 0% | **13.1%** | 0% | 8.7% | 0% | **5.8%** | 11.1% |

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

KLONDIKE RD & FRONTAGE RD - TMC
Wed Jan 6, 2021
PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 807907, Location: 39.725154, -86.34383

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



| Intersection | |
|---|---|
| Int Delay, s/veh | 3.6 |

| Movement | SET | SER | NWL | NWT | NEL | NER |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 32 | 43 | 54 | 34 | 4 | 27 |
| Future Vol, veh/h | 32 | 43 | 54 | 34 | 4 | 27 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | 115 | - | 0 | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 71 | 71 | 71 | 71 | 71 | 71 |
| Heavy Vehicles, % | 17 | 0 | 10 | 4 | 0 | 5 |
| Mvmt Flow | 45 | 61 | 76 | 48 | 6 | 38 |

| Major/Minor | Major1 | | Major2 | | Minor1 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 0 | 0 | 106 | 0 | 276 | 76 |
| Stage 1 | - | - | - | - | 76 | - |
| Stage 2 | - | - | - | - | 200 | - |
| Critical Hdwy | - | - | 4.2 | - | 6.4 | 6.25 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.4 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.4 | - |
| Follow-up Hdwy | - | - | 2.29 | - | 3.5 | 3.345 |
| Pot Cap-1 Maneuver | - | - | 1437 | - | 718 | 977 |
| Stage 1 | - | - | - | - | 952 | - |
| Stage 2 | - | - | - | - | 838 | - |
| Platoon blocked, % | - | - | | - | | |
| Mov Cap-1 Maneuver | - | - | 1437 | - | 680 | 977 |
| Mov Cap-2 Maneuver | - | - | - | - | 694 | - |
| Stage 1 | - | - | - | - | 952 | - |
| Stage 2 | - | - | - | - | 794 | - |

| Approach | SE | NW | NE |
|---|---|---|---|
| HCM Control Delay, s | 0 | 4.7 | 9.1 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | NELn1 | NWL | NWT | SET | SER |
|---|---|---|---|---|---|
| Capacity (veh/h) | 928 | 1437 | - | - | - |
| HCM Lane V/C Ratio | 0.047 | 0.053 | - | - | - |
| HCM Control Delay (s) | 9.1 | 7.6 | - | - | - |
| HCM Lane LOS | A | A | - | - | - |
| HCM 95th %tile Q(veh) | 0.1 | 0.2 | - | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 3.9 |

| Movement | SET | SER | NWL | NWT | NEL | NER |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 65 | 2 | 13 | 59 | 25 | 51 |
| Future Vol, veh/h | 65 | 2 | 13 | 59 | 25 | 51 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | 115 | - | 0 | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 72 | 72 | 72 | 72 | 72 | 72 |
| Heavy Vehicles, % | 14 | 0 | 25 | 11 | 0 | 9 |
| Mvmt Flow | 90 | 3 | 18 | 82 | 35 | 71 |

| Major/Minor | Major1 | | Major2 | | Minor1 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 0 | 0 | 93 | 0 | 210 | 92 |
| Stage 1 | - | - | - | - | 92 | - |
| Stage 2 | - | - | - | - | 118 | - |
| Critical Hdwy | - | - | 4.35 | - | 6.4 | 6.29 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.4 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.4 | - |
| Follow-up Hdwy | - | - | 2.425 | - | 3.5 | 3.381 |
| Pot Cap-1 Maneuver | - | - | 1369 | - | 783 | 946 |
| Stage 1 | - | - | - | - | 937 | - |
| Stage 2 | - | - | - | - | 912 | - |
| Platoon blocked, % | - | - | | - | | |
| Mov Cap-1 Maneuver | - | - | 1369 | - | 773 | 946 |
| Mov Cap-2 Maneuver | - | - | - | - | 771 | - |
| Stage 1 | - | - | - | - | 937 | - |
| Stage 2 | - | - | - | - | 900 | - |

| Approach | SE | NW | NE |
|---|---|---|---|
| HCM Control Delay, s | 0 | 1.4 | 9.6 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | NELn1 | NWL | NWT | SET | SER |
|---|---|---|---|---|---|
| Capacity (veh/h) | 880 | 1369 | - | - | - |
| HCM Lane V/C Ratio | 0.12 | 0.013 | - | - | - |
| HCM Control Delay (s) | 9.6 | 7.7 | - | - | - |
| HCM Lane LOS | A | A | - | - | - |
| HCM 95th %tile Q(veh) | 0.4 | 0 | - | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 3.6 |

| Movement | SET | SER | NWL | NWT | NEL | NER |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 35 | 47 | 59 | 37 | 4 | 30 |
| Future Vol, veh/h | 35 | 47 | 59 | 37 | 4 | 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 | - | - | 115 | - | 0 | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 71 | 71 | 71 | 71 | 71 | 71 |
| Heavy Vehicles, % | 17 | 0 | 10 | 4 | 0 | 5 |
| Mvmt Flow | 49 | 66 | 83 | 52 | 6 | 42 |

| Major/Minor | Major1 | | Major2 | | Minor1 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 0 | 0 | 115 | 0 | 300 | 82 |
| Stage 1 | - | - | - | - | 82 | - |
| Stage 2 | - | - | - | - | 218 | - |
| Critical Hdwy | - | - | 4.2 | - | 6.4 | 6.25 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.4 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.4 | - |
| Follow-up Hdwy | - | - | 2.29 | - | 3.5 | 3.345 |
| Pot Cap-1 Maneuver | - | - | 1426 | - | 696 | 969 |
| Stage 1 | - | - | - | - | 946 | - |
| Stage 2 | - | - | - | - | 823 | - |
| Platoon blocked, % | - | - | | - | | |
| Mov Cap-1 Maneuver | - | - | 1426 | - | 656 | 969 |
| Mov Cap-2 Maneuver | - | - | - | - | 676 | - |
| Stage 1 | - | - | - | - | 946 | - |
| Stage 2 | - | - | - | - | 775 | - |

| Approach | SE | NW | NE |
|---|---|---|---|
| HCM Control Delay, s | 0 | 4.7 | 9.1 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | NELn1 | NWL | NWT | SET | SER |
|---|---|---|---|---|---|
| Capacity (veh/h) | 922 | 1426 | - | - | - |
| HCM Lane V/C Ratio | 0.052 | 0.058 | - | - | - |
| HCM Control Delay (s) | 9.1 | 7.7 | - | - | - |
| HCM Lane LOS | A | A | - | - | - |
| HCM 95th %tile Q(veh) | 0.2 | 0.2 | - | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 3.9 |

| Movement | SET | SER | NWL | NWT | NEL | NER |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 72 | 2 | 14 | 65 | 28 | 56 |
| Future Vol, veh/h | 72 | 2 | 14 | 65 | 28 | 56 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | 115 | - | 0 | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 72 | 72 | 72 | 72 | 72 | 72 |
| Heavy Vehicles, % | 14 | 0 | 25 | 11 | 0 | 9 |
| Mvmt Flow | 100 | 3 | 19 | 90 | 39 | 78 |

| Major/Minor | Major1 | | Major2 | | Minor1 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 0 | 0 | 103 | 0 | 230 | 102 |
| Stage 1 | - | - | - | - | 102 | - |
| Stage 2 | - | - | - | - | 128 | - |
| Critical Hdwy | - | - | 4.35 | - | 6.4 | 6.29 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.4 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.4 | - |
| Follow-up Hdwy | - | - | 2.425 | - | 3.5 | 3.381 |
| Pot Cap-1 Maneuver | - | - | 1357 | - | 763 | 934 |
| Stage 1 | - | - | - | - | 927 | - |
| Stage 2 | - | - | - | - | 903 | - |
| Platoon blocked, % | - | - | | - | | |
| Mov Cap-1 Maneuver | - | - | 1357 | - | 752 | 934 |
| Mov Cap-2 Maneuver | - | - | - | - | 757 | - |
| Stage 1 | - | - | - | - | 927 | - |
| Stage 2 | - | - | - | - | 890 | - |

| Approach | SE | NW | NE |
|---|---|---|---|
| HCM Control Delay, s | 0 | 1.4 | 9.8 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | NELn1 | NWL | NWT | SET | SER |
|---|---|---|---|---|---|
| Capacity (veh/h) | 866 | 1357 | - | - | - |
| HCM Lane V/C Ratio | 0.135 | 0.014 | - | - | - |
| HCM Control Delay (s) | 9.8 | 7.7 | - | - | - |
| HCM Lane LOS | A | A | - | - | - |
| HCM 95th %tile Q(veh) | 0.5 | 0 | - | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 6.2 |

| Movement | SET | SER | NWL | NWT | NEL | NER |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 32 | 48 | 89 | 34 | 12 | 135 |
| Future Vol, veh/h | 32 | 48 | 89 | 34 | 12 | 135 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | 115 | - | 0 | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 71 | 71 | 71 | 71 | 71 | 71 |
| Heavy Vehicles, % | 16 | 0 | 11 | 3 | 0 | 6 |
| Mvmt Flow | 45 | 68 | 125 | 48 | 17 | 190 |

| Major/Minor | Major1 | | Major2 | | Minor1 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 0 | 0 | 113 | 0 | 377 | 79 |
| Stage 1 | - | - | - | - | 79 | - |
| Stage 2 | - | - | - | - | 298 | - |
| Critical Hdwy | - | - | 4.21 | - | 6.4 | 6.26 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.4 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.4 | - |
| Follow-up Hdwy | - | - | 2.299 | - | 3.5 | 3.354 |
| Pot Cap-1 Maneuver | - | - | 1422 | - | 629 | 970 |
| Stage 1 | - | - | - | - | 949 | - |
| Stage 2 | - | - | - | - | 758 | - |
| Platoon blocked, % | - | - | | - | | |
| Mov Cap-1 Maneuver | - | - | 1422 | - | 574 | 970 |
| Mov Cap-2 Maneuver | - | - | - | - | 605 | - |
| Stage 1 | - | - | - | - | 949 | - |
| Stage 2 | - | - | - | - | 691 | - |

| Approach | SE | NW | NE |
|---|---|---|---|
| HCM Control Delay, s | 0 | 5.6 | 10 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | NELn1 | NWL | NWT | SET | SER |
|---|---|---|---|---|---|
| Capacity (veh/h) | 924 | 1422 | - | - | - |
| HCM Lane V/C Ratio | 0.224 | 0.088 | - | - | - |
| HCM Control Delay (s) | 10 | 7.8 | - | - | - |
| HCM Lane LOS | B | A | - | - | - |
| HCM 95th %tile Q(veh) | 0.9 | 0.3 | - | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 6.4 |

| Movement | SET | SER | NWL | NWT | NEL | NER |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 63 | 13 | 67 | 57 | 35 | 143 |
| Future Vol, veh/h | 63 | 13 | 67 | 57 | 35 | 143 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | 115 | - | 0 | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 72 | 72 | 72 | 72 | 72 | 72 |
| Heavy Vehicles, % | 14 | 0 | 6 | 12 | 0 | 4 |
| Mvmt Flow | 88 | 18 | 93 | 79 | 49 | 199 |

