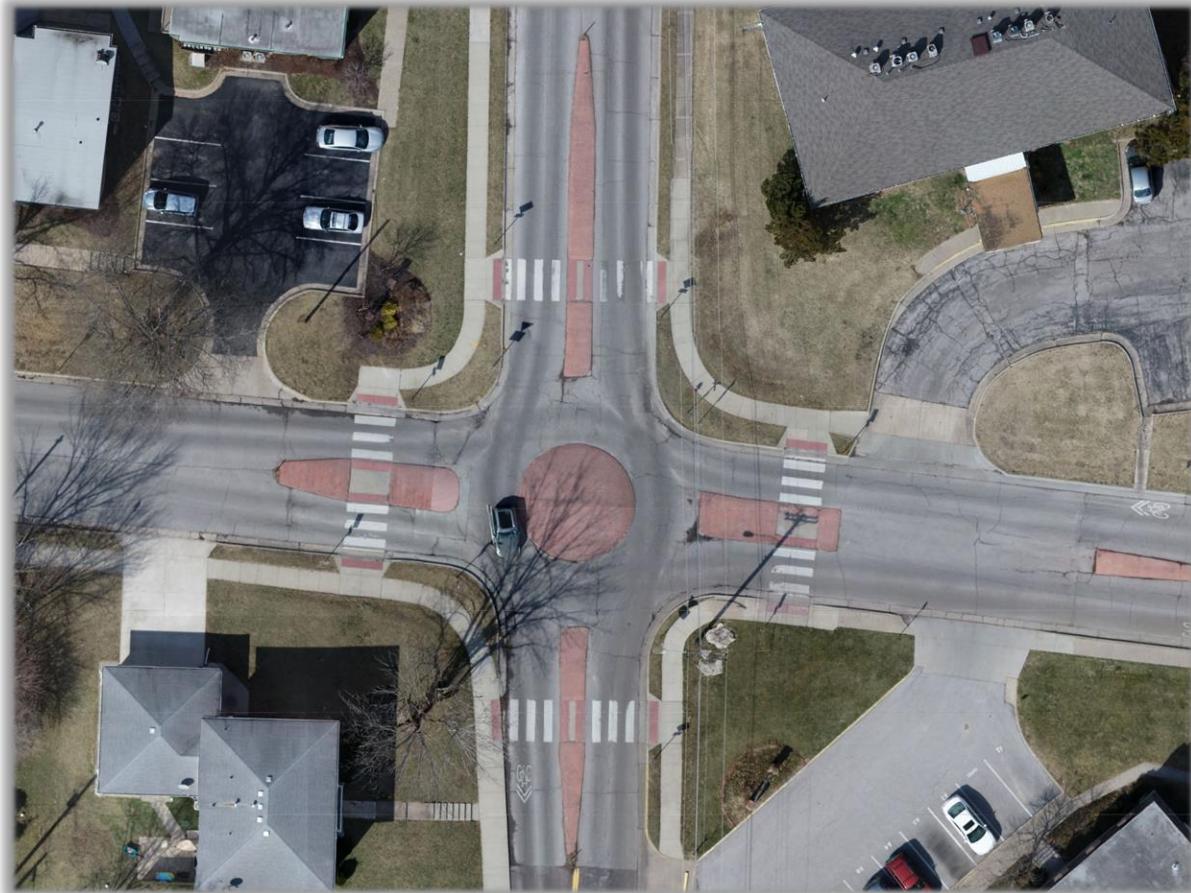


INTERSECTION EVALUATION

FAIRVIEW ROAD AND ROLLINS ROAD

COLUMBIA, MISSOURI

April 21, 2023



Prepared For:

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INTRODUCTION

OBJECTIVES:

This report is a summary of the traffic analysis performed for the City of Columbia on the intersection of Fairview Road and Rollins Road.

The objectives of this study are:

1. Analyze the existing and anticipated traffic flow through the intersection.
2. Evaluate options for traffic control and/or geometric improvements to reduce intersection delay and improve safety.

PROJECT BACKGROUND:

In the past decade, the intersection of Fairview Road with Rollins Road has been the subject of discussion and study related to the capacity and operations of the intersection. In 2012, The Columbia City Council directed city staff to evaluate the intersection to determine if the installation of traffic signals would be appropriate. A study titled “Traffic Signal Warrant Analysis and Recommendations at Fairview Road and Rollins Road” was prepared by Sam Budzyna, E.I.T. in January of 2012. This study concluded that, at that time, a traffic signal did not meet any warrants as required by the Manual on Uniform Traffic Control Devices (MUTCD). The study did, however, recommend consideration of a mini-roundabout. Plans for the proposed mini-roundabout were produced in early 2013 and the mini-roundabout was subsequently constructed.

Since the construction of the mini-roundabout, it has been the subject of public scrutiny. There has been confusion about the necessity of the roundabout and about the ability of drivers to navigate it correctly.

In June of 2016, after conducting a public hearing about the intersection of nearby Fairview Road and Chapel Hill Road, the City Council directed city staff to conduct further analysis of both the Rollins Road and the Chapel Hill Road intersections with Fairview Road. This report is a result of further study of the intersection of Fairview Road and Rollins Road.

PROJECT APPROACH:

In order to properly analyze current conditions at the subject intersection, this study followed these steps:

Establish and Analyze Existing Conditions. Manual traffic counts were conducted via video for each intersection movement as well as pedestrian crossing volumes. These counts were tabulated for 15 minute increments for a 24 hour period on April 5, 2022. The traffic volumes were then analyzed utilizing Synchro 11 software that applies the methodologies for intersection analysis as outlined in the Highway Capacity Manual (HCM) published by the Transportation Research Board. In addition, roadway tube counters were placed at the approaches to the intersection to get estimates of approach speeds.

Project and Analyze Future Conditions. The existing traffic volumes were projected for 20 years at a rate of 1.5% increase per year to estimate future volumes in the year 2042.



Evaluate Potential Intersection Control Options. Varying intersection control methods and geometries were analyzed with the existing and projected traffic volumes to determine which options were feasible for this intersection.

Conduct a Traffic Signal Warrants Analysis. The traffic volumes and existing intersection geometry were reviewed using methods described in the Manual for Uniform Traffic Control Devices (MUTCD) published by U.S. Department of Transportation Federal Highway Administration to determine the appropriateness of a traffic signal at this location.

BASE CONDITIONS

EXISTING ROADWAY DATA:

Rollins Road: Rollins Road is a 36' wide neighborhood collector consisting of one vehicle lane in each direction. There is a 4' sidewalk at the back of curb along the south side of the east portion of Rollins Road and a 5' sidewalk along the south side of the west portion.

Fairview Road: Fairview Road is a major collector consisting of one vehicle lane in each direction. It is approximately 38' wide north of Rollins and 36' wide south of Rollins. Sidewalks at varying widths are present along both sides of Fairview Road. Bicycle striping varies in the vicinity of the intersection with lanes present north of Fairview's intersection with Rollins Road.



Rollins Road (facing east)





Rollins Road (facing west)



Fairview Road (facing north)





Fairview Road (facing south)

All four approaches are controlled by a mini-roundabout (yield control).

EXISTING TRAFFIC DATA:

Allstate Consultants conducted manual traffic counts in April of 2022. The results of these traffic counts are shown in Appendix B.

INTERSECTION LEVEL OF SERVICE ANALYSIS:

The existing traffic volumes were analyzed using Synchro 11, a macroscopic traffic modeling software package. The Synchro 11 method of analysis used for this study is based on procedures detailed in the *Highway Capacity Manual* published by the Transportation Research Board. The *Highway Capacity Manual*, which is widely accepted as the standard method for determining roadway capacity, uses Levels of Service to rank facility performance. There are six Levels of Service ranging from 'A' representing the best operating conditions to 'F' which represents the worst operating conditions.

Level of Service directly corresponds to the amount of delay a driver experiences at an intersection (control delay). Tables 1 and 2 illustrate the ranges of control delay that constitute each Level of Service at unsignalized and signalized intersections. Drivers have different expectations of delay at signalized intersections vs. unsignalized intersections and thus the delay ranges differ between the two. For highway



design, Level of Service C is generally used. However, during peak periods in urban and suburban areas, Level of Service D is normally considered acceptable.

Table 1

HCM Unsignalized Intersection Level of Service Criteria

| <i>Level of Service</i> | <i>Delay Range (seconds)</i> |
|-------------------------|------------------------------|
| A | <10 |
| B | >10 and <15 |
| C | >15 and <25 |
| D | >25 and <35 |
| E | >35 and <50 |
| F | >50 |

Table 2

HCM Signalized Intersection Level of Service Criteria

| <i>Level of Service</i> | <i>Delay Range (seconds)</i> |
|-------------------------|------------------------------|
| A | <10 |
| B | >10 and <20 |
| C | >20 and <35 |
| D | >35 and <55 |
| E | >55 and <80 |
| F | >80 |

The HCM Levels of Service and delay for the 2022 Existing Conditions and the 2042 Projected Conditions as calculated via Synchro 11 are reported in Tables 3 and 4. Level of Service is reported per approach as well as overall for this intersection.

HCM Roundabout analysis completed via Synchro 11 is macroscopic in nature and assumes compliance from drivers. Lack of compliance in the form of unnecessary stopping and yielding were observed and will reduce the operational capacity of the roundabout (sometimes significantly). An approximation of this actual operational capacity could be generated using a microscopic traffic simulation model (such as VISSIM) but this analysis would be very costly and likely inaccurate due to the number of assumptions required. Allstate Consultants can perform microscopic analysis on this intersection if desired, but we do not believe it is necessary at this time.

A review of Tables 3 and 4 indicate that with the existing traffic volumes the intersection operates with high levels of service with regards to delay. However, observations of the intersection revealed that a noticeable portion of drivers did not navigate the intersection as designed. Some drivers were observed treating the intersection more like an all-way stop controlled (AWSC) intersection. Therefore, we believe that the intersection is not likely operating with delays as low as are indicated in the roundabout control analysis. In reality, the intersection delays are probably between the calculated delays for a roundabout and the calculated delays for all way stop control. Nevertheless, we did not observe conditions that made us believe that intersection capacity is a major issue at this time.



Table 3**HCM Intersection Level of Service****Existing Volumes with Roundabout Control (April 2022)**

| Intersection | Movement | AM Peak LOS (Delay) | PM Peak LOS (Delay) |
|-----------------------------------|-------------------------|------------------------|------------------------|
| Fairview Road and Rollins Road | Eastbound Rollins Rd. | A (7.2) | A (7.6) |
| | Westbound Rollins Rd. | A (7.6) | A (8.7) |
| | Northbound Fairview Rd. | B (11.8) | A (8.3) |
| | Southbound Fairview Rd. | A (7.1) | B (12.9) |
| | Intersection | A (9.3) | B (10.3) |

Table 4**HCM Intersection Level of Service****Projected Volumes with Roundabout Control (2042)**

| Intersection | Movement | AM Peak LOS (Delay) | PM Peak LOS (Delay) |
|-----------------------------------|-------------------------|------------------------|------------------------|
| Fairview Road and Rollins Road | Eastbound Rollins Rd. | A (9.8) | B (10.8) |
| | Westbound Rollins Rd. | B (10.8) | B (13.3) |
| | Northbound Fairview Rd. | C (12.8) | B (11.8) |
| | Southbound Fairview Rd. | A (9.5) | D (29.3) |
| | Intersection | C (16.1) | C 19.5) |

EXISTING SPEED DATA:

Speed is a major component of intersection safety. Controlling speeds is critical for any intersection to protect the safety of pedestrians, drivers, and passengers that use the intersection. All intersections rely on driver compliance with the signage to control speeds and movements through the intersections. Roundabouts and mini roundabouts utilize intersection geometry in addition to signage to control speeds and movements. There has been concern at this intersection about lack of speed compliance. In an effort to adequately determine the speed characteristics of this intersection, Allstate utilized two separate methods to obtain speed information.

Method 1: Tube Counters

Tube counters were set near the crosswalks at each approach. The tube counter setup included two tubes spaced 10' apart that allowed speeds to be determined based on the time differential of the axle hits.



This is an effective way to determine speeds, but it also has some limitations due to the strength of the axle hits at slow speeds as well as the potential for misinterpreting multiple hits from different axle configurations or from the vehicle hitting the tubes at an angle. We generally have high confidence in the speeds derived from the tube counts, but the data is better looked at as a set of data than as individual vehicle speeds.

Table 5

**Approach Speeds (measured at cross walks)
Measured with Tube Counters June 28, 2022**

| Movement | Mean Speed | Pace Range (mph) (% within Pace) | % Exceeding |
|----------------------------|------------|-------------------------------------|-------------|
| AM Eastbound Rollins Rd. | 13.0 | 11.0-21.0 (70.1%) | 0.5% |
| PM Eastbound Rollins Rd. | 12.6 | 11.5-21.5 (68.9%) | 0.0% |
| AM Westbound Rollins Rd. | 15.4 | 11.0-21.0 (85.2%) | 0.4% |
| PM Westbound Rollins Rd. | 14.6 | 11.2-21.2 (81.3%) | 0.1% |
| AM Northbound Fairview Rd. | 13.0 | 10.2-20.2 (64.5%) | 0.7% |
| PM Northbound Fairview Rd. | 12.7 | 9.4-19.4 (65.0%) | 0.5% |
| AM Southbound Fairview Rd. | 13.0 | 8.3-18.3 (77.5%) | 0.4% |
| PM Southbound Fairview Rd. | 12.0 | 8.8-18.8 (69.7%) | 1.0% |

Method 2: Video Analysis

Video footage was taken via static drone of the intersection on June 28, 2022. A desktop review of this video footage determined speed based on the amount of time that it took to traverse a known distance within the roundabout. This information was reduced via spreadsheet to get average speeds at two points for each approach. The first point (labeled mean speed-thru) was taken within the circle at the point when the vehicle passed the first splitter island (i.e., this is after the right turn movements are made but before the left turn movements separate from the thru movement). The second point (labeled as mean speed-left turn) when the vehicle passed the second splitter island (i.e., this is after the left turning movements separated from the thru movements). The speeds determined via this method are shown in Table 6.



Table 6
Speeds within roundabout
Measured with Drone assistance June 28, 2022

| Movement | Mean Speed-Thru (mph) | Mean Speed-Left Turn |
|---------------------------------------|-----------------------|----------------------|
| Approach from Eastbound Rollins Rd. | 11.3 | 8.4 |
| Approach from Westbound Rollins Rd. | 11.3 | 8.7 |
| Approach from Northbound Fairview Rd. | 12.6 | 7.1 |
| Approach from Southbound Fairview Rd. | 12.5 | 7.6 |

As can be seen from Tables 5 and 6, average speeds range from 12.0mph to 15.4mph at the crosswalks, 11.3mph-12.6mph for the thru movements in the roundabout, and 7.1mph-8.7mph for the left turning movements in the roundabout.