| Major/Minor | Major1 | | Major2 | | Minor1 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 0 | 0 | 106 | 0 | 362 | 97 |
| Stage 1 | - | - | - | - | 97 | - |
| Stage 2 | - | - | - | - | 265 | - |
| Critical Hdwy | - | - | 4.16 | - | 6.4 | 6.24 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.4 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.4 | - |
| Follow-up Hdwy | - | - | 2.254 | - | 3.5 | 3.336 |
| Pot Cap-1 Maneuver | - | - | 1460 | - | 641 | 954 |
| Stage 1 | - | - | - | - | 932 | - |
| Stage 2 | - | - | - | - | 784 | - |
| Platoon blocked, % | - | - | | - | | |
| Mov Cap-1 Maneuver | - | - | 1460 | - | 600 | 954 |
| Mov Cap-2 Maneuver | - | - | - | - | 635 | - |
| Stage 1 | - | - | - | - | 932 | - |
| Stage 2 | - | - | - | - | 734 | - |

| Approach | SE | NW | NE |
|---|---|---|---|
| HCM Control Delay, s | 0 | 4.1 | 10.8 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | NELn1 | NWL | NWT | SET | SER |
|---|---|---|---|---|---|
| Capacity (veh/h) | 868 | 1460 | - | - | - |
| HCM Lane V/C Ratio | 0.285 | 0.064 | - | - | - |
| HCM Control Delay (s) | 10.8 | 7.6 | - | - | - |
| HCM Lane LOS | B | A | - | - | - |
| HCM 95th %tile Q(veh) | 1.2 | 0.2 | - | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 6.1 |

| Movement | SET | SER | NWL | NWT | NEL | NER |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 35 | 52 | 94 | 37 | 12 | 138 |
| Future Vol, veh/h | 35 | 52 | 94 | 37 | 12 | 138 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | 115 | - | 0 | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 71 | 71 | 71 | 71 | 71 | 71 |
| Heavy Vehicles, % | 17 | 0 | 12 | 3 | 0 | 6 |
| Mvmt Flow | 49 | 73 | 132 | 52 | 17 | 194 |

| Major/Minor | Major1 | | Major2 | | Minor1 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 0 | 0 | 122 | 0 | 402 | 86 |
| Stage 1 | - | - | - | - | 86 | - |
| Stage 2 | - | - | - | - | 316 | - |
| Critical Hdwy | - | - | 4.22 | - | 6.4 | 6.26 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.4 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.4 | - |
| Follow-up Hdwy | - | - | 2.308 | - | 3.5 | 3.354 |
| Pot Cap-1 Maneuver | - | - | 1406 | - | 608 | 962 |
| Stage 1 | - | - | - | - | 942 | - |
| Stage 2 | - | - | - | - | 744 | - |
| Platoon blocked, % | - | - | | - | | |
| Mov Cap-1 Maneuver | - | - | 1406 | - | 551 | 962 |
| Mov Cap-2 Maneuver | - | - | - | - | 588 | - |
| Stage 1 | - | - | - | - | 942 | - |
| Stage 2 | - | - | - | - | 674 | - |

| Approach | SE | NW | NE |
|---|---|---|---|
| HCM Control Delay, s | 0 | 5.6 | 10.1 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | NELn1 | NWL | NWT | SET | SER |
|---|---|---|---|---|---|
| Capacity (veh/h) | 915 | 1406 | - | - | - |
| HCM Lane V/C Ratio | 0.231 | 0.094 | - | - | - |
| HCM Control Delay (s) | 10.1 | 7.8 | - | - | - |
| HCM Lane LOS | B | A | - | - | - |
| HCM 95th %tile Q(veh) | 0.9 | 0.3 | - | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 6.4 |

| Movement | SET | SER | NWL | NWT | NEL | NER |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 70 | 13 | 68 | 63 | 38 | 148 |
| Future Vol, veh/h | 70 | 13 | 68 | 63 | 38 | 148 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | 115 | - | 0 | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 72 | 72 | 72 | 72 | 72 | 72 |
| Heavy Vehicles, % | 14 | 0 | 6 | 13 | 0 | 3 |
| Mvmt Flow | 97 | 18 | 94 | 88 | 53 | 206 |

| Major/Minor | Major1 | | Major2 | | Minor1 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 0 | 0 | 115 | 0 | 382 | 106 |
| Stage 1 | - | - | - | - | 106 | - |
| Stage 2 | - | - | - | - | 276 | - |
| Critical Hdwy | - | - | 4.16 | - | 6.4 | 6.23 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.4 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.4 | - |
| Follow-up Hdwy | - | - | 2.254 | - | 3.5 | 3.327 |
| Pot Cap-1 Maneuver | - | - | 1449 | - | 624 | 946 |
| Stage 1 | - | - | - | - | 923 | - |
| Stage 2 | - | - | - | - | 775 | - |
| Platoon blocked, % | - | - | | - | | |
| Mov Cap-1 Maneuver | - | - | 1449 | - | 583 | 946 |
| Mov Cap-2 Maneuver | - | - | - | - | 624 | - |
| Stage 1 | - | - | - | - | 923 | - |
| Stage 2 | - | - | - | - | 725 | - |

| Approach | SE | NW | NE |
|---|---|---|---|
| HCM Control Delay, s | 0 | 4 | 11 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | NELn1 | NWL | NWT | SET | SER |
|---|---|---|---|---|---|
| Capacity (veh/h) | 856 | 1449 | - | - | - |
| HCM Lane V/C Ratio | 0.302 | 0.065 | - | - | - |
| HCM Control Delay (s) | 11 | 7.7 | - | - | - |
| HCM Lane LOS | B | A | - | - | - |
| HCM 95th %tile Q(veh) | 1.3 | 0.2 | - | - | - |

# SMITH ROAD & PROPOSED ACCESS DRIVE A

# CAPACITY ANALYSIS

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

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 43 | 21 | 181 | 13 | 8 | 73 |
| Future Vol, veh/h | 43 | 21 | 181 | 13 | 8 | 73 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | 0 | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 0 | 0 | 1 | 0 | 0 | 3 |
| Mvmt Flow | 47 | 23 | 197 | 14 | 9 | 79 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 301 | 204 | 0 | 0 | 211 | 0 |
| Stage 1 | 204 | - | - | - | - | - |
| Stage 2 | 97 | - | - | - | - | - |
| Critical Hdwy | 6.4 | 6.2 | - | - | 4.1 | - |
| Critical Hdwy Stg 1 | 5.4 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.4 | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 3.3 | - | - | 2.2 | - |
| Pot Cap-1 Maneuver | 695 | 842 | - | - | 1372 | - |
| Stage 1 | 835 | - | - | - | - | - |
| Stage 2 | 932 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | 690 | 842 | - | - | 1372 | - |
| Mov Cap-2 Maneuver | 690 | - | - | - | - | - |
| Stage 1 | 835 | - | - | - | - | - |
| Stage 2 | 925 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 10.2 | 0 | 0.8 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | WBLn2 | SBL | SBT |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 690 | 842 | 1372 | - |
| HCM Lane V/C Ratio | - | - | 0.068 | 0.027 | 0.006 | - |
| HCM Control Delay (s) | - | - | 10.6 | 9.4 | 7.6 | 0 |
| HCM Lane LOS | - | - | B | A | A | A |
| HCM 95th %tile Q(veh) | - | - | 0.2 | 0.1 | 0 | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.9 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 25 | 12 | 508 | 39 | 20 | 185 |
| Future Vol, veh/h | 25 | 12 | 508 | 39 | 20 | 185 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | 0 | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 1 |
| Mvmt Flow | 27 | 13 | 552 | 42 | 22 | 201 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 818 | 573 | 0 | 0 | 594 | 0 |
| Stage 1 | 573 | - | - | - | - | - |
| Stage 2 | 245 | - | - | - | - | - |
| Critical Hdwy | 6.4 | 6.2 | - | - | 4.1 | - |
| Critical Hdwy Stg 1 | 5.4 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.4 | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 3.3 | - | - | 2.2 | - |
| Pot Cap-1 Maneuver | 348 | 523 | - | - | 992 | - |
| Stage 1 | 568 | - | - | - | - | - |
| Stage 2 | 800 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | 339 | 523 | - | - | 992 | - |
| Mov Cap-2 Maneuver | 339 | - | - | - | - | - |
| Stage 1 | 568 | - | - | - | - | - |
| Stage 2 | 780 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 15.1 | 0 | 0.8 |
| HCM LOS | C | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | WBLn2 | SBL | SBT |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 339 | 523 | 992 | - |
| HCM Lane V/C Ratio | - | - | 0.08 | 0.025 | 0.022 | - |
| HCM Control Delay (s) | - | - | 16.5 | 12.1 | 8.7 | 0 |
| HCM Lane LOS | - | - | C | B | A | A |
| HCM 95th %tile Q(veh) | - | - | 0.3 | 0.1 | 0.1 | - |

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

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 43 | 21 | 196 | 13 | 8 | 77 |
| Future Vol, veh/h | 43 | 21 | 196 | 13 | 8 | 77 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | 0 | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 0 | 0 | 1 | 0 | 0 | 3 |
| Mvmt Flow | 47 | 23 | 213 | 14 | 9 | 84 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 322 | 220 | 0 | 0 | 227 | 0 |
| Stage 1 | 220 | - | - | - | - | - |
| Stage 2 | 102 | - | - | - | - | - |
| Critical Hdwy | 6.4 | 6.2 | - | - | 4.1 | - |
| Critical Hdwy Stg 1 | 5.4 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.4 | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 3.3 | - | - | 2.2 | - |
| Pot Cap-1 Maneuver | 676 | 825 | - | - | 1353 | - |
| Stage 1 | 821 | - | - | - | - | - |
| Stage 2 | 927 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | 671 | 825 | - | - | 1353 | - |
| Mov Cap-2 Maneuver | 671 | - | - | - | - | - |
| Stage 1 | 821 | - | - | - | - | - |
| Stage 2 | 921 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 10.4 | 0 | 0.7 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | WBLn2 | SBL | SBT |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 671 | 825 | 1353 | - |
| HCM Lane V/C Ratio | - | - | 0.07 | 0.028 | 0.006 | - |
| HCM Control Delay (s) | - | - | 10.8 | 9.5 | 7.7 | 0 |
| HCM Lane LOS | - | - | B | A | A | A |
| HCM 95th %tile Q(veh) | - | - | 0.2 | 0.1 | 0 | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.9 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 25 | 12 | 555 | 39 | 20 | 199 |
| Future Vol, veh/h | 25 | 12 | 555 | 39 | 20 | 199 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | 0 | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 1 |
| Mvmt Flow | 27 | 13 | 603 | 42 | 22 | 216 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 884 | 624 | 0 | 0 | 645 | 0 |
| Stage 1 | 624 | - | - | - | - | - |
| Stage 2 | 260 | - | - | - | - | - |
| Critical Hdwy | 6.4 | 6.2 | - | - | 4.1 | - |
| Critical Hdwy Stg 1 | 5.4 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.4 | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 3.3 | - | - | 2.2 | - |
| Pot Cap-1 Maneuver | 318 | 489 | - | - | 950 | - |
| Stage 1 | 538 | - | - | - | - | - |
| Stage 2 | 788 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | 310 | 489 | - | - | 950 | - |
| Mov Cap-2 Maneuver | 310 | - | - | - | - | - |
| Stage 1 | 538 | - | - | - | - | - |
| Stage 2 | 768 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 16 | 0 | 0.8 |
| HCM LOS | C | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | WBLn2 | SBL | SBT |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 310 | 489 | 950 | - |
| HCM Lane V/C Ratio | - | - | 0.088 | 0.027 | 0.023 | - |
| HCM Control Delay (s) | - | - | 17.7 | 12.6 | 8.9 | 0 |
| HCM Lane LOS | - | - | C | B | A | A |
| HCM 95th %tile Q(veh) | - | - | 0.3 | 0.1 | 0.1 | - |

# SMITH ROAD & PROPOSED ACCESS DRIVE B

# CAPACITY ANALYSIS

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

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 50 | 12 | 182 | 41 | 16 | 100 |
| Future Vol, veh/h | 50 | 12 | 182 | 41 | 16 | 100 |
| 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 | - | 100 | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 0 | 0 | 1 | 0 | 0 | 2 |
| Mvmt Flow | 54 | 13 | 198 | 45 | 17 | 109 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 341 | 198 | 0 | 0 | 243 | 0 |
| Stage 1 | 198 | - | - | - | - | - |
| Stage 2 | 143 | - | - | - | - | - |
| Critical Hdwy | 6.4 | 6.2 | - | - | 4.1 | - |
| Critical Hdwy Stg 1 | 5.4 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.4 | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 3.3 | - | - | 2.2 | - |
| Pot Cap-1 Maneuver | 659 | 848 | - | - | 1335 | - |
| Stage 1 | 840 | - | - | - | - | - |
| Stage 2 | 889 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | 650 | 848 | - | - | 1335 | - |
| Mov Cap-2 Maneuver | 650 | - | - | - | - | - |
| Stage 1 | 840 | - | - | - | - | - |
| Stage 2 | 877 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 10.7 | 0 | 1.1 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | WBLn2 | SBL | SBT |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 650 | 848 | 1335 | - |
| HCM Lane V/C Ratio | - | - | 0.084 | 0.015 | 0.013 | - |
| HCM Control Delay (s) | - | - | 11 | 9.3 | 7.7 | 0 |
| HCM Lane LOS | - | - | B | A | A | A |
| HCM 95th %tile Q(veh) | - | - | 0.3 | 0 | 0 | - |

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

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 82 | 39 | 508 | 79 | 37 | 173 |
| Future Vol, veh/h | 82 | 39 | 508 | 79 | 37 | 173 |
| 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 | - | 100 | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 1 |
| Mvmt Flow | 89 | 42 | 552 | 86 | 40 | 188 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 820 | 552 | 0 | 0 | 638 | 0 |
| Stage 1 | 552 | - | - | - | - | - |
| Stage 2 | 268 | - | - | - | - | - |
| Critical Hdwy | 6.4 | 6.2 | - | - | 4.1 | - |
| Critical Hdwy Stg 1 | 5.4 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.4 | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 3.3 | - | - | 2.2 | - |
| Pot Cap-1 Maneuver | 347 | 537 | - | - | 956 | - |
| Stage 1 | 581 | - | - | - | - | - |
| Stage 2 | 782 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | 331 | 537 | - | - | 956 | - |
| Mov Cap-2 Maneuver | 331 | - | - | - | - | - |
| Stage 1 | 581 | - | - | - | - | - |
| Stage 2 | 745 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 17.4 | 0 | 1.6 |
| HCM LOS | C | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | WBLn2 | SBL | SBT |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 331 | 537 | 956 | - |
| HCM Lane V/C Ratio | - | - | 0.269 | 0.079 | 0.042 | - |
| HCM Control Delay (s) | - | - | 19.8 | 12.3 | 8.9 | 0 |
| HCM Lane LOS | - | - | C | B | A | A |
| HCM 95th %tile Q(veh) | - | - | 1.1 | 0.3 | 0.1 | - |

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

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 50 | 12 | 197 | 41 | 16 | 104 |
| Future Vol, veh/h | 50 | 12 | 197 | 41 | 16 | 104 |
| 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 | - | 100 | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 0 | 0 | 1 | 0 | 0 | 2 |
| Mvmt Flow | 54 | 13 | 214 | 45 | 17 | 113 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 361 | 214 | 0 | 0 | 259 | 0 |
| Stage 1 | 214 | - | - | - | - | - |
| Stage 2 | 147 | - | - | - | - | - |
| Critical Hdwy | 6.4 | 6.2 | - | - | 4.1 | - |
| Critical Hdwy Stg 1 | 5.4 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.4 | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 3.3 | - | - | 2.2 | - |
| Pot Cap-1 Maneuver | 642 | 831 | - | - | 1317 | - |
| Stage 1 | 826 | - | - | - | - | - |
| Stage 2 | 885 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | 633 | 831 | - | - | 1317 | - |
| Mov Cap-2 Maneuver | 633 | - | - | - | - | - |
| Stage 1 | 826 | - | - | - | - | - |
| Stage 2 | 873 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 10.9 | 0 | 1 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | WBLn2 | SBL | SBT |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 633 | 831 | 1317 | - |
| HCM Lane V/C Ratio | - | - | 0.086 | 0.016 | 0.013 | - |
| HCM Control Delay (s) | - | - | 11.2 | 9.4 | 7.8 | 0 |
| HCM Lane LOS | - | - | B | A | A | A |
| HCM 95th %tile Q(veh) | - | - | 0.3 | 0 | 0 | - |

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

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 82 | 39 | 555 | 79 | 37 | 187 |
| Future Vol, veh/h | 82 | 39 | 555 | 79 | 37 | 187 |
| 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 | - | 100 | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 1 |
| Mvmt Flow | 89 | 42 | 603 | 86 | 40 | 203 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 886 | 603 | 0 | 0 | 689 | 0 |
| Stage 1 | 603 | - | - | - | - | - |
| Stage 2 | 283 | - | - | - | - | - |
| Critical Hdwy | 6.4 | 6.2 | - | - | 4.1 | - |
| Critical Hdwy Stg 1 | 5.4 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.4 | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 3.3 | - | - | 2.2 | - |
| Pot Cap-1 Maneuver | 318 | 503 | - | - | 915 | - |
| Stage 1 | 550 | - | - | - | - | - |
| Stage 2 | 770 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | 302 | 503 | - | - | 915 | - |
| Mov Cap-2 Maneuver | 302 | - | - | - | - | - |
| Stage 1 | 550 | - | - | - | - | - |
| Stage 2 | 732 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 18.9 | 0 | 1.5 |
| HCM LOS | C | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | WBLn2 | SBL | SBT |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 302 | 503 | 915 | - |
| HCM Lane V/C Ratio | - | - | 0.295 | 0.084 | 0.044 | - |
| HCM Control Delay (s) | - | - | 21.8 | 12.8 | 9.1 | 0 |
| HCM Lane LOS | - | - | C | B | A | A |
| HCM 95th %tile Q(veh) | - | - | 1.2 | 0.3 | 0.1 | - |

# FRONTAGE ROAD & PROPOSED ACCESS DRIVE C

# CAPACITY ANALYSIS

| Intersection | |
|---|---|
| Int Delay, s/veh | 3.5 |

| Movement | SBL | SBR | NEL | NET | SWT | SWR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 45 | 58 | 65 | 126 | 120 | 46 |
| Future Vol, veh/h | 45 | 58 | 65 | 126 | 120 | 46 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | 0 | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 49 | 63 | 71 | 137 | 130 | 50 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 434 | 155 | 180 | 0 | - | 0 |
| Stage 1 | 155 | - | - | - | - | - |
| Stage 2 | 279 | - | - | - | - | - |
| Critical Hdwy | 6.4 | 6.2 | 4.1 | - | - | - |
| Critical Hdwy Stg 1 | 5.4 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.4 | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 3.3 | 2.2 | - | - | - |
| Pot Cap-1 Maneuver | 583 | 896 | 1408 | - | - | - |
| Stage 1 | 878 | - | - | - | - | - |
| Stage 2 | 773 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 551 | 896 | 1408 | - | - | - |
| Mov Cap-2 Maneuver | 551 | - | - | - | - | - |
| Stage 1 | 830 | - | - | - | - | - |
| Stage 2 | 773 | - | - | - | - | - |

| Approach | SB | NE | SW |
|---|---|---|---|
| HCM Control Delay, s | 10.6 | 2.6 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NEL | NET | SBLn1 | SBLn2 | SWT | SWR |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1408 | - | 551 | 896 | - | - |
| HCM Lane V/C Ratio | 0.05 | - | 0.089 | 0.07 | - | - |
| HCM Control Delay (s) | 7.7 | 0 | 12.2 | 9.3 | - | - |
| HCM Lane LOS | A | A | B | A | - | - |
| HCM 95th %tile Q(veh) | 0.2 | - | 0.3 | 0.2 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 5.1 |

| Movement | SBL | SBR | NEL | NET | SWT | SWR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 73 | 133 | 120 | 173 | 73 | 76 |
| Future Vol, veh/h | 73 | 133 | 120 | 173 | 73 | 76 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | 0 | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 79 | 145 | 130 | 188 | 79 | 83 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 569 | 121 | 162 | 0 | - | 0 |
| Stage 1 | 121 | - | - | - | - | - |
| Stage 2 | 448 | - | - | - | - | - |
| Critical Hdwy | 6.4 | 6.2 | 4.1 | - | - | - |
| Critical Hdwy Stg 1 | 5.4 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.4 | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 3.3 | 2.2 | - | - | - |
| Pot Cap-1 Maneuver | 487 | 936 | 1429 | - | - | - |
| Stage 1 | 909 | - | - | - | - | - |
| Stage 2 | 648 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 437 | 936 | 1429 | - | - | - |
| Mov Cap-2 Maneuver | 437 | - | - | - | - | - |
| Stage 1 | 816 | - | - | - | - | - |
| Stage 2 | 648 | - | - | - | - | - |

| Approach | SB | NE | SW |
|---|---|---|---|
| HCM Control Delay, s | 11.5 | 3.2 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NEL | NET | SBLn1 | SBLn2 | SWT | SWR |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1429 | - | 437 | 936 | - | - |
| HCM Lane V/C Ratio | 0.091 | - | 0.182 | 0.154 | - | - |
| HCM Control Delay (s) | 7.8 | 0 | 15.1 | 9.5 | - | - |
| HCM Lane LOS | A | A | C | A | - | - |
| HCM 95th %tile Q(veh) | 0.3 | - | 0.7 | 0.5 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 3.5 |

| Movement | SBL | SBR | NEL | NET | SWT | SWR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 45 | 58 | 65 | 126 | 120 | 46 |
| Future Vol, veh/h | 45 | 58 | 65 | 126 | 120 | 46 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | 0 | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 49 | 63 | 71 | 137 | 130 | 50 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 434 | 155 | 180 | 0 | - | 0 |
| Stage 1 | 155 | - | - | - | - | - |
| Stage 2 | 279 | - | - | - | - | - |
| Critical Hdwy | 6.4 | 6.2 | 4.1 | - | - | - |
| Critical Hdwy Stg 1 | 5.4 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.4 | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 3.3 | 2.2 | - | - | - |
| Pot Cap-1 Maneuver | 583 | 896 | 1408 | - | - | - |
| Stage 1 | 878 | - | - | - | - | - |
| Stage 2 | 773 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 551 | 896 | 1408 | - | - | - |
| Mov Cap-2 Maneuver | 551 | - | - | - | - | - |
| Stage 1 | 830 | - | - | - | - | - |
| Stage 2 | 773 | - | - | - | - | - |

| Approach | SB | NE | SW |
|---|---|---|---|
| HCM Control Delay, s | 10.6 | 2.6 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NEL | NET | SBLn1 | SBLn2 | SWT | SWR |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1408 | - | 551 | 896 | - | - |
| HCM Lane V/C Ratio | 0.05 | - | 0.089 | 0.07 | - | - |
| HCM Control Delay (s) | 7.7 | 0 | 12.2 | 9.3 | - | - |
| HCM Lane LOS | A | A | B | A | - | - |
| HCM 95th %tile Q(veh) | 0.2 | - | 0.3 | 0.2 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 5.1 |

| Movement | SBL | SBR | NEL | NET | SWT | SWR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 73 | 133 | 120 | 173 | 73 | 76 |
| Future Vol, veh/h | 73 | 133 | 120 | 173 | 73 | 76 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | 0 | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 79 | 145 | 130 | 188 | 79 | 83 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 569 | 121 | 162 | 0 | - | 0 |
| Stage 1 | 121 | - | - | - | - | - |
| Stage 2 | 448 | - | - | - | - | - |
| Critical Hdwy | 6.4 | 6.2 | 4.1 | - | - | - |
| Critical Hdwy Stg 1 | 5.4 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.4 | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 3.3 | 2.2 | - | - | - |
| Pot Cap-1 Maneuver | 487 | 936 | 1429 | - | - | - |
| Stage 1 | 909 | - | - | - | - | - |
| Stage 2 | 648 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 437 | 936 | 1429 | - | - | - |
| Mov Cap-2 Maneuver | 437 | - | - | - | - | - |
| Stage 1 | 816 | - | - | - | - | - |
| Stage 2 | 648 | - | - | - | - | - |

| Approach | SB | NE | SW |
|---|---|---|---|
| HCM Control Delay, s | 11.5 | 3.2 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NEL | NET | SBLn1 | SBLn2 | SWT | SWR |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1429 | - | 437 | 936 | - | - |
| HCM Lane V/C Ratio | 0.091 | - | 0.182 | 0.154 | - | - |
| HCM Control Delay (s) | 7.8 | 0 | 15.1 | 9.5 | - | - |
| HCM Lane LOS | A | A | C | A | - | - |
| HCM 95th %tile Q(veh) | 0.3 | - | 0.7 | 0.5 | - | - |