EXISTING INTERSECTION OBSERVATIONS:

Field observation and video capture were utilized to observe operations at the existing mini-roundabout to gauge operations and determine any compliance issues. Compliance issues were observed and fall into the following categories:

Unnecessary stopping/yielding: Vehicles approaching the intersection and treating the intersection as a stop controlled intersection was the most commonly observed occurrence of driver confusion. We observed this happening several times and even observed drivers waiting for vehicles to enter and traverse the intersection from the opposite direction prior to entering the intersection. This type of driver confusion reduces the efficiency of the intersection but likely does not significantly reduce the safety of the intersection.

Proceeding without the right of way: There were a few occasions of vehicles entering the intersection when there was already a circulating vehicle in the intersection that was close enough that it was forced to slow or stop when the subject vehicle entered. This type of driver confusion is more dangerous because it directly contradicts the yielding priorities and has the potential to cause crashes if the circulating driver does not have time to stop.

Standard vehicles traversing the center island: There are occasions when standard passenger vehicles (cars and pickups) drive directly over the center island when making a thru or left movement. These instances tended to occur when traffic was very light and did not conflict with other movements. Therefore, this does not present a significant safety concern unless it starts happening when the intersection is busy enough to have conflicting movements.

Speed: The most noticeable speed related issue observed in the field and on video is a few near miss crashes at the point within the roundabout where left turning vehicles separate from the thru movements. The sharp geometry of the roundabout creates a differential speed that is sometimes unexpected by the trailing thru driver. We observed a few instances of near misses when two vehicles traversing the



roundabout were closely spaced and nearly had a rear-end type collision when the leading driver slowed to make the left turn.

The issues identified in the above paragraphs above can be caused by a number of contributing factors. These include:

- The lack of horizontal deflection on the approaches. Approach deflection promotes speed control at cross walks and at the point of merging into the circulating traffic. The lack of horizontal deflection approaching the roundabout allows vehicles to not slow down until the last possible second prior to deciding to merge or waiting for the next gap in the circulating traffic. The result is driver confusion at the merge point from both the circulating drivers and the approaching drivers.
- The relatively close spacing along the circulatory pavement of the approaches limits the decision time for approaching drivers. The only effective way to address this is to increase the size of the roundabout circulatory pavement.
- The center island and the splitter islands are all constructed of a mountable concrete pavement. This is necessary for large vehicle to be able to use this space to traverse the tight geometry of the roundabout. Utilizing a more aggressive profile for the mountable islands may provide better speed control and reduce the amount of passenger vehicles traversing the center island. However, this makes it more difficult and uncomfortable for large vehicles to utilize the intersection.

ANALYSIS OF ALTERNATIVES

In addition to the existing mini-roundabout control, this study examined the potential for signal control, all-way stop control, and two-way stop control. As noted in the project background section, a signal warrant analysis was performed in 2012 and determined that signals were not warranted at that time. Prior to performing a HCM Level of Service analysis on a signalized intersection we performed an updated warrant analysis with 2022 traffic volumes.

TRAFFIC SIGNAL WARRANT ANALYSIS:

Traffic signals are one of the methods of intersection control that is often considered when unsignalized intersections are not operating satisfactorily. However, it is possible for traffic signals that are installed prior to demonstrated need may create more problems than they solve. For instance, certain types of crashes such as rear-end collisions often increase when a traffic signal is installed. For this reason, the Manual on Uniform Traffic Control Devices contains nine possible traffic signal warrants ensure that traffic signals are justified prior to them being installed.

Warrant 1, Eight-Hour Vehicular Volume: This warrant identifies minimum volumes that must be met for a minimum of 8 hours during a day. This warrant has two conditions: Condition A – Minimum Vehicular Volume, and Condition B – Interruption of Continuous Traffic. This warrant is met if either condition is



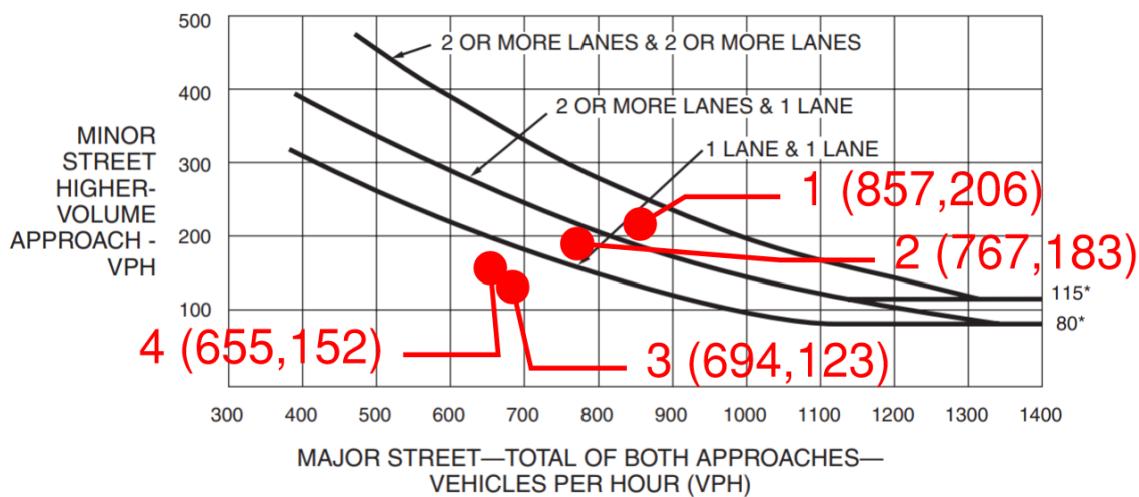
met or if both conditions are met to the 80% level. As can be seen in Table 7, the existing traffic does not meet the requirements of this warrant.

Table 7
MUTCD Traffic Signal Warrant 1

| | Major Street (Total of Both Approaches) | Minor Street (Higher Approach) |
|----------------------------------|---|--|
| Actual 8th Hour Volume | 552 | 91 |
| Required 8th Hour Volumes | | |
| Condition A | 500 | 150 |
| Condition B | 750 | 75 |
| Combined Conditions A&B | 600 | 120 |

Warrant 2, Four-Hour Vehicular Volume: This warrant identifies minimum volumes that must be met for each of the highest four hours of a day. This warrant is met when the plotted points of any of four hours of a day fall above the applicable curve in Figure 4C-1 of the MUTCD. This curve has been referenced and the applicable four points plotted in Figure 4C-1. As can be seen from Figure 1, this warrant is not met because the third and fourth highest hours fall below the “1 Lane & 1 Lane” curve that applies to the subject intersection.

Figure 4C-1. Warrant 2, Four-Hour Vehicular Volume



*Note: 115 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 80 vph applies as the lower threshold volume for a minor-street approach with one lane.



Warrant 3, Peak Hour: This warrant is only intended to be applied to entrances of high peak hour generators such as large office complexes or manufacturing plants. Therefore, this warrant does not apply to the subject intersection.

Warrant 4, Pedestrian Volume: While there are pedestrian facilities at this intersection, there were not enough to meet this warrant. The lowest threshold for pedestrian volume is 107 pedestrians in an hour and the highest hourly pedestrian volume was 49 pedestrians.

Warrant 5, School Crossing: This warrant requires a study of the frequency and adequacy of gaps in the vehicular traffic stream is not sufficient to allow school children to cross the major street. Observations of this intersection revealed that school children had adequate gaps in vehicular traffic. We did not observe any issues with pedestrians having to wait more than just briefly to cross. Therefore, we do not consider that this warrant has been met.

Warrant 6, Coordinated Signal System: This warrant is for intersections that are part of a coordinated signal system. This warrant does not apply to the subject intersection.

Warrant 7, Crash Experience: Warrant 7 requires five or more crashes susceptible to correction by a traffic signal within one year. This warrant is not met in terms of total number of crashes and most of the reported crashes are not of the type that would be anticipated to be corrected with a traffic signal. Therefore, this warrant does not apply to the subject intersection.

Warrant 8, Roadway Network: This warrant is intended to encourage “concentration and organization of traffic flow on a roadway network.” Since this is not a stated goal for this intersection, this warrant was not considered.

Warrant 9, Intersection near a Grade Crossing: This warrant is intended to be used when the intersection is adjacent to a railroad crossing and therefore does not apply to this intersection.

The existing intersection does not meet any warrants. Based on this, signalization was not analyzed as an alternative.

CAPACITY ANALYSIS OF ALL WAY STOP CONTROL ALTERNATIVE:

Prior to the installation of the mini-roundabout, this intersection operated with all-way stop control. A capacity analysis of an all-way stop control alternative was performed using Synchro 11; the results can be found in the tables below:



Table 8
HCM Intersection Level of Service
Existing Volumes with All Way Stop Control (April 2022)

| Intersection | Movement | AM Peak LOS (Delay) | PM Peak LOS (Delay) |
|-----------------------------------|-------------------------|------------------------|------------------------|
| Fairview Road and Rollins Road | Eastbound Rollins Rd. | B (12.4) | B (12.0) |
| | Westbound Rollins Rd. | B (11.8) | C (15.5) |
| | Northbound Fairview Rd. | C (24.2) | C (21.3) |
| | Southbound Fairview Rd. | C (15.1) | E (37.5) |
| | Intersection | C (18.4) | D (26.5) |

Table 9
HCM Intersection Level of Service
Projected Volumes with All Way Stop Control (2042)

| Intersection | Movement | AM Peak LOS (Delay) | PM Peak LOS (Delay) |
|-----------------------------------|-------------------------|------------------------|------------------------|
| Fairview Road and Rollins Road | Eastbound Rollins Rd. | C (18.7) | C (16.5) |
| | Westbound Rollins Rd. | C (17.1) | D (28.3) |
| | Northbound Fairview Rd. | F (151.5) | F (85.6) |
| | Southbound Fairview Rd. | E (35.3) | F (212.9) |
| | Intersection | F (82.9) | F (124.3) |

Based on the analysis above, all way stop control would provide acceptable Levels of Service (except for E on southbound Fairview in the PM Peak) for existing traffic volumes, but projected volumes would overwhelm the intersection leading to significant delay.

CAPACITY ANALYSIS OF TWO WAY STOP CONTROL ALTERNATIVE:

We also checked a two-way stop control alternative. Capacity analysis of this alternative was performed using Synchro 11; the results can be found in the tables below:



Table 10
HCM Intersection Level of Service
Existing Volumes with Two Way Stop Control (April 2022)

| Intersection | Movement | AM Peak LOS (Delay) | PM Peak LOS (Delay) |
|-----------------------------------|-------------------------|------------------------|------------------------|
| Fairview Road and Rollins Road | Eastbound Rollins Rd. | E (38.1) | D (34.4) |
| | Westbound Rollins Rd. | E (37.4) | F (118.0) |
| | Northbound Fairview Rd. | A (0.4) | A (0.4) |
| | Southbound Fairview Rd. | A (1.6) | A (0.7) |
| | Intersection | B (10.8) | D (25.1) |

Table 11
HCM Intersection Level of Service
Projected Volumes with Two Way Stop Control (2042)

| Intersection | Movement | AM Peak LOS (Delay) | PM Peak LOS (Delay) |
|-----------------------------------|-------------------------|------------------------|------------------------|
| Fairview Road and Rollins Road | Eastbound Rollins Rd. | F (312.7) | F (927.3) |
| | Westbound Rollins Rd. | F (700.4) | F (940.2) |
| | Northbound Fairview Rd. | A (0.5) | A (0.5) |
| | Southbound Fairview Rd. | A (1.7) | A (0.8) |
| | Intersection | F (91.3) | F (240.1) |

Based on the analysis above, two-way stop control is not a viable option. The stop-controlled approaches (Rollins) would have very high delays with today's traffic and would completely fail with the projected volumes.

POTENTIAL IMPROVEMENTS TO THE MINI-ROUNABOUT:

With signal control ruled out due to lack of warrants and both all-way stop control and two-way stop control introducing capacity issues, this section examines what improvements, if any, could be made the existing mini-roundabout to address the challenges observed and noted above.

Reconstruction as a full-sized roundabout: Reconstruction of this mini-roundabout to a full sized roundabout would allow the incorporation of standard roundabout items that would likely address the operational challenges observed. The current mini-roundabout has a diameter of approximately 60'- 70'. A standard roundabout would increase this diameter to at least 110' with 120' – 130' being preferable. This increased diameter would allow for a raised island in the center, horizontal deflection upon entry, and greater spacing between entry lanes. All these items would be anticipated to greatly increase compliance and efficiency. However, right of way is limited at this location and the properties at each



corner of the intersection would be impacted. Preliminary design could be completed to gauge these impacts.

Horizontal adjustments to the mini-roundabout: Based on the site constraints and the small diameter of the existing mini-roundabout, there are limited options to improve the geometry. Reducing approach lane widths to 12' and reducing the splitter island widths to 6' or less could allow the existing mini-roundabout to incorporate a small amount of horizontal deflection. The deflection would be small and located very near the entrance (without much length to develop an offset). This deflection has the potential to encourage compliance and reduce speed, but it is likely it would have no quantifiable impact. A conceptual layout of these modifications is shown in Appendix

Education/Enforcement: If intersection remains as a mini-roundabout, a combination of education and enforcement could increase compliance.

CONCLUSIONS AND RECOMMENDATIONS:

This study examined the existing mini-roundabout control as well as all way stop control, two way stop control, and signal control alternatives. All way and two way stop control have operational disadvantages as traffic increases and signal control does not meet warrants. Compliance issues were observed with the intersection in its current configuration which will likely continue to frustrate motorists and could lead to crashes. However, historically, crash numbers have been low and crashes have been minor in nature.

The existing intersection as configured does not have capacity issues, significant crash history, or major speed issues. However, based on our field and video observations of driver confusion, we believe the actual Level of Service is likely lower than the calculated Level of Service for Roundabout control but is also higher than the calculated Level of Service for all way stop control. Even with somewhat reduced roundabout capacity, the intersection will likely operate adequately for many years without significant modifications.