# FRONTAGE ROAD & PROPOSED ACCESS DRIVE D

# CAPACITY ANALYSIS

| Intersection | |
|---|---|
| Int Delay, s/veh | 1 |

| Movement | SBL | SBR | NEL | NET | SWT | SWR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 3 | 28 | 9 | 162 | 138 | 2 |
| Future Vol, veh/h | 3 | 28 | 9 | 162 | 138 | 2 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 3 | 30 | 10 | 176 | 150 | 2 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 347 | 151 | 152 | 0 | - | 0 |
| Stage 1 | 151 | - | - | - | - | - |
| Stage 2 | 196 | - | - | - | - | - |
| Critical Hdwy | 6.4 | 6.2 | 4.1 | - | - | - |
| Critical Hdwy Stg 1 | 5.4 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.4 | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 3.3 | 2.2 | - | - | - |
| Pot Cap-1 Maneuver | 654 | 901 | 1441 | - | - | - |
| Stage 1 | 882 | - | - | - | - | - |
| Stage 2 | 842 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 649 | 901 | 1441 | - | - | - |
| Mov Cap-2 Maneuver | 649 | - | - | - | - | - |
| Stage 1 | 875 | - | - | - | - | - |
| Stage 2 | 842 | - | - | - | - | - |

| Approach | SB | NE | SW |
|---|---|---|---|
| HCM Control Delay, s | 9.3 | 0.4 | 0 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NEL | NET | SBLn1 | SWT | SWR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1441 | - | 868 | - | - |
| HCM Lane V/C Ratio | 0.007 | - | 0.039 | - | - |
| HCM Control Delay (s) | 7.5 | 0 | 9.3 | - | - |
| HCM Lane LOS | A | A | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 0.1 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.8 |

| Movement | SBL | SBR | NEL | NET | SWT | SWR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 2 | 16 | 22 | 224 | 133 | 4 |
| Future Vol, veh/h | 2 | 16 | 22 | 224 | 133 | 4 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 2 | 17 | 24 | 243 | 145 | 4 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 438 | 147 | 149 | 0 | - | 0 |
| Stage 1 | 147 | - | - | - | - | - |
| Stage 2 | 291 | - | - | - | - | - |
| Critical Hdwy | 6.4 | 6.2 | 4.1 | - | - | - |
| Critical Hdwy Stg 1 | 5.4 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.4 | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 3.3 | 2.2 | - | - | - |
| Pot Cap-1 Maneuver | 580 | 905 | 1445 | - | - | - |
| Stage 1 | 885 | - | - | - | - | - |
| Stage 2 | 763 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 569 | 905 | 1445 | - | - | - |
| Mov Cap-2 Maneuver | 569 | - | - | - | - | - |
| Stage 1 | 868 | - | - | - | - | - |
| Stage 2 | 763 | - | - | - | - | - |

| Approach | SB | NE | SW |
|---|---|---|---|
| HCM Control Delay, s | 9.3 | 0.7 | 0 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NEL | NET | SBLn1 | SWT | SWR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1445 | - | 849 | - | - |
| HCM Lane V/C Ratio | 0.017 | - | 0.023 | - | - |
| HCM Control Delay (s) | 7.5 | 0 | 9.3 | - | - |
| HCM Lane LOS | A | A | A | - | - |
| HCM 95th %tile Q(veh) | 0.1 | - | 0.1 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 1 |

| Movement | SBL | SBR | NEL | NET | SWT | SWR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 3 | 28 | 9 | 162 | 138 | 2 |
| Future Vol, veh/h | 3 | 28 | 9 | 162 | 138 | 2 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 3 | 30 | 10 | 176 | 150 | 2 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 347 | 151 | 152 | 0 | - | 0 |
| Stage 1 | 151 | - | - | - | - | - |
| Stage 2 | 196 | - | - | - | - | - |
| Critical Hdwy | 6.4 | 6.2 | 4.1 | - | - | - |
| Critical Hdwy Stg 1 | 5.4 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.4 | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 3.3 | 2.2 | - | - | - |
| Pot Cap-1 Maneuver | 654 | 901 | 1441 | - | - | - |
| Stage 1 | 882 | - | - | - | - | - |
| Stage 2 | 842 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 649 | 901 | 1441 | - | - | - |
| Mov Cap-2 Maneuver | 649 | - | - | - | - | - |
| Stage 1 | 875 | - | - | - | - | - |
| Stage 2 | 842 | - | - | - | - | - |

| Approach | SB | NE | SW |
|---|---|---|---|
| HCM Control Delay, s | 9.3 | 0.4 | 0 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NEL | NET | SBLn1 | SWT | SWR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1441 | - | 868 | - | - |
| HCM Lane V/C Ratio | 0.007 | - | 0.039 | - | - |
| HCM Control Delay (s) | 7.5 | 0 | 9.3 | - | - |
| HCM Lane LOS | A | A | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 0.1 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.8 |

| Movement | SBL | SBR | NEL | NET | SWT | SWR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 2 | 16 | 22 | 224 | 133 | 4 |
| Future Vol, veh/h | 2 | 16 | 22 | 224 | 133 | 4 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 2 | 17 | 24 | 243 | 145 | 4 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 438 | 147 | 149 | 0 | - | 0 |
| Stage 1 | 147 | - | - | - | - | - |
| Stage 2 | 291 | - | - | - | - | - |
| Critical Hdwy | 6.4 | 6.2 | 4.1 | - | - | - |
| Critical Hdwy Stg 1 | 5.4 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.4 | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 3.3 | 2.2 | - | - | - |
| Pot Cap-1 Maneuver | 580 | 905 | 1445 | - | - | - |
| Stage 1 | 885 | - | - | - | - | - |
| Stage 2 | 763 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 569 | 905 | 1445 | - | - | - |
| Mov Cap-2 Maneuver | 569 | - | - | - | - | - |
| Stage 1 | 868 | - | - | - | - | - |
| Stage 2 | 763 | - | - | - | - | - |

| Approach | SB | NE | SW |
|---|---|---|---|
| HCM Control Delay, s | 9.3 | 0.7 | 0 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NEL | NET | SBLn1 | SWT | SWR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1445 | - | 849 | - | - |
| HCM Lane V/C Ratio | 0.017 | - | 0.023 | - | - |
| HCM Control Delay (s) | 7.5 | 0 | 9.3 | - | - |
| HCM Lane LOS | A | A | A | - | - |
| HCM 95th %tile Q(veh) | 0.1 | - | 0.1 | - | - |

# FRONTAGE ROAD & PROPOSED ACCESS DRIVE E

# CAPACITY ANALYSIS

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.6 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 2 | 163 | 133 | 4 | 9 | 7 |
| Future Vol, veh/h | 2 | 163 | 133 | 4 | 9 | 7 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 2 | 177 | 145 | 4 | 10 | 8 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 149 | 0 | - | 0 | 328 | 147 |
| Stage 1 | - | - | - | - | 147 | - |
| Stage 2 | - | - | - | - | 181 | - |
| Critical Hdwy | 4.1 | - | - | - | 6.4 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.4 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.4 | - |
| Follow-up Hdwy | 2.2 | - | - | - | 3.5 | 3.3 |
| Pot Cap-1 Maneuver | 1445 | - | - | - | 671 | 905 |
| Stage 1 | - | - | - | - | 885 | - |
| Stage 2 | - | - | - | - | 855 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1445 | - | - | - | 670 | 905 |
| Mov Cap-2 Maneuver | - | - | - | - | 670 | - |
| Stage 1 | - | - | - | - | 883 | - |
| Stage 2 | - | - | - | - | 855 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.1 | 0 | 9.9 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1445 | - | - | - | 756 |
| HCM Lane V/C Ratio | 0.002 | - | - | - | 0.023 |
| HCM Control Delay (s) | 7.5 | 0 | - | - | 9.9 |
| HCM Lane LOS | A | A | - | - | A |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.1 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.4 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 5 | 221 | 133 | 11 | 6 | 4 |
| Future Vol, veh/h | 5 | 221 | 133 | 11 | 6 | 4 |
| 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, % | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 5 | 240 | 145 | 12 | 7 | 4 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 157 | 0 | - | 0 | 401 | 151 |
| Stage 1 | - | - | - | - | 151 | - |
| Stage 2 | - | - | - | - | 250 | - |
| Critical Hdwy | 4.1 | - | - | - | 6.4 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.4 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.4 | - |
| Follow-up Hdwy | 2.2 | - | - | - | 3.5 | 3.3 |
| Pot Cap-1 Maneuver | 1435 | - | - | - | 609 | 901 |
| Stage 1 | - | - | - | - | 882 | - |
| Stage 2 | - | - | - | - | 796 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1435 | - | - | - | 607 | 901 |
| Mov Cap-2 Maneuver | - | - | - | - | 607 | - |
| Stage 1 | - | - | - | - | 878 | - |
| Stage 2 | - | - | - | - | 796 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.2 | 0 | 10.2 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1435 | - | - | - | 698 |
| HCM Lane V/C Ratio | 0.004 | - | - | - | 0.016 |
| HCM Control Delay (s) | 7.5 | 0 | - | - | 10.2 |
| HCM Lane LOS | A | A | - | - | B |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.6 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 2 | 163 | 133 | 4 | 9 | 7 |
| Future Vol, veh/h | 2 | 163 | 133 | 4 | 9 | 7 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 2 | 177 | 145 | 4 | 10 | 8 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 149 | 0 | - | 0 | 328 | 147 |
| Stage 1 | - | - | - | - | 147 | - |
| Stage 2 | - | - | - | - | 181 | - |
| Critical Hdwy | 4.1 | - | - | - | 6.4 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.4 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.4 | - |
| Follow-up Hdwy | 2.2 | - | - | - | 3.5 | 3.3 |
| Pot Cap-1 Maneuver | 1445 | - | - | - | 671 | 905 |
| Stage 1 | - | - | - | - | 885 | - |
| Stage 2 | - | - | - | - | 855 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1445 | - | - | - | 670 | 905 |
| Mov Cap-2 Maneuver | - | - | - | - | 670 | - |
| Stage 1 | - | - | - | - | 883 | - |
| Stage 2 | - | - | - | - | 855 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.1 | 0 | 9.9 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1445 | - | - | - | 756 |
| HCM Lane V/C Ratio | 0.002 | - | - | - | 0.023 |
| HCM Control Delay (s) | 7.5 | 0 | - | - | 9.9 |
| HCM Lane LOS | A | A | - | - | A |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.1 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.4 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 5 | 221 | 133 | 11 | 6 | 4 |
| Future Vol, veh/h | 5 | 221 | 133 | 11 | 6 | 4 |
| 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, % | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 5 | 240 | 145 | 12 | 7 | 4 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 157 | 0 | - | 0 | 401 | 151 |
| Stage 1 | - | - | - | - | 151 | - |
| Stage 2 | - | - | - | - | 250 | - |
| Critical Hdwy | 4.1 | - | - | - | 6.4 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.4 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.4 | - |
| Follow-up Hdwy | 2.2 | - | - | - | 3.5 | 3.3 |
| Pot Cap-1 Maneuver | 1435 | - | - | - | 609 | 901 |
| Stage 1 | - | - | - | - | 882 | - |
| Stage 2 | - | - | - | - | 796 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1435 | - | - | - | 607 | 901 |
| Mov Cap-2 Maneuver | - | - | - | - | 607 | - |
| Stage 1 | - | - | - | - | 878 | - |
| Stage 2 | - | - | - | - | 796 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.2 | 0 | 10.2 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1435 | - | - | - | 698 |
| HCM Lane V/C Ratio | 0.004 | - | - | - | 0.016 |
| HCM Control Delay (s) | 7.5 | 0 | - | - | 10.2 |
| HCM Lane LOS | A | A | - | - | B |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0 |