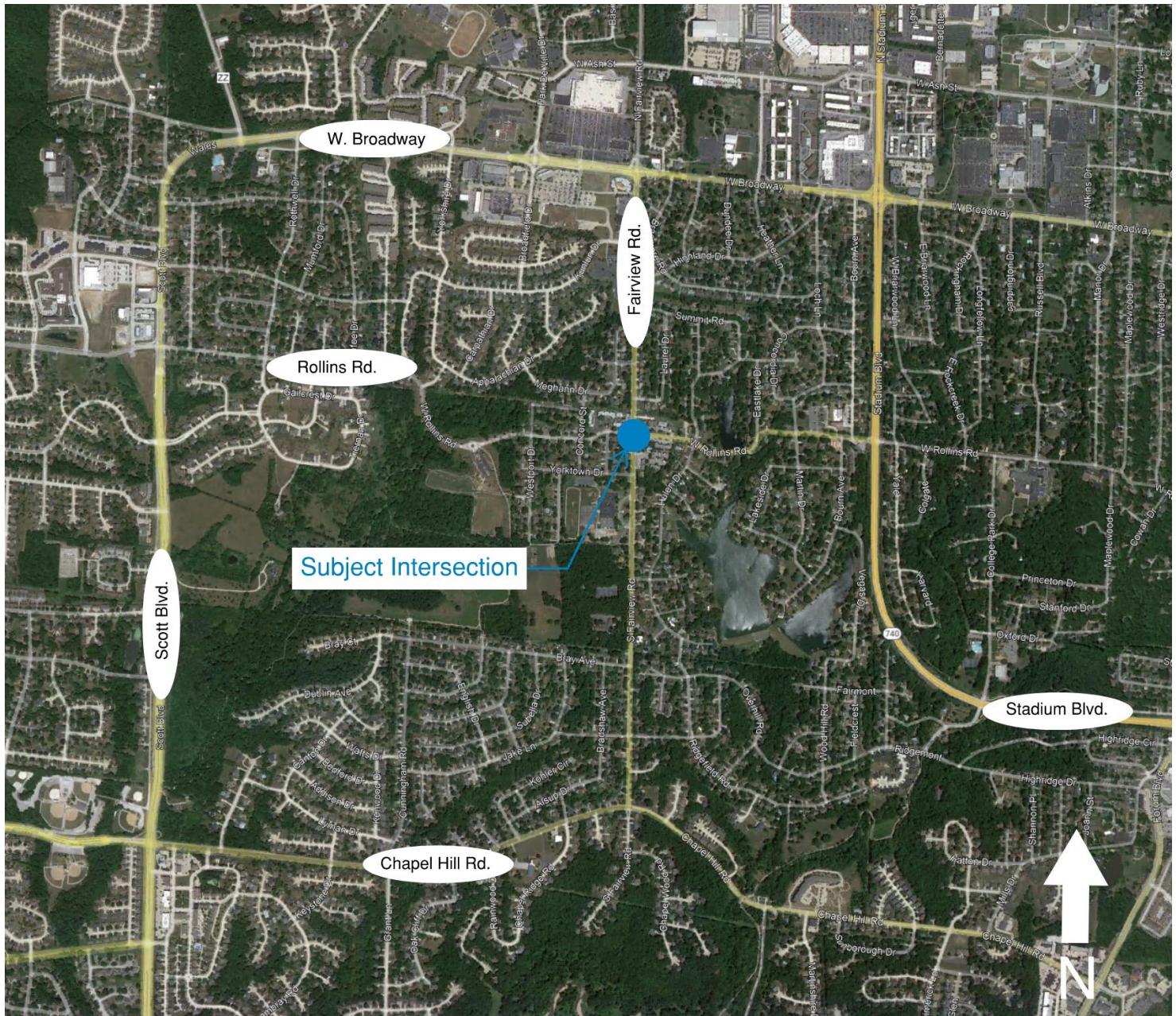
We recommend that when safety or capacity issues begin to be a significant problem, a modern roundabout should be constructed with a larger circulatory roadway and better approach and exit geometry. This will likely be a significant investment due to the necessary property acquisition and pavement reconstruction.

If the modern roundabout is not feasible then minor reconstruction of the islands as shown conceptually in Appendix E could help reduce driver confusion and encourage speed compliance.



APPENDIX A: SITE LOCATION MAP





Site Location Map

Fairview Rd. and Rollins Rd.



APPENDIX B: TRAFFIC VOLUME DISPLAYS



Turning Movement Counts

Fairview and Rollins

Columbia, MO

File Name: Fairview and Rollins-4-5-22

Site Code:

Location:

All Vehicles

Study Date: 04/05/2022

| Rollins Road | | | | |
|--------------|---|---|---|--|
| | Right | Thru | Left | U-Turn |
| 33 | | | | |
| |  |  |  |  |
| | | | | |

| Fairview Road | | | | |
|---------------|---|---|---|---|
| 24 | 218 | 54 | 0 | |
| Right | Thru | Left | U-Turn | |
| |  |  |  |  |

AM Peak Hour Statistics
AM Peak Hour Begins: 07:45
AM Peak Hour Volume: 1051
AM Peak Hour Factor: 0.831

| Fairview Road | | | | |
|---------------|---|---|---|---|
| U-Turn | Left | Thru | Right | |
| 14 | 13 | 369 | 76 | |
| |  |  |  |  |

| Rollins Road | | | | |
|--------------|---|---|---|---|
| 44 | 34 | 50 | 0 | |
| Right | Thru | Left | U-Turn | |
| |  |  |  |  |

Turning Movement Counts

Fairview and Rollins

Columbia, MO

File Name: Fairview and Rollins-4-5-22

Site Code:

Study Date: 04/05/2022

Location:

All Vehicles

| Rollins Road | | | |
|--------------|------|------|--------|
| Right | Thru | Left | U-Turn |
| 18 | 40 | 18 | 0 |
| Right | Thru | Left | U-Turn |

| Fairview Road | | | |
|---|--|---|---|
| 33 | 422 | 44 | 0 |
| Right | Thru | Left | U-Turn |
|  |  |  |  |

PM Peak Hour Statistics
PM Peak Hour Begins: 16:30
PM Peak Hour Volume: 1175
PM Peak Hour Factor: 0.915

| Rollins Road | | | |
|---|---|---|---|
| 60 | 83 | 80 | 1 |
| Right | Thru | Left | U-Turn |
|  |  |  |  |

| Fairview Road | | | |
|---------------|------|------|-------|
| U-Turn | Left | Thru | Right |
| 0 | 19 | 311 | 46 |
| U-Turn | Left | Thru | Right |

Turning Movement Counts

Fairview and Rollins
Columbia, MO

File Name:

Site Code:

Location:

Study Date:

All Vehicles

| Rollins Road | | | |
|--------------|------|------|--------|
| Right | Thru | Left | U-Turn |
| 44 | 113 | 51 | 1 |
| | | | |

| Fairview Road | | | |
|---|--|---|---|
| 32 | 294 | 73 | 0 |
| Right | Thru | Left | U-Turn |
|  |  |  |  |

Projected 2042
AM Peak Hour

| Fairview Road | | | |
|---------------|------|------|-------|
| U-Turn | Left | Thru | Right |
| 19 | 18 | 497 | 102 |

| Rollins Road | | | |
|---|---|---|---|
| 59 | 46 | 67 | 1 |
| Right | Thru | Left | U-Turn |
|  |  |  |  |

Turning Movement Counts

Fairview and Rollins
Columbia, MO

File Name:

Site Code:

Location:

Study Date:

All Vehicles

| Rollins Road | | | |
|---|---|---|---|
| Right | Thru | Left | U-Turn |
| 24 | 54 | 24 | 1 |
|  |  |  |  |

| Fairview Road | | | |
|---|---|---|---|
| 44 | 568 | 59 | 0 |
| Right | Thru | Left | U-Turn |
|  |  |  |  |

Projected 2042
PM Peak Hour

| Fairview Road | | | |
|---|---|---|---|
| U-Turn | Left | Thru | Right |
| 1 | 26 | 419 | 62 |
|  |  |  |  |

| Rollins Road | | | |
|---|---|---|---|
| 81 | 112 | 108 | 1 |
| Right | Thru | Left | U-Turn |
|  |  |  |  |

APPENDIX C: SYNCHRO ANALYSIS



Intersection

Intersection Delay, s/veh 9.3

Intersection LOS A

| Approach | EB | WB | NB | SB |
|-----------------------------|-------|-------|-------|-------|
| Entry Lanes | 1 | 1 | 1 | 1 |
| Conflicting Circle Lanes | 1 | 1 | 1 | 1 |
| Adj Approach Flow, veh/h | 169 | 140 | 513 | 323 |
| Demand Flow Rate, veh/h | 173 | 143 | 523 | 330 |
| Vehicles Circulating, veh/h | 374 | 482 | 198 | 124 |
| Vehicles Exiting, veh/h | 80 | 239 | 349 | 501 |
| Follow-Up Headway, s | 3.186 | 3.186 | 3.186 | 3.186 |
| Ped Vol Crossing Leg, #/h | 0 | 0 | 0 | 0 |
| Ped Cap Adj | 1.000 | 1.000 | 1.000 | 1.000 |
| Approach Delay, s/veh | 7.2 | 7.6 | 11.8 | 7.1 |
| Approach LOS | A | A | B | A |

| Lane | Left | Left | Left | Left |
|-----------------------|-------|-------|-------|-------|
| Designated Moves | LTR | LTR | LTR | LTR |
| Assumed Moves | LTR | LTR | LTR | LTR |
| RT Channelized | | | | |
| Lane Util | 1.000 | 1.000 | 1.000 | 1.000 |
| Critical Headway, s | 5.193 | 5.193 | 5.193 | 5.193 |
| Entry Flow, veh/h | 173 | 143 | 523 | 330 |
| Cap Entry Lane, veh/h | 777 | 698 | 927 | 998 |
| Entry HV Adj Factor | 0.978 | 0.981 | 0.980 | 0.980 |
| Flow Entry, veh/h | 169 | 140 | 513 | 323 |
| Cap Entry, veh/h | 760 | 684 | 909 | 978 |
| V/C Ratio | 0.223 | 0.205 | 0.564 | 0.331 |
| Control Delay, s/veh | 7.2 | 7.6 | 11.8 | 7.1 |
| LOS | A | A | B | A |
| 95th %tile Queue, veh | 1 | 1 | 4 | 1 |

Queuing and Blocking Report

Baseline

04/05/2023

Intersection: 3: Fairview Road & Rollins Road

| Movement | EB | WB | NB | SB |
|-----------------------|------|------|------|------|
| Directions Served | ULTR | ULTR | ULTR | ULTR |
| Maximum Queue (ft) | 53 | 50 | 49 | 78 |
| Average Queue (ft) | 17 | 22 | 27 | 28 |
| 95th Queue (ft) | 52 | 55 | 54 | 75 |
| Link Distance (ft) | 233 | 628 | 402 | 340 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | | | |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

Network Summary

Network wide Queuing Penalty: 0

Intersection

Intersection Delay, s/veh 10.3

Intersection LOS B

| Approach | EB | WB | NB | SB |
|-----------------------------|-------|-------|-------|-------|
| Entry Lanes | 1 | 1 | 1 | 1 |
| Conflicting Circle Lanes | 1 | 1 | 1 | 1 |
| Adj Approach Flow, veh/h | 84 | 243 | 410 | 544 |
| Demand Flow Rate, veh/h | 85 | 248 | 418 | 555 |
| Vehicles Circulating, veh/h | 609 | 389 | 116 | 205 |
| Vehicles Exiting, veh/h | 151 | 145 | 578 | 432 |
| Follow-Up Headway, s | 3.186 | 3.186 | 3.186 | 3.186 |
| Ped Vol Crossing Leg, #/h | 0 | 0 | 0 | 0 |
| Ped Cap Adj | 1.000 | 1.000 | 1.000 | 1.000 |
| Approach Delay, s/veh | 7.6 | 8.7 | 8.3 | 12.9 |
| Approach LOS | A | A | A | B |

| Lane | Left | Left | Left | Left |
|-----------------------|-------|-------|-------|-------|
| Designated Moves | LTR | LTR | LTR | LTR |
| Assumed Moves | LTR | LTR | LTR | LTR |
| RT Channelized | | | | |
| Lane Util | 1.000 | 1.000 | 1.000 | 1.000 |
| Critical Headway, s | 5.193 | 5.193 | 5.193 | 5.193 |
| Entry Flow, veh/h | 85 | 248 | 418 | 555 |
| Cap Entry Lane, veh/h | 615 | 766 | 1006 | 921 |
| Entry HV Adj Factor | 0.990 | 0.981 | 0.981 | 0.980 |
| Flow Entry, veh/h | 84 | 243 | 410 | 544 |
| Cap Entry, veh/h | 608 | 751 | 987 | 902 |
| V/C Ratio | 0.138 | 0.324 | 0.415 | 0.603 |
| Control Delay, s/veh | 7.6 | 8.7 | 8.3 | 12.9 |
| LOS | A | A | A | B |
| 95th %tile Queue, veh | 0 | 1 | 2 | 4 |

Intersection: 3: Fairview Road & Rollins Road

| Movement | EB | WB | NB | SB |
|-----------------------|------|------|------|------|
| Directions Served | ULTR | ULTR | ULTR | ULTR |
| Maximum Queue (ft) | 100 | 54 | 50 | 180 |
| Average Queue (ft) | 26 | 33 | 16 | 88 |
| 95th Queue (ft) | 90 | 64 | 50 | 173 |
| Link Distance (ft) | 233 | 628 | 402 | 340 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | | | |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

Network Summary

Network wide Queuing Penalty: 0

Intersection

Intersection Delay, s/veh 16.1

Intersection LOS C

| Approach | EB | WB | NB | SB |
|-----------------------------|-------|-------|-------|-------|
| Entry Lanes | 1 | 1 | 1 | 1 |
| Conflicting Circle Lanes | 1 | 1 | 1 | 1 |
| Adj Approach Flow, veh/h | 227 | 188 | 692 | 435 |
| Demand Flow Rate, veh/h | 231 | 191 | 705 | 444 |
| Vehicles Circulating, veh/h | 504 | 650 | 265 | 168 |
| Vehicles Exiting, veh/h | 108 | 320 | 470 | 673 |
| Follow-Up Headway, s | 3.186 | 3.186 | 3.186 | 3.186 |
| Ped Vol Crossing Leg, #/h | 0 | 0 | 0 | 0 |
| Ped Cap Adj | 1.000 | 1.000 | 1.000 | 1.000 |
| Approach Delay, s/veh | 9.8 | 10.8 | 23.8 | 9.5 |
| Approach LOS | A | B | C | A |

| Lane | Left | Left | Left | Left |
|-----------------------|-------|-------|-------|-------|
| Designated Moves | LTR | LTR | LTR | LTR |
| Assumed Moves | LTR | LTR | LTR | LTR |
| RT Channelized | | | | |
| Lane Util | 1.000 | 1.000 | 1.000 | 1.000 |
| Critical Headway, s | 5.193 | 5.193 | 5.193 | 5.193 |
| Entry Flow, veh/h | 231 | 191 | 705 | 444 |
| Cap Entry Lane, veh/h | 683 | 590 | 867 | 955 |
| Entry HV Adj Factor | 0.981 | 0.984 | 0.981 | 0.979 |
| Flow Entry, veh/h | 227 | 188 | 692 | 435 |
| Cap Entry, veh/h | 669 | 581 | 851 | 935 |
| V/C Ratio | 0.338 | 0.324 | 0.813 | 0.465 |
| Control Delay, s/veh | 9.8 | 10.8 | 23.8 | 9.5 |
| LOS | A | B | C | A |
| 95th %tile Queue, veh | 1 | 1 | 9 | 3 |