# FRONTAGE ROAD & PROPOSED ACCESS DRIVE F

# CAPACITY ANALYSIS

| Intersection | |
|---|---|
| Int Delay, s/veh | 1.1 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 3 | 169 | 129 | 8 | 27 | 8 |
| Future Vol, veh/h | 3 | 169 | 129 | 8 | 27 | 8 |
| 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, % | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 3 | 184 | 140 | 9 | 29 | 9 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 149 | 0 | - | 0 | 335 | 145 |
| Stage 1 | - | - | - | - | 145 | - |
| Stage 2 | - | - | - | - | 190 | - |
| Critical Hdwy | 4.1 | - | - | - | 6.4 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.4 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.4 | - |
| Follow-up Hdwy | 2.2 | - | - | - | 3.5 | 3.3 |
| Pot Cap-1 Maneuver | 1445 | - | - | - | 664 | 908 |
| Stage 1 | - | - | - | - | 887 | - |
| Stage 2 | - | - | - | - | 847 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1445 | - | - | - | 663 | 908 |
| Mov Cap-2 Maneuver | - | - | - | - | 663 | - |
| Stage 1 | - | - | - | - | 885 | - |
| Stage 2 | - | - | - | - | 847 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.1 | 0 | 10.4 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1445 | - | - | - | 707 |
| HCM Lane V/C Ratio | 0.002 | - | - | - | 0.054 |
| HCM Control Delay (s) | 7.5 | 0 | - | - | 10.4 |
| HCM Lane LOS | A | A | - | - | B |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.2 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.7 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 8 | 219 | 139 | 23 | 17 | 5 |
| Future Vol, veh/h | 8 | 219 | 139 | 23 | 17 | 5 |
| 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, % | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 9 | 238 | 151 | 25 | 18 | 5 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 176 | 0 | - | 0 | 420 | 164 |
| Stage 1 | - | - | - | - | 164 | - |
| Stage 2 | - | - | - | - | 256 | - |
| Critical Hdwy | 4.1 | - | - | - | 6.4 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.4 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.4 | - |
| Follow-up Hdwy | 2.2 | - | - | - | 3.5 | 3.3 |
| Pot Cap-1 Maneuver | 1412 | - | - | - | 594 | 886 |
| Stage 1 | - | - | - | - | 870 | - |
| Stage 2 | - | - | - | - | 791 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1412 | - | - | - | 590 | 886 |
| Mov Cap-2 Maneuver | - | - | - | - | 590 | - |
| Stage 1 | - | - | - | - | 864 | - |
| Stage 2 | - | - | - | - | 791 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.3 | 0 | 10.9 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1412 | - | - | - | 638 |
| HCM Lane V/C Ratio | 0.006 | - | - | - | 0.037 |
| HCM Control Delay (s) | 7.6 | 0 | - | - | 10.9 |
| HCM Lane LOS | A | A | - | - | B |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.1 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 1.1 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 3 | 169 | 129 | 8 | 27 | 8 |
| Future Vol, veh/h | 3 | 169 | 129 | 8 | 27 | 8 |
| 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, % | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 3 | 184 | 140 | 9 | 29 | 9 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 149 | 0 | - | 0 | 335 | 145 |
| Stage 1 | - | - | - | - | 145 | - |
| Stage 2 | - | - | - | - | 190 | - |
| Critical Hdwy | 4.1 | - | - | - | 6.4 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.4 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.4 | - |
| Follow-up Hdwy | 2.2 | - | - | - | 3.5 | 3.3 |
| Pot Cap-1 Maneuver | 1445 | - | - | - | 664 | 908 |
| Stage 1 | - | - | - | - | 887 | - |
| Stage 2 | - | - | - | - | 847 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1445 | - | - | - | 663 | 908 |
| Mov Cap-2 Maneuver | - | - | - | - | 663 | - |
| Stage 1 | - | - | - | - | 885 | - |
| Stage 2 | - | - | - | - | 847 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.1 | 0 | 10.4 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1445 | - | - | - | 707 |
| HCM Lane V/C Ratio | 0.002 | - | - | - | 0.054 |
| HCM Control Delay (s) | 7.5 | 0 | - | - | 10.4 |
| HCM Lane LOS | A | A | - | - | B |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.2 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.7 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 8 | 219 | 139 | 23 | 17 | 5 |
| Future Vol, veh/h | 8 | 219 | 139 | 23 | 17 | 5 |
| 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, % | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 9 | 238 | 151 | 25 | 18 | 5 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 176 | 0 | - | 0 | 420 | 164 |
| Stage 1 | - | - | - | - | 164 | - |
| Stage 2 | - | - | - | - | 256 | - |
| Critical Hdwy | 4.1 | - | - | - | 6.4 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.4 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.4 | - |
| Follow-up Hdwy | 2.2 | - | - | - | 3.5 | 3.3 |
| Pot Cap-1 Maneuver | 1412 | - | - | - | 594 | 886 |
| Stage 1 | - | - | - | - | 870 | - |
| Stage 2 | - | - | - | - | 791 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1412 | - | - | - | 590 | 886 |
| Mov Cap-2 Maneuver | - | - | - | - | 590 | - |
| Stage 1 | - | - | - | - | 864 | - |
| Stage 2 | - | - | - | - | 791 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.3 | 0 | 10.9 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1412 | - | - | - | 638 |
| HCM Lane V/C Ratio | 0.006 | - | - | - | 0.037 |
| HCM Control Delay (s) | 7.6 | 0 | - | - | 10.9 |
| HCM Lane LOS | A | A | - | - | B |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.1 |

# FRONTAGE ROAD & PROPOSED ACCESS DRIVE G

# CAPACITY ANALYSIS

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.7 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 4 | 192 | 127 | 4 | 12 | 10 |
| Future Vol, veh/h | 4 | 192 | 127 | 4 | 12 | 10 |
| 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, % | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 4 | 209 | 138 | 4 | 13 | 11 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 142 | 0 | - | 0 | 357 | 140 |
| Stage 1 | - | - | - | - | 140 | - |
| Stage 2 | - | - | - | - | 217 | - |
| Critical Hdwy | 4.1 | - | - | - | 6.4 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.4 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.4 | - |
| Follow-up Hdwy | 2.2 | - | - | - | 3.5 | 3.3 |
| Pot Cap-1 Maneuver | 1453 | - | - | - | 645 | 913 |
| Stage 1 | - | - | - | - | 892 | - |
| Stage 2 | - | - | - | - | 824 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1453 | - | - | - | 643 | 913 |
| Mov Cap-2 Maneuver | - | - | - | - | 643 | - |
| Stage 1 | - | - | - | - | 889 | - |
| Stage 2 | - | - | - | - | 824 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.2 | 0 | 10 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1453 | - | - | - | 743 |
| HCM Lane V/C Ratio | 0.003 | - | - | - | 0.032 |
| HCM Control Delay (s) | 7.5 | 0 | - | - | 10 |
| HCM Lane LOS | A | A | - | - | B |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.1 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.5 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 9 | 227 | 156 | 11 | 7 | 6 |
| Future Vol, veh/h | 9 | 227 | 156 | 11 | 7 | 6 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 10 | 247 | 170 | 12 | 8 | 7 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 182 | 0 | - | 0 | 443 | 176 |
| Stage 1 | - | - | - | - | 176 | - |
| Stage 2 | - | - | - | - | 267 | - |
| Critical Hdwy | 4.1 | - | - | - | 6.4 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.4 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.4 | - |
| Follow-up Hdwy | 2.2 | - | - | - | 3.5 | 3.3 |
| Pot Cap-1 Maneuver | 1405 | - | - | - | 576 | 872 |
| Stage 1 | - | - | - | - | 859 | - |
| Stage 2 | - | - | - | - | 782 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1405 | - | - | - | 571 | 872 |
| Mov Cap-2 Maneuver | - | - | - | - | 571 | - |
| Stage 1 | - | - | - | - | 852 | - |
| Stage 2 | - | - | - | - | 782 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.3 | 0 | 10.4 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1405 | - | - | - | 679 |
| HCM Lane V/C Ratio | 0.007 | - | - | - | 0.021 |
| HCM Control Delay (s) | 7.6 | 0 | - | - | 10.4 |
| HCM Lane LOS | A | A | - | - | B |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.1 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.7 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 4 | 192 | 127 | 4 | 12 | 10 |
| Future Vol, veh/h | 4 | 192 | 127 | 4 | 12 | 10 |
| 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, % | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 4 | 209 | 138 | 4 | 13 | 11 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 142 | 0 | - | 0 | 357 | 140 |
| Stage 1 | - | - | - | - | 140 | - |
| Stage 2 | - | - | - | - | 217 | - |
| Critical Hdwy | 4.1 | - | - | - | 6.4 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.4 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.4 | - |
| Follow-up Hdwy | 2.2 | - | - | - | 3.5 | 3.3 |
| Pot Cap-1 Maneuver | 1453 | - | - | - | 645 | 913 |
| Stage 1 | - | - | - | - | 892 | - |
| Stage 2 | - | - | - | - | 824 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1453 | - | - | - | 643 | 913 |
| Mov Cap-2 Maneuver | - | - | - | - | 643 | - |
| Stage 1 | - | - | - | - | 889 | - |
| Stage 2 | - | - | - | - | 824 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.2 | 0 | 10 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1453 | - | - | - | 743 |
| HCM Lane V/C Ratio | 0.003 | - | - | - | 0.032 |
| HCM Control Delay (s) | 7.5 | 0 | - | - | 10 |
| HCM Lane LOS | A | A | - | - | B |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.1 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.5 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 9 | 227 | 156 | 11 | 7 | 6 |
| Future Vol, veh/h | 9 | 227 | 156 | 11 | 7 | 6 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 10 | 247 | 170 | 12 | 8 | 7 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 182 | 0 | - | 0 | 443 | 176 |
| Stage 1 | - | - | - | - | 176 | - |
| Stage 2 | - | - | - | - | 267 | - |
| Critical Hdwy | 4.1 | - | - | - | 6.4 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.4 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.4 | - |
| Follow-up Hdwy | 2.2 | - | - | - | 3.5 | 3.3 |
| Pot Cap-1 Maneuver | 1405 | - | - | - | 576 | 872 |
| Stage 1 | - | - | - | - | 859 | - |
| Stage 2 | - | - | - | - | 782 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1405 | - | - | - | 571 | 872 |
| Mov Cap-2 Maneuver | - | - | - | - | 571 | - |
| Stage 1 | - | - | - | - | 852 | - |
| Stage 2 | - | - | - | - | 782 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.3 | 0 | 10.4 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1405 | - | - | - | 679 |
| HCM Lane V/C Ratio | 0.007 | - | - | - | 0.021 |
| HCM Control Delay (s) | 7.6 | 0 | - | - | 10.4 |
| HCM Lane LOS | A | A | - | - | B |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.1 |