Intersection: 3: Fairview Road & Rollins Road

| Movement | EB | WB | NB | SB |
|-----------------------|------|------|------|------|
| Directions Served | ULTR | ULTR | ULTR | ULTR |
| Maximum Queue (ft) | 138 | 31 | 98 | 76 |
| Average Queue (ft) | 69 | 24 | 57 | 49 |
| 95th Queue (ft) | 133 | 44 | 111 | 77 |
| Link Distance (ft) | 233 | 628 | 402 | 340 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | | | |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

Network Summary

Network wide Queuing Penalty: 0

Intersection

Intersection Delay, s/veh 19.5

Intersection LOS C

| Approach | EB | WB | NB | SB |
|-----------------------------|-------|-------|-------|-------|
| Entry Lanes | 1 | 1 | 1 | 1 |
| Conflicting Circle Lanes | 1 | 1 | 1 | 1 |
| Adj Approach Flow, veh/h | 112 | 328 | 551 | 730 |
| Demand Flow Rate, veh/h | 115 | 334 | 562 | 744 |
| Vehicles Circulating, veh/h | 816 | 523 | 155 | 275 |
| Vehicles Exiting, veh/h | 203 | 194 | 776 | 582 |
| Follow-Up Headway, s | 3.186 | 3.186 | 3.186 | 3.186 |
| Ped Vol Crossing Leg, #/h | 0 | 0 | 0 | 0 |
| Ped Cap Adj | 1.000 | 1.000 | 1.000 | 1.000 |
| Approach Delay, s/veh | 10.8 | 13.3 | 11.8 | 29.3 |
| Approach LOS | B | B | B | D |

| Lane | Left | Left | Left | Left |
|-----------------------|-------|-------|-------|-------|
| Designated Moves | LTR | LTR | LTR | LTR |
| Assumed Moves | LTR | LTR | LTR | LTR |
| RT Channelized | | | | |
| Lane Util | 1.000 | 1.000 | 1.000 | 1.000 |
| Critical Headway, s | 5.193 | 5.193 | 5.193 | 5.193 |
| Entry Flow, veh/h | 115 | 334 | 562 | 744 |
| Cap Entry Lane, veh/h | 500 | 670 | 968 | 858 |
| Entry HV Adj Factor | 0.972 | 0.981 | 0.980 | 0.981 |
| Flow Entry, veh/h | 112 | 328 | 551 | 730 |
| Cap Entry, veh/h | 486 | 657 | 949 | 842 |
| V/C Ratio | 0.230 | 0.499 | 0.581 | 0.867 |
| Control Delay, s/veh | 10.8 | 13.3 | 11.8 | 29.3 |
| LOS | B | B | B | D |
| 95th %tile Queue, veh | 1 | 3 | 4 | 11 |

Intersection: 3: Fairview Road & Rollins Road

| Movement | EB | WB | NB | SB |
|-----------------------|------|------|------|------|
| Directions Served | ULTR | ULTR | ULTR | ULTR |
| Maximum Queue (ft) | 53 | 97 | 55 | 301 |
| Average Queue (ft) | 29 | 66 | 30 | 153 |
| 95th Queue (ft) | 57 | 102 | 59 | 297 |
| Link Distance (ft) | 233 | 628 | 402 | 340 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | | | |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

Network Summary

Network wide Queuing Penalty: 0

Intersection

Intersection Delay, s/veh 18.4

Intersection LOS C

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 38 | 84 | 33 | 50 | 34 | 44 | 27 | 369 | 76 | 54 | 218 | 24 |
| Future Vol, veh/h | 38 | 84 | 33 | 50 | 34 | 44 | 27 | 369 | 76 | 54 | 218 | 24 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 41 | 91 | 36 | 54 | 37 | 48 | 29 | 401 | 83 | 59 | 237 | 26 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| Approach | | | | | | | | | | | | |
| Opposing Approach | WB | | WB | | | NB | | | SB | | | |
| Opposing Lanes | 1 | | | 1 | | | 1 | | | 1 | | |
| Conflicting Approach Left | SB | | | NB | | | EB | | | WB | | |
| Conflicting Lanes Left | 1 | | | | 1 | | | 1 | | | 1 | |
| Conflicting Approach Right | NB | | | SB | | | WB | | | EB | | |
| Conflicting Lanes Right | 1 | | | | 1 | | | 1 | | | 1 | |
| HCM Control Delay | 12.4 | | | 11.8 | | | 24.2 | | | 15.1 | | |
| HCM LOS | B | | B | | | C | | | C | | | |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, % | 6% | 25% | 39% | 18% |
| Vol Thru, % | 78% | 54% | 27% | 74% |
| Vol Right, % | 16% | 21% | 34% | 8% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 472 | 155 | 128 | 296 |
| LT Vol | 27 | 38 | 50 | 54 |
| Through Vol | 369 | 84 | 34 | 218 |
| RT Vol | 76 | 33 | 44 | 24 |
| Lane Flow Rate | 513 | 168 | 139 | 322 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.767 | 0.306 | 0.254 | 0.523 |
| Departure Headway (Hd) | 5.494 | 6.533 | 6.573 | 5.849 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 662 | 551 | 548 | 621 |
| Service Time | 3.494 | 4.558 | 4.6 | 3.849 |
| HCM Lane V/C Ratio | 0.775 | 0.305 | 0.254 | 0.519 |
| HCM Control Delay | 24.2 | 12.4 | 11.8 | 15.1 |
| HCM Lane LOS | C | B | B | C |
| HCM 95th-tile Q | 7.2 | 1.3 | 1 | 3 |

Queuing and Blocking Report

Baseline

04/03/2023

Intersection: 3: Fairview Road & Rollins Road

| Movement | EB | WB | NB | SB |
|-----------------------|-----|-----|-----|-----|
| Directions Served | LTR | LTR | LTR | LTR |
| Maximum Queue (ft) | 95 | 49 | 121 | 149 |
| Average Queue (ft) | 49 | 36 | 93 | 76 |
| 95th Queue (ft) | 95 | 53 | 123 | 142 |
| Link Distance (ft) | 256 | 652 | 426 | 363 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | | | |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

Network Summary

Network wide Queuing Penalty: 0

Intersection

Intersection Delay, s/veh 26.5

Intersection LOS D

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 18 | 40 | 18 | 81 | 83 | 60 | 19 | 311 | 46 | 44 | 422 | 33 |
| Future Vol, veh/h | 18 | 40 | 18 | 81 | 83 | 60 | 19 | 311 | 46 | 44 | 422 | 33 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 20 | 43 | 20 | 88 | 90 | 65 | 21 | 338 | 50 | 48 | 459 | 36 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| Approach | | | | | | | | | | | | |
| Opposing Approach | WB | | | WB | | | NB | | | SB | | |
| Opposing Lanes | 1 | | | 1 | | | 1 | | | 1 | | |
| Conflicting Approach Left | SB | | | NB | | | EB | | | WB | | |
| Conflicting Lanes Left | 1 | | | 1 | | | 1 | | | 1 | | |
| Conflicting Approach Right | NB | | | SB | | | WB | | | EB | | |
| Conflicting Lanes Right | 1 | | | 1 | | | 1 | | | 1 | | |
| HCM Control Delay | 12 | | | 15.5 | | | 21.3 | | | 37.5 | | |
| HCM LOS | B | | | C | | | C | | | E | | |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, % | 5% | 24% | 36% | 9% |
| Vol Thru, % | 83% | 53% | 37% | 85% |
| Vol Right, % | 12% | 24% | 27% | 7% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 376 | 76 | 224 | 499 |
| LT Vol | 19 | 18 | 81 | 44 |
| Through Vol | 311 | 40 | 83 | 422 |
| RT Vol | 46 | 18 | 60 | 33 |
| Lane Flow Rate | 409 | 83 | 243 | 542 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.685 | 0.169 | 0.459 | 0.882 |
| Departure Headway (Hd) | 6.038 | 7.374 | 6.794 | 5.853 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 597 | 484 | 528 | 618 |
| Service Time | 4.089 | 5.453 | 4.852 | 3.899 |
| HCM Lane V/C Ratio | 0.685 | 0.171 | 0.46 | 0.877 |
| HCM Control Delay | 21.3 | 12 | 15.5 | 37.5 |
| HCM Lane LOS | C | B | C | E |
| HCM 95th-tile Q | 5.3 | 0.6 | 2.4 | 10.4 |

Intersection: 3: Fairview Road & Rollins Road

| Movement | EB | WB | NB | SB |
|-----------------------|-----|-----|-----|-----|
| Directions Served | LTR | LTR | LTR | LTR |
| Maximum Queue (ft) | 54 | 78 | 99 | 164 |
| Average Queue (ft) | 41 | 52 | 66 | 92 |
| 95th Queue (ft) | 59 | 87 | 95 | 154 |
| Link Distance (ft) | 256 | 652 | 426 | 363 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | | | |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

Network Summary

Network wide Queuing Penalty: 0

Intersection

Intersection Delay, s/veh 82.9

Intersection LOS F

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|----------------------------|------|------|------|------|------|------|-------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 51 | 113 | 44 | 67 | 46 | 59 | 37 | 497 | 102 | 73 | 294 | 32 |
| Future Vol, veh/h | 51 | 113 | 44 | 67 | 46 | 59 | 37 | 497 | 102 | 73 | 294 | 32 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 55 | 123 | 48 | 73 | 50 | 64 | 40 | 540 | 111 | 79 | 320 | 35 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| Approach | | | | | | | | | | | | |
| Opposing Approach | WB | | | WB | | | NB | | | SB | | |
| Opposing Lanes | 1 | | | 1 | | | 1 | | | 1 | | |
| Conflicting Approach Left | SB | | | NB | | | EB | | | WB | | |
| Conflicting Lanes Left | 1 | | | 1 | | | 1 | | | 1 | | |
| Conflicting Approach Right | NB | | | SB | | | WB | | | EB | | |
| Conflicting Lanes Right | 1 | | | 1 | | | 1 | | | 1 | | |
| HCM Control Delay | 18.7 | | | 17.1 | | | 151.5 | | | 35.3 | | |
| HCM LOS | C | | | C | | | F | | | E | | |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, % | 6% | 25% | 39% | 18% |
| Vol Thru, % | 78% | 54% | 27% | 74% |
| Vol Right, % | 16% | 21% | 34% | 8% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 636 | 208 | 172 | 399 |
| LT Vol | 37 | 51 | 67 | 73 |
| Through Vol | 497 | 113 | 46 | 294 |
| RT Vol | 102 | 44 | 59 | 32 |
| Lane Flow Rate | 691 | 226 | 187 | 434 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 1.257 | 0.48 | 0.404 | 0.817 |
| Departure Headway (Hd) | 6.545 | 8.31 | 8.464 | 7.287 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 553 | 436 | 428 | 499 |
| Service Time | 4.594 | 6.31 | 6.464 | 5.287 |
| HCM Lane V/C Ratio | 1.25 | 0.518 | 0.437 | 0.87 |
| HCM Control Delay | 151.5 | 18.7 | 17.1 | 35.3 |
| HCM Lane LOS | F | C | C | E |
| HCM 95th-tile Q | 27.1 | 2.5 | 1.9 | 7.9 |

Intersection: 3: Fairview Road & Rollins Road

| Movement | EB | WB | NB | SB |
|-----------------------|-----|-----|-----|-----|
| Directions Served | LTR | LTR | LTR | LTR |
| Maximum Queue (ft) | 137 | 51 | 308 | 183 |
| Average Queue (ft) | 83 | 42 | 203 | 105 |
| 95th Queue (ft) | 134 | 59 | 310 | 177 |
| Link Distance (ft) | 256 | 652 | 426 | 363 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | | | |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

Network Summary

Network wide Queuing Penalty: 0

Intersection

Intersection Delay, s/veh 124.3

Intersection LOS F

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|----------------------------|------|------|------|------|------|------|------|------|------|-------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 24 | 54 | 24 | 108 | 112 | 81 | 26 | 419 | 62 | 59 | 568 | 44 |
| Future Vol, veh/h | 24 | 54 | 24 | 108 | 112 | 81 | 26 | 419 | 62 | 59 | 568 | 44 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 26 | 59 | 26 | 117 | 122 | 88 | 28 | 455 | 67 | 64 | 617 | 48 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| Approach | | | | | | | | | | | | |
| Opposing Approach | WB | | | EB | | | SB | | | NB | | SB |
| Opposing Lanes | 1 | | | 1 | | | 1 | | | 1 | | |
| Conflicting Approach Left | SB | | | NB | | | EB | | | WB | | |
| Conflicting Lanes Left | 1 | | | 1 | | | 1 | | | 1 | | |
| Conflicting Approach Right | NB | | | SB | | | WB | | | EB | | |
| Conflicting Lanes Right | 1 | | | 1 | | | 1 | | | 1 | | |
| HCM Control Delay | 16.5 | | | 28.3 | | | 85.6 | | | 212.9 | | |
| HCM LOS | C | | | D | | | F | | | F | | |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, % | 5% | 24% | 36% | 9% |
| Vol Thru, % | 83% | 53% | 37% | 85% |
| Vol Right, % | 12% | 24% | 27% | 7% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 507 | 102 | 301 | 671 |
| LT Vol | 26 | 24 | 108 | 59 |
| Through Vol | 419 | 54 | 112 | 568 |
| RT Vol | 62 | 24 | 81 | 44 |
| Lane Flow Rate | 551 | 111 | 327 | 729 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 1.059 | 0.269 | 0.687 | 1.401 |
| Departure Headway (Hd) | 7.615 | 9.918 | 8.534 | 7.17 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 479 | 365 | 425 | 511 |
| Service Time | 5.615 | 7.918 | 6.534 | 5.17 |
| HCM Lane V/C Ratio | 1.15 | 0.304 | 0.769 | 1.427 |
| HCM Control Delay | 85.6 | 16.5 | 28.3 | 212.9 |
| HCM Lane LOS | F | C | D | F |
| HCM 95th-tile Q | 15.6 | 1.1 | 5 | 33.1 |