# FRONTAGE ROAD & PROPOSED ACCESS DRIVE H

# CAPACITY ANALYSIS

| Intersection | |
|---|---|
| Int Delay, s/veh | 3.5 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 86 | 118 | 78 | 19 | 12 | 53 |
| Future Vol, veh/h | 86 | 118 | 78 | 19 | 12 | 53 |
| 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, % | 0 | 0 | 0 | 5 | 8 | 0 |
| Mvmt Flow | 93 | 128 | 85 | 21 | 13 | 58 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 106 | 0 | - | 0 | 410 | 96 |
| Stage 1 | - | - | - | - | 96 | - |
| Stage 2 | - | - | - | - | 314 | - |
| Critical Hdwy | 4.1 | - | - | - | 6.48 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.48 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.48 | - |
| Follow-up Hdwy | 2.2 | - | - | - | 3.572 | 3.3 |
| Pot Cap-1 Maneuver | 1498 | - | - | - | 586 | 966 |
| Stage 1 | - | - | - | - | 913 | - |
| Stage 2 | - | - | - | - | 727 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1498 | - | - | - | 547 | 966 |
| Mov Cap-2 Maneuver | - | - | - | - | 547 | - |
| Stage 1 | - | - | - | - | 852 | - |
| Stage 2 | - | - | - | - | 727 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 3.2 | 0 | 9.6 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1498 | - | - | - | 846 |
| HCM Lane V/C Ratio | 0.062 | - | - | - | 0.084 |
| HCM Control Delay (s) | 7.6 | 0 | - | - | 9.6 |
| HCM Lane LOS | A | A | - | - | A |
| HCM 95th %tile Q(veh) | 0.2 | - | - | - | 0.3 |

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

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 103 | 131 | 133 | 24 | 7 | 34 |
| Future Vol, veh/h | 103 | 131 | 133 | 24 | 7 | 34 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 0 | 0 | 0 | 4 | 0 | 0 |
| Mvmt Flow | 112 | 142 | 145 | 26 | 8 | 37 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 171 | 0 | - | 0 | 524 | 158 |
| Stage 1 | - | - | - | - | 158 | - |
| Stage 2 | - | - | - | - | 366 | - |
| Critical Hdwy | 4.1 | - | - | - | 6.4 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.4 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.4 | - |
| Follow-up Hdwy | 2.2 | - | - | - | 3.5 | 3.3 |
| Pot Cap-1 Maneuver | 1418 | - | - | - | 517 | 893 |
| Stage 1 | - | - | - | - | 875 | - |
| Stage 2 | - | - | - | - | 706 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1418 | - | - | - | 473 | 893 |
| Mov Cap-2 Maneuver | - | - | - | - | 473 | - |
| Stage 1 | - | - | - | - | 800 | - |
| Stage 2 | - | - | - | - | 706 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 3.4 | 0 | 9.9 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1418 | - | - | - | 775 |
| HCM Lane V/C Ratio | 0.079 | - | - | - | 0.058 |
| HCM Control Delay (s) | 7.8 | 0 | - | - | 9.9 |
| HCM Lane LOS | A | A | - | - | A |
| HCM 95th %tile Q(veh) | 0.3 | - | - | - | 0.2 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 3.5 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 86 | 118 | 78 | 19 | 12 | 53 |
| Future Vol, veh/h | 86 | 118 | 78 | 19 | 12 | 53 |
| 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, % | 0 | 0 | 0 | 5 | 8 | 0 |
| Mvmt Flow | 93 | 128 | 85 | 21 | 13 | 58 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 106 | 0 | - | 0 | 410 | 96 |
| Stage 1 | - | - | - | - | 96 | - |
| Stage 2 | - | - | - | - | 314 | - |
| Critical Hdwy | 4.1 | - | - | - | 6.48 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.48 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.48 | - |
| Follow-up Hdwy | 2.2 | - | - | - | 3.572 | 3.3 |
| Pot Cap-1 Maneuver | 1498 | - | - | - | 586 | 966 |
| Stage 1 | - | - | - | - | 913 | - |
| Stage 2 | - | - | - | - | 727 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1498 | - | - | - | 547 | 966 |
| Mov Cap-2 Maneuver | - | - | - | - | 547 | - |
| Stage 1 | - | - | - | - | 852 | - |
| Stage 2 | - | - | - | - | 727 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 3.2 | 0 | 9.6 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1498 | - | - | - | 846 |
| HCM Lane V/C Ratio | 0.062 | - | - | - | 0.084 |
| HCM Control Delay (s) | 7.6 | 0 | - | - | 9.6 |
| HCM Lane LOS | A | A | - | - | A |
| HCM 95th %tile Q(veh) | 0.2 | - | - | - | 0.3 |

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

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 103 | 131 | 133 | 24 | 7 | 34 |
| Future Vol, veh/h | 103 | 131 | 133 | 24 | 7 | 34 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 0 | 0 | 0 | 4 | 0 | 0 |
| Mvmt Flow | 112 | 142 | 145 | 26 | 8 | 37 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 171 | 0 | - | 0 | 524 | 158 |
| Stage 1 | - | - | - | - | 158 | - |
| Stage 2 | - | - | - | - | 366 | - |
| Critical Hdwy | 4.1 | - | - | - | 6.4 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.4 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.4 | - |
| Follow-up Hdwy | 2.2 | - | - | - | 3.5 | 3.3 |
| Pot Cap-1 Maneuver | 1418 | - | - | - | 517 | 893 |
| Stage 1 | - | - | - | - | 875 | - |
| Stage 2 | - | - | - | - | 706 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1418 | - | - | - | 473 | 893 |
| Mov Cap-2 Maneuver | - | - | - | - | 473 | - |
| Stage 1 | - | - | - | - | 800 | - |
| Stage 2 | - | - | - | - | 706 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 3.4 | 0 | 9.9 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1418 | - | - | - | 775 |
| HCM Lane V/C Ratio | 0.079 | - | - | - | 0.058 |
| HCM Control Delay (s) | 7.8 | 0 | - | - | 9.9 |
| HCM Lane LOS | A | A | - | - | A |
| HCM 95th %tile Q(veh) | 0.3 | - | - | - | 0.2 |

# FRONTAGE ROAD & PROPOSED ACCESS DRIVE I

# CAPACITY ANALYSIS

| Intersection | |
|---|---|
| Int Delay, s/veh | 3.5 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 22 | 108 | 83 | 51 | 87 | 14 |
| Future Vol, veh/h | 22 | 108 | 83 | 51 | 87 | 14 |
| 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, % | 0 | 1 | 1 | 16 | 9 | 0 |
| Mvmt Flow | 24 | 117 | 90 | 55 | 95 | 15 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 145 | 0 | - | 0 | 283 | 118 |
| Stage 1 | - | - | - | - | 118 | - |
| Stage 2 | - | - | - | - | 165 | - |
| Critical Hdwy | 4.1 | - | - | - | 6.49 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.49 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.49 | - |
| Follow-up Hdwy | 2.2 | - | - | - | 3.581 | 3.3 |
| Pot Cap-1 Maneuver | 1450 | - | - | - | 693 | 939 |
| Stage 1 | - | - | - | - | 890 | - |
| Stage 2 | - | - | - | - | 848 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1450 | - | - | - | 681 | 939 |
| Mov Cap-2 Maneuver | - | - | - | - | 681 | - |
| Stage 1 | - | - | - | - | 874 | - |
| Stage 2 | - | - | - | - | 848 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 1.3 | 0 | 11 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1450 | - | - | - | 708 |
| HCM Lane V/C Ratio | 0.016 | - | - | - | 0.155 |
| HCM Control Delay (s) | 7.5 | 0 | - | - | 11 |
| HCM Lane LOS | A | A | - | - | B |
| HCM 95th %tile Q(veh) | 0.1 | - | - | - | 0.5 |

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

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 26 | 112 | 149 | 52 | 52 | 8 |
| Future Vol, veh/h | 26 | 112 | 149 | 52 | 52 | 8 |
| 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, % | 0 | 0 | 1 | 2 | 2 | 0 |
| Mvmt Flow | 28 | 122 | 162 | 57 | 57 | 9 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 219 | 0 | - | 0 | 369 | 191 |
| Stage 1 | - | - | - | - | 191 | - |
| Stage 2 | - | - | - | - | 178 | - |
| Critical Hdwy | 4.1 | - | - | - | 6.42 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | 2.2 | - | - | - | 3.518 | 3.3 |
| Pot Cap-1 Maneuver | 1362 | - | - | - | 631 | 856 |
| Stage 1 | - | - | - | - | 841 | - |
| Stage 2 | - | - | - | - | 853 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1362 | - | - | - | 617 | 856 |
| Mov Cap-2 Maneuver | - | - | - | - | 617 | - |
| Stage 1 | - | - | - | - | 822 | - |
| Stage 2 | - | - | - | - | 853 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 1.5 | 0 | 11.3 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1362 | - | - | - | 641 |
| HCM Lane V/C Ratio | 0.021 | - | - | - | 0.102 |
| HCM Control Delay (s) | 7.7 | 0 | - | - | 11.3 |
| HCM Lane LOS | A | A | - | - | B |
| HCM 95th %tile Q(veh) | 0.1 | - | - | - | 0.3 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 3.5 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 22 | 108 | 83 | 51 | 87 | 14 |
| Future Vol, veh/h | 22 | 108 | 83 | 51 | 87 | 14 |
| 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, % | 0 | 1 | 1 | 16 | 9 | 0 |
| Mvmt Flow | 24 | 117 | 90 | 55 | 95 | 15 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 145 | 0 | - | 0 | 283 | 118 |
| Stage 1 | - | - | - | - | 118 | - |
| Stage 2 | - | - | - | - | 165 | - |
| Critical Hdwy | 4.1 | - | - | - | 6.49 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.49 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.49 | - |
| Follow-up Hdwy | 2.2 | - | - | - | 3.581 | 3.3 |
| Pot Cap-1 Maneuver | 1450 | - | - | - | 693 | 939 |
| Stage 1 | - | - | - | - | 890 | - |
| Stage 2 | - | - | - | - | 848 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1450 | - | - | - | 681 | 939 |
| Mov Cap-2 Maneuver | - | - | - | - | 681 | - |
| Stage 1 | - | - | - | - | 874 | - |
| Stage 2 | - | - | - | - | 848 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 1.3 | 0 | 11 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1450 | - | - | - | 708 |
| HCM Lane V/C Ratio | 0.016 | - | - | - | 0.155 |
| HCM Control Delay (s) | 7.5 | 0 | - | - | 11 |
| HCM Lane LOS | A | A | - | - | B |
| HCM 95th %tile Q(veh) | 0.1 | - | - | - | 0.5 |