Intersection: 3: Fairview Road & Rollins Road

| Movement | EB | WB | NB | SB |
|-----------------------|-----|-----|-----|-----|
| Directions Served | LTR | LTR | LTR | LTR |
| Maximum Queue (ft) | 72 | 97 | 140 | 319 |
| Average Queue (ft) | 46 | 61 | 91 | 208 |
| 95th Queue (ft) | 74 | 91 | 139 | 327 |
| Link Distance (ft) | 256 | 652 | 426 | 363 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | | | |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

Network Summary

Network wide Queuing Penalty: 0

Intersection

Int Delay, s/veh 10.8

Movement EBL EBT EBR WBL WBT WBR NBL NBT NBR SBL SBT SBR

Lane Configurations

| | | | | | | | | | | | | |
|--------------------|----|----|----|----|----|----|----|-----|----|----|-----|----|
| Traffic Vol, veh/h | 38 | 84 | 33 | 50 | 34 | 44 | 27 | 369 | 76 | 54 | 218 | 24 |
|--------------------|----|----|----|----|----|----|----|-----|----|----|-----|----|

| | | | | | | | | | | | | |
|-------------------|----|----|----|----|----|----|----|-----|----|----|-----|----|
| Future Vol, veh/h | 38 | 84 | 33 | 50 | 34 | 44 | 27 | 369 | 76 | 54 | 218 | 24 |
|-------------------|----|----|----|----|----|----|----|-----|----|----|-----|----|

| | | | | | | | | | | | | |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|

| | | | | | | | | | | | | |
|----------------|---|---|------|---|---|------|---|---|------|---|---|------|
| RT Channelized | - | - | None |
|----------------|---|---|------|---|---|------|---|---|------|---|---|------|

| | | | | | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | |
|--------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Veh in Median Storage, # | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - | - |
|--------------------------|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | |
|----------|---|---|---|---|---|---|---|---|---|---|---|---|
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
|----------|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | |
|------------------|----|----|----|----|----|----|----|----|----|----|----|----|
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
|------------------|----|----|----|----|----|----|----|----|----|----|----|----|

| | | | | | | | | | | | | |
|-------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
|-------------------|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | |
|-----------|----|----|----|----|----|----|----|-----|----|----|-----|----|
| Mvmt Flow | 41 | 91 | 36 | 54 | 37 | 48 | 29 | 401 | 83 | 59 | 237 | 26 |
|-----------|----|----|----|----|----|----|----|-----|----|----|-----|----|

Major/Minor Minor2 Minor1 Major1 Major2

| | | | | | | | | | | | | |
|----------------------|-----|-----|-----|-----|-----|-----|-----|---|---|-----|---|---|
| Conflicting Flow All | 911 | 910 | 250 | 933 | 882 | 443 | 263 | 0 | 0 | 484 | 0 | 0 |
|----------------------|-----|-----|-----|-----|-----|-----|-----|---|---|-----|---|---|

| | | | | | | | | | | | | |
|---------|-----|-----|---|-----|-----|---|---|---|---|---|---|---|
| Stage 1 | 368 | 368 | - | 501 | 501 | - | - | - | - | - | - | - |
|---------|-----|-----|---|-----|-----|---|---|---|---|---|---|---|

| | | | | | | | | | | | | |
|---------|-----|-----|---|-----|-----|---|---|---|---|---|---|---|
| Stage 2 | 543 | 542 | - | 432 | 381 | - | - | - | - | - | - | - |
|---------|-----|-----|---|-----|-----|---|---|---|---|---|---|---|

| | | | | | | | | | | | | |
|---------------|------|------|------|------|------|------|------|---|---|------|---|---|
| Critical Hdwy | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 | 4.12 | - | - | 4.12 | - | - |
|---------------|------|------|------|------|------|------|------|---|---|------|---|---|

| | | | | | | | | | | | | |
|---------------------|------|------|---|------|------|---|---|---|---|---|---|---|
| Critical Hdwy Stg 1 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
|---------------------|------|------|---|------|------|---|---|---|---|---|---|---|

| | | | | | | | | | | | | |
|---------------------|------|------|---|------|------|---|---|---|---|---|---|---|
| Critical Hdwy Stg 2 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
|---------------------|------|------|---|------|------|---|---|---|---|---|---|---|

| | | | | | | | | | | | | |
|----------------|-------|-------|-------|-------|-------|-------|-------|---|---|-------|---|---|
| Follow-up Hdwy | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
|----------------|-------|-------|-------|-------|-------|-------|-------|---|---|-------|---|---|

| | | | | | | | | | | | | |
|--------------------|-----|-----|-----|-----|-----|-----|------|---|---|------|---|---|
| Pot Cap-1 Maneuver | 255 | 275 | 789 | 246 | 285 | 615 | 1301 | - | - | 1079 | - | - |
|--------------------|-----|-----|-----|-----|-----|-----|------|---|---|------|---|---|

| | | | | | | | | | | | | |
|---------|-----|-----|---|-----|-----|---|---|---|---|---|---|---|
| Stage 1 | 652 | 621 | - | 552 | 543 | - | - | - | - | - | - | - |
|---------|-----|-----|---|-----|-----|---|---|---|---|---|---|---|

| | | | | | | | | | | | | |
|---------|-----|-----|---|-----|-----|---|---|---|---|---|---|---|
| Stage 2 | 524 | 520 | - | 602 | 613 | - | - | - | - | - | - | - |
|---------|-----|-----|---|-----|-----|---|---|---|---|---|---|---|

| | | | | | | | | | | | | |
|--------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
|--------------------|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | |
|--------------------|----|-----|-----|-----|-----|-----|------|---|---|------|---|---|
| Mov Cap-1 Maneuver | 95 | 249 | 789 | 157 | 258 | 615 | 1301 | - | - | 1079 | - | - |
|--------------------|----|-----|-----|-----|-----|-----|------|---|---|------|---|---|

| | | | | | | | | | | | | |
|--------------------|----|-----|---|-----|-----|---|---|---|---|---|---|---|
| Mov Cap-2 Maneuver | 95 | 249 | - | 157 | 258 | - | - | - | - | - | - | - |
|--------------------|----|-----|---|-----|-----|---|---|---|---|---|---|---|

| | | | | | | | | | | | | |
|---------|-----|-----|---|-----|-----|---|---|---|---|---|---|---|
| Stage 1 | 632 | 581 | - | 535 | 526 | - | - | - | - | - | - | - |
|---------|-----|-----|---|-----|-----|---|---|---|---|---|---|---|

| | | | | | | | | | | | | |
|---------|-----|-----|---|-----|-----|---|---|---|---|---|---|---|
| Stage 2 | 435 | 504 | - | 453 | 574 | - | - | - | - | - | - | - |
|---------|-----|-----|---|-----|-----|---|---|---|---|---|---|---|

Approach EB WB NB SB

| | | | | |
|-------------------|------|------|-----|-----|
| HCM Control Delay | 38.1 | 37.4 | 0.4 | 1.6 |
|-------------------|------|------|-----|-----|

| | | | | |
|---------|---|---|---|---|
| HCM LOS | E | E | - | - |
|---------|---|---|---|---|

Minor Lane/Major Mvmt NBL NBT NBR EBL NBL WBL NBL SBL SBT SBR

| | | | | | | | | | | | |
|------------------|------|---|---|-----|-----|------|---|---|---|---|---|
| Capacity (veh/h) | 1301 | - | - | 270 | 245 | 1079 | - | - | - | - | - |
|------------------|------|---|---|-----|-----|------|---|---|---|---|---|

| | | | | | | | | | | | |
|--------------------|-------|---|---|-------|-------|-------|---|---|---|---|---|
| HCM Lane V/C Ratio | 0.023 | - | - | 0.624 | 0.568 | 0.054 | - | - | - | - | - |
|--------------------|-------|---|---|-------|-------|-------|---|---|---|---|---|

| | | | | | | | | | | | |
|-----------------------|-----|---|---|------|------|-----|---|---|---|---|---|
| HCM Control Delay (s) | 7.8 | 0 | - | 38.1 | 37.4 | 8.5 | 0 | - | - | - | - |
|-----------------------|-----|---|---|------|------|-----|---|---|---|---|---|

| | | | | | | | | | | | |
|--------------|---|---|---|---|---|---|---|---|---|---|---|
| HCM Lane LOS | A | A | - | E | E | A | A | A | - | - | - |
|--------------|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | |
|-----------------------|-----|---|---|-----|-----|-----|---|---|---|---|---|
| HCM 95th %tile Q(veh) | 0.1 | - | - | 3.8 | 3.2 | 0.2 | - | - | - | - | - |
|-----------------------|-----|---|---|-----|-----|-----|---|---|---|---|---|

Queuing and Blocking Report

Baseline

04/05/2023

Intersection: 3: Fairview Road & Rollins Road

| Movement | EB | WB | NB | SB |
|-----------------------|-----|-----|-----|-----|
| Directions Served | LTR | LTR | LTR | LTR |
| Maximum Queue (ft) | 77 | 90 | 28 | 54 |
| Average Queue (ft) | 50 | 53 | 6 | 23 |
| 95th Queue (ft) | 84 | 86 | 24 | 56 |
| Link Distance (ft) | 256 | 652 | 426 | 363 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | | | |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

Network Summary

Network wide Queuing Penalty: 0

Intersection

Int Delay, s/veh 25.1

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 18 | 40 | 18 | 81 | 83 | 60 | 19 | 311 | 46 | 44 | 422 | 33 |
| Future Vol, veh/h | 18 | 40 | 18 | 81 | 83 | 60 | 19 | 311 | 46 | 44 | 422 | 33 |
| Conflicting Peds, #/hr | 3 | 0 | 3 | 2 | 0 | 2 | 6 | 0 | 6 | 2 | 0 | 2 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 20 | 43 | 20 | 88 | 90 | 65 | 21 | 338 | 50 | 48 | 459 | 36 |

| Major/Minor | Minor2 | Minor1 | | | | Major1 | | Major2 | | | | |
|----------------------|--------|--------|-------|-------|-------|--------|-------|--------|---|-------|---|---|
| Conflicting Flow All | 1065 | 1015 | 486 | 1019 | 1008 | 372 | 501 | 0 | 0 | 394 | 0 | 0 |
| Stage 1 | 579 | 579 | - | 411 | 411 | - | - | - | - | - | - | - |
| Stage 2 | 486 | 436 | - | 608 | 597 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 | 4.12 | - | - | 4.12 | - | - |
| Critical Hdwy Stg 1 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 200 | 238 | 581 | 215 | 240 | 674 | 1063 | - | - | 1165 | - | - |
| Stage 1 | 501 | 501 | - | 618 | 595 | - | - | - | - | - | - | - |
| Stage 2 | 563 | 580 | - | 483 | 491 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | 14 | 216 | 576 | 164 | 218 | 668 | 1057 | - | - | 1158 | - | - |
| Mov Cap-2 Maneuver | 14 | 216 | - | 164 | 218 | - | - | - | - | - | - | - |
| Stage 1 | 485 | 469 | - | 598 | 576 | - | - | - | - | - | - | - |
| Stage 2 | 416 | 561 | - | 398 | 460 | - | - | - | - | - | - | - |

| Approach | EB | WB | | | NB | SB | | |
|-----------------------|------|-----|-----|-------|--------|-------|-----|-----|
| HCM Control Delay, s | 34.4 | 118 | | | 0.4 | 0.7 | | |
| HCM LOS | D | F | | | | | | |
| | | | | | | | | |
| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLN1 | WBBLN1 | SBL | SBT | SBR |
| Capacity (veh/h) | 1057 | - | - | 203 | 232 | 1158 | - | - |
| HCM Lane V/C Ratio | 0.02 | - | - | 0.407 | 1.049 | 0.041 | - | - |
| HCM Control Delay (s) | 8.5 | 0 | - | 34.4 | 118 | 8.2 | 0 | - |
| HCM Lane LOS | A | A | - | D | F | A | A | - |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 1.8 | 10.3 | 0.1 | - | - |

Intersection: 3: Fairview Road & Rollins Road

| Movement | EB | WB |
|-----------------------|-----|-----|
| Directions Served | LTR | LTR |
| Maximum Queue (ft) | 54 | 116 |
| Average Queue (ft) | 32 | 75 |
| 95th Queue (ft) | 64 | 127 |
| Link Distance (ft) | 256 | 652 |
| Upstream Blk Time (%) | | |
| Queuing Penalty (veh) | | |
| Storage Bay Dist (ft) | | |
| Storage Blk Time (%) | | |
| Queuing Penalty (veh) | | |

Network Summary

Network wide Queuing Penalty: 0

Intersection

Int Delay, s/veh 132.3

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 52 | 113 | 44 | 68 | 46 | 59 | 37 | 497 | 102 | 73 | 294 | 32 |
| Future Vol, veh/h | 52 | 113 | 44 | 68 | 46 | 59 | 37 | 497 | 102 | 73 | 294 | 32 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 57 | 123 | 48 | 74 | 50 | 64 | 40 | 540 | 111 | 79 | 320 | 35 |

| Major/Minor | Minor2 | Minor1 | | | Major1 | | | Major2 | | | | |
|----------------------|--------|--------|-------|-------|--------|-------|-------|--------|---|-------|---|---|
| Conflicting Flow All | 1229 | 1227 | 338 | 1257 | 1189 | 596 | 355 | 0 | 0 | 651 | 0 | 0 |
| Stage 1 | 496 | 496 | - | 676 | 676 | - | - | - | - | - | - | - |
| Stage 2 | 733 | 731 | - | 581 | 513 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 | 4.12 | - | - | 4.12 | - | - |
| Critical Hdwy Stg 1 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 155 | 178 | 704 | 148 | 188 | 504 | 1204 | - | - | 935 | - | - |
| Stage 1 | 556 | 545 | - | 443 | 453 | - | - | - | - | - | - | - |
| Stage 2 | 412 | 427 | - | 499 | 536 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | 91 | 151 | 704 | ~ 40 | 159 | 504 | 1204 | - | - | 935 | - | - |
| Mov Cap-2 Maneuver | 91 | 151 | - | ~ 40 | 159 | - | - | - | - | - | - | - |
| Stage 1 | 527 | 487 | - | 420 | 429 | - | - | - | - | - | - | - |
| Stage 2 | 301 | 404 | - | 311 | 479 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB | | | | |
|-----------------------|----------|----------|---------|----------|-------|-------|-----|-----|
| HCM Control Delay | \$ 312.7 | \$ 700.4 | 0.5 | 1.7 | | | | |
| HCM LOS | F | F | | | | | | |
| | | | | | | | | |
| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLN1 | WBLN1 | SBL | SBT | SBR |
| Capacity (veh/h) | 1204 | - | - | 151 | 82 | 935 | - | - |
| HCM Lane V/C Ratio | 0.033 | - | - | 1.504 | 2.293 | 0.085 | - | - |
| HCM Control Delay (s) | 8.1 | 0 | \$ 312. | \$ 700.4 | 9.2 | 0 | - | - |
| HCM Lane LOS | A | A | - | F | F | A | A | - |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 15.1 | 17.3 | 0.3 | - | - |

Notes

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

Intersection: 3: Fairview Road & Rollins Road

| Movement | EB | WB | NB | SB |
|-----------------------|-----|-----|-----|-----|
| Directions Served | LTR | LTR | LTR | LTR |
| Maximum Queue (ft) | 217 | 51 | 53 | 71 |
| Average Queue (ft) | 118 | 50 | 17 | 31 |
| 95th Queue (ft) | 209 | 51 | 52 | 77 |
| Link Distance (ft) | 256 | 652 | 426 | 363 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | | | |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

Network Summary

Network wide Queuing Penalty: 0

Intersection

Int Delay, s/veh 240.1

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 25 | 54 | 24 | 109 | 112 | 81 | 27 | 419 | 62 | 59 | 568 | 44 |
| Future Vol, veh/h | 25 | 54 | 24 | 109 | 112 | 81 | 27 | 419 | 62 | 59 | 568 | 44 |
| Conflicting Peds, #/hr | 3 | 0 | 3 | 2 | 0 | 2 | 6 | 0 | 6 | 2 | 0 | 2 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 27 | 59 | 26 | 118 | 122 | 88 | 29 | 455 | 67 | 64 | 617 | 48 |

| Major/Minor | Minor2 | Minor1 | | | | Major1 | | Major2 | | | | |
|----------------------|--------|--------|-------|-------|-------|--------|-------|--------|---|-------|---|---|
| Conflicting Flow All | 1430 | 1361 | 650 | 1368 | 1352 | 498 | 671 | 0 | 0 | 528 | 0 | 0 |
| Stage 1 | 775 | 775 | - | 553 | 553 | - | - | - | - | - | - | - |
| Stage 2 | 655 | 586 | - | 815 | 799 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 | 4.12 | - | - | 4.12 | - | - |
| Critical Hdwy Stg 1 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 112 | 148 | 469 | 124 | 150 | 572 | 919 | - | - | 1039 | - | - |
| Stage 1 | 391 | 408 | - | 517 | 514 | - | - | - | - | - | - | - |
| Stage 2 | 455 | 497 | - | 371 | 398 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | 13 | 126 | 465 | ~66 | 128 | 567 | 914 | - | - | 1033 | - | - |
| Mov Cap-2 Maneuver | 13 | 126 | - | ~66 | 128 | - | - | - | - | - | - | - |
| Stage 1 | 371 | 366 | - | 491 | 488 | - | - | - | - | - | - | - |
| Stage 2 | 275 | 472 | - | 264 | 357 | - | - | - | - | - | - | - |

| Approach | EB | WB | | | NB | SB | | |
|-------------------|----------|----|----------|--|-----|----|-----|--|
| HCM Control Delay | \$ 927.3 | | \$ 940.2 | | 0.5 | | 0.8 | |
| HCM LOS | F | | F | | | | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBL | EBN | EBR | WBL | WBN | WBR | SBL | SBT | SBR |
|-----------------------|-------|-----|----------|----------|-------|-------|-----|-----|-----|-----|-----|-----|
| Capacity (veh/h) | 914 | - | - | 43 | 113 | 1033 | - | - | - | - | - | - |
| HCM Lane V/C Ratio | 0.032 | - | - | 2.604 | 2.905 | 0.062 | - | - | - | - | - | - |
| HCM Control Delay (s) | 9.1 | 0 | \$ 927.3 | \$ 940.2 | 8.7 | 0 | - | - | - | - | - | - |
| HCM Lane LOS | A | A | - | F | F | A | A | A | A | - | - | - |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 12.1 | 30.9 | 0.2 | - | - | - | - | - | - |

Notes

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

Intersection: 3: Fairview Road & Rollins Road

| Movement | EB | WB | NB | SB |
|-----------------------|-----|-----|-----|-----|
| Directions Served | LTR | LTR | LTR | LTR |
| Maximum Queue (ft) | 89 | 508 | 73 | 51 |
| Average Queue (ft) | 57 | 372 | 20 | 22 |
| 95th Queue (ft) | 91 | 586 | 67 | 54 |
| Link Distance (ft) | 256 | 652 | 426 | 363 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | | | |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

Network Summary

Network wide Queuing Penalty: 0

APPENDIX D: SPEED DATA



12 Hour Speed

| mph | Total | < 10 | 10 - < 12 | 12 - < 14 | 14 - < 16 | 16 - < 18 | 18 - < 20 | 20 - < 22 | 22 - < 24 | 24 - < 26 | 26 - < 28 | 28 - < 30 | 30 - < 32 | 32 - < 34 | 34 - < 36 | 36 - < 38 | 38 - < 40 | 40 - < 200 | W Rollins EB |
|-----------------|-------|------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|--------------|
| 12:00 AM | 8 | 1 | 0 | 1 | 1 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 12:15 AM | 5 | 1 | 0 | 1 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 12:30 AM | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 12:45 AM | 2 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1:00 AM | 3 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1:15 AM | 3 | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1:30 AM | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1:45 AM | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 2:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 2:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 2:30 AM | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 2:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 3:00 AM | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 3:15 AM | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 3:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 3:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 4:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 4:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 4:30 AM | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 4:45 AM | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 5:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 5:15 AM | 5 | 0 | 0 | 0 | 1 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 5:30 AM | 2 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 5:45 AM | 5 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | |
| 6:00 AM | 2 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 6:15 AM | 9 | 0 | 1 | 0 | 3 | 0 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 6:30 AM | 12 | 0 | 0 | 1 | 2 | 5 | 2 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 6:45 AM | 22 | 4 | 1 | 3 | 7 | 1 | 2 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 7:00 AM | 33 | 3 | 1 | 4 | 6 | 8 | 9 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 7:15 AM | 37 | 11 | 3 | 5 | 5 | 6 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 7:30 AM | 47 | 12 | 0 | 5 | 11 | 12 | 5 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 7:45 AM | 53 | 16 | 2 | 5 | 7 | 17 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 8:00 AM | 70 | 32 | 1 | 12 | 8 | 10 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 8:15 AM | 62 | 29 | 0 | 2 | 7 | 16 | 5 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 8:30 AM | 47 | 16 | 0 | 4 | 11 | 8 | 7 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 8:45 AM | 39 | 7 | 2 | 3 | 7 | 12 | 5 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 9:00 AM | 31 | 5 | 0 | 2 | 8 | 8 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 9:15 AM | 37 | 10 | 1 | 3 | 7 | 9 | 5 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 9:30 AM | 38 | 6 | 1 | 4 | 6 | 13 | 6 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 9:45 AM | 49 | 14 | 3 | 4 | 8 | 7 | 7 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 10:00 AM | 42 | 14 | 1 | 3 | 10 | 6 | 6 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 10:15 AM | 51 | 13 | 0 | 5 | 9 | 12 | 8 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 10:30 AM | 44 | 8 | 1 | 6 | 7 | 13 | 6 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 10:45 AM | 46 | 15 | 1 | 7 | 5 | 10 | 7 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 11:00 AM | 42 | 6 | 1 | 5 | 10 | 10 | 7 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 11:15 AM | 49 | 13 | 2 | 2 | 9 | 10 | 10 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 11:30 AM | 44 | 8 | 2 | 2 | 9 | 8 | 11 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 11:45 AM | 64 | 14 | 4 | 6 | 12 | 16 | 9 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Total | 1011 | 258 | 32 | 98 | 180 | 228 | 152 | 42 | 13 | 5 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | |
| % | | 25.5 | 3.2 | 9.7 | 17.8 | 22.6 | 15.0 | 4.2 | 1.3 | 0.5 | 0.2 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | |

Average (Mean) 13.0 mph
Minimum 1.0 mph
Maximum 35.7 mph

Pace Range 11.0 - 21.0 mph 709 vehicles (70.1%)

Percentile Speeds

| % | mph |
|----|------|
| 10 | 1.4 |
| 15 | 1.8 |
| 50 | 15.4 |
| 85 | 18.7 |
| 90 | 19.3 |

Speeds Exceeded

| mph | % | Count |
|-----|------|-------|
| 25 | 0.4% | 4 |
| 35 | 0.1% | 1 |
| 45 | 0.0% | 0 |
| 55 | 0.0% | 0 |
| 65 | 0.0% | 0 |
| 75 | 0.0% | 0 |

12 Hour Speed

| mph | Total | < 10 | 10 - < 12 | 12 - < 14 | 14 - < 16 | 16 - < 18 | 18 - < 20 | 20 - < 22 | 22 - < 24 | 24 - < 26 | 26 - < 28 | 28 - < 30 | 30 - < 32 | 32 - < 34 | 34 - < 36 | 36 - < 38 | 38 - < 40 | 40 - < 200 | W Rollins EB |
|-----------------|-------|------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|--------------|
| 12:00 PM | 57 | 16 | 1 | 2 | 14 | 13 | 8 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 12:15 PM | 57 | 14 | 2 | 2 | 12 | 13 | 12 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 12:30 PM | 58 | 16 | 2 | 8 | 12 | 16 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 12:45 PM | 45 | 8 | 1 | 4 | 8 | 15 | 7 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1:00 PM | 62 | 20 | 2 | 6 | 7 | 15 | 7 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1:15 PM | 66 | 15 | 2 | 3 | 10 | 17 | 17 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1:30 PM | 41 | 12 | 1 | 6 | 13 | 4 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1:45 PM | 61 | 16 | 5 | 10 | 15 | 11 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 2:00 PM | 45 | 13 | 2 | 7 | 9 | 6 | 4 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 2:15 PM | 61 | 14 | 0 | 4 | 15 | 14 | 8 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 2:30 PM | 55 | 7 | 0 | 3 | 9 | 20 | 13 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 2:45 PM | 72 | 19 | 2 | 6 | 12 | 14 | 16 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 3:00 PM | 72 | 21 | 1 | 3 | 25 | 13 | 6 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 3:15 PM | 69 | 26 | 0 | 4 | 12 | 18 | 6 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 3:30 PM | 67 | 25 | 0 | 3 | 7 | 14 | 14 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 3:45 PM | 68 | 29 | 0 | 0 | 14 | 11 | 10 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 4:00 PM | 66 | 23 | 2 | 4 | 9 | 17 | 6 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 4:15 PM | 68 | 23 | 2 | 5 | 10 | 12 | 10 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 4:30 PM | 58 | 16 | 0 | 1 | 12 | 16 | 10 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 4:45 PM | 86 | 41 | 1 | 2 | 11 | 18 | 8 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 5:00 PM | 82 | 35 | 1 | 1 | 8 | 19 | 10 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 5:15 PM | 87 | 31 | 0 | 2 | 14 | 25 | 12 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 5:30 PM | 88 | 39 | 1 | 4 | 15 | 12 | 10 | 4 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 5:45 PM | 73 | 19 | 1 | 5 | 11 | 15 | 17 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 6:00 PM | 59 | 22 | 1 | 3 | 8 | 18 | 6 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 6:15 PM | 66 | 18 | 0 | 3 | 11 | 17 | 12 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 6:30 PM | 46 | 13 | 0 | 4 | 11 | 10 | 6 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 6:45 PM | 50 | 9 | 1 | 3 | 11 | 7 | 14 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 7:00 PM | 55 | 15 | 1 | 3 | 12 | 16 | 7 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 7:15 PM | 47 | 8 | 1 | 3 | 8 | 13 | 10 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 7:30 PM | 56 | 16 | 0 | 1 | 9 | 19 | 8 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 7:45 PM | 53 | 15 | 2 | 6 | 9 | 7 | 9 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 8:00 PM | 46 | 8 | 1 | 5 | 8 | 11 | 9 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 8:15 PM | 50 | 13 | 2 | 5 | 16 | 4 | 6 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 8:30 PM | 31 | 7 | 0 | 4 | 4 | 12 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 8:45 PM | 31 | 2 | 0 | 6 | 10 | 9 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 9:00 PM | 31 | 6 | 1 | 3 | 7 | 5 | 4 | 4 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 9:15 PM | 21 | 3 | 0 | 1 | 4 | 7 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 9:30 PM | 28 | 3 | 2 | 1 | 9 | 8 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 9:45 PM | 16 | 1 | 1 | 2 | 6 | 4 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 10:00 PM | 20 | 1 | 0 | 2 | 3 | 5 | 6 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 10:15 PM | 8 | 0 | 1 | 1 | 3 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 10:30 PM | 12 | 0 | 0 | 2 | 3 | 2 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 10:45 PM | 4 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 11:00 PM | 16 | 1 | 1 | 4 | 2 | 6 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 11:15 PM | 6 | 0 | 0 | 1 | 3 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 11:30 PM | 5 | 0 | 0 | 0 | 1 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 11:45 PM | 4 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Total | 2325 | 659 | 44 | 158 | 442 | 534 | 340 | 118 | 25 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| % | | 28.3 | 1.9 | 6.8 | 19.0 | 23.0 | 14.6 | 5.1 | 1.1 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |

Average (Mean) 12.6 mph
Minimum 1.0 mph
Maximum 27.8 mph

Pace Range 11.5 - 21.5 mph 1603 vehicles (68.9%)

Percentile Speeds

| % | mph |
|----|------|
| 10 | 1.4 |
| 15 | 1.7 |
| 50 | 15.4 |
| 85 | 18.7 |
| 90 | 19.3 |

Speeds Exceeded

| mph | % | Count |
|-----|------|-------|
| 25 | 0.0% | 1 |
| 35 | 0.0% | 0 |
| 45 | 0.0% | 0 |
| 55 | 0.0% | 0 |
| 65 | 0.0% | 0 |
| 75 | 0.0% | 0 |