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

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 26 | 112 | 149 | 52 | 52 | 8 |
| Future Vol, veh/h | 26 | 112 | 149 | 52 | 52 | 8 |
| 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, % | 0 | 0 | 1 | 2 | 2 | 0 |
| Mvmt Flow | 28 | 122 | 162 | 57 | 57 | 9 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 219 | 0 | - | 0 | 369 | 191 |
| Stage 1 | - | - | - | - | 191 | - |
| Stage 2 | - | - | - | - | 178 | - |
| Critical Hdwy | 4.1 | - | - | - | 6.42 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | 2.2 | - | - | - | 3.518 | 3.3 |
| Pot Cap-1 Maneuver | 1362 | - | - | - | 631 | 856 |
| Stage 1 | - | - | - | - | 841 | - |
| Stage 2 | - | - | - | - | 853 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1362 | - | - | - | 617 | 856 |
| Mov Cap-2 Maneuver | - | - | - | - | 617 | - |
| Stage 1 | - | - | - | - | 822 | - |
| Stage 2 | - | - | - | - | 853 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 1.5 | 0 | 11.3 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1362 | - | - | - | 641 |
| HCM Lane V/C Ratio | 0.021 | - | - | - | 0.102 |
| HCM Control Delay (s) | 7.7 | 0 | - | - | 11.3 |
| HCM Lane LOS | A | A | - | - | B |
| HCM 95th %tile Q(veh) | 0.1 | - | - | - | 0.3 |

# FRONTAGE ROAD & PLAINFIELD VILLAGE DRIVE

# CAPACITY ANALYSIS

| Intersection | |
|---|---|
| Int Delay, s/veh | 4.8 |

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 116 | 79 | 9 | 40 | 94 | 85 |
| Future Vol, veh/h | 116 | 79 | 9 | 40 | 94 | 85 |
| 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, % | 6 | 2 | 0 | 12 | 4 | 0 |
| Mvmt Flow | 126 | 86 | 10 | 43 | 102 | 92 |

| Major/Minor | Major1 | | Major2 | | Minor1 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 0 | 0 | 212 | 0 | 232 | 169 |
| Stage 1 | - | - | - | - | 169 | - |
| Stage 2 | - | - | - | - | 63 | - |
| Critical Hdwy | - | - | 4.1 | - | 6.44 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.44 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.44 | - |
| Follow-up Hdwy | - | - | 2.2 | - | 3.536 | 3.3 |
| Pot Cap-1 Maneuver | - | - | 1370 | - | 752 | 880 |
| Stage 1 | - | - | - | - | 856 | - |
| Stage 2 | - | - | - | - | 955 | - |
| Platoon blocked, % | - | - | | - | | |
| Mov Cap-1 Maneuver | - | - | 1370 | - | 747 | 880 |
| Mov Cap-2 Maneuver | - | - | - | - | 747 | - |
| Stage 1 | - | - | - | - | 856 | - |
| Stage 2 | - | - | - | - | 948 | - |

| Approach | EB | WB | NB |
|---|---|---|---|
| HCM Control Delay, s | 0 | 1.4 | 10.9 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT |
|---|---|---|---|---|---|
| Capacity (veh/h) | 805 | - | - | 1370 | - |
| HCM Lane V/C Ratio | 0.242 | - | - | 0.007 | - |
| HCM Control Delay (s) | 10.9 | - | - | 7.6 | 0 |
| HCM Lane LOS | B | - | - | A | A |
| HCM 95th %tile Q(veh) | 0.9 | - | - | 0 | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 5.6 |

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 102 | 62 | 65 | 65 | 136 | 27 |
| Future Vol, veh/h | 102 | 62 | 65 | 65 | 136 | 27 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 1 | 0 | 0 | 2 | 1 | 0 |
| Mvmt Flow | 111 | 67 | 71 | 71 | 148 | 29 |

| Major/Minor | Major1 | | Major2 | | Minor1 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 0 | 0 | 178 | 0 | 358 | 145 |
| Stage 1 | - | - | - | - | 145 | - |
| Stage 2 | - | - | - | - | 213 | - |
| Critical Hdwy | - | - | 4.1 | - | 6.41 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.41 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.41 | - |
| Follow-up Hdwy | - | - | 2.2 | - | 3.509 | 3.3 |
| Pot Cap-1 Maneuver | - | - | 1410 | - | 642 | 908 |
| Stage 1 | - | - | - | - | 885 | - |
| Stage 2 | - | - | - | - | 825 | - |
| Platoon blocked, % | - | - | | - | | |
| Mov Cap-1 Maneuver | - | - | 1410 | - | 609 | 908 |
| Mov Cap-2 Maneuver | - | - | - | - | 609 | - |
| Stage 1 | - | - | - | - | 885 | - |
| Stage 2 | - | - | - | - | 782 | - |

| Approach | EB | WB | NB |
|---|---|---|---|
| HCM Control Delay, s | 0 | 3.8 | 12.7 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT |
|---|---|---|---|---|---|
| Capacity (veh/h) | 644 | - | - | 1410 | - |
| HCM Lane V/C Ratio | 0.275 | - | - | 0.05 | - |
| HCM Control Delay (s) | 12.7 | - | - | 7.7 | 0 |
| HCM Lane LOS | B | - | - | A | A |
| HCM 95th %tile Q(veh) | 1.1 | - | - | 0.2 | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 4.9 |

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 116 | 79 | 10 | 40 | 94 | 94 |
| Future Vol, veh/h | 116 | 79 | 10 | 40 | 94 | 94 |
| 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, % | 6 | 2 | 0 | 12 | 4 | 0 |
| Mvmt Flow | 126 | 86 | 11 | 43 | 102 | 102 |

| Major/Minor | Major1 | | Major2 | | Minor1 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 0 | 0 | 212 | 0 | 234 | 169 |
| Stage 1 | - | - | - | - | 169 | - |
| Stage 2 | - | - | - | - | 65 | - |
| Critical Hdwy | - | - | 4.1 | - | 6.44 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.44 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.44 | - |
| Follow-up Hdwy | - | - | 2.2 | - | 3.536 | 3.3 |
| Pot Cap-1 Maneuver | - | - | 1370 | - | 750 | 880 |
| Stage 1 | - | - | - | - | 856 | - |
| Stage 2 | - | - | - | - | 953 | - |
| Platoon blocked, % | - | - | | - | | |
| Mov Cap-1 Maneuver | - | - | 1370 | - | 744 | 880 |
| Mov Cap-2 Maneuver | - | - | - | - | 744 | - |
| Stage 1 | - | - | - | - | 856 | - |
| Stage 2 | - | - | - | - | 945 | - |

| Approach | EB | WB | NB |
|---|---|---|---|
| HCM Control Delay, s | 0 | 1.5 | 11 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT |
|---|---|---|---|---|---|
| Capacity (veh/h) | 806 | - | - | 1370 | - |
| HCM Lane V/C Ratio | 0.254 | - | - | 0.008 | - |
| HCM Control Delay (s) | 11 | - | - | 7.6 | 0 |
| HCM Lane LOS | B | - | - | A | A |
| HCM 95th %tile Q(veh) | 1 | - | - | 0 | - |

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

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 102 | 62 | 72 | 65 | 136 | 30 |
| Future Vol, veh/h | 102 | 62 | 72 | 65 | 136 | 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, % | 1 | 0 | 0 | 2 | 1 | 0 |
| Mvmt Flow | 111 | 67 | 78 | 71 | 148 | 33 |

| Major/Minor | Major1 | | Major2 | | Minor1 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 0 | 0 | 178 | 0 | 372 | 145 |
| Stage 1 | - | - | - | - | 145 | - |
| Stage 2 | - | - | - | - | 227 | - |
| Critical Hdwy | - | - | 4.1 | - | 6.41 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.41 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.41 | - |
| Follow-up Hdwy | - | - | 2.2 | - | 3.509 | 3.3 |
| Pot Cap-1 Maneuver | - | - | 1410 | - | 631 | 908 |
| Stage 1 | - | - | - | - | 885 | - |
| Stage 2 | - | - | - | - | 813 | - |
| Platoon blocked, % | - | - | | - | | |
| Mov Cap-1 Maneuver | - | - | 1410 | - | 594 | 908 |
| Mov Cap-2 Maneuver | - | - | - | - | 594 | - |
| Stage 1 | - | - | - | - | 885 | - |
| Stage 2 | - | - | - | - | 766 | - |

| Approach | EB | WB | NB |
|---|---|---|---|
| HCM Control Delay, s | 0 | 4 | 12.9 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT |
|---|---|---|---|---|---|
| Capacity (veh/h) | 634 | - | - | 1410 | - |
| HCM Lane V/C Ratio | 0.285 | - | - | 0.056 | - |
| HCM Control Delay (s) | 12.9 | - | - | 7.7 | 0 |
| HCM Lane LOS | B | - | - | A | A |
| HCM 95th %tile Q(veh) | 1.2 | - | - | 0.2 | - |

# PERRY ROAD & FRONTAGE ROAD

# CAPACITY ANALYSIS

| Intersection | |
|---|---|
| Int Delay, s/veh | 3.4 |

| Movement | EBL | EBT | WBT | WBR | SWL | SWR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 45 | 364 | 72 | 146 | 134 | 44 |
| Future Vol, veh/h | 45 | 364 | 72 | 146 | 134 | 44 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | 0 |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 0 | 2 | 4 | 0 | 0 | 0 |
| Mvmt Flow | 49 | 396 | 78 | 159 | 146 | 48 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 237 | 0 | - | 0 | 454 | 119 |
| Stage 1 | - | - | - | - | 158 | - |
| Stage 2 | - | - | - | - | 296 | - |
| Critical Hdwy | 4.1 | - | - | - | 6.8 | 6.9 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.8 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.8 | - |
| Follow-up Hdwy | 2.2 | - | - | - | 3.5 | 3.3 |
| Pot Cap-1 Maneuver | 1342 | - | - | - | 540 | 917 |
| Stage 1 | - | - | - | - | 860 | - |
| Stage 2 | - | - | - | - | 735 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1342 | - | - | - | 515 | 917 |
| Mov Cap-2 Maneuver | - | - | - | - | 515 | - |
| Stage 1 | - | - | - | - | 820 | - |
| Stage 2 | - | - | - | - | 735 | - |

| Approach | EB | WB | SW |
|---|---|---|---|
| HCM Control Delay, s | 0.9 | 0 | 13.3 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SWLn1 | SWLn2 |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1342 | - | - | - | 515 | 917 |
| HCM Lane V/C Ratio | 0.036 | - | - | - | 0.283 | 0.052 |
| HCM Control Delay (s) | 7.8 | 0.1 | - | - | 14.7 | 9.1 |
| HCM Lane LOS | A | A | - | - | B | A |
| HCM 95th %tile Q(veh) | 0.1 | - | - | - | 1.2 | 0.2 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 6 |

| Movement | EBL | EBT | WBT | WBR | SWL | SWR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 61 | 388 | 355 | 231 | 161 | 45 |
| Future Vol, veh/h | 61 | 388 | 355 | 231 | 161 | 45 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | 0 |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 66 | 422 | 386 | 251 | 175 | 49 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 637 | 0 | - | 0 | 855 | 319 |
| Stage 1 | - | - | - | - | 512 | - |
| Stage 2 | - | - | - | - | 343 | - |
| Critical Hdwy | 4.1 | - | - | - | 6.8 | 6.9 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.8 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.8 | - |
| Follow-up Hdwy | 2.2 | - | - | - | 3.5 | 3.3 |
| Pot Cap-1 Maneuver | 956 | - | - | - | 301 | 683 |
| Stage 1 | - | - | - | - | 572 | - |
| Stage 2 | - | - | - | - | 696 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 956 | - | - | - | 274 | 683 |
| Mov Cap-2 Maneuver | - | - | - | - | 274 | - |
| Stage 1 | - | - | - | - | 521 | - |
| Stage 2 | - | - | - | - | 696 | - |