12 Hour Speed

| mph | Total | < 10 | 10 - < 12 | 12 - < 14 | 14 - < 16 | 16 - < 18 | 18 - < 20 | 20 - < 22 | 22 - < 24 | 24 - < 26 | 26 - < 28 | 28 - < 30 | 30 - < 32 | 32 - < 34 | 34 - < 36 | 36 - < 38 | 38 - < 40 | 40 - < 200 | E Rollins WB | | | |
|-----------------|-------|------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|--------------|--|--|--|
| 12:00 AM | 4 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 12:15 AM | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 12:30 AM | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 12:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 1:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 1:15 AM | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 1:30 AM | 2 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 1:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 2:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 2:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 2:30 AM | 2 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 2:45 AM | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 3:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 3:15 AM | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 3:30 AM | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 3:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 4:00 AM | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 4:15 AM | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 4:30 AM | 3 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 4:45 AM | 13 | 0 | 0 | 2 | 3 | 5 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 5:00 AM | 3 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 5:15 AM | 6 | 0 | 0 | 0 | 3 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 5:30 AM | 4 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 5:45 AM | 12 | 0 | 1 | 1 | 5 | 1 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 6:00 AM | 13 | 1 | 0 | 1 | 5 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | | | |
| 6:15 AM | 13 | 0 | 1 | 2 | 3 | 2 | 2 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 6:30 AM | 36 | 2 | 0 | 2 | 10 | 13 | 3 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 6:45 AM | 42 | 0 | 3 | 3 | 8 | 12 | 12 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 7:00 AM | 54 | 1 | 3 | 8 | 10 | 15 | 13 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 7:15 AM | 50 | 3 | 0 | 4 | 12 | 10 | 19 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 7:30 AM | 68 | 4 | 1 | 5 | 17 | 14 | 18 | 4 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 7:45 AM | 98 | 13 | 3 | 10 | 11 | 29 | 23 | 7 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 8:00 AM | 91 | 16 | 2 | 8 | 22 | 21 | 17 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 8:15 AM | 59 | 1 | 4 | 12 | 9 | 20 | 10 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 8:30 AM | 56 | 6 | 3 | 7 | 12 | 12 | 11 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 8:45 AM | 65 | 7 | 1 | 7 | 10 | 23 | 13 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 9:00 AM | 53 | 7 | 2 | 5 | 10 | 14 | 10 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 9:15 AM | 54 | 9 | 3 | 4 | 6 | 8 | 14 | 6 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 9:30 AM | 57 | 5 | 2 | 8 | 13 | 16 | 10 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 9:45 AM | 41 | 6 | 3 | 5 | 7 | 10 | 5 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 10:00 AM | 44 | 11 | 2 | 3 | 8 | 8 | 10 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 10:15 AM | 43 | 3 | 1 | 4 | 11 | 10 | 11 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 10:30 AM | 45 | 1 | 4 | 4 | 10 | 13 | 11 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 10:45 AM | 46 | 5 | 3 | 2 | 12 | 13 | 8 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 11:00 AM | 56 | 5 | 1 | 8 | 10 | 22 | 8 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 11:15 AM | 65 | 12 | 0 | 6 | 15 | 18 | 11 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 11:30 AM | 57 | 10 | 4 | 6 | 12 | 16 | 8 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 11:45 AM | 61 | 7 | 5 | 8 | 9 | 16 | 9 | 5 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| Total | 1327 | 136 | 55 | 137 | 267 | 354 | 271 | 75 | 25 | 5 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | | | |
| % | | 10.2 | 4.1 | 10.3 | 20.1 | 26.7 | 20.4 | 5.7 | 1.9 | 0.4 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | |

Average (Mean) 15.4 mph
Minimum 1.0 mph
Maximum 32.3 mph

Pace Range 11.0 - 21.0 mph 1130 vehicles (85.2%)

Percentile Speeds

| mph | % | mph |
|-----|------|-----|
| 25 | 0.4% | 5 |
| 35 | 0.0% | 0 |
| 45 | 0.0% | 0 |
| 55 | 0.0% | 0 |
| 65 | 0.0% | 0 |
| 75 | 0.0% | 0 |

Speeds Exceeded

| mph | % | Count |
|-----|------|-------|
| 25 | 0.4% | 5 |
| 35 | 0.0% | 0 |
| 45 | 0.0% | 0 |
| 55 | 0.0% | 0 |
| 65 | 0.0% | 0 |
| 75 | 0.0% | 0 |

12 Hour Speed

| mph | Total | < 10 | 10 - < 12 | 12 - < 14 | 14 - < 16 | 16 - < 18 | 18 - < 20 | 20 - < 22 | 22 - < 24 | 24 - < 26 | 26 - < 28 | 28 - < 30 | 30 - < 32 | 32 - < 34 | 34 - < 36 | 36 - < 38 | 38 - < 40 | 40 - < 200 | E Rollins WB |
|-----------------|-------|------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|--------------|
| 12:00 PM | 61 | 12 | 3 | 7 | 11 | 15 | 10 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | |
| 12:15 PM | 43 | 11 | 3 | 6 | 10 | 6 | 4 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 12:30 PM | 53 | 9 | 1 | 9 | 15 | 10 | 6 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 12:45 PM | 72 | 12 | 1 | 13 | 11 | 20 | 9 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1:00 PM | 73 | 18 | 1 | 9 | 10 | 25 | 9 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1:15 PM | 64 | 16 | 4 | 4 | 15 | 14 | 10 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1:30 PM | 58 | 13 | 2 | 3 | 12 | 20 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1:45 PM | 46 | 10 | 4 | 12 | 7 | 7 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 2:00 PM | 45 | 5 | 2 | 9 | 14 | 11 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 2:15 PM | 49 | 7 | 0 | 5 | 16 | 11 | 7 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 2:30 PM | 54 | 5 | 4 | 9 | 13 | 17 | 1 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 2:45 PM | 57 | 9 | 1 | 6 | 20 | 7 | 7 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 3:00 PM | 68 | 7 | 5 | 6 | 13 | 20 | 12 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 3:15 PM | 72 | 14 | 6 | 10 | 13 | 13 | 11 | 4 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 3:30 PM | 66 | 7 | 3 | 9 | 12 | 15 | 12 | 7 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 3:45 PM | 65 | 19 | 2 | 3 | 9 | 16 | 12 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 4:00 PM | 70 | 18 | 3 | 9 | 10 | 12 | 11 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 4:15 PM | 67 | 12 | 3 | 5 | 9 | 16 | 11 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 4:30 PM | 73 | 9 | 5 | 5 | 11 | 17 | 15 | 8 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 4:45 PM | 66 | 11 | 2 | 11 | 9 | 14 | 9 | 6 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 5:00 PM | 70 | 14 | 3 | 7 | 8 | 23 | 11 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 5:15 PM | 70 | 14 | 1 | 5 | 13 | 17 | 12 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 5:30 PM | 70 | 4 | 1 | 4 | 12 | 30 | 15 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 5:45 PM | 57 | 1 | 1 | 5 | 7 | 21 | 16 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 6:00 PM | 50 | 1 | 1 | 5 | 11 | 16 | 10 | 4 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 6:15 PM | 41 | 2 | 1 | 6 | 8 | 12 | 7 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 6:30 PM | 50 | 2 | 3 | 6 | 10 | 21 | 5 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 6:45 PM | 49 | 1 | 3 | 9 | 12 | 13 | 9 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 7:00 PM | 46 | 4 | 1 | 4 | 14 | 12 | 9 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 7:15 PM | 38 | 0 | 5 | 4 | 11 | 9 | 7 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 7:30 PM | 22 | 1 | 2 | 3 | 6 | 6 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 7:45 PM | 38 | 5 | 0 | 5 | 9 | 8 | 10 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 8:00 PM | 38 | 4 | 1 | 3 | 16 | 5 | 8 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 8:15 PM | 25 | 2 | 2 | 4 | 5 | 7 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 8:30 PM | 25 | 0 | 1 | 3 | 4 | 8 | 3 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 8:45 PM | 28 | 1 | 1 | 3 | 6 | 10 | 4 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 9:00 PM | 28 | 1 | 5 | 2 | 6 | 7 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 9:15 PM | 14 | 1 | 1 | 2 | 0 | 4 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 9:30 PM | 20 | 0 | 1 | 2 | 2 | 10 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 9:45 PM | 16 | 0 | 2 | 3 | 4 | 6 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 10:00 PM | 9 | 0 | 0 | 1 | 3 | 3 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 10:15 PM | 9 | 0 | 0 | 2 | 2 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 10:30 PM | 10 | 1 | 0 | 1 | 2 | 3 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 10:45 PM | 10 | 0 | 0 | 3 | 2 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 11:00 PM | 13 | 0 | 3 | 4 | 1 | 1 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 11:15 PM | 4 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 11:30 PM | 4 | 0 | 0 | 0 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 11:45 PM | 6 | 0 | 0 | 1 | 1 | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Total | 2082 | 284 | 94 | 247 | 417 | 547 | 325 | 136 | 24 | 7 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | |
| % | | 13.6 | 4.5 | 11.9 | 20.0 | 26.3 | 15.6 | 6.5 | 1.2 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |

Average (Mean) 14.6 mph
Minimum 1.0 mph
Maximum 32.2 mph

Pace Range 11.2 - 21.2 mph 1693 vehicles (81.3%)

Percentile Speeds

| % | mph |
|----|------|
| 10 | 2.7 |
| 15 | 10.8 |
| 50 | 16.0 |
| 85 | 18.9 |
| 90 | 19.6 |

Speeds Exceeded

| mph | % | Count |
|-----|------|-------|
| 25 | 0.1% | 2 |
| 35 | 0.0% | 0 |
| 45 | 0.0% | 0 |
| 55 | 0.0% | 0 |
| 65 | 0.0% | 0 |
| 75 | 0.0% | 0 |

12 Hour Speed

| mph | Total | < 10 | 10 - < 12 | 12 - < 14 | 14 - < 16 | 16 - < 18 | 18 - < 20 | 20 - < 22 | 22 - < 24 | 24 - < 26 | 26 - < 28 | 28 - < 30 | 30 - < 32 | 32 - < 34 | 34 - < 36 | 36 - < 38 | 38 - < 40 | 40 - < 200 | S Fair NB |
|-----------------|-------|------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|-----------|
| 12:00 AM | 4 | 1 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 12:15 AM | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 12:30 AM | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 12:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1:15 AM | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1:30 AM | 3 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 2:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 2:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 2:30 AM | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 2:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 3:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 3:15 AM | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 3:30 AM | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 3:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 4:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 4:15 AM | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 4:30 AM | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 4:45 AM | 6 | 0 | 0 | 0 | 1 | 3 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 5:00 AM | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 5:15 AM | 6 | 0 | 0 | 0 | 0 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 5:30 AM | 5 | 1 | 0 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 5:45 AM | 9 | 0 | 0 | 1 | 1 | 3 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 6:00 AM | 11 | 1 | 0 | 1 | 1 | 2 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | |
| 6:15 AM | 12 | 1 | 0 | 1 | 3 | 1 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 6:30 AM | 34 | 4 | 2 | 5 | 7 | 8 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 6:45 AM | 36 | 4 | 6 | 3 | 5 | 9 | 4 | 4 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 7:00 AM | 44 | 7 | 3 | 4 | 14 | 8 | 5 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 7:15 AM | 46 | 8 | 3 | 7 | 9 | 9 | 3 | 5 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 7:30 AM | 58 | 24 | 5 | 8 | 8 | 6 | 4 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 7:45 AM | 73 | 26 | 7 | 9 | 10 | 9 | 7 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 8:00 AM | 60 | 40 | 6 | 5 | 6 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 8:15 AM | 47 | 17 | 2 | 7 | 7 | 4 | 3 | 3 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 8:30 AM | 47 | 8 | 6 | 6 | 9 | 6 | 9 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 8:45 AM | 55 | 15 | 2 | 5 | 7 | 11 | 5 | 8 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 9:00 AM | 42 | 13 | 1 | 2 | 7 | 9 | 7 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 9:15 AM | 41 | 11 | 3 | 5 | 4 | 9 | 5 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 9:30 AM | 51 | 16 | 3 | 6 | 6 | 14 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 9:45 AM | 34 | 8 | 2 | 6 | 7 | 5 | 2 | 2 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 10:00 AM | 34 | 14 | 1 | 1 | 8 | 5 | 3 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 10:15 AM | 36 | 5 | 4 | 4 | 2 | 6 | 7 | 5 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 10:30 AM | 42 | 7 | 4 | 4 | 13 | 7 | 4 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 10:45 AM | 42 | 6 | 6 | 7 | 11 | 3 | 6 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 11:00 AM | 42 | 12 | 3 | 8 | 6 | 10 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 11:15 AM | 61 | 17 | 7 | 11 | 9 | 12 | 4 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 11:30 AM | 42 | 16 | 4 | 8 | 4 | 7 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 11:45 AM | 48 | 13 | 3 | 3 | 5 | 11 | 8 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Total | 1084 | 295 | 84 | 130 | 171 | 187 | 116 | 64 | 22 | 10 | 3 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | |
| % | | 27.2 | 7.7 | 12.0 | 15.8 | 17.3 | 10.7 | 5.9 | 2.0 | 0.9 | 0.3 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | |

Average (Mean) 13.0 mph
Minimum 1.0 mph
Maximum 32.1 mph

Pace Range 10.2 - 20.2 mph 699 vehicles (64.5%)

Percentile Speeds

| % | mph |
|----|------|
| 10 | 1.7 |
| 15 | 4.4 |
| 50 | 14.5 |
| 85 | 18.8 |
| 90 | 19.6 |

| mph | % | Count |
|-----|------|-------|
| 25 | 0.7% | 8 |
| 35 | 0.0% | 0 |
| 45 | 0.0% | 0 |
| 55 | 0.0% | 0 |
| 65 | 0.0% | 0 |
| 75 | 0.0% | 0 |

12 Hour Speed

| mph | Total | < 10 | 10 - < 12 | 12 - < 14 | 14 - < 16 | 16 - < 18 | 18 - < 20 | 20 - < 22 | 22 - < 24 | 24 - < 26 | 26 - < 28 | 28 - < 30 | 30 - < 32 | 32 - < 34 | 34 - < 36 | 36 - < 38 | 38 - < 40 | 40 - < 200 | S Fair NB |
|-----------------|-------|------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|-----------|
| 12:00 PM | 46 | 22 | 1 | 5 | 5 | 7 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 12:15 PM | 47 | 16 | 4 | 9 | 8 | 7 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 12:30 PM | 46 | 17 | 3 | 3 | 6 | 8 | 2 | 5 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 12:45 PM | 58 | 15 | 9 | 4 | 4 | 15 | 7 | 2 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1:00 PM | 54 | 22 | 5 | 5 | 6 | 10 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1:15 PM | 60 | 23 | 5 | 3 | 10 | 13 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1:30 PM | 46 | 11 | 5 | 9 | 4 | 11 | 4 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1:45 PM | 32 | 14 | 7 | 5 | 1 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 2:00 PM | 38 | 14 | 4 | 9 | 5 | 4 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 2:15 PM | 47 | 12 | 7 | 7 | 8 | 6 | 2 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 2:30 PM | 40 | 10 | 5 | 3 | 8 | 5 | 5 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 2:45 PM | 53 | 17 | 4 | 9 | 10 | 4 | 3 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 3:00 PM | 47 | 16 | 4 | 9 | 6 | 8 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 3:15 PM | 60 | 24 | 8 | 13 | 3 | 6 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 3:30 PM | 61 | 11 | 3 | 9 | 12 | 16 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 3:45 PM | 60 | 21 | 4 | 7 | 8 | 6 | 8 | 5 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 4:00 PM | 67 | 20 | 6 | 9 | 13 | 5 | 10 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 4:15 PM | 61 | 29 | 4 | 11 | 5 | 7 | 1 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 4:30 PM | 63 | 24 | 4 | 6 | 6 | 9 | 10 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 4:45 PM | 54 | 15 | 3 | 4 | 7 | 11 | 9 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 5:00 PM | 60 | 22 | 4 | 6 | 6 | 13 | 5 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 5:15 PM | 61 | 26 | 7 | 6 | 11 | 7 | 1 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 5:30 PM | 59 | 23 | 9 | 14 | 4 | 4 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 5:45 PM | 43 | 14 | 8 | 3 | 3 | 7 | 3 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 6:00 PM | 36 | 8 | 1 | 4 | 5 | 12 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 6:15 PM | 35 | 6 | 2 | 5 | 9 | 2 | 5 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 6:30 PM | 35 | 9 | 1 | 7 | 7 | 7 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 6:45 PM | 48 | 9 | 3 | 8 | 7 | 11 | 6 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 7:00 PM | 34 | 7 | 0 | 6 | 7 | 8 | 4 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 7:15 PM | 29 | 5 | 4 | 3 | 5 | 6 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 7:30 PM | 19 | 0 | 3 | 4 | 8 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 7:45 PM | 32 | 6 | 2 | 1 | 9 | 7 | 4 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 8:00 PM | 31 | 4 | 3 | 4 | 10 | 5 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 8:15 PM | 17 | 3 | 2 | 2 | 4 | 2 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 8:30 PM | 27 | 2 | 4 | 3 | 7 | 3 | 3 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 8:45 PM | 26 | 3 | 0 | 5 | 6 | 7 | 3 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 9:00 PM | 26 | 1 | 1 | 1 | 4 | 8 | 8 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 9:15 PM | 9 | 0 | 1 | 0 | 2 | 1 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 9:30 PM | 18 | 2 | 1 | 2 | 3 | 5 | 3 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 9:45 PM | 11 | 1 | 1 | 1 | 3 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 10:00 PM | 10 | 0 | 2 | 0 | 4 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 10:15 PM | 10 | 1 | 1 | 0 | 2 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 10:30 PM | 10 | 2 | 0 | 2 | 2 | 2 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 10:45 PM | 10 | 1 | 1 | 1 | 2 | 1 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 11:00 PM | 9 | 2 | 0 | 1 | 1 | 2 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 11:15 PM | 4 | 0 | 1 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 11:30 PM | 3 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 11:45 PM | 5 | 1 | 0 | 0 | 1 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Total | 1757 | 511 | 157 | 228 | 267 | 294 | 171 | 89 | 26 | 13 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| % | | 29.1 | 8.9 | 13.0 | 15.2 | 16.7 | 9.7 | 5.1 | 1.5 | 0.7 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |

Speeds Exceeded

| mph | % | Count |
|-----|------|-------|
| 25 | 0.5% | 8 |
| 35 | 0.0% | 0 |
| 45 | 0.0% | 0 |
| 55 | 0.0% | 0 |
| 65 | 0.0% | 0 |
| 75 | 0.0% | 0 |

| Average (Mean) | 12.7 mph |
|----------------|----------|
| Minimum | 1.0 mph |
| Maximum | 26.6 mph |

| Pace Range | 9.4 - 19.4 mph | 1142 vehicles (65.0%) |
|------------|----------------|-----------------------|
|------------|----------------|-----------------------|

| Percentile Speeds |
|-------------------|
|-------------------|

| % | mph |
|----|------|
| 10 | 2.0 |
| 15 | 5.6 |
| 50 | 13.9 |
| 85 | 18.3 |
| 90 | 19.2 |

12 Hour Speed

12 Hour Speed

| mph | Total | < 10 | 10 - < 12 | 12 - < 14 | 14 - < 16 | 16 - < 20 | 18 - < 22 | 20 - < 22 | 22 - < 24 | 24 - < 26 | 26 - < 28 | 28 - < 30 | 30 - < 32 | 32 - < 34 | 34 - < 36 | 36 - < 38 | 38 - < 40 | 40 - < 200 | N Fair SB |
|-----------------|-------|------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|-----------|
| 12:00 PM | 46 | 23 | 2 | 9 | 4 | 4 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 12:15 PM | 60 | 19 | 5 | 13 | 11 | 7 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 12:30 PM | 51 | 18 | 8 | 8 | 9 | 5 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 12:45 PM | 46 | 16 | 6 | 8 | 8 | 2 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1:00 PM | 52 | 14 | 7 | 8 | 10 | 10 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1:15 PM | 51 | 21 | 6 | 9 | 8 | 4 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1:30 PM | 41 | 11 | 5 | 5 | 8 | 6 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1:45 PM | 53 | 25 | 11 | 10 | 2 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 2:00 PM | 45 | 12 | 6 | 11 | 7 | 5 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 2:15 PM | 55 | 13 | 5 | 6 | 15 | 9 | 5 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 2:30 PM | 48 | 8 | 4 | 9 | 11 | 12 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 2:45 PM | 68 | 18 | 6 | 23 | 10 | 10 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 3:00 PM | 63 | 26 | 6 | 11 | 8 | 9 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 3:15 PM | 59 | 22 | 7 | 13 | 10 | 4 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 3:30 PM | 72 | 25 | 9 | 7 | 15 | 10 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 3:45 PM | 64 | 22 | 10 | 8 | 10 | 7 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 4:00 PM | 55 | 17 | 12 | 14 | 5 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 4:15 PM | 62 | 23 | 8 | 9 | 13 | 2 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 4:30 PM | 53 | 13 | 4 | 10 | 11 | 9 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 4:45 PM | 74 | 40 | 8 | 5 | 14 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | |
| 5:00 PM | 81 | 34 | 7 | 9 | 13 | 9 | 5 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 5:15 PM | 86 | 44 | 3 | 6 | 12 | 14 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 5:30 PM | 62 | 34 | 2 | 8 | 4 | 11 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 5:45 PM | 58 | 17 | 3 | 7 | 11 | 13 | 5 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 6:00 PM | 53 | 11 | 5 | 9 | 9 | 9 | 7 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 6:15 PM | 70 | 11 | 11 | 9 | 16 | 15 | 4 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 6:30 PM | 43 | 9 | 7 | 4 | 11 | 8 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 6:45 PM | 56 | 10 | 6 | 11 | 16 | 7 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 7:00 PM | 57 | 11 | 2 | 13 | 12 | 10 | 3 | 5 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 7:15 PM | 45 | 11 | 5 | 8 | 11 | 6 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 7:30 PM | 52 | 11 | 6 | 9 | 15 | 7 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 7:45 PM | 51 | 10 | 6 | 11 | 11 | 10 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 8:00 PM | 38 | 8 | 6 | 8 | 10 | 2 | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 8:15 PM | 50 | 10 | 7 | 13 | 11 | 7 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 8:30 PM | 30 | 3 | 6 | 6 | 8 | 4 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 8:45 PM | 31 | 4 | 5 | 6 | 9 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 9:00 PM | 32 | 5 | 2 | 5 | 10 | 6 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 9:15 PM | 20 | 1 | 2 | 4 | 6 | 4 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 9:30 PM | 29 | 5 | 4 | 9 | 3 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 9:45 PM | 18 | 5 | 2 | 4 | 5 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 10:00 PM | 22 | 1 | 2 | 3 | 2 | 8 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | |
| 10:15 PM | 7 | 0 | 3 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 10:30 PM | 12 | 1 | 2 | 0 | 1 | 7 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 10:45 PM | 7 | 0 | 1 | 0 | 2 | 1 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 11:00 PM | 13 | 1 | 0 | 4 | 2 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 11:15 PM | 8 | 2 | 0 | 3 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 11:30 PM | 6 | 0 | 2 | 0 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 11:45 PM | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Total | 2157 | 645 | 242 | 366 | 403 | 305 | 139 | 40 | 10 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 4 | |
| % | | 29.9 | 11.2 | 17.0 | 18.7 | 14.1 | 6.4 | 1.9 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | |

Average (Mean) 12.0 mph
Minimum 1.0 mph
Maximum 80.9 mph

Pace Range 8.8 - 18.8 mph 1503 vehicles (69.7%)

Percentile Speeds

| % | mph | % | mph | Count |
|----|------|----|------|-------|
| 10 | 2.2 | 15 | 5.3 | |
| 50 | 13.2 | 85 | 17.1 | |
| 90 | 17.9 | | | |

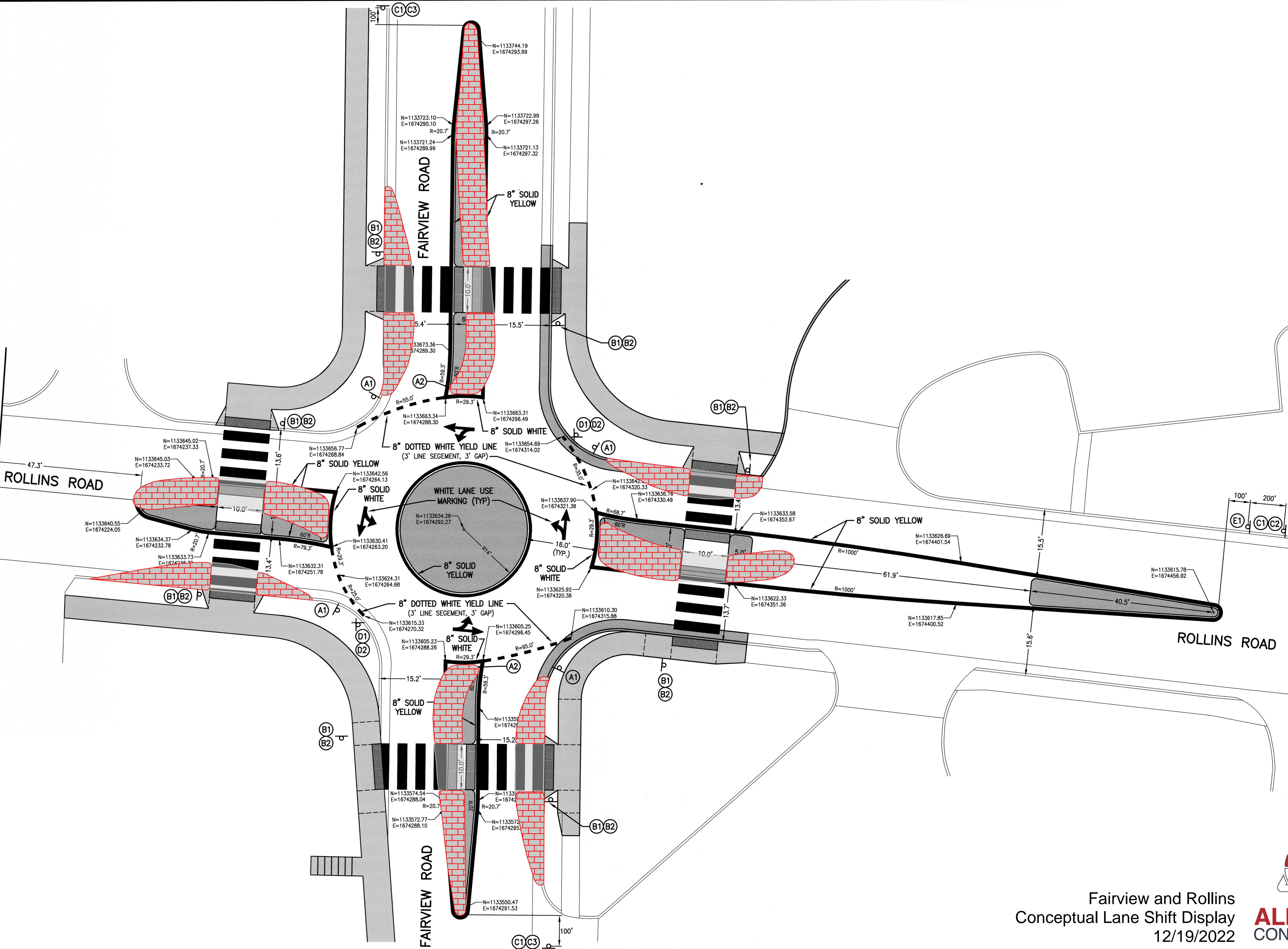
| Speeds Exceeded | mph | % | Count |
|-----------------|-----|------|-------|
| | 25 | 0.3% | 6 |
| | 35 | 0.2% | 5 |
| | 45 | 0.1% | 3 |
| | 55 | 0.1% | 3 |
| | 65 | 0.1% | 2 |
| | 75 | 0.1% | 2 |

APPENDIX E: CONCEPTUAL MINI ROUNDABOUT MODIFICATIONS

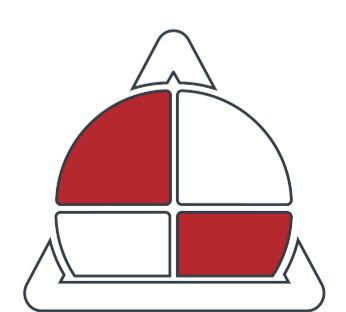


MATCHLINE A
SEE SHEET 7

MATCHLINE



Fairview and Rollins Conceptual Lane Shift Display 12/19/2022



ALLSTATE CONSULTANTS