| Approach | EB | WB | SW |
|---|---|---|---|
| HCM Control Delay, s | 1.5 | 0 | 32.7 |
| HCM LOS | | | D |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SWLn1 | SWLn2 |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | 956 | - | - | - | 274 | 683 |
| HCM Lane V/C Ratio | 0.069 | - | - | - | 0.639 | 0.072 |
| HCM Control Delay (s) | 9 | 0.3 | - | - | 38.8 | 10.7 |
| HCM Lane LOS | A | A | - | - | E | B |
| HCM 95th %tile Q(veh) | 0.2 | - | - | - | 4 | 0.2 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 3.2 |

| Movement | EBL | EBT | WBT | WBR | SWL | SWR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 45 | 364 | 72 | 146 | 134 | 44 |
| Future Vol, veh/h | 45 | 364 | 72 | 146 | 134 | 44 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | 100 | 0 | 0 |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 0 | 2 | 4 | 0 | 0 | 0 |
| Mvmt Flow | 49 | 396 | 78 | 159 | 146 | 48 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 237 | 0 | - | 0 | 374 | 39 |
| Stage 1 | - | - | - | - | 78 | - |
| Stage 2 | - | - | - | - | 296 | - |
| Critical Hdwy | 4.1 | - | - | - | 6.8 | 6.9 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.8 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.8 | - |
| Follow-up Hdwy | 2.2 | - | - | - | 3.5 | 3.3 |
| Pot Cap-1 Maneuver | 1342 | - | - | - | 605 | 1031 |
| Stage 1 | - | - | - | - | 942 | - |
| Stage 2 | - | - | - | - | 735 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1342 | - | - | - | 577 | 1031 |
| Mov Cap-2 Maneuver | - | - | - | - | 577 | - |
| Stage 1 | - | - | - | - | 898 | - |
| Stage 2 | - | - | - | - | 735 | - |

| Approach | EB | WB | SW |
|---|---|---|---|
| HCM Control Delay, s | 0.9 | 0 | 12.2 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SWLn1 | SWLn2 |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1342 | - | - | - | 577 | 1031 |
| HCM Lane V/C Ratio | 0.036 | - | - | - | 0.252 | 0.046 |
| HCM Control Delay (s) | 7.8 | 0.1 | - | - | 13.3 | 8.7 |
| HCM Lane LOS | A | A | - | - | B | A |
| HCM 95th %tile Q(veh) | 0.1 | - | - | - | 1 | 0.1 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 4.5 |

| Movement | EBL | EBT | WBT | WBR | SWL | SWR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 61 | 388 | 355 | 231 | 161 | 45 |
| Future Vol, veh/h | 61 | 388 | 355 | 231 | 161 | 45 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | 100 | 0 | 0 |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 66 | 422 | 386 | 251 | 175 | 49 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 637 | 0 | - | 0 | 729 | 193 |
| Stage 1 | - | - | - | - | 386 | - |
| Stage 2 | - | - | - | - | 343 | - |
| Critical Hdwy | 4.1 | - | - | - | 6.8 | 6.9 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.8 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.8 | - |
| Follow-up Hdwy | 2.2 | - | - | - | 3.5 | 3.3 |
| Pot Cap-1 Maneuver | 956 | - | - | - | 362 | 822 |
| Stage 1 | - | - | - | - | 662 | - |
| Stage 2 | - | - | - | - | 696 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 956 | - | - | - | 329 | 822 |
| Mov Cap-2 Maneuver | - | - | - | - | 329 | - |
| Stage 1 | - | - | - | - | 602 | - |
| Stage 2 | - | - | - | - | 696 | - |

| Approach | EB | WB | SW |
|---|---|---|---|
| HCM Control Delay, s | 1.5 | 0 | 23.8 |
| HCM LOS | | | C |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SWLn1 | SWLn2 |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | 956 | - | - | - | 329 | 822 |
| HCM Lane V/C Ratio | 0.069 | - | - | - | 0.532 | 0.06 |
| HCM Control Delay (s) | 9 | 0.3 | - | - | 27.7 | 9.7 |
| HCM Lane LOS | A | A | - | - | D | A |
| HCM 95th %tile Q(veh) | 0.2 | - | - | - | 3 | 0.2 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 3.4 |

| Movement | EBL | EBT | WBT | WBR | SWL | SWR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 45 | 401 | 79 | 146 | 134 | 44 |
| Future Vol, veh/h | 45 | 401 | 79 | 146 | 134 | 44 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | 0 |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 0 | 2 | 4 | 0 | 0 | 0 |
| Mvmt Flow | 49 | 436 | 86 | 159 | 146 | 48 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 245 | 0 | - | 0 | 482 | 123 |
| Stage 1 | - | - | - | - | 166 | - |
| Stage 2 | - | - | - | - | 316 | - |
| Critical Hdwy | 4.1 | - | - | - | 6.8 | 6.9 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.8 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.8 | - |
| Follow-up Hdwy | 2.2 | - | - | - | 3.5 | 3.3 |
| Pot Cap-1 Maneuver | 1333 | - | - | - | 518 | 911 |
| Stage 1 | - | - | - | - | 852 | - |
| Stage 2 | - | - | - | - | 718 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1333 | - | - | - | 493 | 911 |
| Mov Cap-2 Maneuver | - | - | - | - | 493 | - |
| Stage 1 | - | - | - | - | 810 | - |
| Stage 2 | - | - | - | - | 718 | - |

| Approach | EB | WB | SW |
|---|---|---|---|
| HCM Control Delay, s | 1 | 0 | 13.8 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SWLn1 | SWLn2 |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1333 | - | - | - | 493 | 911 |
| HCM Lane V/C Ratio | 0.037 | - | - | - | 0.295 | 0.052 |
| HCM Control Delay (s) | 7.8 | 0.2 | - | - | 15.3 | 9.2 |
| HCM Lane LOS | A | A | - | - | C | A |
| HCM 95th %tile Q(veh) | 0.1 | - | - | - | 1.2 | 0.2 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 6.7 |

| Movement | EBL | EBT | WBT | WBR | SWL | SWR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 61 | 428 | 393 | 231 | 161 | 45 |
| Future Vol, veh/h | 61 | 428 | 393 | 231 | 161 | 45 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | 0 |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 66 | 465 | 427 | 251 | 175 | 49 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 678 | 0 | - | 0 | 918 | 339 |
| Stage 1 | - | - | - | - | 553 | - |
| Stage 2 | - | - | - | - | 365 | - |
| Critical Hdwy | 4.1 | - | - | - | 6.8 | 6.9 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.8 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.8 | - |
| Follow-up Hdwy | 2.2 | - | - | - | 3.5 | 3.3 |
| Pot Cap-1 Maneuver | 923 | - | - | - | 275 | 663 |
| Stage 1 | - | - | - | - | 546 | - |
| Stage 2 | - | - | - | - | 679 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 923 | - | - | - | 249 | 663 |
| Mov Cap-2 Maneuver | - | - | - | - | 249 | - |
| Stage 1 | - | - | - | - | 494 | - |
| Stage 2 | - | - | - | - | 679 | - |

| Approach | EB | WB | SW |
|---|---|---|---|
| HCM Control Delay, s | 1.4 | 0 | 39.7 |
| HCM LOS | | | E |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SWLn1 | SWLn2 |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | 923 | - | - | - | 249 | 663 |
| HCM Lane V/C Ratio | 0.072 | - | - | - | 0.703 | 0.074 |
| HCM Control Delay (s) | 9.2 | 0.3 | - | - | 47.7 | 10.9 |
| HCM Lane LOS | A | A | - | - | E | B |
| HCM 95th %tile Q(veh) | 0.2 | - | - | - | 4.7 | 0.2 |

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

| Movement | EBL | EBT | WBT | WBR | SWL | SWR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 45 | 401 | 79 | 146 | 134 | 44 |
| Future Vol, veh/h | 45 | 401 | 79 | 146 | 134 | 44 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 100 | - | - | 100 | 0 | 0 |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 0 | 2 | 4 | 0 | 0 | 0 |
| Mvmt Flow | 49 | 436 | 86 | 159 | 146 | 48 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 245 | 0 | - | 0 | 402 | 43 |
| Stage 1 | - | - | - | - | 86 | - |
| Stage 2 | - | - | - | - | 316 | - |
| Critical Hdwy | 4.1 | - | - | - | 6.8 | 6.9 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.8 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.8 | - |
| Follow-up Hdwy | 2.2 | - | - | - | 3.5 | 3.3 |
| Pot Cap-1 Maneuver | 1333 | - | - | - | 582 | 1025 |
| Stage 1 | - | - | - | - | 933 | - |
| Stage 2 | - | - | - | - | 718 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1333 | - | - | - | 560 | 1025 |
| Mov Cap-2 Maneuver | - | - | - | - | 560 | - |
| Stage 1 | - | - | - | - | 898 | - |
| Stage 2 | - | - | - | - | 718 | - |

| Approach | EB | WB | SW |
|---|---|---|---|
| HCM Control Delay, s | 0.8 | 0 | 12.5 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SWLn1 | SWLn2 |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1333 | - | - | - | 560 | 1025 |
| HCM Lane V/C Ratio | 0.037 | - | - | - | 0.26 | 0.047 |
| HCM Control Delay (s) | 7.8 | - | - | - | 13.7 | 8.7 |
| HCM Lane LOS | A | - | - | - | B | A |
| HCM 95th %tile Q(veh) | 0.1 | - | - | - | 1 | 0.1 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 4.6 |

| Movement | EBL | EBT | WBT | WBR | SWL | SWR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 61 | 428 | 393 | 231 | 161 | 45 |
| Future Vol, veh/h | 61 | 428 | 393 | 231 | 161 | 45 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 100 | - | - | 100 | 0 | 0 |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 66 | 465 | 427 | 251 | 175 | 49 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 678 | 0 | - | 0 | 792 | 214 |
| Stage 1 | - | - | - | - | 427 | - |
| Stage 2 | - | - | - | - | 365 | - |
| Critical Hdwy | 4.1 | - | - | - | 6.8 | 6.9 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.8 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.8 | - |
| Follow-up Hdwy | 2.2 | - | - | - | 3.5 | 3.3 |
| Pot Cap-1 Maneuver | 923 | - | - | - | 330 | 797 |
| Stage 1 | - | - | - | - | 632 | - |
| Stage 2 | - | - | - | - | 679 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 923 | - | - | - | 306 | 797 |
| Mov Cap-2 Maneuver | - | - | - | - | 306 | - |
| Stage 1 | - | - | - | - | 586 | - |
| Stage 2 | - | - | - | - | 679 | - |

| Approach | EB | WB | SW |
|---|---|---|---|
| HCM Control Delay, s | 1.1 | 0 | 26.7 |
| HCM LOS | | | D |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SWLn1 | SWLn2 |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | 923 | - | - | - | 306 | 797 |
| HCM Lane V/C Ratio | 0.072 | - | - | - | 0.572 | 0.061 |
| HCM Control Delay (s) | 9.2 | - | - | - | 31.4 | 9.8 |
| HCM Lane LOS | A | - | - | - | D | A |
| HCM 95th %tile Q(veh) | 0.2 | - | - | - | 3.3 | 0.2 |